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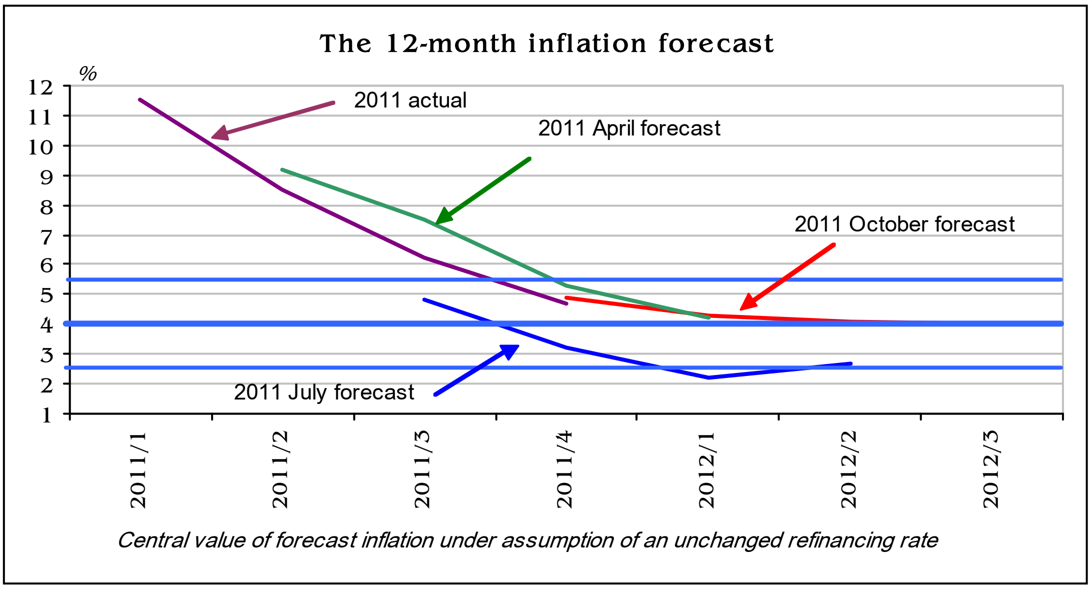
ACTUAL INDICATORS AND DEVELOPMENTS IN 2011

The beginning of 2011 was characterized by high inflation environment which had been a consequence of ***increased international prices of raw materials and food products***, ***declined supply*** in ***agriculture*** in Armenia due to the recorded downfall in that sector as well as ***second round effects*** of high inflation and ***high inflationary expectations*** during 2010.

At the end of 2010 the Board of the Central Bank outlined a necessity to tighten monetary conditions if second round effects of high inflation and expectations persist in the consumer market. In its announcements the Central Bank was repeatedly stressing about great likelihood of inflation rates ***to have been in a down-sloping trajectory since the second half of 2011 yet price increases took broader segments of the consumer market, however***. This was concomitant with ***uncertainties from the external environment***, which at a later point were reflected in i***ntensification of inflationary pressures in global raw materials and food products markets*** and, accordingly, expansion of the inflation environment in Armenia. The 12-month inflation reached 11.5 percent in March (price increase on food products made as much as 8.3 pp of contribution). The Board of the Central Bank announced that the monetary inflation was manageable and that the inflation environment remained primarily a supply-side product, while recovery of aggregate demand and labor market developments were creating moderate inflationary pressures. In such a situation ***raising the interest rate was a necessity in order to mitigate second round effects of high inflation and anchor the expectations***.

To curb the inflation environment in the coming months through neutralizing second round effects and anchoring expectations, the Board of the Central Bank ***raised, three months in a row since February, the refinancing rate for a total of 1.25 pp***. In the subsequent months the inflation environment became somewhat temperate not only due to tightened monetary conditions but also because of implementation of contractionary fiscal policy, weakened inflationary pressures on the Armenian economy from the external sector, neutral impact from private consumption, even weaker inflationary impact from the labor market relative to the previous period, and falling prices of agricultural products amid growing output in that sector. In the mid of the year however the 12-month inflation was still far from the confidence band as it contained the second half of 2010's high inflation. In June the 12-month inflation reached 8.5 percent.



The developments in this period of time indicated that inflationary risks were in balance. At the start of the third quarter a steep reduction in inflation was forecast, the inflation prospect was more optimistic which prompted the Board of the Central Bank to ***loosen monetary conditions*** and the refinancing rate was lowered by 0.5 pp, as a result. At the end of the year the Armenian economy was progressing in line with the scenario as outlined in the fourth quarter's monetary policy program, which means implementation of a neutral policy, i.e. setting an interest rate level which leaves neither expansionary nor contractionary impact on the inflation environment. Under current conditions of economic development such an interest rate level is around an 8 percent. Based on what was described above, the Board of the Central Bank left the refinancing rate unchanged in the last months of 2011

As it was outlined in the 2011 monetary policy programs, the 12-month inflation started reducing since the middle of the year and at the end of the year it entered the confidence band of 4%±1.5 pp, making up 4.7 percent. Prices of food products, non-food products and service tariffs made, respectively, 3.1 pp, 0.7 pp and 0.9 pp of contribution to the 12-month inflation indicator.

External environment

At the end of 2011 world economic growth rates slowed down and risks to future growth outlook intensified in the face of escalation of debt crisis in the Euro-area. According to the IMF estimations, global economic growth rates have reduced, making up 3.8 percent compared with 5.2 percent recorded in the previous year. The slowdown reflected the sluggish economic activity in developed countries, which was forecast for 2011 to be 1.6 percent on average against 3.2 percent in 2010. Similarly, economic activity in emerging countries was somewhat lower, making up 6.2 percent against 7.3 percent recorded in 2010. Among developed countries, U.S.A., Japan and Euro-area states saw their economic growth rates slowing down. While economic developments in U.S.A. and Euro-area in 2011 were challenged by fiscal and debt impediments as well as financial and economic problems, Japan's economic advancement was damaged by the expanded fallout of the March 2011 earthquake. In 2011 economies of emerging countries incurred the influence of various shocks spilled over from the global economy, which was more prominent in the second half of the year, determined by considerable reduction in capital, financial and foreign currency flows and tightened macroeconomic conditions in the domestic economy. Especially pronounced was the slowing of economic growth rates in China, India and Brazil, the leading club of emerging economies. Economic growth in Russia, which is one of the main partners to Armenia, also slowed down in the fourth quarter of 2011, with the annual growth rate remained almost on the previous year's level. In early 2011, amid notable increase of international prices of raw materials and food products, both developed and emerging economies were faced with the problem of considerable inflationary pressures domestically. So, according to preliminary estimations, average inflation in 2011 was 2.7 percent (1.6 percent in 2010) in developed countries and 7.2 percent (6.1 percent in 2010) in emerging countries.

