CENTRAL BANK OF THE REPUBLIC OF ARMENIA

The Monetary Policy Program
of the Republic of Armenia

Quarter III, 2009

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ACTUAL INDICATORS AND DEVELOPMENTS IN QUARTER II, 2009

Q2 2009 actual indicators and developments

The main factor that determined the inflation behavior and monetary policy directions in the second quarter of 2009 was faster rate of economic decline. Despite the dram depreciation and some spillover of inflationary pressures from international markets in early March and the rise in the main utility service tariffs since April, the domestic inflationary environment has been generally at a low level under faster-than forecasted shrinkage of GDP. Though the rate of inflation, affected by the said factors, grew considerably in relation to the previous quarter, it however stood nearly 1 percentage point below the forecast, resting with the lower border of the target.

As a result of the above developments, in the second quarter of 2009 inflation was 4.5 percent, whereas the 12-month inflation indicator was 3.6 percent, growing by 2.6 percentage points against the same indicator recorded in the previous quarter. During the quarter, prices of food products (alcohol and tobacco included) have grown by 2.7 percent, (with 1.4 percenatge point contribution to inflation), prices of non-food products, by 7.5 percent (with 1.2 percenatge point contribution to inflation), and service tariffs have risen by 6.2 percent (with 1.9 percenatge point contribution to inflation). Inflation during the quarter has been driven by 39.4 percent increase in fruit price (with 1.0 percenatge point contribution to inflation); 20.5 percent increase in petrol price (with 0.5 percenatge point contribution to inflation); 16.3 percent increase in medicaments price (with 0.3 percenatge point contribution to inflation); and 18.3 percent rise in housing and public utility service tariffs (with 1.3 percenatge point contribution to inflation).

In the second quarter of 2009, core inflation was 2.1 percent[1] whereas the 12-mnth core inflation remained almost unchanged, around 3.4 percent, in relation the previous quarter.

External environment[2]

The declining rates of the global economy somewhat slowed in the second quarter of 2009, though the timing within which the economy would recover still remain too uncertain. According to the IMF estimations[3], the global economic downturn in 2009 will make up 1.4 percent, yet some 2.5 percent economic growth is forecast for 2010. In the second quarter of 2009 too, all countries carried on pumping liquidity into their economies through quantitative easing and expansionary fiscal policies, with the main purpose to regain stability in financial markets and boost up aggregate demand.

With global economic decline persisting, inflationary environment of the external sector remained weak, although prices of some commodities have increased during the quarter. This was explained by slightly improved expectations, the US dollar depreciation as well as factors specific to any given market.

In the second quarter of 2009, compared with the previous quarter, there has been a rise in international oil prices, with Brent crude oil having averaged USD 59 a barrel [which dropped by 51.7 percent year-on-year but rose by 31 percent in relation to the previous quarter]. The increase was determined mainly by optimistic expectations for the global economy recovery as well as OPEC's consistent policy now supporting a limited supply strategy.

In the second quarter of 2009, the copper price at the London Metal Exchange averaged USD 4690 per ton, having grown by 36 percent quarter-on-quarter, whereas the year-on-year decline has been 44.5 percent.

The gold price in the second quarter averaged USD 922, having grown by 1.5 percent against the previous quarter. The gold price has not fallen in annualized terms as well, primarily because of its being as a reserve asset.

There has been a certain rise also in prices of food products during the second quarter. The grain price at the Chicago Board of Trade averaged USD 6.8 a bushel. The rice price has not changed in relation to the previous quarter, making up round USD 12.5 per short hundredweight (45.3 kg).

There has been a considerable increase in the sugar price, which averaged USD 15.6, having grown by 17.7 percent against the previous quarter, whereas its year-on-year increase has been 27.6 percent. Increased demand in India (because of poor produce domestically) is the main driver of the rise in sugar price. The butter price has dropped nearly by 6.5 percent in relation to the previous quarter.

In financial markets in the second quarter of 2009, the US dollar exchange rate depreciated nearly by 5 percent quarter-on-quarter, having averaged 1.36 vis-à-vis Euro, whereas the US dollar appreciation has been 14.7 percent year-on-year.

