CENTRAL BANK OF MONTENEGRO

RESEARCH, STATISTICS AND IT DEPARTMENT

INFLATION REPORT
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1. INFLATION INDICATORS

In Q3 2010, consumer prices increased by 0.4%. In the reporting quarter, the highest increase was in prices under food and non-alcoholic beverages by 1.3%, household furnishings by 0.5% and clothing and footwear by 0.3%. The highest monthly increase in consumer prices was recorded in July (0.2%), while August and September recorded respective growth of 0.1%. The annual increase in September was 0.3%, while the average consumer prices' rate (period to period) amounted to 0.4%.

The inflation increase in the Q3, in relation to the previous quarter, was mostly affected by higher prices under food and non-alcoholic beverages by 1.3%, household furnishings by 0.5% and clothing and footwear by 0.3%. In Q3 2010, the higher prices under the category food and non-alcoholic beverages were recorded by meat (0.8%), wheat flour (0.5%), milk, cheese and eggs (0.1%), oils and fats (13%), vegetables (4.4%), non-alcoholic beverages (6.2%) while prices of fruit and fish declined by 3.9% and 4.8%, respectively. In the reporting period, there was a minor increase of prices under alcoholic beverages and tobacco (0.1%), due to higher prices of alcoholic beverages by 0.3%, while prices under housing furnishings rose by 0.5% mostly due to increased prices of goods and services for routine household maintenance (1.3%) and furniture and furnishings (0.1%). The increase was also recorded in prices of clothes and footwear (0.3%), due to increase in footwear by 0.9%, while prices under restaurants and hotels rose by 0.2% due to higher prices of catering services by 0.2%. Lower prices of solid fuels by 3.8% (wood coal and wood for hating) affected the lower prices in the category housing by 0.9%. In the reporting period, prices under transport were by 0.1% lower due to lower price of fuel and lubricants (-1%), while prices under "culture and entertainment" fell by (0.6%). In Q3 2010, there was no change in prices under communication and education.

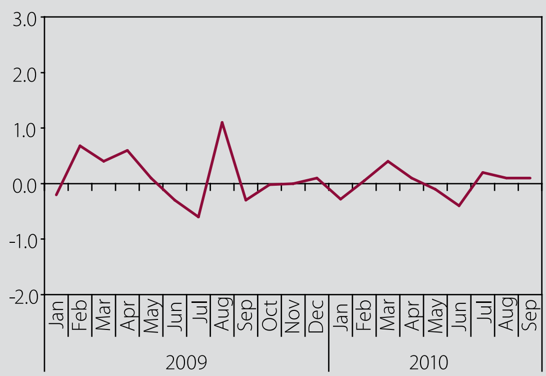
Annual **core inflation** rate amounted to 0.26% in September 2010 and it was by 0.05 percentage points lower than total inflation. Since January 2010 (excluding August), annual base inflation was lower than total inflation. Observed in the first five months, as well as in July, annual core inflation rate was negative.

Table 1 - Inflation, %

	2009				2010		
	III	VI	IX	XII	III	VI	IX
Change in relation to previous year- end	0.8	1.2	1.4	1.5	0.2	-0.2	0.2
Annual change	5.5	2.8	1.7	1.5	0.7	0.2	0.3

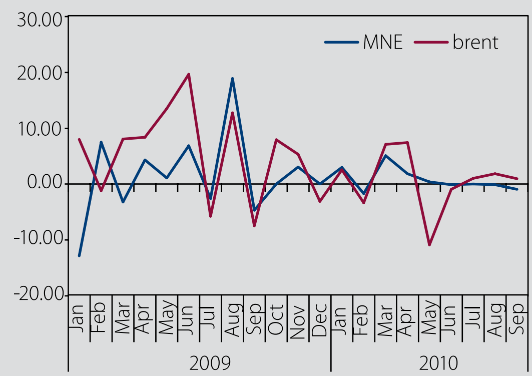
Source: Monstat

Graph 1 - Consumer prices, monthly rate



Source: Monstat

Graph 2 - Oil prices, monthly growth rate



Source: Monstat and "Monthly Oil Market Reports", OPEC

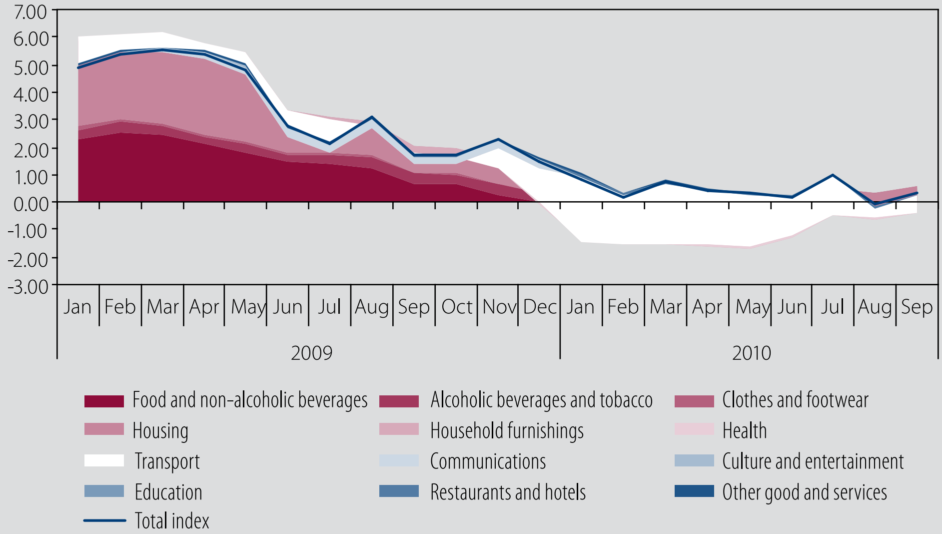
In Q3 2010, the average price of OPEC reference basket amounted to USD/barrel 73.76, which was by 3.7% less in relation to the average price recorded in Q2 2010. Average price of Brent amounted to USD/barrel 76.84 in Q3 2010, which is by 2% less in relation to Q2 2010 and 3% more in relation to the average price of Brent in the last quarter of 2009. The highest price of Brent was recorded in April amounting to USD/barrel 84.79, being the highest since September 2008 when it amounted to USD/barrel 98.13. Despite some turbulences and obstacles at the market, the continued global economic recovery positively affected the demand for oil. Still, the analysts estimate that the demand was not as strong as in the previous two quarters, and they expect its strengthening by the end of 2010. Prices under fuel and lubricants decreased by 1% in Q3 2010 in Montenegro, indicating that their growth should be expected in the coming period.

Table 2 – Share of individual categories in total inflation

	Weights	IX 10 / VI 10	Growth rate	Contribution	Share in total inflation
TOTAL	10000	100.4	0.4	0.4	100.0
Food and non-alcoholic beverages	3755	101.3	1.3	0.5	129.9
Alcoholic beverages and tobacco	372	100.1	0.1	0.0	1.1
Clothes and footwear	761	100.3	0.3	0.0	5.5
Housing	1287	99.1	-0.9	-0.1	-30.4
Household furnishings	494	100.5	0.5	0.0	6.3
Health	280	100.1	0.1	0.0	0.8
Transport	1216	99.9	-0.1	0.0	-4.8
Communications	558	100.0	0.0	0.0	0.0
Culture and entertainment	321	99.4	-0.6	0.0	-5.3
Education	218	100.0	0.0	0.0	0.0
Restaurants and hotels	296	100.2	0.2	0.0	1.3
Other goods and services	442	99.6	-0.4	0.0	-4.6

Source: Monstat and CBM calculations

Graph 3 – Consumer prices components: Contribution to the annual rate (index points)



Source: Monstat and CBM calculation

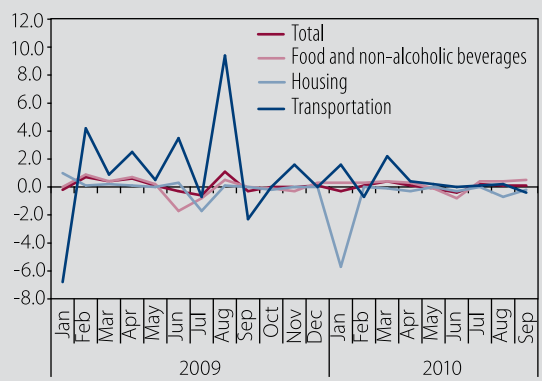
In September 2010, annual consumer price rate amounted to 0.3%, being by 0.1 percentage points higher in relation to the annual rate from June. The highest annual increase was recorded in prices under food and non-alcoholic beverages (1.4%), transport (4.9%), health (2.4%) and restaurants and hotels (2.3%).