In the fourth quarter of 2011, international commodity prices fell notably amid the slowing of the global economy and intensified debt problems in the Euro-area. Average annual prices however remained at the level somewhat higher from the previous year's.

In the fourth quarter of 2011 *Brent* crude oil price averaged USD 109 a barrel (3.3 percent q-o-q decrease). However, amidst high prices recorded primarily in the first half of the year, the average annual oil price has risen by roughly 40 percent in relation to 2010.

Prices of base metals further dropped in the face of slowing global economic activity. In the fourth quarter of 2011 in particular, the copper price fell by about 16.4 percent q-o-q, averaging USD 7530 per ton. Despite the price decrease in the last quarters, the average annual copper prices exceeded the previous year's respective indicator by about 17.1 percent. The molybdenum price in global markets reported around 4.5 percent fall on average in 2011 in relation to the previous year's respective indicator, and this was due to the downward trend observable since the second quarter of 2011.

In view of expectations for expanding financial problems in the Euro-area banking systems as well as increasing demand for liquidity resulting from this, the international gold price surprised with its stably downward trend especially in the end of the year. As a result, it showed an estimated 1.3 percent q-o-q drop. However, average annual gold price increase in 2011 has been more than 28 percent.

In the fourth quarter of 2011 international prices of food products mainly trended down. Specifically, food price index, which is released by FAO, has dropped by 6.4 percent on average relative to the previous quarter. Note that the end-year indicator is about 5.5 percent lower from the previous end-year's respective indicator and about 11.3 percent lower from the February peak this year. All this notwithstanding, average international food price index in 2011 has risen by about 22.8 percent in relation to the previous year's average.

International wheat price in the fourth quarter decreased considerably amid somewhat a sluggish global demand and an expected and currently reported record crop. At the Chicago Board of Trade, international wheat price dropped by 11.4 percent q-o-q, making up USD 7.6 a bushel. Though there has been a considerable fall in prices in the end of the year, coming closer to the level observed at the end of the previous year, average annual growth of wheat price in 2011 was more than 41 percent.

In spite of inflationary pressures as a result of floods and price regulatory policies in Thailand, heavy crops expected in China and relaxed export ban in India and increased export volumes from Brazil all contributed to the end-year falling of the international rice price. This was fostered also by estimations of expected record volumes of crops in the marketing year 2011/2012 (about 462 million tons) and world stock (about 100 million tons). So, in the fourth quarter international rice price fell by 9.2 percent and reached USD 15.5 U.S. hundredweight (45.4 kg). Albeit more optimistic prospects for increasing rice production volumes and global stock, the international rice prices grew in 2011 by an average 22.5 percent owing to public regulatory mechanisms for rice trade introduced in the main exporter countries.

At the end of the fourth quarter, sugar price dropped considerably mostly due to expectations of excess supply in the market, reflecting massive production of sugar in India, Europe, Thailand and Russia). In the fourth quarter the sugar prices index, released by the New York Board of Trade, fell by 13.7 percent q-o-q, with an average price of U.S. cent 23.8/Pounds. Despite the deflationary trends observable from the second half of the year, in the face of less-than-expected crops in Brazil at the beginning of the year, international sugar prices in 2011 have grown by more than 20 percent in relation to the previous year.

In the fourth quarter of 2011 the global financial markets were characterized with high volatility due to persisted debt problems in Euro-area, more uncertainties over fiscal consolidation mechanisms in the U.S.A. and downgrades from rating agencies as a response. However, expanded optimism over the U.S. economic developments at the end of the year and continued tightness in European financial markets pushed the Euro exchange rate to depreciate versus the U.S. dollar, which made up approximately 4.5 percent q-o-q, with the dollar amounting to 1.35 for one Euro. Despite a notable weakening of Euro at the end of the year, it however has tended to appreciate during the year, with an average annual appreciation of 4.9 percent in 2011.

At the end of the year some recovery trends in the U.S. economy were observable in spite of more pessimistic expectations for the global economy. Different leading indicators showed for more buoyancy in economy activity and reducing unemployment in the fourth quarter, concomitant with the trends for subsiding inflation trends. However, in the face of still slower pace of the U.S. economic recovery as well as pessimistic expectations transmitted from the external environment, the US Federal Reserve System implemented an expansionary monetary policy during the fourth quarter, too, while keeping the policy rate within the range of 0-0.25 pp.

In Euro-area, intensified financial and debt problems created serious impediments to economic growth prospects. Under such conditions, though the inflation indicator is still above the target level (2.8 percent in end-December), the European Central Bank eased the monetary conditions in November and December by lowering the refinancing rate by a total of 0.5 pp and setting it at the 1.00 percent level. In the meantime, the ECB appeared with a decision to launch a 'non-standard' policy measures in order to tackle liquidity issues in the banking system and further stimulate the economy.

As a result of the aforementioned developments, the three-month LIBOR has risen notably, amounting to 0.48 percent on average.

The financial and economic hardships were further seen in developed countries during 2011, which affected the economic activity of emerging countries. As a result, despite considerable deflationary trends seen in the main commodity markets during the fourth quarter, the 2011 average annual price levels are still markedly higher from the previous year's respective figures.

Aggregate supply[1]

The economic growth indicator of the third quarter of 2011 was 6.5 percent y-o-y.

Looking at the y-o-y economic growth indicator of the period January-December 2011, it should be noted that the Central Bank estimates calculated on the basis of Economic Activity Index are in line with the scenario, i.e. are in the range of 4.1 – 4.5 percent[2]. Provided that risks are upside in industry and agriculture and downside in construction, as were outlined in previous forecasts, the decline in construction was entirely offset by more-than-expected growth in industry and agriculture.

In **Industry** the growth of value added is estimated around 17 percent y-o-y mainly due to the increased volumes in *metal ore mining (13.4 percent), food production (16.7 percent), beverage production (19.7 percent), metallurgy (9.9 percent), production of building materials (7 percent)* and *items of finished metal manufactures (92.7 percent),* which is the result of consistent improvement in external demand as domestic and world economies recover even if the recovery rate is slow. High growth in electricity and gas production volumes (21.6 percent), driven by more economic activity as well as increased electricity exports to Iran, further contributed to the growth of value added.

In **Construction** estimated value added will reduce by around 13 percent y-o-y. The reduction in construction volumes financed by *international loans (-41.4 percent), organizations (-23.4 percent), households (-32.2 percent)* and *humanitarian aid (-12 percent)* was slightly moderated by increased volumes of construction financed by *state budget (16.8 percent)* and *local budgets (nearly 5.9-fold increase).*

The shrinkage of construction volumes financed by international loans is explained by both the accomplished projects that were financed by international organizations in the agriculture, irrigation and energy fields and postponed major road construction and supporting infrastructures projects.

