

THE CENTRAL BANK
OF THE
REPUBLIC OF ARMENIA

*Approved under Board of the Central Bank
Resolution No. 135 A,
dated 31.05.2013*

Inflation Report

Monetary Policy Program, Q2, 2013

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*Status report on implementation
of the Monetary Policy Program
Q1, 2013*

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Since January 2006 the Central Bank of Armenia has moved to a fully-fledged inflation targeting strategy whereby the monetary policy was steered to minimize any deviations of potential inflation from a 4 percent target.

Each quarter, the monetary policy programs of the Bank used to present inflation forecast for the upcoming 12-month period under the assumption of unchanged interest rates as well as forecasts of the response of the policy rate. The programs included a blueprint for monetary policy directions.

The forecasting and policy analyses capacities of the Bank have considerably improved recently as the quarterly projections model became a more sophisticated one while the list of short-term models designed to forecast different suites of macroeconomic indicators expanded. Not only the Bank is now able to present inflation forecasts for upcoming 12-months but also it can provide medium-term conditional inflation forecasts.

Starting from Q2, 2012, the Bank has expanded inflation forecasts for a longer time horizon of 3 years instead of previously applied 1-year and publishes non-conditional inflation instead of conditional.

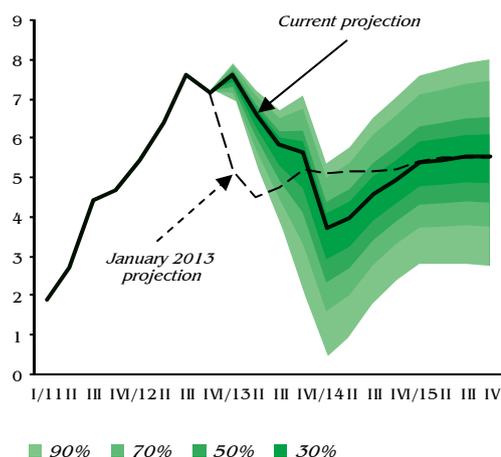
In consideration of best international experience, public surveys as well as seeking to raise public awareness the Bank approves and publishes, starting from the second quarter of 2012, Status Report on Implementation of Monetary Policy of the previous quarter and Monetary Policy Program of the next quarter in a single paper.

1. EXECUTIVE SUMMARY¹

The potential of economy further trended upward in Armenia in the first quarter of 2013; the growth is expected in the range of 7.4 – 7.7 percent in the first quarter of 2013.

In the forecast horizon, excess growth of real consumption will further reduce as the supply shock in agriculture observed in the previous year gradually wanes out, driving the economic growth indicator to stabilize around its equilibrium.

Real GDP cumulative growth projection probability distribution for 3-year horizon



In external sector in the first quarter of 2013 world demand remained sluggish; no inflationary trends were observable in basic food and raw material markets of the world.

In the forecast horizon, inflation will stabilize around its 4 percent target level. Starting from the second quarter of 2013, however, the 12-month inflation is predicted to accelerate due to the influence of waned out supply shock, heavy hails in May and possible rise in energy resources in the third quarter. As a result, in the upcoming one year the inflation indicator will step above the target, to come up to an 8 percent level.

The *potential of economy* further trended upward in Armenia in the first quarter of 2013, reflecting persistently **strong economic activity**, under which circumstance the growth is expected in the range of 7.4 – 7.7 percent in the first quarter of 2013. Strong growths in industry and services remain an important contribution to the strengthening of economy potential. The Central Bank intended to adjust the growth potential estimation upside. However, taking into consideration the influence of **heavy hails in May and possible rise in energy tariffs starting from the third quarter**, the economic growth potential in **forecast horizon** is estimated to have been at the 5.5 percent level as provided for in the previous quarter's program.

The beginning of the year was marked with persistently strong **private consumption** growth rates: it is an estimated 6.9 percent which is however some slowing compared to the indicator reported for the last quarter of the previous year.

In the forecast horizon, excess growth of real consumption will further reduce as the supply shock in agriculture observed in the previous year gradually wanes out, driving the economic growth indicator to stabilize around its equilibrium. In particular, in 2013 the real consumption growth rates will slow down to 5 percent while private investment will report some increase of 5.3 percent. In 2013 there will be an average 5.6 percent economic growth mainly owing to increased output in industry and service (with a combined contribution of 3.8 pp).

In the **forecast horizon**, domestic prices will feel **deflationary pressures** as the private demand weakens and the fiscal policy implementation remains an estimated neutral.

In **external sector** in the first quarter of 2013 world demand remained sluggish primarily due to the problems in Armenia's main trade partners in EU countries as well as slower-than-expected growth in the Russian economy. In such conditions no inflationary trends were observable in **basic food and raw material markets** of the world. Moreover, at the end of the first quarter some markets started to see deflationary patterns.