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[1] *The core inflation calculation methodology developed by the Central Bank is detailed in the CBA Review (Q1, 2008). The paper regularly publishes core inflation indicators.*
[2] *The source of all numerical data is Bloomberg Information System. .*
[3] *IMF World Economic Outlook Update, 08/07/09.*

Driven by continued global economic crisis, the US Federal Reserve System remained committed to its 'quantitative easing' policy. In the meantime, the 3-month US dollar LIBOR kept on dropping to 0.85 percent. In the second quarter of 2009, the European Central Bank has lowered its interest rates by 0.25 percentage point to have set them on a 1 percent level.

So, albeit some rise in international prices recorded in the second quarter of 2009, these however are considerably at low levels, as opposed to the price levels observed in recent years, and are maintaining a low inflationary external environment.

Aggregate Supply[4]

The negative impact of the global economic crisis deepened in the second quarter of 2009, thus leading to an economic decline of around 22.9% (during the period of January-June the economic decline was 16.3%). Recession was experienced in all sectors of the economy, and most notably, in the industry and construction. In particular, value added decreased by around 13.2% in the ***industry*** primarily due to the reduction of volumes of metal ore extraction (by 9.1%), chemical industry (by 50%), production of construction materials (by 29.7%) and jewelry products (by 56.1%) resulting from both a slowdown in construction and deceased external demand. In light of these developments the demand in electricity and natural gas dropped, and, subsequently, a decline of 9.3% was traced in the energy sub-sector.

In the ***construction sector*** the value added declined by around 60.6% due to reduced capital inflows and population incomes. Basically, in January-May construction activities financed by individuals and businesses declined by 68.7% and 37% accordingly.

In the sectoral breakdown of the construction area the volumes of housing, as well as building activities in the transport and trade sectors fell significantly.

In the ***agriculture sector*** the value added declined by 1.1% due to decreased volumes of animal production. In particular, in the animal production sub-sector a decrease was traced in production of meat and milk (by 5.9% and 10.3% accordingly in January-May), and egg production increased by 17.8%. On the other hand, during the quarter plant production grew to some extent.

In the ***services sector*** the value added declined by 1.1% primarily because of reduced trade volumes resulting from a decrease in car trade (by 50.2%). The decline traced in the sector of other services was mainly due to reduced financial operations and transport services.

Labor Market[5]

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[4] *The indicators for sectors of the economy and GDP growth for QII, 2009 represent estimates which are based on the actuals for January-June. In the Gross Supply and Gross Demand sections the y-o-y growth rates are presented unless otherwise indicated.*

[5] *The labor market data represent the CBA estimates which are based on actual indicators for April and estimates for May and June.*

In the second quarter of 2009, despite the high rates of economic decline, the average growth of nominal wages in the economy was approximately 4.0% which resulted from a certain upward adjustment of wages in budget-supported organizations, as well as the existing rigidities of wage adjustments in the labor market. Certain persistency were also observed in unemployment, and as a consequence, the average unemployment rate for the quarter grew only by year on year 0.6 percentage points (6.9%) compared to the previous year. As a result, labor productivity considerably fell during the quarter (by around 17.0%).

These developments led to a certain growth of unit labor costs, and in the consumer market inflationary pressures of around 1-1.5% were exerted from the labor market.

Aggregate Demand[6]

According to the CBA estimates, in the second quarter of 2009 real private spending fell by around 19.2% in response to decreased population incomes, namely, external remittances, uncertainties in the investment environment and negative expectations about the economic activity. In the structure of private spendings real investments decreased by more than 48.0%, and consumption fell by around 8.0%.

During the second quarter the private sector spending had a constraining effect on inflation. According to the CBA estimates, the assessed level of real private spending was by 9-10% below its potential level. This gave rise to deflationary pressures in the consumer market by causing the inflation rate to fall by 2.7-3.0 percentage points.

During the second quarter of 2009, in light of the developments in the world and domestic economy, no material changes occurred in items of the current account, and the trends of the first quarter continued. The trade balance deficit continued to decrease: export of goods and services[7] fell by y-o-y 33.8% while import of goods and services[8] dropped by y-o-y 28.7%. Exports declines were primarily due to the sustained low level of metal prices in global markets which resulted in high rates of decline for the main commodity groups. In the second quarter the decrease in real exports of goods and services was y-o-y 6.4%.