In **Services** the growth of value added is estimated around 3.1 percent y-o-y as a result of increased volume of *services rendered, retail trade turnover* and *wholesale trade turnover* by 6.1 percent, 2.2 percent and 5.5 percent, respectively. The increase in the volume of services rendered was driven by growth recorded in

[1] Indicators of sub-branches of the economy are for the period January-December.
[2] See the 30 percent interval in the Real GDP Growth (Cumulative) Projection Probability Distribution Chart in this paper.

financial and *insurance* (24.3 percent), *information & communication* (1.1 percent), *healthcare* (13.7 percent) and *education* (2.1 percent).

In **Agriculture** the growth of value added is estimated to reach 14.5 percent y-o-y, which is a result of 26.6 percent growth in *plant growing* and 0.1 percent growth in *animal breeding.* The growth in animal breeding was due to increased volumes in *slaughtered animal and poultry* (2.9 percent) and *milk production* (0.1 percent), which entirely offset the 9.8 percent reduction in *egg production.* The growth in plant growing was conditioned by increased output in *wheat* (34.8 percent), *potato* (15.6 percent), *vegetables* (11.5 percent), *berries* (83.7 percent), *grapes* (3 percent) and *melons and gourds* (36.5 percent). The growth in plant growing was due to both improved climatic conditions as well as certain government programs implemented in this field[3].

Labor Market[4]

In the fourth quarter of 2011 average nominal wages grew by 6.0 percent, reflecting wage increase in private sector as well as moderate increase of wages in some budget-supported organizations. Under such conditions the annual nominal wage growth in 2011 has been 6.0 percent. Increased productivity in industry and services, growing demand for labor as well as the single-payment window introduced in the healthcare system and recorded inflation in the previous year had a significant impact on the growth of nominal wages in the private sector.

In the fourth quarter of 2011 demand for labor continued increasing mostly due to a reported increase of output in industry and services. As a result, the average quarterly unemployment rate fell against the same period of the previous year by 0.8 pp and reached 6 percent. Whereas in 2011, the average unemployment rate is estimated 6.2 percent, which is 0.8 pp lower from the respective indicator recorded in 2010.

In the fourth quarter the growth of nominal wages in the economy slightly outstripped the productivity growth. As a result, unit labor costs somewhat increased in the fourth quarter thus creating 0.2 pp of inflationary pressures in the consumer market.

Aggregate Demand[5]

In the fourth quarter of 2011 private spending in real terms grew by 3.5 percent, determined by real growth in consumer expenditures. At the same, time, public expenditures in real terms have increased by around 1.2 percent. Under such conditions the growth of domestic demand is estimated 3.7 percent.

As estimated by the Central Bank, in 2011 private consumption in real terms increased by 3.6 percent due to the growth of private sector disposable income as a result of increased private remittances and reported domestic economic growth. Expanded volumes of lending to the economy somewhat contributed to the growth of private consumption.

Though economic activity in 2011 remained strong and economy lending grew considerably, private investments however reported about 3 percent decline in the fourth quarter, which was attributable to the developments in construction[6]. In 2011 private investments decreased by 5.5 percent.

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[3] *These include programs for agricultural lending, agro-product supply chain, wheat and barley seed growing and production, development of organic agriculture and domestic production of bio-fertilizers.*

[4] *The labor market data for the fourth quarter of 2011 are the Central Bank estimates which are based on actual October and November 2011 figures and December 2011 estimations. The growth indicators represented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.*

[5] *The data on real growth of private sector consumption and investments for the fourth quarter of 2011 are the Central Bank estimates. Actual figures of these indicators are as of the third quarter of 2011. The growth indicators represented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.*

[6] *See section Aggregate supply.*

In the fourth quarter growth rate of private spending slowed down notably, influenced by both domestic and external factors. Composite economic indices[7] as calculated and published by the Central Bank point out to the above developments with private spending. In the fourth quarter the growth rate of consumer confidence index slowed down, reaching 2.4 percent versus 11.8 percent increase in the third quarter; also the current conditions index and the economic activity index declined, respectively, by 2.7 percent and 6 percent.

In the fourth quarter of 2011, because of slowing growth rates in private spending, the gap between private spending and their potential level remained negative in the face of continued reduction. This is why in the fourth quarter private sector expenditures created weak deflationary pressure in the range of 0.1 – 0.2 pp.

In the fourth quarter the current account of Balance of Payments improved considerably and is estimated to amount to roughly 11.8 percent of GDP, compared to the previous year's respective indicator of 14.5 percent.

As for the fourth quarter developments, the current account kept on improving in the face of slowing growth rates of the world economy and growing uncertainties. The above-mentioned events, coupled with some slowing of the domestic economic activity, resulted in slower growth rates of export and import and private remittances in dollar terms. Thus, in the fourth quarter of 2011, the y-o-y growth of export[8] of goods and services in dollar terms was estimated 17.1 percent under declining prices of metals in world markets, and the growth of real volumes, 24.1 percent[9], due to persisted high growth in industry. Based on the 2011 results, the growth of export of goods and services is estimated about 25.0 percent in dollar terms and about 19.0 percent in real terms.

The world and domestic economic developments were also reflected in the import performance the growth rates of which also slowed down. In the fourth quarter the growth of import of goods and services was estimated 10.3 percent y-o-y in dollar terms[10]and 5.5 percent y-o-y in real terms. Based on the 2011 results, the growth of import of goods and services is estimated around 14.0 percent in dollar terms and up to 1.0 percent in real terms (in the first half of 2011 the volumes of import shrank).

The growth rates of inflow of non-commercial remittances of individuals slowed down in the fourth quarter and reached 11.5 percent y-o-y against 13.3 percent y-o-y growth of outflow. This was influenced by certain slowdown in growth rates of the Russian economy in the fourth quarter. In the outcome, the growth of net inflow of non-commercial remittances in the fourth quarter was 11.2 percent y-o-y. Based on the 2011 results, the growth of net inflow has been 19.6 percent.

Consolidated budget

In the fourth quarter of 2011 performance of state budget was in line with previous months' trends, i.e. collection of revenue according to the program and savings on certain expenditures items. So, in the fourth quarter the fiscal policy's impact[11] on aggregate demand was 0.9 pp contractionary instead of the forecast neutral, attributable to contractionary impact from revenues and neutral impact from expenditures instead of the forecast expansionary.

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[7] See http://www.cba.am/am/SitePages/statsscci.aspx.
[8] In January-December of 2011, the growth of export of goods (FOB) has been 27.7 percent. The fourth quarter indicator of export of services is a forecast.
[9] The Central Bank estimate.
[10] In January-December of 2011, the growth of import of goods (CIF) has been 10.7 percent. The third quarter indicator of import of services is a forecast.
[11] Consolidated budget indicators which were prepared on the basis of preliminary actual data of the fourth quarter of 2011 (including PIU funds) were used for the review of the fiscal sector. The 2011 fiscal impulse indicators were estimated against the respective period of 2010 consolidated budget indicators. The impact of revenues has been calculated against an estimated nominal GDP indicator and the impact of expenditures has been calculated against an estimated potential GDP indicator.