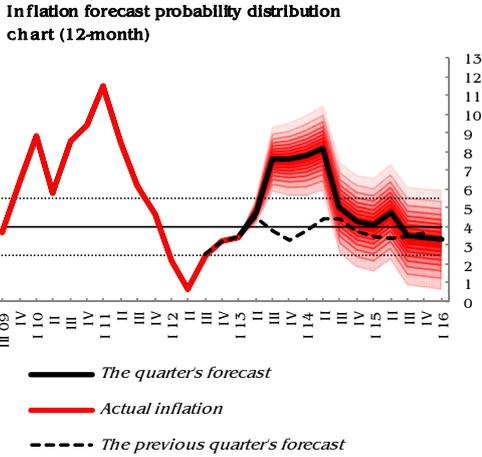
In the forecast horizon, no inflationary pressures will be seen in the external sector. Because uncertainties over political solutions to debt problems in industrialized economies are persisting, it is anticipated that world economic growth rates will slowly recover. Given small impact of external demand, international prices of major raw materials and food products will behave relatively steady whilst staying at existing high levels.

In the light of the aforementioned developments in external and domestic economies, in the first quarter of 2013 **the 12-month inflation** behaved relatively steadily, as was expected, reaching 3.4 percent at the end of March thus staying in the lower bound of the band.

¹ The monetary policy program was prepared using basic preliminary macroeconomic indicators that describe the socio-economic situation of Armenia for the period January-April 2013, as provided by the Republic of Armenia National Statistics Service (as of May 20, 2013).

In the first quarter of 2013, in view of the influence of waned out supply shock over the inflation environment as well as the lack of inflationary pressures from external sector and domestic economy, the Central Bank continued implementing *a neutral monetary policy*, leaving the refinancing rate unchanged (see details in section 3.1.1 Actual inflation and attainment of target).

In the forecast horizon, the inflation will stabilize around the target 4 percent level. In view of the aforementioned developments in external and domestic sectors as well as the influence of the temporary supply shock waned out, it is predicted that the *12-month inflation* will pace slightly faster, staying within the upper bound of the band at the end of June. The inflation environment will expand influenced by the *possible price increases on agricultural products due to heavy hails in May and probable rise in energy resources starting from the third quarter of 2013*. As a result, starting from the third quarter, the inflation indicator will step above its target and stay within an 8 percent level in the course of the upcoming one year. In the event the decision on revised tariffs of energy resources is final, the Central Bank will adjust the current directions of the monetary policy by raising the refinancing rate in order to mitigate high inflation and its second-round effects and to anchor inflation expectations. Once inflation expectations are neutralized, the Central Bank will look to readjust its policy by lowering the refinancing rate accordingly. As a result of such action the 12-month inflation is anticipated to subside and enter the confidence band already starting from the third quarter of 2014.



The Central Bank will adjust the current directions of the monetary policy by raising the refinancing rate in order to tame high inflation and its second-round effects, which is expected from the third quarter of 2013, and to anchor inflation expectations. Once inflation expectations are neutralized, the Central Bank will look to readjust its policy by lowering the refinancing rate accordingly.

In the forecast horizon, the existing risks are estimated as balanced, determined by development prospects for the global and domestic economies.

2. FORECAST, FORECAST CHANGES, RISKS

2.1. External environment²

In the forecast horizon, external sector will be marked with slowly recovering economic growth rates concomitant with a moderate inflation environment.

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In April 2013 the IMF readjusted world growth outlook indicator downside for both developed and developing countries.

In the **U.S.A.** the Federal Reserve System will continue implementing a low-interest-rates policy during 2013, too. As a result, it is anticipated that growth rates will be accelerating starting the second half of 2013 and this will last up until 2015, making up 2.5 percent.

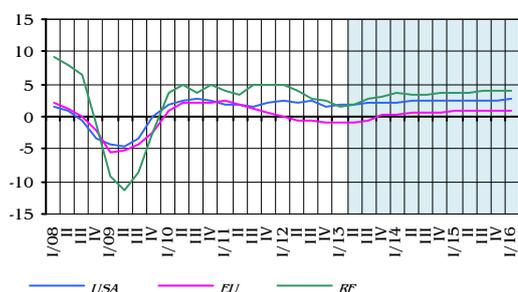
In spite of some improvement in financial conditions in the **Euro-area**, economic recovery will be at quite a slow pace. Driven by real sector problems economic recovery will be put off until 2014, and it will reach 1 percent at the end of 2015. In pursuit of economic stimulation, the European Central Bank will continue a low-interest-rates policy. As such, in May the ECB lowered the policy rate down to 0.5 percent.

The forecast of economic growth in **Russia** for 2013 is about 2.4 percent. At the end of 2015 that indicator is expected to reach 4 percent. The inflation indicator will be within 6 percent in 2013.

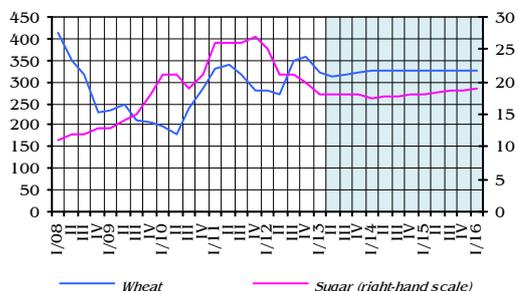
There are **serious uncertainties and risks** about the further pace of global economy. Specifically, downside risks to the global economic growth will be driven by further fiscal consolidation in the U.S.A., escalated debt problems in Euro-area, as well as possible rise in energy resources due to geopolitical developments.