The reduction of imports of goods and services was conditioned by the low inflationary environment in the world markets, and the continuous decline of the domestic demand. Real imports of goods and services decreased by y-o-y 22.7%.

In terms of total remittances of individuals effected through the banking system – these include commercial and non-commercial remittances – in the second quarter of 2009 the decrease of net inflow was y-o-y 22.0%. In addition, the decrease of net inflow of non-commercial remittances was y-o-y 35.5%. This was primarily due to the deepening recession in Russia[9] (according to estimations, in the second quarter of 2009 Russia's GDP fell by 10.6%) and new pessimistic expectations for development at the year-end.

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[6] *The official data on private sector consumption and investments are as of Q1, 2009.*
[7] *In January-June the volumes of export of goods (FOB) fell by 45.9%. The quarterly indicators for services are forecasts.*
[8] *In January-June the decline of imports of goods (SIF) was 27.5%. The quarterly indicators for services are forecasts.*
[9] *The bulk of individuals' remittances is received from Russia.*

In light of the above flows and declining GDP, the current account to GDP ratio, according to assessments, deteriorated. Based on estimations for H1, 2009, the mentioned ratio is 15.2% versus 12.3% recorded for the same period of the previous year.

Consolidated budget

In the first six months of 2009, the fiscal policy's impact on aggregate demand has been expansionary[10], which is fully attributable to the creation of expansionary expenditures impulse. The state budget expenditures have increased by 8.8 percent in comparison with the first six months of the previous period. Relative to the same period of the previous year, the taxes have declined by 18.3 percent (without account of social security charges), while a neutral impulse has been recorded based on the six months' results. The creation of expansionary expenditures impulse and neutral incomes impulse is mainly attributable to e considerably low GDP level observed over the first half of the year.

To sum up, the fiscal policy's impact on aggregate demand has been 3 percent expansionary, according to the six months' results, which is mostly determined by more expenditures and greater reduction of GDP in comparison with the same period of the previous year

Money and credit

Following the downfalls observed over the first quarter of 2009, the monetary indicators showed patters of stabilization in the second quarter. This was determined by new equilibrium for the exchange rate created in the foreign exchange market and a policy of quantitative easing and interest rate cuts which the Central Bank carries out in a consistent manner. Particularly, during the second quarter, the Central Bank lowered the Repo Rate by 1.5 percentage points (from 7.5 percent in April to 6 percent in June), which has reflected in the reduction of interest rates in the dram money market since May. Thus, in the period May-June, the interest rates of interbank repo rates and the yield of short-term treasury bills have dropped by round 0.86 percentage point and round 0.71 percentage point, respectively.

In a situation like this, the monetary indicators have grown over the second quarter, as was opposed to the previous quarter. As well as broad money has increased by 3.9 percent quarter-on-quarter, of which deposits have grown by 6.8 percent and currency in circulation, by 11.3 percent.

Driven by the above said factors, unlike its rising in the previous quarter, the dollarization in this quarter, too, behaved in a steady manner. A good indication of this is that foreign currency-denominated deposits have grown by 3.3 percent quarter-on-quarter (in the previous quarter, the growth was 37.6 percent quarter-on-quarter).

Despite the slowdown in lending during the quarter (by 4.5 percent quarter-on-quarter), there was some revival observed in the credit market at the end of the quarter,

[10] *The fiscal policy's impact on aggregate demand is estimated through the fiscal impulses. Pursuant to the current methodology for fiscal impulses, the GDP used in the revenues impulse calculation is the actual nominal GDP and the GDP in the revenues impulse calculation is the potential GDP.*

which was reflected in both falling interest rates on lending and growing volumes of loan origination.