In Q3 2010, **producers' prices of manufactured products** declined by 0.4% in relation to the previous quarter, whereby manufacturing industry prices fell by 0.5%. Prices under electricity, gas and water supply and under mining and quarrying remained unchanged. In relation to 2009-end, producers' prices of manufactured products recorded 0.4% increase in September, while their annual growth amounted to 1.6%.

Graph 4 – Consumer prices, annual rate

Source: Monstat

Graph 5 – Selected categories – consumer prices, monthly rate

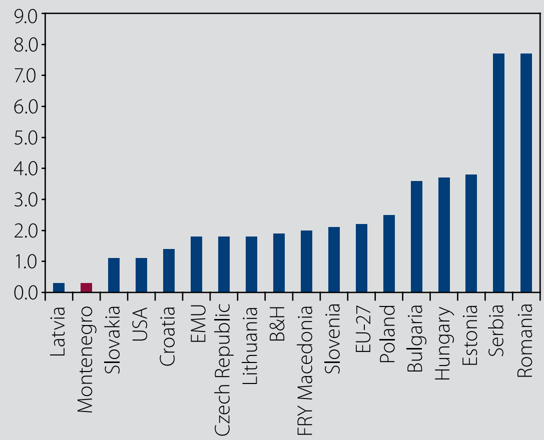


Source: Monstat

The comparison of annual inflation recorded in Montenegro to the inflation in selected countries shows that the same rate (0.3%) was recorded only in Latvia, while higher annual rate was recorded in all other selected countries. The highest annual growth in selected countries was recorded in Romania and Serbia (7.7%).

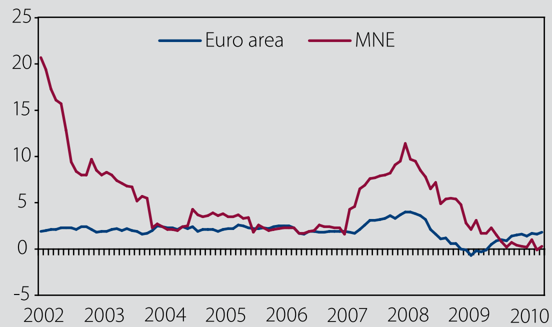
Annual rate recorded in Euro area, measured by harmonized consumer prices index (HCPI) amounted to 1.8%, while the annual inflation in Montenegro, measured by CPI, amounted to 0.3%.

Graph 6 - Annual inflation rate in selected countries, September 2010



Source: National Statistical Offices and Eurostat

Graph 7 – Inflation in Eurozone and Montenegro since the introduction of euro (annual rates)



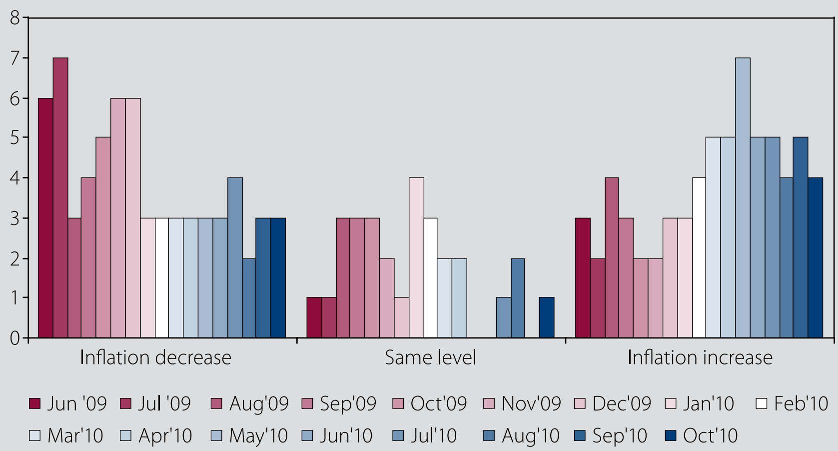
Source: Monstat and Eurostat

2. INFLATION FORECASTS

BANKS' EXPECTATIONS

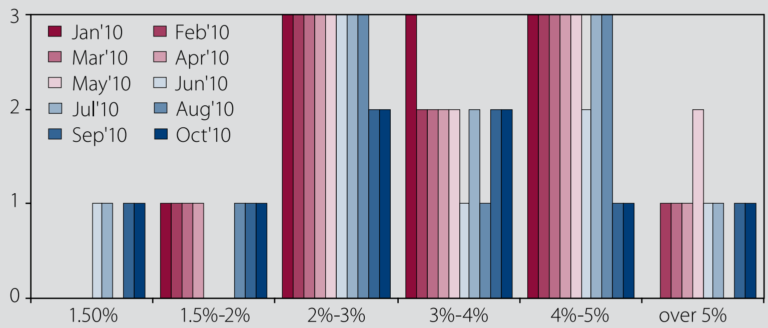
Regarding the banks' inflation expectations, based on the survey[1] results from October 2010, three banks expected lower rate, one bank expected the same and four banks expected higher inflation rate in 2010, in relation to 2009 (Graph 8).

Graph 8 - Inflation forecasts (banks)



[1] *Out of eleven banks, eight responded to the survey in October.*

Graph 9 – Forecasted inflation level (banks)

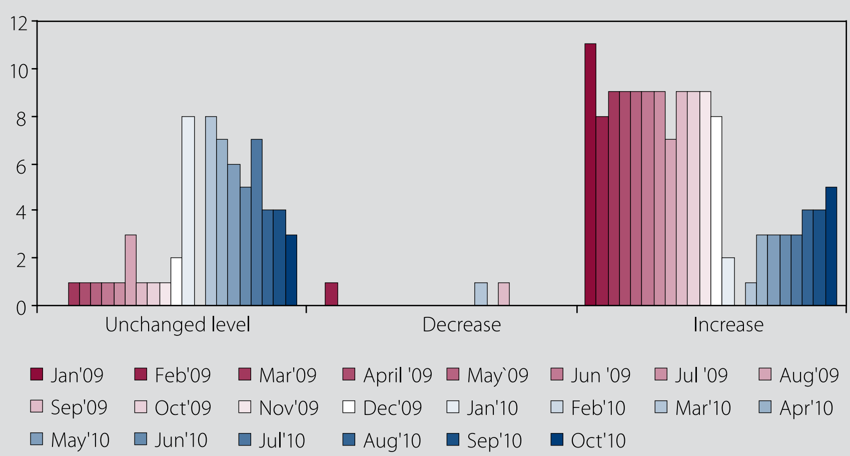


Concerning the forecasts on lending interest rates, the banks did not forecast a decrease in nominal interest rates, while one bank forecasted lower effective interest rates. Five banks expected the increase in both rates, while three banks expected that the nominal lending interest rates will remain unchanged and two banks expected that effective lending interest rates will remain unchanged in 2010 in relation to 2009.