The yearly results show that the annual program on the revenue side of the budget was even over-performed, and saving on certain expenditures items amounted to nearly AMD 40.0 billion, prevailing part of which was due to the first nine months of the year.

The fiscal policy implemented by the Government during the year can be characterized as continuation of the policy to macroeconomic stabilization through both collection of revenues and savings on public expenditures. According to annual results, the fiscal policy had 1.3 pp of contractionary impact on aggregate demand, determined by contractionary effect mostly due to the aforementioned savings on expenditures. Such contractionary impact was more pronounced in the first half of the year.

As for the proportions on consolidated budget indicators relative to the year 2010, revenues and expenditures have grown in comparison with the previous year and amounted to 9.6 percent and 2.7 percent, respectively. The growth of tax revenue of state budget has been nearly 10.1 percent.

To sum up, in the fourth quarter of 2011 the fiscal policy's contractionary impact reflects the lagged influence of contractionary policy implemented in previous quarters. Also, taking into account weak inflationary pressures from the labor market and weak deflationary pressures from private expenditures, one may conclude that net impact of domestic demand and labor market in the fourth quarter was deflationary and estimated in the range of 0.5 – 0.6 pp.

Money and credit

Trends of gradually reducing 12-month inflation were maintained during the fourth quarter of 2011 too, with 4.1 percent inflation against 5.6 percent recorded in the same period of the previous year. The year ended with an annual 4.7 percent inflation which is within the confidence band of 4%±1.5 pp. In view of the down-sloping trajectory of the 12-month inflation in the earlier part of the year as well as estimations of notable moderation of inflationary expectations in the upcoming one-year horizon, which was consistent with the baseline scenario presented in most recent monetary policy program, the Central Bank implemented a neutral monetary policy by leaving the refinancing rate unchanged.

Despite a stable level of the policy rate during the quarter, the following developments were observed in the financial market: in repo market in end-December average interest rate rose against September by 1.5 pp and amounted to 11.2 percent and in interbank repo market average interest rate increased by 0.9 pp and amounted to 10.2 percent; in primary market of treasury bills in December, average interest rate of securities of up to 1-year of maturity rose against September by 2.6 pp and amounted to 10.7 percent. The market rates rose absolutely during December, incurring the influence of increased demand for dram in the short run as a result of the change in the reserve requirement mechanism. As part of dedollarization measures, the month of December was the final phase of the change in the reserve requirement mechanism, suggesting that provisioning against attracted foreign currency deposits be only in Armenian Dram instead of previously practiced requirement of 75 percent in Dram and 25 percent in foreign currency.

In the foreign exchange market in December of 2011, relative to September of 2011, average market exchange rate of dram behaved as follows: it depreciated versus USD by 2.8 percent, reaching 383.2 drams for one dollar; it appreciated versus EUR by 1.7 percent, reaching 504.6 drams for one euro and it depreciated versus RUB by 0.16 percent, reaching 12.16 drams for one ruble. Relative to December of the previous year, the dram's average market exchange rate depreciated as follows: AMD versus USD by 5.9 percent, AMD versus EUR by 5.6 percent, and AMD versus RUB by 3.8 percent.

In the fourth quarter of 2011 actual monetary indicators were consistent with the scenario based on the most recent forecasts. As a result, broad money and dram broad money grew during the quarter by 10.4 percent and 11.4 percent, respectively. The growth has been due to dram deposits and currency in circulation, having grown by 14.1 percent and 9.1 percent, respectively, which was concurrent with the 9.1 percent increase of foreign currency deposits. In spite of quite high growth of foreign currency deposits in the fourth quarter in relation to previous months, the dollarization of the economy subdued further (by 0.5 pp relative to the end of the previous quarter and by 1.3 pp relative to the end of the same quarter of the previous year). High growth rates in economy lending were maintained during the fourth quarter as the highest quarterly growth of 8.9 percent was recorded.

In the monetary environment the annual developments were as follows: broad money has grown by 23.7 percent, dram broad money, by 26.4 percent, dram deposits, by 42.7 percent, and foreign currency deposits, by 20.0 percent. The annual growth of economy lending has been 35.3 percent, with lending in dram increased by 23.7 percent and lending in foreign currency increased by around 44.7 percent.

UPCOMING 12-MONTH PERIOD FORECASTS

External environment[12]

The global economy entered a territory complicated enough and characterized by high vulnerability and significant downside risks. Escalation of financial and fiscal problems in Euro-area starting from the second half of 2011 brought about material risks to economic development prospects in both developed and emerging countries.

According to January forecasts released by the IMF, global economic growth for 2012 will reach 3.3 percent, lower from September forecast of 4 percent. Although the slowing of the economic growth rates will be determined mostly by escalation of economic problems in developed countries, that will penetrate through various channels of transmission to emerging countries as well. According to forecasts, in 2012 average economic growth rate in developed countries will be 1.2 percent (versus 1.9 percent forecast in September). Economic hardships will intensify especially in Euro-area where 0.5 percent of economic decline is predicted (versus 1.1 percent of economic growth forecast in September). Economies in the U.S.A. and Japan will trend mainly positively, after the previous year's economic hardships, to report 1.8 percent and 1.7 percent of economic growth, respectively, in 2012 based on the forecasts. The slowing of economic growth rates in developed countries will have its impact on emerging countries as they now are less able to withstand economic shocks and, unlike during the 2008-2009 crisis, are more vulnerable now. In particular, global financial markets will operate in the times of greater uncertainties amid fiscal and financial problems in advanced countries, which means that emerging countries will have less opportunities to borrow funds from these markets. Difficulties mat rise in terms of inflow of foreign currency funds associated with reduced transfers and returns from export of minerals in the face of slowing economic activity in advanced countries. As a result, the main burden of stimulating the domestic demand will lie on the replenishment of domestic resources. It should be noted that though fiscal conditions in emerging countries are more favorable compared to those of developed countries, it however has deteriorated during the 2008-2010 crisis. In 2012 therefore, emerging countries will experience certain economic hardships, too. According to the IMF estimations, growth rates will decline to 5.4 percent (against September forecast of 6.1 percent). Economic growth in Russia, which is one of the main partners to Armenia, will also slow down to make up 3.3 percent in 2012 against 4.1 percent estimated for 2011.