Upcoming 12-month period forecasts

External environment[11]

In the times of global economic crisis, the world economic growth in 2009 is expected to be a negative value (-1.4 percent) while prices in commodities markets will remain on the same level, according to the IMF forecasts. Particularly, international oil prices are expected to be on average USD 60-70 a barrel for 2009 and for the first half of 2010, whole the copper prices will be in the range of USD 4500-5000 per ton. The price of gold as a reserve asset will be kept at a higher level. Prices of food products are expected to grow slowly. Particularly, grain prices are expected to grow continuously in the course of the next 12-month period, up to USD 6.8 a bushel. Some price increase is expected in the sugar market as well. There is expectation that countries would carry on conducting stimulating fiscal and monetary policies to improve the situation in credit markets and enhance aggregate demand. In the yearend of 2009 and beginning of 2010, when there is likelihood that the situation with the world economy would improve, economic growth and price indicators are expected to recover slowly. The IMF estimates that economic growth in 2010 will be 2.5 percent; economic growth in developed countries will be 0.6 percent (0.8 percent in the USA, -0.3 percent in Euro zone, 1.7 percent in Japan), and economic growth in developing countries will be 4.7 percent (8.5 percent in China, 6.5 percent in India, 1.5 percent in Russia). Nonetheless, there is still a great deal of uncertainty with regard to these forecasts as risks both upside and downside are likely to emerge.

[11] *The forecasts of external sector have been based on the information provided from the IMF, World Bank, The Economist, Global Insight, Financial Times, US Department of Agriculture, РосБизнесКонсалтинг and other sources.*

Aggregate Supply

Based on the revised forecasts – and primarily the adjustments which were made taking into account the decline in the construction and services sectors which have relatively large shares in the GDP - it is anticipated that in 2009 the economic decline will be approximately 12-15%.

It is expected that in the first six months of 2010 the sectors of the economy will recover their real value added growths in view of both the economic decline in the first quarter of 2009 and the expansionary programs undertaken by the Armenian government. As a result, it is anticipated that in the first six months of 2010 the economy will recover: according to the CBA estimations, the economic growth will be approximately 0.5-2%.

The economic growth risks are binary. Furthermore, downside risks prevail which depend on the level of the domestic demand which was lower than expected due to the continuous decline of the global demand, as well as on the pace of the programs to be launched by the government of Armenia, At the same time, upside risks are dependent on the progress in implementation of large-scale regional transport and energy projects by the government.

For the ***industry*** sector, forecasts have been adjusted upward, taking into account the large-scale government programs. In particular, it can be anticipated that real value added growth will take place in the sub-sectors of metal ore mining and metallurgical industry at the year-end thanks to the financial support provided to mining companies by the government in the form of budgetary credits and guarantees.

The expected growth in the above sub-sectors will partially compensate for the anticipated declines of real values added in the food industry (resulting from the expected production decrease in the food processing sub-sector and export of cognac due to the decline of global demand), production of construction materials (due to the construction decline), as well as jewelry products and chemical industry. Subsequently, for the industry sector the projected value added real decline will be 4-7% in 2009.

It is expected that during the first six months of 2010 the industry sector will recover, and according to the CBA estimations, the real growth for the sector will be approximately 4 - 7%.

For the ***construction*** sector, the value added forecasts have been adjusted downward, taking into account the expected decrease of capital inflows and population incomes, as well as the significant reduction of housing. While the decline rates will gradually slow down thanks to the provided government financial support, at the year-end the expected real value added decrease will be 40-50%.

During the first six months of 2010 the slowdown of decline rates in the construction sector will continue, and by the end of the mentioned period a positive growth rate will be recorded.

Forecasts for the ***agriculture*** sector have not been adjusted: a real growth of 2-3% is projected, taking into account the increase in the routine growth base, i.e., gardens and crops areas, as well as animal heads.

Around 4% of real growth is anticipated in the agriculture sector for the first six months of 2010.

For the ***services*** sector, the growth forecasts have also been adjusted downward, taking into account the adjusted projections for private and public consumption which, in turn, will impact both the volumes of sales turnover and delivered other services. Subsequently, for services a zero-level real growth of value added is anticipated for 2009.

It is expected that in the first quarter of 2010 the industry sector will recover, and according to the CBA estimations, its real growth will be approximately 4 -7%.