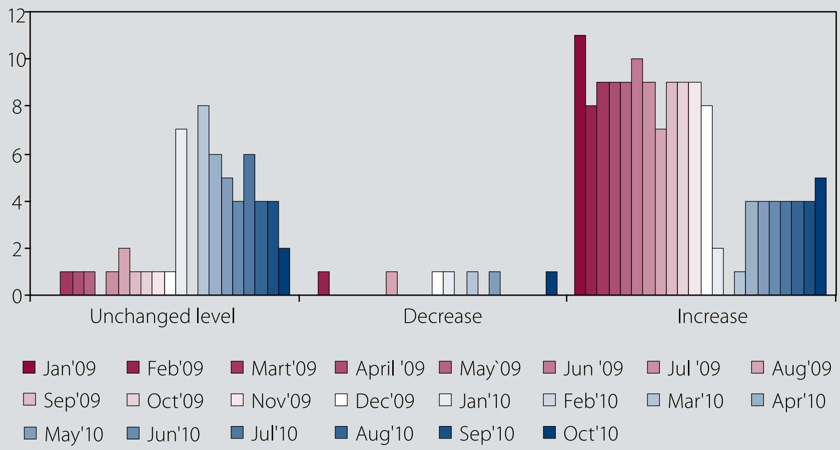
Regarding the deposit interest rates, four banks expected unchanged level, one bank forecasted growth, while three banks expected decline of deposit interest rates in 2010 in relation to 2009.

Market trend indicator (black line in Graph 12) is used for the purpose of calculating inflation forecasts. It is calculated as the difference between the number of banks expecting inflation increase (blue columns) and the number of banks expecting inflation decrease (red columns). If the market trend indicator has a negative value, lower inflation rate is expected in the coming period. If it has a positive value, then an increase in the inflation rate may be expected. If it has a zero value, an unchanged inflation rate may be expected in the coming period. The more negative the value is, the lower the inflation forecast is, and vice versa, while higher positive value means higher inflation level forecasts. Thus, Graph 12 shows that, in October 2010, the inflation forecast was at the slightly lower level than forecasts in the previous two months, that is, it was at the same level as banks' inflation forecasts from July 2010.

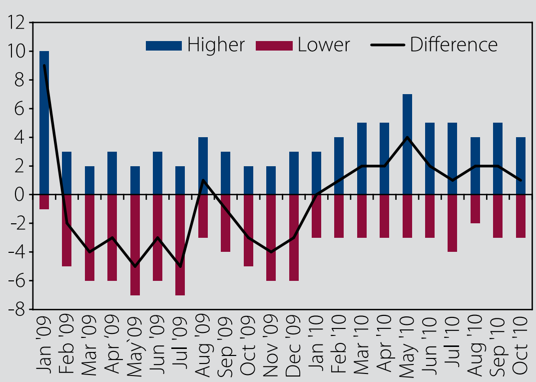
Graph 10 – Nominal lending interest rates forecasts



Graph 11 – Effective lending interest rates forecasts



Graph 12 – Market trend indicator

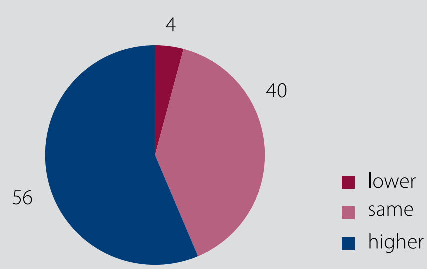


EXPECTATIONS OF ECONOMY (EXCEPT BANKS)

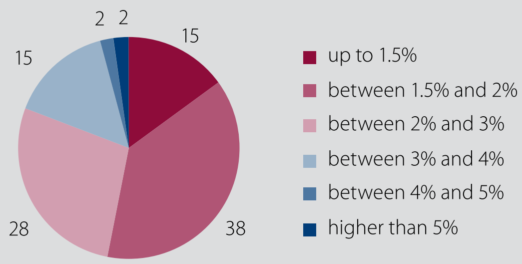
Inflation

Out of total surveyed companies, 56% expected higher inflation, 40% expected unchanged level, while the remaining 4% expected lower inflation rate in 2010, in relation to 2009. At the same time, 38% of surveyed companies believed that the inflation in 2010 would amount between 1.5% and 2%, while only 2% forecasted inflation higher than 5%. Some 8% of companies expected increase in salaries, 14% expected decrease, while 78% expected the unchanged level. Most of surveyed companies (63%) expected the same level of production input prices, while 16% of them believed in decrease of their products (services) by the end of 2010. As for the number of employees, 68% of surveyed companies expected the unchanged level by the 2010-end, 18% of them believed in increase and 14% expected a decrease.

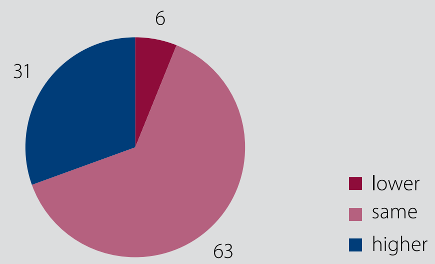
Graph 13 - Forecasted inflation in 2010, in relation to 2009 (responses by the percentage share)



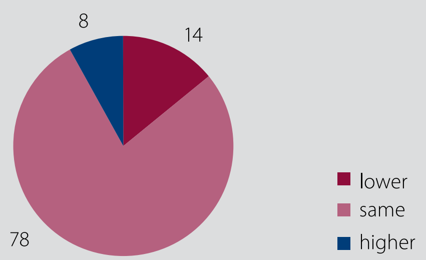
Graph 14 – Forecasted inflation in 2010



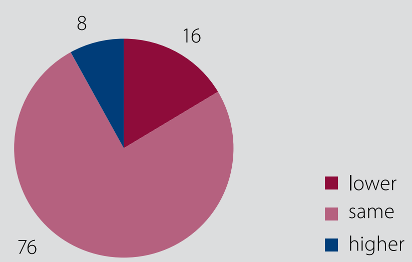
Graph 17 – Expected level of prices of production inputs by end-2010



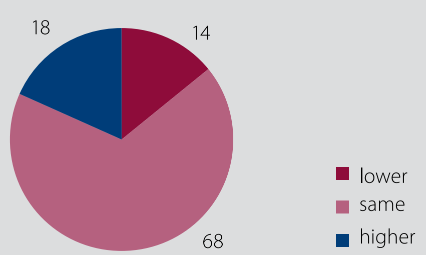
Graph 15 – Expected level of salaries by end-2010



Graph 18 – Expected level of products' (services) prices by end-2010



Graph 16 – Expected level in number of emloyees by end-2010

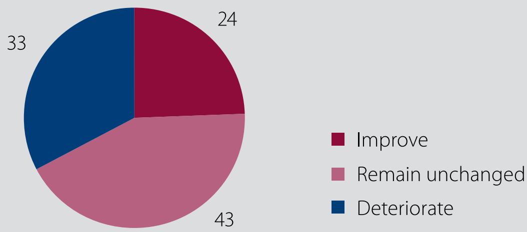


Business Environment

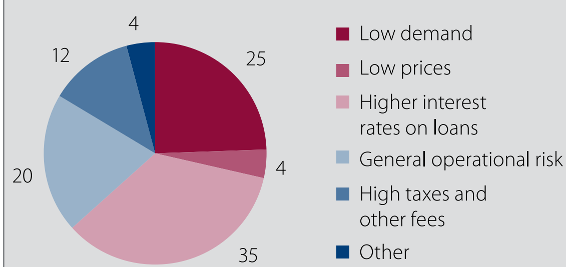
The survey results showed that most of the surveyed companies (43%) expected unchanged business environment, while 33% expected deterioration of business environment in 2010.

Besides, 23% of surveyed companies expected lower, 54% expected the unchanged while 23% of them expected higher lending interest rates in 2010 in relation to 2009. In terms of business barriers, most of survey participants considered high lending interest rates (35%), low demand (25%) and general operational risks (20%) as obstacles.