The environment in the commodity markets will be somewhat deflationary in the face of slowing of the world economic growth rates. Yet, estimations suggest, no significant drop in prices will be seen in commodity markets, determined by supply- and demand-side factors. Specifically, despite an expected economic slowdown in Euro-area, the latter's impact on international prices of main commodities is estimated to be moderate, which is conditioned by sizable reduction of the share of the Euro-area's demand in these markets. China, which represents about 11 percent of global oil demand, nearly 20 percent of wheat demand, more than 40 percent of base metals demand and in recent years provides more than half of the growth of basic commodity demand globally, is expected to see its economic growth rates slowing somehow down to 8.2 percent in 2012 against 9.2 percent in 2011, however experts argue that this only refers to the country's now most probable economic scenario of 'soft landing' which will create a weak inflationary environment only. Regarding supply-side factors, which will prevent prices from an

[12] *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, РосБизнесКон-салтинг and other sources.*

excessive falling, it should be noted that prices in some commodity markets (aluminum, nickel, oil, among others) are quite close to minimum fundamental prices associated with production costs. This will therefore create an extra pressure on their pricing.

In addition to the general trends referred to above, certain commodity markets will develop under market fundamentals specific to any particular market. According to International Energy Agency estimations, production of oil by non-OPEC countries is expected to increase in 2012 by about 1.9 percent which will lead to more oil stock under a moderate growth of demand and anticipated increase of production volumes by OPEC countries. This however will still rest at the level lower from the five-year average. Moreover, international oil prices will be affected considerably by geopolitical factors not least because of a pending EU ban on Iranian oil exports and retaliatory threats from Tehran to close the Strait of Hormuz, through which roughly 30 percent of world oil exports flows. Under such conditions, the year 2012 will see stabilizing international oil prices and even slight downward trends, with the price of Brent crude averaging around USD 107 a barrel.

An even expected slowing of growth rates of world demand will not hamper the base metals markets to operate under the fundamental tightness; it is expected that the demand will outstrip production volumes. Despite an expected launch of several investment projects, the deficit of supply will persist in these markets by further having pressure on prices. At the same time, the investment demand will reduce in 2012 on the whole conditioned by uncertainties over the ways to tackle debt problems in Euro-area. As a result, base metals prices will tend to stabilize and thus create minor inflationary pressures. Under such conditions, average price of copper will be shaped at a notably lower level in comparison with the previous year.

Prices of precious metals are expected to show moderate growth patterns in the forecast time horizon. Despite an expected supply growth, in which event the gold market would report some excess volumes in 2012, the investment demand will remain the key driver of this market. It however will more likely be restrictive determined by optimistic expectations about the U.S. growth and anticipated appreciation of the U.S. dollar.

The world food market in 2012 will be mostly balanced and creation of some deflationary environment is possible in the event of increased volumes of crops. According to January estimations of the US Department of Agriculture, some 692 million tons of wheat production is expected for the marketing year 2011/2012 against around 652 million tons recorded in the previous period 2010/2011 (growth of 6.1 percent), mostly owing to Argentina, Australia, the CIS and China. According to estimations by International Grain Council, sowing areas are expected to grow by about 1.7 percent in 2012 mainly in the North America and the CIS. And albeit the world wheat stock will somewhat decrease in marketing year 2012/2013 in relation to marketing year 2011/2012, that will nevertheless be considerably higher from the 5-year average. As a result, world wheat stock will be replenished markedly this year reaching 210 million tons, which will come closer to the 12-year peak. If so, the international wheat prices will show mainly deflationary trends during 2012.

In marketing year 2011/2012 world production of rice will be at record levels, about 462 million tons. This will be concurrent with substantial increase of world consumption, which will make up 459 million tons. If so, the level of world rice stock will grow above the 9-year peak to make up more than 100 million tons. Though bigger part of stock will be accumulated in the main exporter countries, in India and Thailand in particular, enforcement of state regulatory mechanisms will restrict the ability of prices to respond. This means that rice prices may fall slightly in 2012, according to forecasts.

In 2012 the tightness in the world sugar market will further loosen thanks to production volumes in Europe and Thailand which are expected to be higher from previous projections. Though the demand is expected to bounce back, world sugar stock will be replenished to some extent but will nevertheless be at a relatively low level. As a result, international sugar price will mainly trend downward in the forecast time horizon.

In 2012 financial markets will remain volatile because of lasting uncertainties associated with possible escalation of financial problems in Euro-area and more pessimistic expectations about world economic growth prospects.

Given the global economic slowdown, the U.S. economy is still vulnerable enough notwithstanding recent positive developments. Adding the necessity of fiscal consolidation, the Federal Reserve System is therefore expected to withhold from tightening monetary conditions up until late 2014 and will conduct a low interest rates policy.

Economic growth prospects in Euro-area are gloomier. The European Central Bank is expected to carry on cutting interest rates started from the end 2011, and will reduce the policy rate by another 0.5 pp in the first quarter of 2012, while implementing a quantitative easing policy and applying liquidity injection mechanisms.

In the foreign exchange market in the forecast horizon, Euro is expected to feel mainly depreciation pressures whereas the U.S. dollar will tend to appreciate in the light of positive developments in the U.S. economy.

Risks to the baseline scenario of global economic projections are mainly associated with more-than-predicted slowing of the world economic growth rates, due to the failure of processes to find solution to debt crisis in Euro-area and its economic fallout. Under this circumstance, international prices of raw materials will trend down while prices of food products will depend largely on weather conditions, with risks to prices possibly going up.

To sum up, risks transmitting to the domestic economy will be reflected mainly in the developments with domestic and external demand (narrowing of capital and financial flows, decreasing of export and etc.) in the face of slowdown of world economic growth rates and escalation of financial and economic problems in Euro-area. On the other hand though, it is mostly expected that no inflationary pressures will come from world commodity markets.

Aggregate Supply

Economic growth forecasts were revised slightly downside, reflecting expectations for slower pace of recovery of the world demand as well as deteriorated expectations of economic agents for future economic growth outlook[13]. So, economic growth is expected in the range of 3.1 – 4.8 percent for 2012.

Below is the forecast for developments in the sectors of the economy.

For ***Industry*** forecasts denote high growth of value added, in the range of 5 – 7 percent for 2012. The forecasts were adjusted slightly downside, mainly due to some slowing of growth rates in world and domestic economies. The growth of industry will continue to be driven by expected growth in *ore mining, metallurgy, food, beverage, diamond processing* and *energy,* owing to expected increase of production capacities of enterprises active in these areas.

For ***Construction*** the forecasts of value added remained almost unchanged. Furthermore, after the peak recorded in 2008, the output volumes in construction halved in the last three years and resulted in somewhat narrowed construction base. In view of the aforementioned developments it is expected that value added

[13] *See http://www.cba.am/CBA_SITE/statistics/complex_index.html?_locale=hy.*

in this branch will be within 3.5 – 5.5 percent for 2012, owing to increased construction volumes in energy, agriculture, transport and communication. The volumes of construction supported by households are not expected to change notably.