In the face of expected sluggishness in world economic recovery no significant inflationary trends will be observed in the world's **main commodity and food product markets**. Moreover, individual commodity markets are predicted to develop under the influence of fundamental factors inherent in any such markets. Risks associated with energy resource price developments will be determined by geopolitical events, the performance of metals prices will be influenced by world economic growth outlook whereas prices of food products will depend mainly on weather conditions.

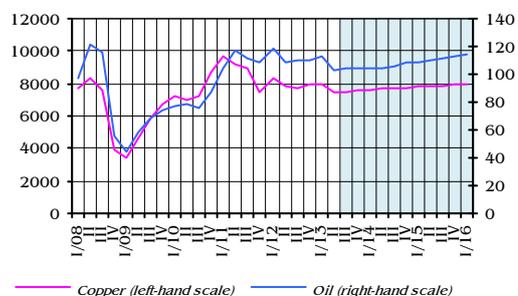
Economic growth in partner countries



Food products (US dollar)



Raw materials (US dollar)



² 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, Economist Intelligence Unit, International Grain Council, International Energy Agency, Barclays Capital, РосБизнесКонсалтинг and other sources.

Developments in commodities markets in the forecast horizon

In 2013 roughly 66 percent of global demand for oil will be met by producing oil by non-OPEC countries (the growth was 2.1 percent against the previous year), under which circumstance average demand for extraction of oil by OPEC countries will reach 36.1 million b/d. In the period 2013-2015 international oil prices are expected to grow moderately as world economic activity rebounds. However, the global market of energy resources will possibly see inflation risks due to geopolitical developments.

Uncertainties are anticipated in base metals markets, whilst inflationary trends will not be seen. In the period 2014-2015, however, moderate inflationary patterns may be observed as the world economic recovery is back on track.

In world wheat markets the fundamental tightness has somewhat weakened, yet further developments in the market will depend on the information about new crops. In 2013 the average wheat price will still be above the average reported for the previous year due to low prices observed at the beginning of 2012. According to April estimations of the U.S. Department of Agriculture, in the marketing year 2012/2013 some 655.4 million tons of wheat crops is expected in consideration of world consumption of 672.6 million tons. The world wheat stock will decrease by 9.1 percent in relation to the marketing year 2011/2012 and will reach 182.2 million tons.

In marketing year 2012/2013 world production of rice will be impressive, 467.6 million tons. On the back of anticipated 469.3 million tons of rice, the world rice stock will decline to some extent (103.8 million tons against 105.5 million tons) for the marketing year 2011/2012. Notwithstanding expected rich crops, the tightness in the rice market may persist if authorities in Thailand decide to further enforce state regulatory mechanisms and keep rice prices artificially high. Under such conditions the rice market will see price stabilization trends, along with inflation risks, however, associated with the enforcement of state regulatory mechanisms in Thailand and other major rice exporter countries.

International prices in sugar markets are mainly expected to show weak deflationary trends in anticipation of rich crops in Brazil and Thailand in the marketing year 2012/2013.

2.2. Aggregate supply and Aggregate demand**Aggregate supply**

Because the economy potential remains strong thanks to persistently high economic growth rates in the first quarter of 2013, adjusting the level of the potential upside is well possible. In view of both current macroeconomic developments³ and possible growing of external and domestic demand⁴, economic growth forecasts of the baseline scenario were to be revised upside. However, in consideration of the said developments, coupled with the probability of adverse effect of possible revision of prices of energy resources starting from the third

In 2013 the economic growth will be in the range 4.7–5.9 percent. In the forecast horizon it will stabilize within 5–6 percent, according to the Central Bank estimates.

³ See details in section 3.2 "Aggregate supply and aggregate demand".

⁴ See details in "Aggregate demand" of this section.

quarter of 2013, somewhat a humbler upward growth indicator was chosen (in the range **4.7 – 5.9 percent**). In the forecast horizon it will stabilize within **5 – 6 percent**, staying close to its long-term equilibrium⁵.

The developments are expected in the sectors of the economy, as follows:

For **Industry** the forecasts were revised slightly upside, owing to higher-than-expected growth in output volumes as well as encouraging optimism⁶ reported with industrial firms during the first quarter of 2013. The growth of industry will continue to be driven by such sub-industries as *ore mining, metallurgy, food and beverage, production of building materials, diamond processing, pharmaceuticals and energy*, owing to expected increase of production capacities of companies active in these fields. As a result, in 2013 the real growth of value added is expected in the region **8.0 – 9.5 percent y-o-y**.

Risks deriving from industry are **balanced**. Moreover, upside risks to economic growth will mostly depend on how effectively the Government will take measures to identify tradable sector's potential; downside risks will be determined by possible slowing of the global economic growth rate.

For **Services** the forecasts were also revised somewhat upside, owing to higher-than-expected trade turnover and revised forecasts of domestic demand in the first quarter. As a result, the **real growth** of value added of services is forecast in the range **5.0 – 6.5 percent y-o-y** for 2013.