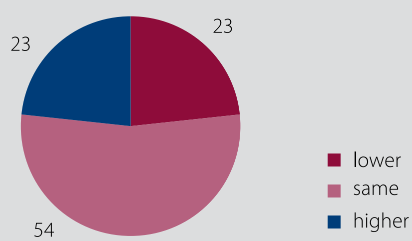
Graph 19 – Expected business environment in 2010 in relation to 2009



Graph 20 – Business barriers



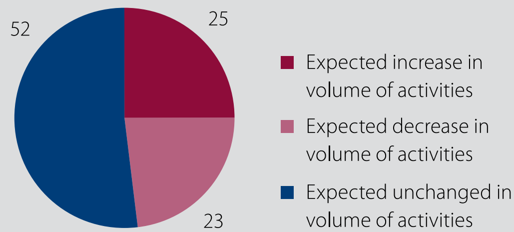
Graph 21 – Expected level of lending interest rates in 2010 in relation to 2009



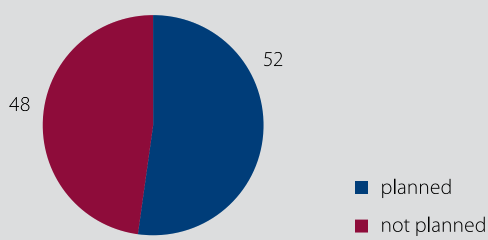
Investments

Out of the total number of surveyed companies, 25% planned the increase in volume of activities by the end of 2010, while 52% planned new investments. Most investments (69%) referred to the increase in fixed assets and 14% to other investments, and 10% into investments in new labour force, while high interest rates and unfavourable conditions for capital indebtedness (35%) and the insuficient exploitation of existing capacities (30%) were described as largest barriers to new investments.

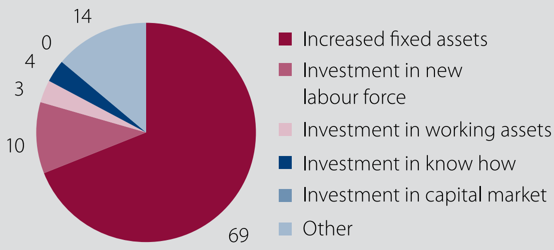
Graph 22 - Forecasted volume of activities in 2010



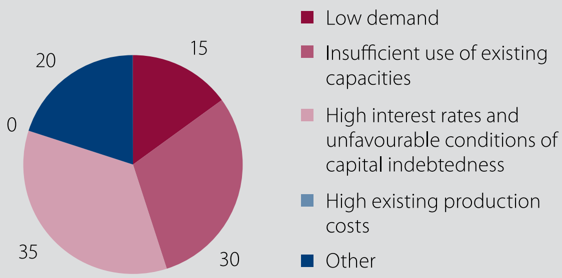
Graph 23 - New investments by the end-2010



Graph 24 - Types of forecasted new investments in 2010



Graph 25 - Obstacles to new investments in 2010



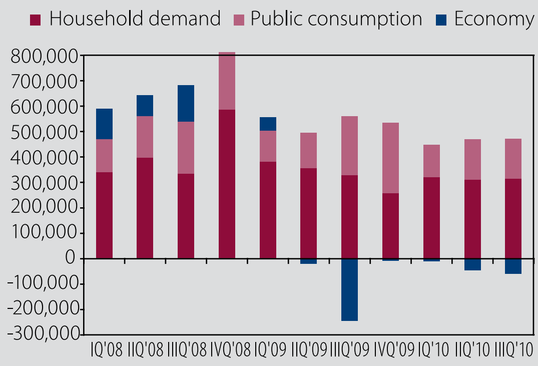
3. INFLATION DETERMINANTS

3.1. DEMAND

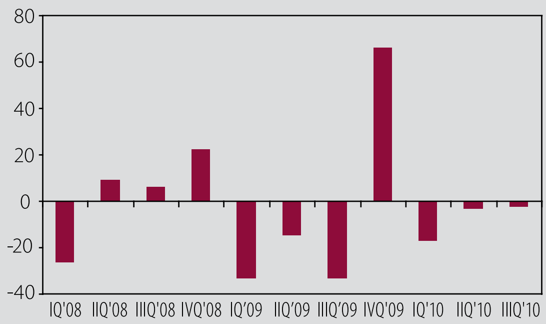
In Q3 2010, aggregate demand recorded decline in relation to the previous quarter. Observed by sectors, public spending was slightly lower than in the previous quarter, with a bit higher household demand. The structure of total demand, compared to the structure in the previous two quarters, shows the increase in share of household and public demand, and the decrease in economic sector demand.

In Q3, the level of aggregate demand was lower by the aggregate demand level in the previous quarter.

Graph 26 - Aggregate demand, EUR thousand



Graph 27 - Quarterly growth rates of aggregate demand



Box 1 - Aggregate demand calculation methodology

Aimed at the more complete monitoring of aggregate demand as the inflation determinant, the CBM has developed the aggregate demand calculation methodology. The starting point of this methodology is that the aggregate demand is the total demand of three sectors:personal consumption (households), investment consumption (corporate sector) and public consuption. However, taking into account the lack of a number of data needed for calculating the aggregate demand, the existing data should not be treated as the indicator of the precise amount of aggregate demand, but as an indicator showing the aggregate demand trend. In the existing methodology, a number of substantial data were not available, such as: corporate investments, revenues from selling shares, non-market incomes, non-observed economy revenues, and the like. The methodology for calculating the aggregate demand is given in the following equation:

$$AD = C + I + G$$

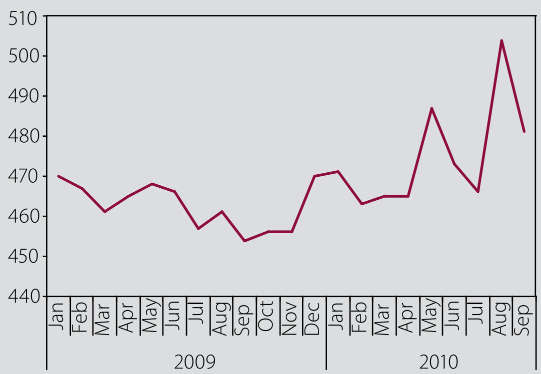
C=sum of paid salaries + sum of paid pensions + paid frozen foreign currency deposits + net compensations to households – net savings by households (savings – loans granted)
I = net savings of economy (deposits - loans)
G = public consumption- paid pensions – salaries paid from the budget – net savings by the Government (deposits – loans – Treasury bills)
AD – aggregate demand, C - personal consumption, I – investment consumption, G – public consumption

3.1.1. Salaries and Other Available Demand Determinants

In the Q3 2010, the average salary in Montenegro amounted to EUR 722, while average salary without taxes and contributions amounted to EUR 484. In relation to the previous quarter, average salary and average salary without taxes and contributions increased by 1.8%.

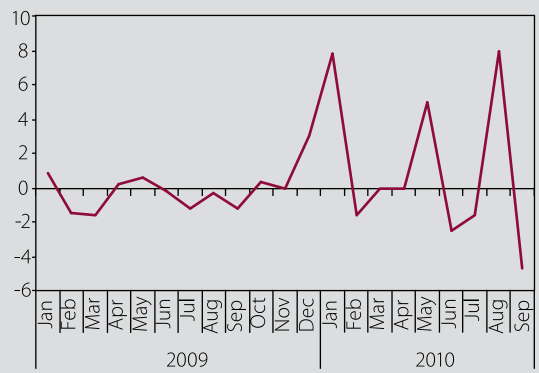
Taking into account the consumer prices, i.e. salaries in real amounts, it can be concluded that real salaries in Q3 2010 declined in July and September, while the increase was recorded in August only.