For ***Services*** the forecasts did not change that much either: the growth in this sector will be mainly due to expected increase in private and public expenditures, which will affect both the trade turnover and volumes of services provided.

As a result, the value added of services is forecast in the range of 2.5 – 4.5 percent for 2012.

For ***Agriculture*** the forecasts were revised downside, attributable to somewhat a stronger base because of higher-than-expected growth recorded in this sector in 2011. As a result, the real growth of value added is expected to be within 4 – 6 percent for 2012, owing to expected growth in *plant growing* and *animal breeding.*

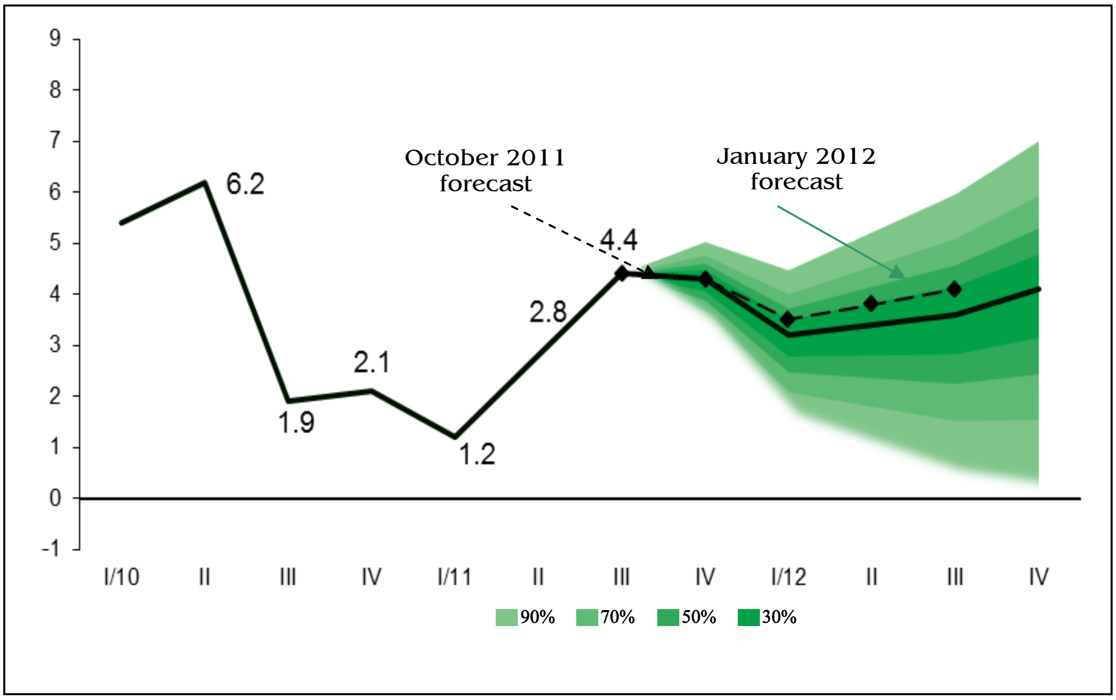
Because the share of *plant growing* in agriculture is large enough and its output depends primarily on the weather, as well as in consideration of medium-term perspective of the planned measures, the least risky scenario was accepted in the forecast.

Under the baseline scenario risks to economic growth are dual-sided and associated with exogenous and indigenous factors. More to the point, downside risks are prevailing as they are associated with decelerated recovery rates of global economy, slower-than expected growth of domestic demand as well as risks to lower indicators in almost all branches of the economy against forecasts.

In particular, downside risks may prevail in industry and services determined by slower recovery in the world economy and domestic demand. In construction, upside risks to the growth are prevailing in connection with more efficient implementation of major road construction and infrastructures improvement projects. Risks are tantamount in agriculture, as there is high reliance on weather conditions.

More uncertainties over the global economic recovery, in comparison with the baseline scenario, will negatively influence Armenia's economic developments, making downside risks to economic development as outlined in the baseline scenario more likely to appear.

Real GDP Growth (Cumulative) Projection Probability Distribution



Economic Growth Projection Probability Distribution

Growth interval	Economic growth probability interval			
	Q1, 2012	Q2, 2012	Q3, 2012	Q4, 2012
< 0%	2.64%	4.69%	6.19%	5.99%
0 – 2.5%	39.55%	34.12%	29.81%	24.07%
2.5 - 5%	56.11%	51.37%	43.91%	37.22%
5 - 8%	1.50%	8.86%	17.30%	26.16%
8% <	0.00%	0.02%	0.53%	3.39%

Real GDP Growth Projection Probability Distribution

Period	90% probability interval		30% probability interval	
	minimum	maximum	minimum	maximum
January-December 2011/ January-December 2010	3.3	5.0	4.1	4.5
January-March 2012/ January-March 2011	1.4	4.5	2.8	3.5
January-June 2012/ January-June 2011	0.9	5.2	2.8	3.8
January-September 2012/ January-September 2011	0.3	6.0	2.8	4.2
January-December 2012/ January-December 2011	0.0	7.0	3.1	4.8

Labor Market[15]

As the economic activity is expected to be slower from previous forecasts, the labor market indicators for 2012 were revised slightly downside. Under such conditions, smaller growth of nominal wages and slower subsidence of the unemployment as compared to previous projections are expected.

In particular, average nominal wages are expected to grow in 2012 by 4.7 percent due to the increase in productivity in the private sector, reduction in unemployment and a moderate growth in some budget-supported organizations. It is predicted that the growth of nominal wages will be concomitant with expected growth of wages in all sectors of the economy.

Demand for labor is predicted to increase and the number of the unemployed to decrease, as there is expectation that the economy will grow in 2012. The average level of the officially unemployed in the economy will reduce against the respective indicator of the previous year by 0.2 pp and will make up 6 percent in 2012.

Under wage rigidities in the economy, in the first quarter of 2012 the growth of nominal wages will be affected by the growth of wages recorded in the fourth quarter of the previous year. In the first quarter the growth rate of wages will remain higher than the growth rate of productivity. This will therefore push unit labor costs up by 3.0 percent, so some inflationary pressures, in the range of 0.2 percent, will be observable in the economy in the first quarter of 2012.

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[15] *The labor market data for 2012 are the Central Bank estimates which are based on actual figures of the third quarter of 2011 and actual October and November figures of 2011. The growth indicators presented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.*

In the period July-December 2012 disequilibrium in the labor market may disappear and in the meantime the growth rate of nominal wages will be similar to the growth rate of productivity. Under such conditions, the anticipation is that economic agents will not be going to report any significant increases of unit labor costs, so the impact of unit labor costs on inflation in the forecast horizon is estimated to be neutral.