Risks to slower growth rates will be determined by possible deceleration in remittances to disposable household income.

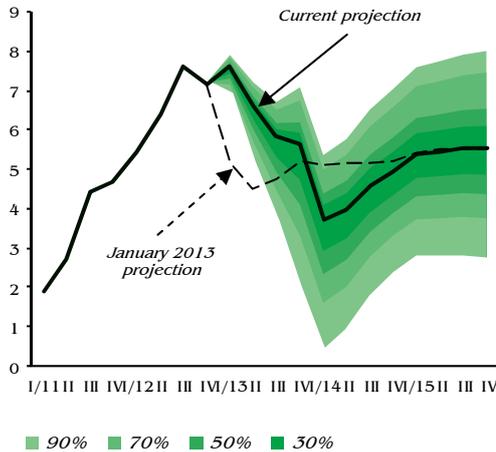
For **Construction** forecasts of value added in 2013 were left unchanged, which means the growth in the range of 2.5 – 4.5 percent is anticipated owing to increased volumes of construction in energy, processing industry, trade, transport and agriculture. Risks in construction are balanced, and are attributable to quicker implementation of road construction and infrastructure improvement projects underway and in prospect.

For **Agriculture** a least risky scenario was further left in regard to current developments here. As a result, the real growth of value added is expected within **1.5 – 3 percent** for 2013 in consideration of the possible impact from adverse weather conditions.

There are **risks to slower growth rates** in agriculture, as they will mostly depend on how fast the sowing areas would recover as a result of the Government help to rural communities suffered from heavy hails.

Under the baseline scenario risks in agriculture are dual sided and associated with exogenous and indigenous factors. Moreover, the downside risks, however insignificant they can be, outweigh the upside risks.

Real GDP cumulative growth projection probability distribution for 3-year horizon



⁵ See the 30 percent interval in the Real GDP Growth (Cumulative) Projection Probability Distribution Chart in this paper.

⁶ See <https://www.cba.am/am/SitePages/statsseabci.aspx>.

Real GDP Growth (Cumulative) Projection Probability Distribution				
Period	90% probability interval		30% probability interval	
	Min	Max	Min	Max
January-December 2013 / January-December 2012	2.0	7.1	4.7	5.9

Labor market⁷: the 2013 forecasts of labor market indicators were revised slightly upside, according to the baseline scenario. This was based on somewhat a stronger-than-expected economic activity in relation to previous forecasts. Under such conditions, in 2013 slightly a faster pace of subsidence of the unemployment in comparison with previous projections is expected.

In spite of higher-than-anticipated economic activity, the 2013 forecasts of wage growth rates were revised downside, which was based on slower-than-expected growth rates in actual nominal wages at the start of the year. Given the economic growth and inflation developments go a path as projected in the baseline scenario, the above-mentioned trends in labor market will continue in the *medium-run* as well.

In particular, in 2013 *average nominal wages are expected to grow by 6.4 percent* due to a moderate increase in productivity in the private sector and adjustment of nominal wages in line with the anticipated inflation environment. On the back of expected economic growth during the year the demand for labor will grow thus pushing the number of jobless down. In 2013 the average level of the unemployment rate in the economy will reduce against the respective indicator of the previous year by 1.1 pp to 16.2 percent.

The level of unemployment will keep on subsiding in the *medium-run*. In the forecast horizon, in the light of reducing unemployment and the government policy steered to wage increment, the growth rates in nominal wages will be even faster which will lead to much higher growth rates in real wages.

Under the aforementioned developments significant imbalances that would affect inflation in the labor market is not likely to appear over 2013 and in the medium-run.

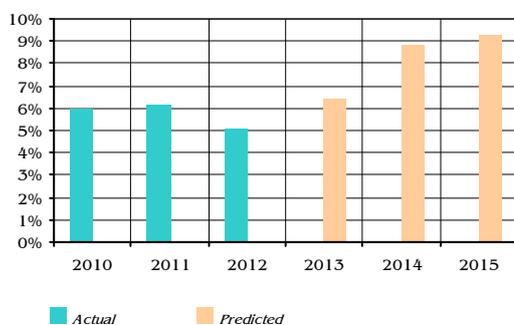
The forecasts of labor market indicators have considered the *minimum salary threshold* which is expected to *increase up to AMD 45 000* in the third quarter of the year. In particular, the increment in household incomes driven by increased wage in both public and private sectors was considered a factor stimulating the domestic demand in the economy, whereas the increasing of the minimum salary was viewed as a factor augmenting company costs. So, one may conclude that demand and company costs increment driven by the increase in minimum salary threshold would leave a negligible impact on inflation, which would be in the region 0.15 – 0.25 pp in the third quarter of 2013.

⁷ The labor market data for 2012 are the Central Bank estimates which are based on Q1 2013 actual data. The growth indicators presented in this subsection are relative to the same quarter of the previous year, unless otherwise specified.

In 2013 average nominal wages are expected to grow by 6.4 percent due to a moderate increase in productivity in the private sector and adjustment of nominal wages in line with the anticipated inflation environment.