Graph 28 – Average salaries without taxes and contributions in Montenegro



Source: Monstat

Graph 29 – Real wages (monthly rate)



Source: Monstat

At the end-September 2010, households' loans amounted to EUR 865.2 million being by EUR 85.1 million or 9% lower in relation to the same period of 2009, or by EUR 54.1 million or 5.9% lower than at end-2009. In the first three quarters of 2010, households' loans declined at the average monthly rate of 0.7% (the average monthly decline rate in 2009 was 1%).

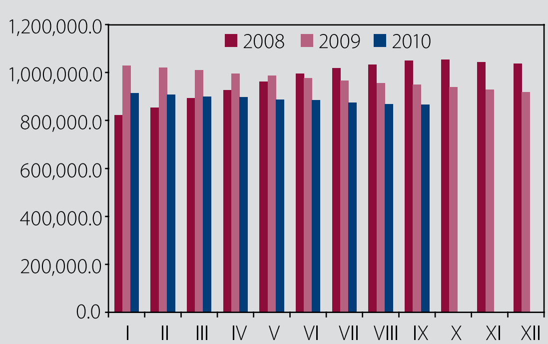
The decline of households' loans continued the average indebtedness trend of this sector. Thus, the debt per capita amounted to 1.373 EUR at the end of Q3 2010, and it was by 5.9% lower in relation to 2009-end.

Household loans at MFIs amounted to EUR 47.5 million at end-September 2010. In relation to the same period of 2009, household loans at MFIs declined by EUR 20.4 million or 30.1%, while they were by EUR 17.7 million or 27.1% lower in relation to end-2009.

Household deposits amounted to EUR 912.4 million at the end of the Q3 2010, which is by EUR 142.5 million or 18.5% more in relation to the same period of 2009 and by EUR 68.5 million or 8.1% more than at end-2009.

As a result of decrease in loans and the household deposits increase, loans to deposits ratio in this sector improved amounting to 0.95 at end-September 2010 (it amounted to 1.09 at end-2009). As a result, the net household savings amounting to EUR 47.2 million was recorded at end-September 2010. At end-September 2009, households' net debt to banks amounted to EUR 180.4 million while it amounted to EUR 75.4 million at the end-2009.

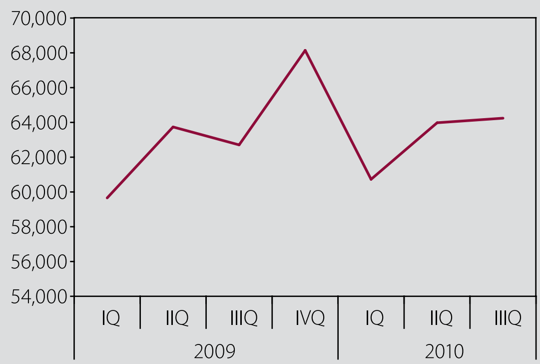
Graph 30 – Household loans, in EUR thousand



The balance of payments statistics shows that the remittances increased in the Q3 2010 in relation to the previous quarter, as well as a minor increase in inflow from salaries and compensations to employees.

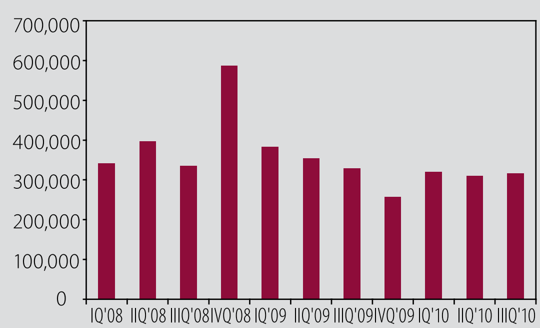
The total demand of household sector by quarters shows minor decline of demand in Q3 in relation to the Q1, and slightly higher demand than in the Q2. The significant growth in demand was recorded in relation to the last quarter of 2009.

Graph 31 – Remittances, EUR thousand



Source: CBM

Graph 32 - Households' demand, EUR thousand



3.1.2. Budgetary Analysis

Consolidated public consumption

In the first nine months of 2010, consolidated public consumption, according to the assessment of the Ministry of Finance, amounted to EUR 914.5 million or 30.2% of the estimated 2010 GDP. It was by 7.7% lower in relation to the same period of 2009 and by 18.2% lower in relation to the plan. The recorded level of public consumption was financed from tax revenues at the amount of EUR 561.3 million, contributions EUR 237 million, fees EUR 66.5 million, taxes EUR 20.8 million, other revenues EUR 32.1 million, and revenues from loan repayments EUR 2.4 million.

Current public revenues[2] amounted to EUR 920.1 million or 30.4% of estimated GDP. In the first nine months of 2010, current budget revenues were by 3.7% lower in relation to the plan, while in relation to the same period of 2009 they were by 4.1% lower. The decline of current revenues was the result of evident decline in tax revenues from tax on income and the VAT.

Tax revenues with 61% recorded the highest share in the structure of current revenues, followed by contributions (25.8%), while other revenues had the share of 13.2%.

The decline of consolidated public expenditures in the first nine months of 2010 was the result in the decline of almost all categories (current and capital expenditures, transfers to institutions, individuals, NGOs and public sectors as well as of reserves, interest and transfers for social protection), while expenditures for granted loans increased. Current budget consumption (consolidated public expenditures minus capital expenditures of the current budget with funds, local government and capital budget) amounted to EUR 820.7 million or 27.1% of GDP and it was by 11% lower in relation to plan, while it was by 1.1% lower in relation to the same period of 2009.

In the structure of public expendtures by economic classification, the highest share was in transfers (49%), followed by current expenditures, capital expenditures and other expenditures with the respective shares of 39.3%, 10.3% and 1.4%.

[2] *Total current public revenues include revenues of the budget, state funds and local self-administration.*

In the period January – September 2010, **public spending** recorded surplus amounting to EUR 5.5 million.

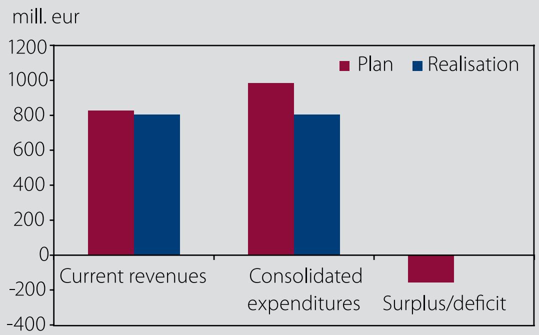
Montenegrin Budget

In the period January – September 2010, Montenegrin Budget including state funds, according to Ministry of Finance preliminary data, recorded total revenues amounting to EUR 845.4 million. Current revenues amounted to EUR 803.8 million or 26.6% of estimated GDP, revenues from borrowings and loans from domestic and foreign sources amounted to EUR 37.9 million or 1.2% of estimated GDP, while revenues from privatization and donations amounted to EUR 4 million or only 0.1% of GDP. Current budget revenues were by 2.8% lower in relation to the plan for the period January - September 2010, as well as by 3.6% in relation to the same period of 2009.

Tax revenues recorded the highest share in the structure of current revenues (62.7%), followed by contributions (29.7%), fees (2.6%), duties (2.0%), other revenues (2.9%) and repayment of loans granted (0.3%). Tax revenues amounted to EUR 504.2 million and were by 7.9% lower than planned. The highest tax revenues came from VAT, excise and custom duties amounting to EUR 413.5 million or 51.4% of current budget revenues. In relation to plan for the reporting period, revenues from contributions increased by 15.5%.

Consolidated budget expenditures (total expenditures minus debt repayment) in the Q3 2010 amounted to EUR 803.8 million or 26.6% of GDP, being lower by 18.2% in relation to the plan and by 4.4% in relation

Graph 33 - Budget of Montenegro with state funds, January – September 2010



Source: Ministry of Finance

to the same period of 2009. In the structure of budget expenditures, current expenditures recorded the highest share of 39.8% or EUR 320.1 million, of which 20.9% referred to gross salaries.