It is expected that during the first six months of 2010 the services sector will recover, and according to the CBA estimations, the real growth for the sector will be approximately 1-4%.

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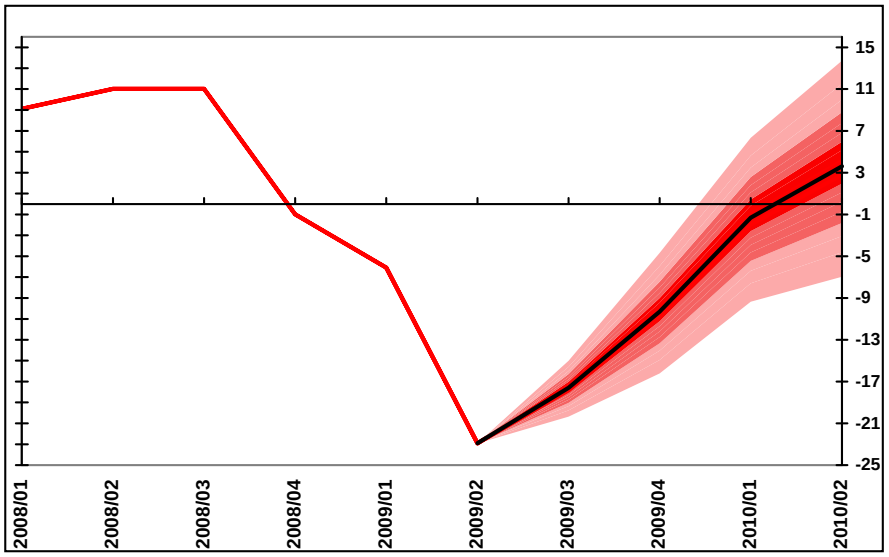
Real GDP Growth Projection Probability Distribution
(quarter over same quarter of previous year)



Economic Growth Projection Probability Breakdown

Economic Growth Band	Probability of Being within the Given Band			
	QIII, 2009	QIV, 2009	QI, 2010	QII, 2010
< -21%	3.16%	0.18%	0.00%	0.01%
-21 - -18%	42.10%	1.74%	0.03%	0.03%
-18 - -15%	51.03%	8.76%	0.23%	0.15%
-15 - -12%	3.68%	23.37%	1.23%	0.58%
-12 - -9%	0.01%	33.07%	4.50%	1.76%
-9 - -6%	0.00%	23.56%	11.43%	4.34%
-6 - -3%	0.00%	7.95%	20.15%	8.62%
-3- 0%	0.00%	1.26%	24.64%	13.82%
0 - 3%	0.00%	0.09%	21.04%	18.40%
3%-6%	0.00%	0.00%	11.55%	18.64%
6%-9%	0.00%	0.00%	4.35%	15.49%
9% <	0.00%	0.00%	1.10%	10.20%

Labor Market

The projections for the labor market indicators for the first six months of 2009 were adjusted to some degree, taking into account the current developments in the economy and the adjusted forecasts for other sectors. In particular, given the certain degree of mitigation of labor market rigidities, it is projected that during the second six months the average nominal wage will fall by around 1.5% due to a decline in the private sector nominal wages. Labor productivity will fall significantly (by around 12%). During the mentioned period the average unemployment rate

will increase by 1.6 percentage points primarily because of under-employed capacities in the economy sectors resulting from decreased aggregate demand.

During the second six months of 2009 the labor market developments will exert certain inflationary pressures on the consumer market since the labor market rigidities will result in higher rates of decline in labor productivity than in wages. Subsequently, some growth of unit labor costs will be traced in the private sector which will trigger inflation by around 0.5-0.7 percentage points. During the first six months of 2010, however, the labor market indicators will improve to a certain degree, greatly contributed by the anti-crisis measures taken by the government towards increasing economic activity in the private sector.