In 2013 the average level of the unemployment rate in the economy will reduce against the respective indicator of the previous year by 1.1 pp to 16.2 percent.

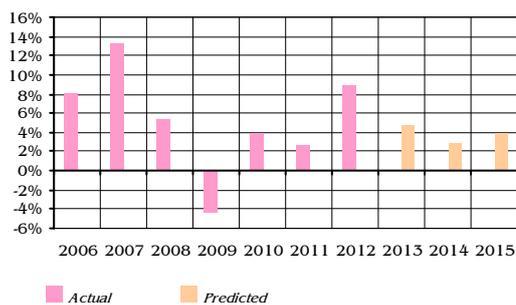
Average nominal wage growth, y-o-y



Aggregate demand⁸

In 2013, relative to the previous year, the private consumption growth rates are expected to slow down as excess growth waned out gradually. Under such conditions, the annual private consumption growth will be 4.9 percent at the end of the year.

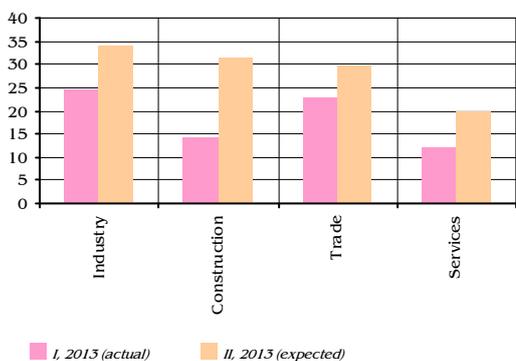
Private consumption growth, y-o-y



Actual Predicted

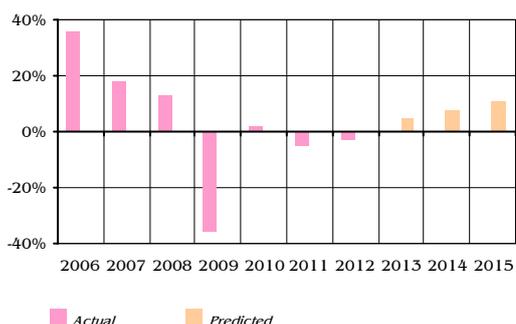
In 2013 private investment will grow by 5.3 percent, according to the Central Bank estimates.

Share of companies having invested and intending to invest



I, 2013 (actual) II, 2013 (expected)

Private investment growth, y-o-y



Actual Predicted

Relative to previous forecasts, the growth rate of *private consumption* for 2013 was revised upside to some extent and it amounts to 4.9 percent. The revision was made in consideration of higher-than-expected growth (6.5 percent) of private trade in the period January-March of 2013, driven in turn by economic benefits of the strong growth reported in agriculture in the previous year as well as impressive credit growth in the first quarter of 2013.

The upside revision notwithstanding, *private consumption growth rates will slow down* in 2013, reflecting gradually abolishing surplus growth of private consumption. The growth rate of private consumption will slow in response to the expected deceleration in the agricultural output volumes and credit growth rates.

The anticipated inflation environment the face of possible revision of prices of energy resources in the second half of 2013 as well as appropriate adjustments to the monetary policy of the Central Bank starting the second half will contribute to further slowing of private consumption growth rates. As a result, *in the forecast horizon* such private consumption growth rates will be relatively slow but will accelerate to some degree at the end of the forecast horizon.

The forecasts of *private investment for 2013* were not changed considerably in relation to previous forecasts.

In the first quarter of 2013 investment activity in the economy was somewhat weaker than anticipated, reflecting 6.5 percent contraction in the output volumes in construction, in relation to the previous year.

A slightly higher economic activity forecasted for 2013, expected moderate growth rates in construction and heightened propensity to invest by companies in the second quarter of the year all point to the transient nature of sluggish investment climate observable at the start of the year.

As a result, private investment will grow slightly in relation to the previous year and will reach 5.3 percent in 2013, according to the Central Bank estimates. Note that relatively stronger investment activity is expected in industry.

Growth rates of private investment in *medium run* will be slightly faster compared to 2013 thus contributing to the expected economic growth for that period. In the *forecast horizon* private investment will recover somewhat slower than outlined in previous projections, due to the influence of possible revision of prices of energy resources on the economic activity.

The forecast of growth rate of *private spending* was revised a little upside in relation to the previous forecasts, and it now

⁸ The data of real growth of private consumption and investments for 2013 are the Central Bank estimates. Actual figures of these data are as of the fourth quarter of 2012 and published by the Republic of Armenia National Statistics Service. The real growth indicators represented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.

reaches 4.9 percent. Also, in view of 8.8 percent growth of public expenditures in real terms and expected development patterns in private spending, domestic demand in 2013 will increase by 5.4 percent. In the *medium-term prospect* growth rates of private spending will slow down and stabilize in the closing of the forecast horizon.

In the first half of 2013 the positive private spending gap will narrow gradually to wane out to zero during the second half of the year, eliminating mismatch between the supply and private sector demand. Under such conditions the private spending will create some 0.2 – 0.3 pp of weak inflationary pressures in the consumer market.