Tax revenues declined by 1.3%, compared to the Q3 2009, resulting from lower revenues from taxes on legal persons' profit (60%) and from revenues from personal income tax (6%) due to changes in legislation. Other tax revenues increased: VAT (6.2%), custom duties (11%), excise duties (0.9%) and other taxes (28.1%). In relation to the plan, all categories of revenues from taxes, except tax on personal income declined. In relation to Q3 2009, increase in current revenues categories was recorded under contributions (11.2%) and fees (0.4%), while compensations, other revenues and receipts from loan repayment recorded decline by 4.5%, 12% and 94.8%, respectively. Expenditures were by 4.4% lower in relation to Q3 2009, being by 18.2% lower in relation to the plan.

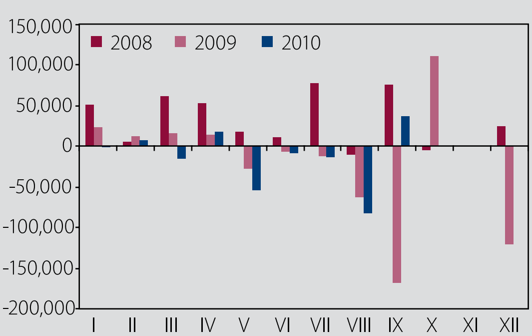
In the first nine months of 2010, the Montenegrin Budget recorded deficit amouting to EUR 0.02 million.

3.1.3. Economy

Due to the absence of corporate sector investments data, net indebtedness of the corporate sector can be used for demand approximation.

Loans granted to the corporate sector were substantially higher than their deposits in the first three quarters of 2010. Net debt of the corporate sector at end-September 2010 was by 14.2% lower in relation to September 2009 or 13.4% in relation to end-2009. The structure of loans granted

Graph 34 - Net indebtedness of the corporate sector, monthly change, EUR thousand



to the corporate sector shows that the share of long-term loans in total loans granted to this sector amounted to 69.9% at the end of the reporting period, whereby loans with maturity over 3 years made up 46% of total loans granted to the corporate sector. This structure of loans points to their dominant use for increasing the economic activity.

3.1.4. External Demand and the Current Account

Gradual recovery of economic activity had positive effects to current account trends. It recorded decline in current account deficit and the increase in surplus at the services and current transfers sub-accounts. In the first nine months of 2010, current account deficit was by 11.6% lower in relation to the same period of 2009 amounting to EUR 502.6 million as the result of decline in external trade deficit.

Total Montenegrin external trade amounted to EUR 1,484.2 million in the first nine months of 2010, which is by 3.7% higher than in the same period of 2009. In the reporting period, imports amounted to EUR 1,235.3 million or 1.5% more than in the same period of 2009. At the same time, Montenegrin exports amounted to EUR 248.9 million, being by 16.1% higher. Coverage of imports by exports amounted to 20%. External trade deficit amounted to EUR 986.4 million or 1.7% less than in the same period of 2009. Coverage of external trade deficit by surplus recorded at other current account's sub-accounts was 49% and it was by 5.7 percentage points higher in relation to the same period of 2009.

The increase in external demand in the Q3 2010 affected positive trends at the services sub-account. In the first nine months of 2009, services sub-account recorded surplus amounting to EUR 431.9 million, or 11.1% more in relation to the same period of 2009. Revenues from services amounted to EUR 661.2 million and were 8.5% higher in relation to the same period of 2009, while expenditures amounted to EUR 229.3 million, being 4% higher than in the first nine months of 2009. Positive result was recorded in transport, where the surplus increased by 66.7%, and travelling with the surplus increase by 6.4%, mostly due to decline in expenditures (10.7%), and increase in revenues (5.3%). Deficit in other services (construction, other business services, computing, insurance, etc.) increased by 1.7%.

The income sub-account recorded deterioration, with the deficit amounting to EUR 27.7 million, in relation to EUR 14.3 million recorded in 2009. Factor income revenues amounted to EUR 116 million or 3.7% less in relation to 2009. Total expenditures amounted to EUR 143.7 million, recording a 6.6% increase. The most of expenditures were due to interest repayments (72.9 million or 7.2% more than in the same period of 2009), while expenditures from investments into ownership (paid dividends) amounted to EUR 64.5 million.

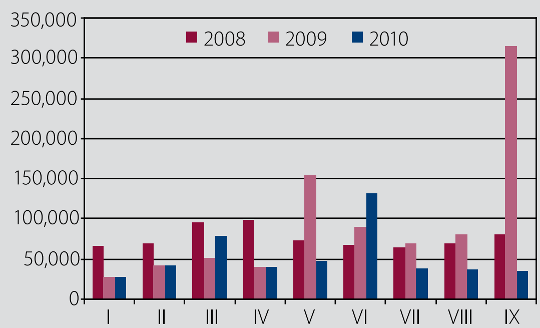
Current transfers sub-account recorded surplus amounting to EUR 79.7 million or 32.9% more than in the same period of 2009. Total transfers to Montenegro amounted to EUR 102.4 million or 21.7% more than in 2009, of which EUR 17.4 million referred to the state sector, while EUR 85 million referred to other sectors. At the same period, the outflow from current transfers amounted to EUR 22.7 million or 5.9% less than in the first nine months of 2009.

Capital-financial account recorded net inflow at the direct and portfolio investments sub-accounts, while other investments sub-account recorded net-outflow. Total FDI inflow in the period January – September 2010 amounted to EUR 397.9 million. In relation to the same period of 2009, net FDI inflow declined by 48.8% but it should be noted that, compared to 2009, when high amount of funds was invested into EPCG, there were no larger privatizations in 2010.

Total FDI inflow in Montenegro amounted to 478.3 million. The inflow from investments into ownership amounted to EUR 355 million, while inflow from investments in the form of the intercompany debt amounted to EUR 106.2 million. Inflow from cash withdrawal invested by residents abroad amounted to EUR 17 million. In the period January-September 2010, total FDI outflow amounted to EUR 80.4 million or 13.2% less than in the same period of 2009. The highest outflow was recorded from residents' investments in foreign banks and companies at the amount of EUR 47 million, while the outflow from withdrawal of assets invested in domestic banks and companies amounted to EUR 33.4 million.

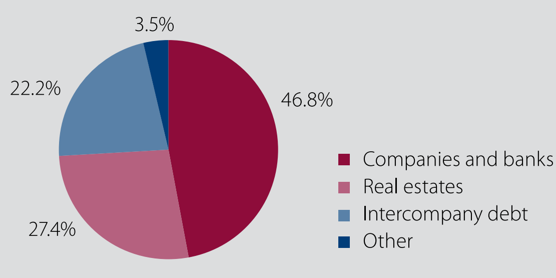
In the first nine months of 2010, **portfolio investments** sub-account recorded net inflow amounting to EUR 187.6 million, as the result of the state indebtedness at the global market by issuing Eurobonds amounting to EUR 200 million. In the first nine months of 2010, **other investments** sub-account recorded net outflow amounting to EUR 429.4 million, being by 10.2% higher in relation to the same period of 2009. Banks reduced their liabilities for loans taken by EUR 43.8 million. The indebtedness of state was significantly lower than in 2009, while the private sector indebtedness increased. The outflow from withdrawal of funds from loan taken from the private sector amounted to EUR 182.9 million, which is significantly more than in 2009 (EUR 57.6 million), while the outflow from repayment of principal amounted to EUR 117.5 million or by 94.6% more than in the same period of 2009.