Aggregate Demand[16]

Private Sector Spending

Estimations of private sector spending for 2012 were revised downside based on expectations for slower economic activity, reduced level of inbound remittances and somewhat sluggish economy lending.

According to revised estimations, in 2012 private expenditures are expected to grow by around 3.5 percent y-o-y, which is determined by both increased private consumption and private investments. The domestic demand is expected to grow by nearly 3 percent y-o-y in the event private spending and public expenditures grow (0.7 percent in real terms).

Though the 2012 forecasts for economic activity, profitability and lending growth were revised downside, the growth rates of private investments were revised slightly upside. The revision was based on more-than-expected decline in investments recorded in 2011, under which circumstance an estimated 6.4 percent growth (a base effect) in investments in 2012 becomes more likely. In 2012 the growth rate of investments will be very slow as compared with the growth rates of investments recorded in pre-crisis times.

Relative to previous forecasts, the growth rate of private consumption was revised downside due to expected slowing of economic activity and private remittances from abroad and medium-term adjustments to the level of private consumption. In 2012 the growth rate of private consumption is estimated to be 2.5 percent.

In 2012 the expected slowing of growth rates in monetary remittances from abroad and in the volumes of economy lending will drive the negative gap of private spending to deteriorate (in the fourth quarter of 2011 it came close to zero). According to the Central Bank estimations, in 2012 the private spending gap will make up 1 – 1.5 percent which, however, will wane out to zero at the end of the year, eliminating incongruence between the supply and private sector demand. So, the aforementioned negative gap will create 0.3 – 0.4 pp of deflationary pressures in the economy in 2012.

Current Account

Forecasts of current account components of Balance of Payments were revised in response to downside revision in global and domestic economic growth rates. In view of expected developments with international metals prices and slowing global economic recovery rates, the growth rates of real export (which was strong in the last two years) will slow down. In 2012 the growth of real export will be conditioned by increased production capacities in industry, processing and mining industries in particular. So, the real growth of export of goods and services is expected in the range of 7–9 percent. In view of export prices developments, growth rates of export of goods and services are expected in the range of 3–5 percent. Risks to exports remain dual-sided, determined by growing downside risks to world economy, metals prices in world markets and industry developments in Armenia.

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[16] The data of real growth of private consumption and investments for 2012 are the Central Bank estimates. Actual figures of these data are as of the third quarter of 2011 and published by the National Statistics Service of Armenia. The real growth indicators represented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.

The developments anticipated in connection with global and domestic economies will be reflected in future behavior of imports, too. In 2012 the growth of import of goods and services by dollar value is expected in the range of 1 – 3 percent. The growth of real import of goods and services is expected within 2 – 4 percent. Risks to import will remain dual-sided and will further depend on developments in the domestic economy and international prices.

Forecasts of growth rates of non-commercial remittances by individuals were revised downside mainly in consideration of developments in the Russian economy. According to the IMF January 2012 forecasts, economic growth in Russia in 2012 will slow down and reach 3.3 percent, which is 0.8 pp lower from previous forecasts. In the light of the aforementioned developments the growth rates of net inflow of non-commercial remittances by individuals in 2012 will slow and be within 9 – 12 percent.

All aforementioned developments suggest that in 2012 the current account will tend to improve further, so the current account to GDP ratio will be in the range of 9– 11 percent, as forecast before.

Consolidated Budget[17]

In 2012 the Government will continue implementing a policy to macroeconomic stabilization by keeping the level of budget deficit low (in line with medium-term public expenditures program) on the one hand, and supporting the economic recovery on the other. Providing a 0.8 pp growth of tax revenue and social security charges in GDP relative to the previous year as well as execution of public expenditures in line with program proportions will be the main benchmark in public expenditures programs. In 2012 budget expenditures will grow by 8.5 percent relative to the preliminary actual indicator of the 2011 budget, whereas the expenditures to GDP ratio will reduce by 0.2 pp. Current expenditures are expected to increase and capital expenditures, to decrease.

The 2012 estimation of the impact of fiscal policy remained unchanged as it is forecast to have 0.6 pp contractionary impact on aggregate demand, hence inflation, based on the 12-month figures. This is mainly a result of slightly expansionary impact of expenditures and contractionary impact of revenues. Incidentally, the fiscal policy had some expansionary effect on aggregate demand in the first half of the year but contractionary effect, in the second half. Yet, taking into account the fiscal policy's lagged impact transmitted from the end-2011, that impact will be neutral in the first half of the year but slightly contractionary, in the second half.

The impact of tax change package (through increased tax burden and more tax collections on the account of shadow businesses), in effect since 1st of January 2012, and the expected impact from increasing expenditures for social needs will offset an estimated 0.6 pp of contractionary impact of the fiscal impulse on aggregate demand.

To sum-up, the fiscal sector and a slow recovery rate of private spending will not expand the inflation environment. Minor inflationary pressures will be observable in the labor market in the beginning of the year which, however, will wane out in the second half of the year. So, one may conclude that net impact of the fiscal sector, private demand and labor market on inflation in 2012 will be predominantly neutral.

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[17] The fiscal sector's impact has been estimated using consolidated budget indicators based on the proportions laid down in the Republic of Armenia Law on State Budget 2012. The fiscal impulse has been estimated against consolidated budget indicators of 2011. The revenues impulse has been calculated against an estimated nominal GDP indicator and the expenditures impulse has been calculated against an estimated potential GDP.