Starting from the end of 2013 the slowing of private spending growth rates will lead to the creation of the private spending negative gap in the *medium-run*, which will however wane out to zero in the closing of the forecast horizon. As a result, in the *medium-run* the private spending will have a 0.6 – 0.7 pp contractionary impact on the inflation.

The forecasts of individual components of **current account** were revised, and the Current Account/GDP ratio will continue improving during 2013 in the face of somewhat weaker global economic recovery and revised projections of growth of the domestic economy. The growth of real export will outgrow the growth of real import. This will lead to the reduction of the dollar value of the balance of trade deficit in spite of the expected deterioration of terms of trade. The growth rates in private remittances of individuals were revised slightly downside in anticipation of the developments in the Russian economy.

Despite weak external demand, in 2013 the **export** growth indicator was revised upside, mainly attributable to the upside revision of growth rates in the domestic industry as well as strong y-o-y growth of export of goods and services in the first quarter of 2013, which has exceeded expectations. As a result, in 2013 the *growth of real export of goods and services will be in the range of 9 – 11 percent*. The downside risks to export will prevail due to slowdown in global economic growth and international metals prices staying at low levels.

The import growth indicator was also revised in consideration of revision of growth rates of domestic economy. In 2013 the *growth of real import of goods and services is expected to be within 0 – 2 percent*. Risks to import will remain dual-sided, as they will be associated with developments in the domestic economy and international price behavior.

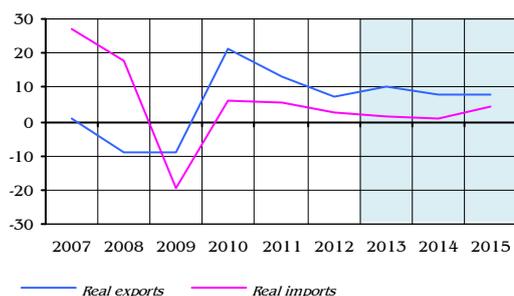
The growth rates of *non-commercial remittances of individuals* were revised slightly downside, *within 6 – 8 percent for 2013*, in view of low growth rates in the Russian economy in the first quarter of 2013 and downward revision of economic growth rates in 2013.

All aforementioned adjustments suggest that the Current Account Deficit/GDP ratio will reduce and stay within 9.0 – 10.0 percent in 2013 from 10.7 percent in 2012.

The current account deficit will carry on improving in the medium run to reach 6.5 – 7.5 percent of GDP in 2015.

In 2013 the growth of real export of goods and services will be in the range of 9 – 11 percent and the growth of real import of goods and services is expected to be within 0-2 percent; the growth rates of non-commercial remittances of individuals are estimated to be within 6 – 8 percent for 2013.

Real exports and imports (y-o-y, %)



In 2013 the Deficit/GDP ratio is expected to reach 2.0 percent.

In view of the state budget performance which was consistent with the projections (see section 3.2.3 “Fiscal policy”), the annual budget program was revised as follows: savings on public expenditures to make up 1.3 percent of annual expenditures and over-performed revenues to reach 2.0 percent of the annual plan. In 2013 the Tax/GDP ratio is expected to increase y-o-y by 0.7 pp⁹, and the Expenditures/GDP ratio - by 0.4 pp. Furthermore, an increase of expenditures has been planned to the expense of both surpassed growth of capital expenditures¹⁰ and current expenditures. ***In 2013 the Deficit/GDP ratio is expected to reach 2.0 percent.***

In 2013 it is anticipated that the fiscal policy’s impact on aggregate demand, hence inflation, would be neutral, which would be driven by contractionary influence of revenues (0.2) and neutral influence of expenditures. More to the point, almost neutral impact was estimated for the second quarter and expansionary impact of 0.9 and 0.8 for the third and fourth quarters, respectively.

The forecasts of ***fiscal policy in forecast horizon*** are based on the main indicators as outlined in the Republic of Armenia Medium-Term Public Expenditures Program, 2014-2016, which is aimed to effective debt management and maintaining the Debt/GDP ratio up to the 2 percent level. ***The impact of fiscal policy in medium run is estimated to be non-inflationary, as a result.***

The fiscal sector’s medium-term impact estimation according to macroeconomic indicators underlying the Medium-Term Public Expenditures Program, 2014-2016, prepared by the Republic of Armenia Ministry of Finance					
	2012	2013	2014	2015	2016
Budget revenues	23.8	23.5	23.4	23.6	23.9
Budget expenditures	25.3	26.2	25.7	25.6	25.9
Debt interest payment	1.01	1.18	1.14	1.13	0.93
Budget balance ¹¹	-1.5	-2.0 ¹²	-2.3	-2.0	-2.0
Primary balance*	-0.5	-1.0	-1.2	-0.9	-1.1
One-off flows**	-0.3	-0.4	-0.3	-0.3	-0.3
Adjusted balance***	-0.2	-0.6	-0.8	-0.6	-0.8
Cyclical balance****	0.2	0.2	0.2	0.1	0.1
Cyclically adjusted primary balance (structural balance sheet)	-0.4	-0.8	-1.0	-0.7	-0.9
Fiscal stance*****		-0.2	0.2	-0.3	0.2

* Budget balance minus debt interest payments.
 ** Temporary or one-off budget entries. In this case net lending is considered; the sign “+” means resources allocated and the sign “-” means resources repaid.
 *** Primary balance sheet adjusted by one-off entries.
 **** Central Bank estimate: a part of the budget balance which depends directly on the business cycles. The latter’s components depend on the GDP gap and revenues and expenditures elasticity coefficients on GDP gap.
 ***** Central Bank estimate: y-o-y change in the structural budget balance that reflects a discretionary nature of the fiscal policy (the positive sign denotes fiscal expansion and the negative sign denotes fiscal contraction).