Graph 35- FDI inflow, in EUR thousand



Source: CBM

Graph 36 – Structure of FDI inflow in the period January – September 2010



Source: CBM

3.2. SUPPLY AND PRODUCTION

In the first nine months of 2010, industrial output increased by 9.6% in relation to the same period of 2009. Monthly data on industrial output in the Q3 2010 have shown the decline in July (-14.3%) and August (-14.2%), while recording increase in industrial output by 27.9%. The comparison of the first nine months of 2010 with the same period of 2009, shows the respective increase of output in mining and quarrying sector and electricity, gas and water supply by 36.2% and 48.1%, while the decline was recorded in manufacturing industry (-11.4%).

In the first nine months of 2010, 1,203.1 thousand tourists visited Montenegro, which was by 5.1% more than in the same period of 2009. The number of domestic and foreign tourists recorded respective increases by 8.4% and 4.6%. The number of overnights in the observed period amounted to 7,729.4 thousand or 5.9% more than in the same period of 2009.

In the first nine months of this year, total wood production amounted to 201 thousand m^3 or 22.1% more than in the same period of 2009.

According to preliminary data, the value of executed construction works in the first nine months amounted to EUR 157.5 million and it was by 4.5% lower in relation to the comparative period. The decline in construction activity, measured by the effective working hours, amounted to 7.5%.

Road passenger transport recorded 21.9% decline in relation to the same period of 2009. Railway passenger transport declined by 6.6%, while air passenger transport increased by 20.4%.

In the first nine months, road freight transport declined by 16.9% (measured by tonne kilometres), while air freight transport and railway freight transport (measured by tonne kilometres) recorded respective increases by 126.7% and 53.8%.

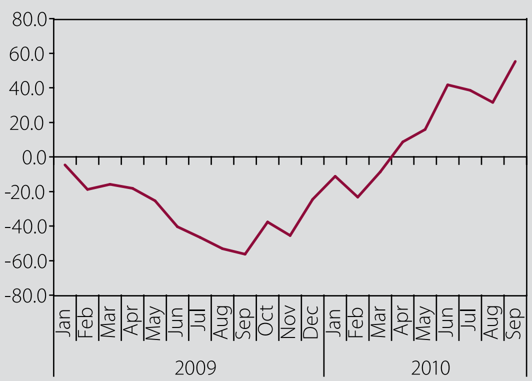
Total turnover in harbours amounted to 1,339.5 thousand tonnes in the first nine months of 2010 or 15.9% higher than in the same period of 2009, whereby exports increased by 31.4% and imports decreased by 8.5%.

3.3. STOCK EXCHANGE INDICES

Since the beginning of 2010, all three indices have recorded decline with slight oscillations. At end-September 2010, Moste and NEX20 recorded respective declines by 24.2% and 5% as well as NEXPIF by 18.8% in relation to end-2009.

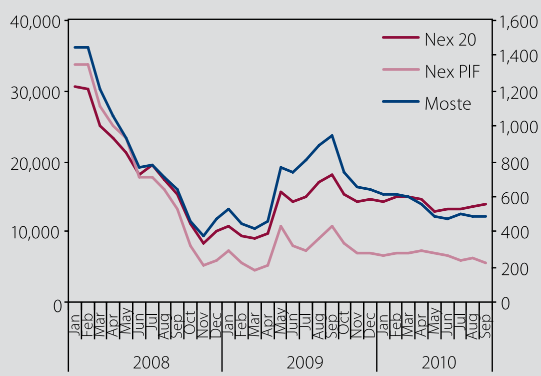
In relation to end-September 2009, all three indices recorded decline. Moste recorded a absolute decline of 464.55 index points or 49%, NEX20 declined by 4,205.78 index points or 23.3%, while NEXPIF decreased by 4,960.95 index points or 46.5%.

Graph 37 - Industrial output, annual growth rate



Source: Monstat

Graph 38 - Nex Montenegro and Montenegro stock exchange indices (NEX20 i NEX PIF- left scale and MOSTE- right scale)



Source: Montenegro stock exchange and Nex Montenegro stock exchange

In relation to the end of Q2 2010, NEXPIF declined by 13.2%, while MOSTE and NEX20 recorded respective increase of 0.9% and 6.2%.

Compared to their maximum historical values (recorded in 2007) at end-September 2010, indices decreased: Moste – 5.1 times, NEX20 – 3.5 times, and NEX PIF – 8.9 times.

Table 3 – General Data on Indices

	MOSTE		NEX 20		NEXPIF	
Value as of 30 September 2010	484,42		13.870,26		5.703,72	
Absolute change in 2010	-154,57		-726,62		-1.316,94	
Starting index value	100,0	March 2003	1000,00	March 2003	1000,00	March 2003
Maximum value in 2010	623,92	18.02.2010.	15.164,99	01.03.2010.	7.438,70	22.04.2010.
Maximum historical value	2.455,4	07.05.2007	48.617,88	07.05.2007.	50.780,54	17.08.2007
Minimum historical value	94,8	23.06.2004	918,57	14.04.2003	959,53	02.04.2003
Growth (decline) in 2010	-24,2%		-5,0%		-18,8%	

Source: Montenegro Stock Exchange and Nex Montenegro stock exchanges

4. MONETARY POLICY

In the first three quarters of 2010, there were neither amendments to existing decisions nor enacting of new decisions regarding the CBM monetary policy instruments.

5. INFLATION FORECAST IN 2010

The "Fan Chart" for the forecast of inflation in Montenegro is the graphic presentation of the distribution of projected inflation forecasts expressed by the Consumer Price Index (CPI). Threfore, instead of identifying some specific points, the Fan Chart, through the distribution of forecasts, takes into account any potential risks and uncertainties that could affect the inflation in the coming period. The purpose of the Fan Chart is to point out and take into consideration any existing uncertainty in real economy, consequently reflecting on the inflation rate growth (higher prices of fuels, increase/decrease in foreign trade deficit).

The Fan Chart of Montenegro for 2010 is based on the following three assessment components:

1. **Values of the central projection**: The values of the Fan Chart central projection are derived from the ARIMA model, and also by applying the Tramo/Seats simulation in order to obtain the most efficient model.
2. **Level of uncertainly** - determines the Fan Chart width. The level of uncertainly ratio is a result of analytic analysis and calculation of relative effects of potential internal (expected increase in electricity prices) and external shocks (oil prices) that may occur in the Montenegrin economy in 2010.
3. **The Fan Chart curve**: following the curve showing the level of distribution of the projected inflation, the Fan Chart adjusts to the forecast in the sense whether the values of the central projection forecast "overestimated" or "underestimated" the inflation rate movements. The position of an inflation distribution average value will depend on this direction.

Fan Chart Central Projection - ARIMA Model for 2010 and the first nine months of 2011

For the purpose of Fan Chart preparation, the ARIMA (Auto-Regressive Integrated Model with Variable Averages) model of temporal series of inflation in Montenegro was developed and expressed by the Consumer Price Index[3].

ARIMA model was used for the purpose of short-term forecasts, whereby an iteration of 382 ARIMA models was prepared, ranked according to their respective efficiency and quality diagnostics.

For the first time, the time series of the Consumer Price Inxdex was used for the forecast, which shall be the basis for forecasting the inflation trends in the coming period.

Following the Tramo/Seats[4] procedure, 4 breaking points were identified (using Chow Test for identification) in the previous series corresponding

[3] *A detailed explanation of the ARIMA model of Montenegro is given in the working study of the Central Bank of Montenegro No. 11 "Inflation Forecast: Empirical Research of Retail Price Index Movements in Montenegro in 2007 –Application of ARIMA Model", 2007.*

[4] *Tramo program represents a program for model assessment and design (mostly ARIMA) having problems with a lack of data, data errors and the presence of a large number of extreme data in time series. SEATS program is used to extract the elements of time series than cannot be directly extracted; those elements are extracted as a trend, season, cycle, and occurrence of Easter or Christmas effect, which allows a superior analysis and projection of ARIMA model. (For more details, please see the manual Tramo and Seats (Gómez and. Maravall, 1996).*

significantly to the changes in the inflation structure from 2001 to the end of first ten months of 2010, which was included in the ARIMA model through dummy variables.