Aggregate Demand

Private Sector Spending

According to the adjusted estimates, a 15-16% decrease in real private spending is anticipated during 2009. In the structure of spending a considerable decrease (by around 35-38%) will be recorded with regard to private investments due to the significant fall of capital inflows and continuous decrease in population incomes. The real decline of private consumption will be within the range of 4-6% which will mirror the real decline of incomes in the private sector. Subsequently, during the second six months of 2009 private spending will remain below its potential level by around 8-9% and will exert deflationary pressures in the consumer market thereby reducing the inflation rate by more than 2.4-2.7 percentage points. However, it should be noted that as early as in the first six months of 2010 the private spending decline rates will slow down considerably thanks to several anti-crisis government measures which will trigger economic activity in the private sector. Private spending will fall by 0.5 - 1.0%. Furthermore, of private consumption drops by around 0.5 - 1%, a slight positive growth will be observed in private investments.

Current Account

Further projections for the line items of the BOP of current account have been adjusted slightly taking into account the uncertainties associated with the recovery of the global market, and the new forecasts for the development of the domestic economy. Namely, it is anticipated that by the year-end export of goods and services will fall by 30-35%. This will be due primarily to the continuing low metal prices and the fact that the depreciation of the real exchange rate of AMD has a slower-than-projected impact on exports. Subsequently, by the year-end the decline of real volumes of exports of goods and services will be 8-11%, despite the expected growth of real exports of copper and molybdenum.

Compared to earlier projections, no material adjustments have been made to import forecasts because the current and expected high rates of GDP decline – which otherwise should result in a greater decrease in imports – will be compensated by the expansionary fiscal policy. In light of limited internal import substitutes, in the near term the latter will contain the high rates of import decline through import of consumer and investment products. As a result, at the end of 2009 for import of goods and services the decline will be within the range of 30-35% and for real volumes it will be 25-30%.

The projections for non-commercial remittances by individuals have not been changed, and by the year-end the decline in their net inflows will be 30-35%. These projections will rely on the present and future developments of the Russian economy.

As a result of these flows, the current account deficit to GDP ratio will be 10-12% for the year in light of its 15% level observed for the first six months of 2009.

In the first six months of 2010 the developments will depend on the rates of recovery of the global and domestic economy. It is anticipated that the export growth will be within the range of 8-11%, and the decline rates for import will be 0-3%. The growth of real export of goods and services will be 3-6%, and the decline in real import of goods and services will vary from 6% to

9%. As to individuals' remittances, it is projected that during the first six months of 2010 these remittances will grow by 5-8%, taking into account the fact that next year a positive growth in the Russian economy is expected (according to the recent IMF projections, in 2010 Russia's economic growth will be 1.5%). It is anticipated that these developments will lead to an improvements of the current account/GDP ratio in 2010.

Consolidated Budget

Thanks to the anti-crisis measures undertaken by the Government an around 24% increase in public expenditures (including net lending) compared to the previous year can be ensured by the year-end. In terms of public revenues, it is anticipated that the taxes to GDP ratio will preserve its previous year's level, and the ongoing improvement of tax administration measures is crucial for ensuring the above level.

As it was expected, the anti-crisis government programs and, hence, ensuring of 2/3 of 2009 government expenditures (including net lending) will take place during the second half of the year. A rather high level of budget deficit is anticipated for the year-end which, in turn, will lead to an impact of the fiscal sector on aggregate demand. According to estimated impulses, such an expansionary impact will be around 6.4 %. However, it should be noted that in view of large-scale government spending, according to our estimations, some difficulties may arise in terms of absorbing liquidity by the economy.

The public sector impact is again assessed as expansionary for the first six months of 2010 in light of the continuing anti-crisis measures taken by the government. It will enhance the increase in the domestic demand and subsequently, recovery of economy growth from the first half of 2010.

Money and Credit

It is anticipated that after certain stabilization observed in the financial market during Q2, 2009, monetary indicators will recover their high rates of growth during the next 12 months due to the expansionary fiscal policy on the one hand and the continuing expansionary monetary policy of the CBA on the other hand. As a result, money supply will increase by 25.6% and credits and deposits will grow by 8.5% and 36.4% accordingly. If the above policies continue during the first half of 2010 then it can be expected that the growth rates for money supply and components will further increase.