INFLATION FORECASTS AND MONETARY POLICY DIRECTIONS IN THE PROJECTED 12-MONTH PERIOD

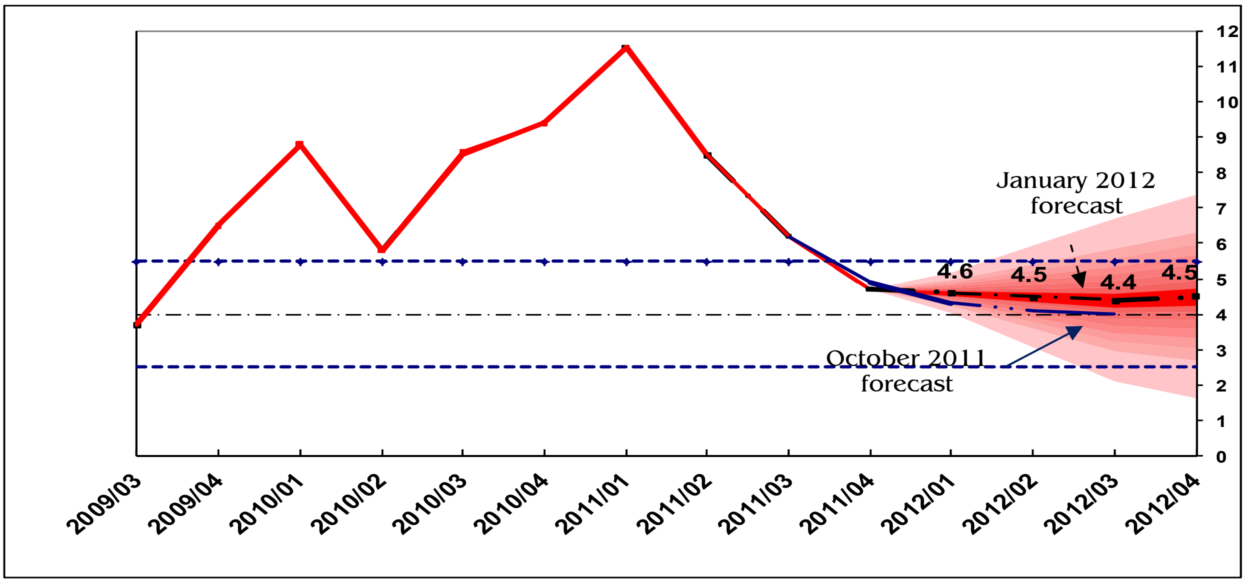
In view of actual and projected macroeconomic conditions, inflation forecasts were made and monetary policy directions for the forecast 12-month horizon projected through Inflation Model by Commodity Groups and the Quarterly Projection Model.

The results of the inflation model by commodity groups were based on an assumption of constant market rates. For the upcoming period, this means that possible inflation developments were estimated in the context of a neutral monetary policy implemented in the previous quarter and the maintenance thereof.

As the baseline scenario suggests, inflationary pressures are not anticipated to transmit to the domestic economy from world food and raw material markets, while developments with domestic demand will not expand the inflation environment either. Conditional forecasts of inflation built on an assumption of constant refinancing rates and on the baseline scenario of macroeconomic forecasts remained almost the same. So, in 2012 the 12-month inflation will all the time rest within the confidence band of 4%±1.5 pp. The central value is forecast to be 4.5 percent in the second quarter of the year, and again 4.5 percent in the fourth quarter of the year, i.e. in the end of the 12-month horizon.

Though the inflation forecast relative to the previous one are almost the same, risks to deviation of inflation from the central value in both sides have grown. Possible external risks, driven by developments in world economy and financial and fiscal policy-related issues in the Euro-area in particular, may have dual-sided effect on future path of inflation. At the same time, risks deriving from agriculture and depending on weather conditions may create both inflationary and deflationary pressures. The summary estimates of impact of potential risks suggest that risks to deviation of inflation from the central value are balanced. Accordingly, the 12-month inflation will be in the range of 3.0 – 5.5 percent with 83.0 percent probability at the end of the second quarter of 2012, and with about 54.1 percent probability at the end of 2012.

Inflation Projection Probability Distribution Chart (12-month)



Inflation Projection Probability Distribution

Inflation interval	Inflation probability interval	
	Q2, 2012	Q4, 2012
< 1.0%	0.01%	2.3%
1.0 - 3.0%	4.3%	17.3%
3.0 - 4.0%	24.1%	21.2%
4.0 - 5.5%	58.9%	32.9%
5.5 - 7.5%	12.5%	24.1%
7.5% <	0.1%	2.1%

Inflation forecasts and projection of monetary policy directions made through the **Quarterly Projections Model used by the Central Bank** were based on actual initial macroeconomic conditions of the fourth quarter of 2011 and external macroeconomic developments and expected change in the external inflation environment. The results generated suggested that the policy of tightening of monetary conditions at the beginning of the year, a contractionary fiscal policy as well as macroeconomic developments in domestic and external environments had neutralized inflationary pressures. Specifically, moderate growth of domestic demand, increased supply of agricultural products as well as deflationary impulses transmitted from the external sector have contributed to the subsiding of the inflation rate. In the fourth quarter the developments in the financial market were in the light of certain interest rate rise following a change in reserve requirement mechanism.

Forecasts made under the aforementioned initial macroeconomic conditions suggest that macroeconomic developments determining further path of inflation will have a neutral impact on the inflation environment on the whole. It is expected that no inflationary pressures will come from world commodities markets in the forecast horizon, and the impact of domestic demand, conditional also on fiscal policy directions, will generally be neutral.

Under the baseline scenario for the aforementioned macroeconomic developments, it is expected that in the forecast horizon the 12-month inflation will be within the confidence band. In such a case, change of monetary policy stance in the upcoming period will not be required, and further implementing a neutral monetary policy will be most reasonable. Also, depending on the extent of materialization of the outlined risks, further adjustment of monetary directions can be considered.

Uncertainties deriving from global economic developments are maintained, and this may cause deviations, both upside and downside, from the baseline scenario. On the one hand, recent estimations of the U.S. and German economic activity contain positive impulses for even a faster global economic growth and, therefore, increased external demand for the Armenian export and faster growth rates domestically. On the other hand, the rising of oil prices in the event of lasted political tension around Iran, on the other hand, the depreciation of currencies of main partner countries amid escalation of debt issues in Euro-area and more unfavorable developments in global economy, may create additional inflationary pressures in the domestic market.

In this context, the forecasts of **monetary indicators** for the coming 12 horizon are based on the actual macroeconomic environment of the previous quarter, macroeconomic developments projected for the next year and the fiscal policy scenario envisaged for the same period of time. Further, in consideration of the developments in world and domestic economies and possible demonstration of dual-sided risks under the inflation environment which somewhat stabilized in the recent period of time, the Central Bank will continue implementing a consistent monetary policy in the upcoming one-year horizon. So, for the upcoming one-year horizon, broad money and dram broad money are expected to grow by 17.6 percent and 21.1 percent y-o-y, respectively, and monetary base, by 8.0 percent. In anticipation of the level of dollarization to subdue, currency in circulation is expected to grow by 13.3 percent y-o-y; dram deposits and FX deposits, by around 30.0 percent and 12.6 percent y-o-y, respectively. The dollarization of the economy (a ratio of FX deposits of residents to broad money) is expected to subside by 4.2 percent while the dramization (a ratio of dram broad money to GDP) is expected to increase by more than 10.0 percent.

According to the forecast baseline scenario, in the upcoming 12-month period the lending to economy by the financial system is expected to slow down. In 2012 the growth of lending is expected to reach 20.2 percent y-o-y or roughly AMD 270.0 billion compared to 33.3 percent y-o-y or nearly AMD 350.0 billion recorded in the previous year. The loan funds will be used in SME lending and mortgage market lending. It should be mentioned, however, that foreign currency lending will remain prevailing in the total portfolio of lending to economy, due to still a large share of foreign currency funds which commercial banks borrowed from foreign organizations.

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