Results of ARIMA projection were compared to the values of forecasted values by Tramo/Seats procedures expressing substantial level of compatibility.

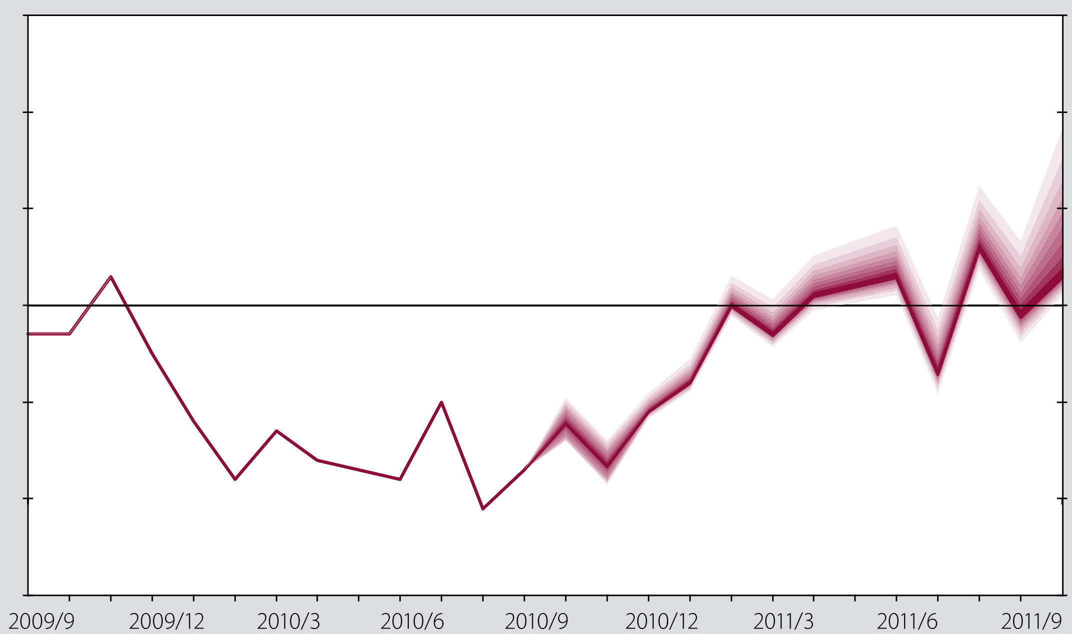
The monthly forecasts value was used as the value of central projection of the Fan Chart of CPI for 2010. The resulting values represented a distribution style, i.e. the values with the highest frequency in this time series distribution.

The mean value of the produced model was 1.2, while the curve ratio varied from -0.35 to 1.35, and the values of standard deviations amounted to σ2=0.34 or σ1=0.12 showing, as in the previous two years, that the central span was located in the lower part of the distribution, and that the corresponding range of uncertainty was concentrated to higher levels of inflation, shown in the graph as a "thicker" range concentrated above the central "dominantly red" range.

Fan Chart presents the inflation distribution with 90% probability. The central projection is usually in the deepest shade of the Fan Chart, i.e. in the central 10% of probability.[5] The Fan Chart has an equal number of bands (eight) on either side of the central band whereby each band is of the same colour, both above and below the central band, cumulatively takes the inflation projection to the next 10% of probability. As the uncertainty degree grows over time, the Fan Chart spreads.

The Fan Chart showing the inflation in Montenegro, based on an ARIMA model assessment and Tramo/Seats simulation for 2010 and the first ten months of 2011 shows 90% probability that the inflation, measured by

Graph 39 – Projected CPI of Montenegro for 2010 and the first ten months of 2011



[5] *The mode value (central projection) can always be found in the deepest band shade, but in case of a heavily unbalanced risk, the central projection may not cover either of these values (Britton, E, Fisher, P.G. and Whitley, J.D. (1998), 'The Inflation Report projections: Understanding the Fan Chart', Bank of England, Quarterly Bulletin, 38, pp. 30–37)*

CPI, will range between 0.1% and 3.8%. To wit, the uncertainty increases as the time horizon for making a projection increases, consequently widening the range of the forecast. The 90% probability shows that the inflation will range from 0.8% to 1.1% in the end-2010.

The central Fan Chart projection, referring to the darkest area on the chart represents a probability range of 10%, forecasting that the inflation in 2010 and the first nine months of 2011, measured by Consumer Price Index, will range between 0.33% and 2.38%, depending on the number of months covered by the forecast. The 10% probability shows that the inflation will range from 0.9% to 1% in the end-2010.

Observed from the economic aspect, according to the model forecast, it is realistic to expect that the inflation will be low, primarily due to the economic growth slow down, lower aggregate demand, unemployment growth, stagnation in earnings and available income. However, the Q3 recorded significant economic recovery which will, due to the influence to the aggregate demand, primarily of the pricate sector (which is expected to recover in 2011) have positive effects to the growth in core inflation and total inflation in 2011, measured by the CPI.

The external assumptions referring to the calculation of the uncertainty level were based on the statistical approach:

1. The price of oil and oil derivatives will not exceed +15% of the price in September 2010;
2. The price of aluminium will not decline more than 10% in relation to the price in September 2010;
3. Real estates prices will not decline more than 2% in relation to the last quarter of 2009;
4. Real wages increase is up to 6%;
5. The increase in food products will not exceed 15% in 2010;
6. There will be no significant increase in taxes or excise duties.

6. EXPECTED INFLATION IN 2010

The Q3 2010 was more favourable in relation to the previous two quarters. The increase was recorded in the industrial output, forestry, some segments of transport, which points that the Montengrin economy may be in the growth zone by the end of 2010.

Annual inflation rate is still extremely low. Still, consumer prices in Q3 rose by 0.4% in relation to the previous quarter. The inflation in the first nine months was 0.4% in relation to the same period of 2009, and by 0.2% in relation to the 2009-end. The annual core inflation was lower than total inflation by 0.05 percentage points and it amounted to 0.26%.

The fact that many surveyed companies have planned the increase in the volume of activity in relation to those expecting reduced activities in the coming period, as well as that 52% of surveyed companies have have planned new investments, indicates that the economic activity growth may be expected, which would act anti-inflatory.

In Q3, prices of food grew and their increase may be expected in the coming period, due to instability in the global prices of many agricultural products, especially cereals. The increase in oil prices may also be expected, which will largely depend on the economic recovery by the end of year.

As regards the expected inflation rate, many surveyed companies and banks expected higher inflation rate in 2010 as compared to 2009. Although it is less likely to fulfil the expectation, it points to the slightly higher inflation rate in the last quarter in relation to the average in the first three quarters. The economic activity recovery, higher prices of food, possible increase in the prices of oil at the global market and the growth of domestic aggregate demand will surely make pressure to the increase in prices. However, a low inflation rate should be expected in 2010.

Model-based assumption shows 10% probability (central range) that the inflation rate in 2010 will range between 0.9% and 1%. Our experts' assessment is very similar to the model assumption as well as to the forecast from June, with the only decline in the infterval of the expected inflation rate.

Table 4 – Estimated inflation rate

Optimistic assessment	Realistic estimation	Pessimistic assessment
0.6%	0.9%	1.5%

The estimate is based on the following assumptions:

- The prices of oil and oil derivatives will not change by more than ±5% until the end of 2010
- There will be no changes in controlled prices until the end of 2010.
- Growth of real wages will not increase over 5%;
- The increase in food products will not exceed 10% in 2010 and
- There will be no misuse of the dominant position at the market.

Deviation of any of these indicators would require revision of the assessment.