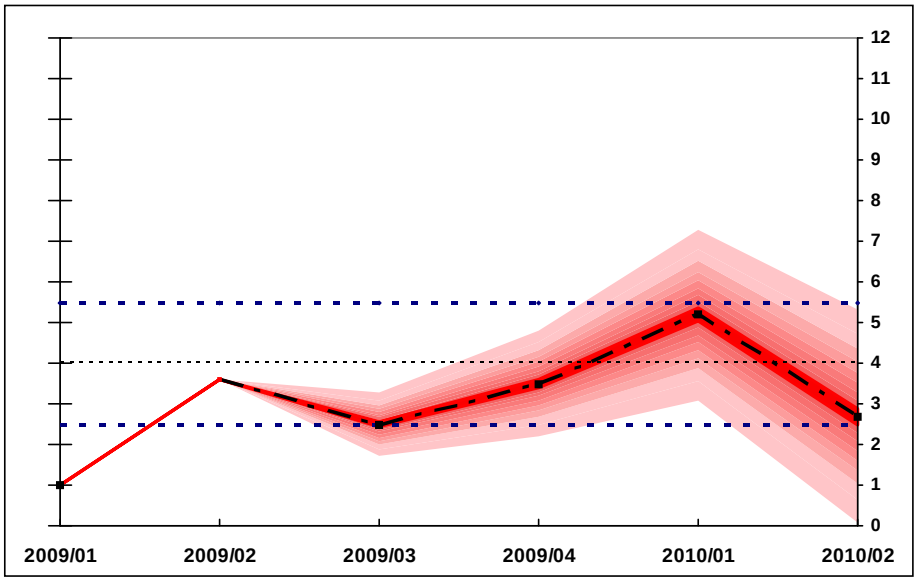
As a result of injections of large volumes of liquidity into the economy and increased lending, the monetization ratio which characterizes financial intermediation will also grow by around 9.8 percentage points thus reaching the level of 29%. These developments will be primarily due to the large budget deficit projected for the above period which in turn will result in an increase in the lending indicator by 13% annually for Q2, 2010.

Furthermore, if any difficulties arise in relation to absorbing dram-denomination liquidity injected into the economy as a result of large-scale spending under anti-crisis government programs, the CBA and the government may undertake coordinated measures towards ensuring a smoother absorbtion.

Inflation Forecasts and Monetary Policy Directions in the Projected 12-Month Period

During the projected period the continuing large negative gap of the domestic demand resulting from the global economic crisis will remain as the key factor which drives the general inflation behavior. At the same time it is anticipated that the combination of anti-crisis government measures and the CBA policy for reducing interest rates and quantitive easing will allow to ensure a recovery of the economic growth rates by the end of the projected period. In this case, as the results of the quarterly projections model used by the CBA show, the existing deflationary pressures will gradually weaken, and throughout the 12-month projected period inflation will remain within the target range of 4±1.5%. Given the hypothesis of unchanged interest rates and taking into account the results of the inflation model by commodity groups, at the end of Q2, 2010 the central value of the projected inflation will be 2.7%, and at the year-end of 2009 it will be 3.5%. In addition, during the projected period both downside and upside inflation risks can emerge, dependent on how quickly the liquidity injected into the economy as a result of the anti-crisis government programs will be absorbed, the timing of recovering global economy, as well as progress in implementation of large-scale regional programs.

Inflation Projection Probability Distribution Chart



Inflation Projection Probability DistributionTable

Inflation band	Probability of Falling within the Given Band	
	QIV, 2009	QII, 2010
< 1.0%	0.09%	14.4%
1.0-2.0%	2.9%	18.7%
2.0-3.0%	23.3%	24.3%
3.0-4.0%	46.8%	21.7%
4.0-5.0%	23.9%	13.3%
5.0-6.0%	3.0%	5.6%
6.0-7.0%	0.09%	1.6%
> 7.0%	0.0%	0.4%

In order to ensure quick recovery of the economy under the condition of inflation maintaining in the target band, balanced deflationary and inflationary risks, the CBA will continue implementing an expansionary monetary policy further reducing the refinancing rate along with active implementation of quantitive easing. In light of the foregoing and large budget deficit, ensuring smoother absorption of liquiditiy injected into the economy attains major importance in terms of accelerating the pace of recovery of the economy and neutralizing potential inflation risks.