⁹ The 2013 GDP figures are the Central Bank estimates.

¹⁰ The growth of capital expenditures is mostly driven by the implementation of the “North-South Highway Investment Project”.

¹¹ The budget balance sheet contains the pension system costs disburseable starting from 2014 (5%, with the share making up an average 0.49% of GDP for 2014-2016).

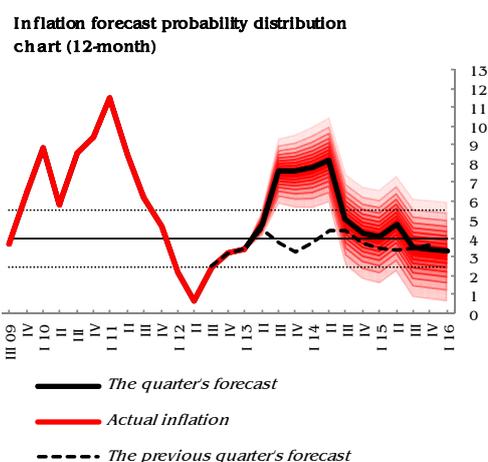
¹² The 2013 budget deficit figure is the Central Bank estimation where the 2013 planned budget revenues are 2.0% more in relation to the figure outlined in the Law on State Budget, mainly due to first quarter revenues over-performed by AMD 11.5 billion, whereas public expenditures are 1.3% less compared to the annual plan which is explained by the first quarter shortfalls on PIU funds disburseable from external sources.

To sum-up, the net impact of the fiscal sector, private demand and labor market on prices in the first half of 2013 will be minor inflationary which will, however, wane out to zero during the second half of the year; in the medium-run though the net impact of the aforementioned factors is estimated as deflationary, with an average annual value of 0.6 – 0.7 pp.

2.3. Inflation forecasts and monetary policy directions in 3-year forecast horizon

Forecasts suggest that in the second half of 2013 the 12-month inflation will expand to get the upper bound of the band at the end of June, which will be determined by the developments in agriculture. The *temporary supply shock* resulted from the previous year's strong growth of agricultural output will phase out in the second quarter of 2013 which will contribute to the expanding of the 12-month inflation. The said forecast was revised upside in consideration of the estimated impact from mid-May rains and frost.

Forecasts of macroeconomic indicators and projection of monetary policy directions made through the Quarterly Projections Model were based on actual macroeconomic developments of the first quarter of 2013.



	Inflation Forecast Probability Distribution Chart				
	< 2.5%	2.5 - 5.5%	5.5 - 7.0%	7.5 - 9.0%	> 9.0%
QII, 2013	0.0%	96.4%	3.6%	0.0%	0.0%
QIII	0.0%	2.2%	44.0%	44.9%	8.9%
QIV	0.0%	3.6%	43.0%	41.8%	11.6%
QI, 2014	0.0%	3.8%	37.0%	41.3%	17.9%
QII	0.0%	2.4%	28.0%	41.8%	27.8%
QIII	4.3%	59.1%	32.3%	4.0%	0.3%
QIV	11.2%	67.9%	19.3%	1.5%	0.1%
QI, 2015	14.3%	68.2%	16.4%	1.1%	0.0%
QII	6.6%	61.0%	28.5%	3.6%	0.3%
QIII	26.3%	63.4%	9.7%	0.5%	0.1%
QIV	28.6%	62.1%	8.8%	0.5%	0.0%
QI, 2016	30.9%	60.7%	8.0%	0.4%	0.0%

In the face of persisting uncertainties over political solution to debt problems in developed countries, in the *forecast horizon* the global economy will recover at a slow pace, according to the baseline scenario. Forecasts of economic growth in both developed and developing countries were revised downside. With the global demand recovering at a slow pace, the *main commodity and food product markets* are not going to see inflationary patterns.

In the Q1 2013 monetary policy program the Central Bank has revised the real economic growth equilibrium of 4.5 percent up to 5.5 percent. The revision was based on high economic growth and low inflation reported in 2012. According to the Central Bank analytics, the increase of the economy potential is

mainly due to industry productivity growth, which is evidenced by large-scale credit to the industry in recent years. According to EAI data, in the previous quarter too, economic activity remained trending upward. Moreover, 12-month inflation has been within the confidence band, rules out existence of short-term demand shock. Therefore, had not there been a need for possible energy price revision, the Central Bank would have revised the real economic growth equilibrium again upside this quarter. Yet, the Central Bank has left such estimation unchanged. All forecasts in this report are based on the said judgments.

Recent developments in the domestic economy are characterized by higher-than-expected economic activity and 12-month inflation close to the target. As was mentioned in the first quarter of 2013 program, such developments were conditioned mainly by the agricultural supply shock and strong performance in industry recorded in the previous year. As was forecast, the supply shock will wane out this quarter and the 12-month inflation will rest within the upper bound of the target at the end of the quarter. Had not there been shocks, the 12-month inflation would have been closer to the target at the end of 2013.

However, because the baseline scenario had the possible energy price revision¹⁵ included in the program and in consideration of its direct and indirect impact on prices of other goods, the assumptions are that 12-month inflation will draw near to the 8 percent level.

Also, in the event of economic growth, in the absence of energy price shock, the 2013 growth forecast would be revised upside, either. However, the slowing of the real consumption growth rates as well as increased company costs will lead to the creation of a negative GDP gap in the fourth quarter of 2013, which will in turn deteriorate because of increased consumption of gas and electricity in wintertime. Given the budget constraints¹⁴ to individuals and companies, the negative impact of the said energy price revision on the economic growth will be felt in 2014. According to the Central Bank forecasts, the negative GDP gap will wane out to zero in the closing of the forecast horizon, with the 2013 economic growth in the range of 4.7 – 5.9 percent, stabilizing around the long-term equilibrium. With these developments, the 12-month inflation will come back to the target, amounting to about 5 percent in the third quarter of 2014.

Thus, the first year of the forecast horizon for possible review of energy tariffs will create inflationary environment which will

¹⁵ The baseline scenario considered the latest available information on the rise in gas and electricity prices. According to the recent publication issued from the Public Utilities Regulatory Commission (<http://www.psrc.am/am/?nid=102&id=1963>) the price per cubic meter of gas is planned to rise to AMD 156 from AMD 132 (an increase of AMD 24) for those consuming up to 10.0 thousand cubic meters of gas, and the price per kW/h of electricity to AMD 38 from AMD 30 (an increase of AMD 8) for those using 0.38 kW of electricity (including households).

¹⁴ Individuals and companies are given budget constraints in terms of income, and the energy price increase will lead to the reduction of the demand for other goods, which will in short run result in a demand lower from the potential, i.e. the negative GDP gap.

be somewhat mitigated by the deflationary influence of the domestic demand.

Given a final decision is made with regard to the revision of energy prices, the Central Bank will carry out a policy to neutralize the effects of inflation expectations. Afterwards, the Central Bank will steer its policy by lowering the policy rate in order to return aggregate demand to its equilibrium.

Risks to inflation deviating from forecast value in short-term and long-term horizons are balanced and depend on external and domestic economic perspectives.

Forecasts of monetary indicators for the projected time horizon are based on the actual macroeconomic environment of the first quarter of 2013, macroeconomic developments projected for the next three years, the fiscal policy scenario, the balance of payments, strategy papers of commercial banks and the results of surveys conducted among banks and credit institutions. In the *forecast horizon* growth rates in lending will remain strong and financial intermediation upward trending yet such growth rates are expected to slow down to some extent in comparison with previous years.

3. ACTUAL DEVELOPMENTS IN Q1 2013

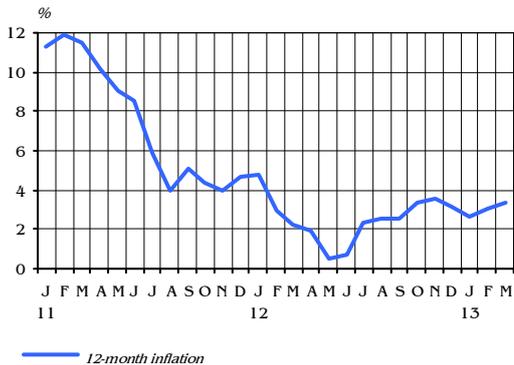
3.1. Inflation

3.1.1. Actual inflation and attainment of target

In the first quarter of 2013 the 12-month inflation behaved relatively stable, reaching 3.4 percent at the end of March.

In view of non-inflationary effects from external and domestic sectors on the domestic prices, a steady path of the 12-month inflation in the first quarter of 2013 was anticipated according to the baseline scenario. The actual first quarter results suggest that inflation was 2.9 percent against 2.7 percent recorded in the first quarter of 2012. In the outcome, the 12-month inflation behaved relatively stable during the first quarter, reaching 3.4 percent at the end of March of 2013.

The 12-month inflation was relatively steady, as was expected



12-month inflation by commodity group as main contributors		
Commodity group	Growth	Contribution
CPI	3.4	
Food products (alcohol and tobacco included)	3.4	1.8
bread products	10.4	1.1
meat products	3.5	0.4
fruit	10.5	0.4
fats and oils	7.9	0.3
eggs	11.6	0.2
Non-food products	5.5	0.9
Services	2.3	0.7

In the first quarter the 12-month core inflation further expanded to 4.2 percent at the end of the quarter from 3.5 percent recorded in the previous quarter.

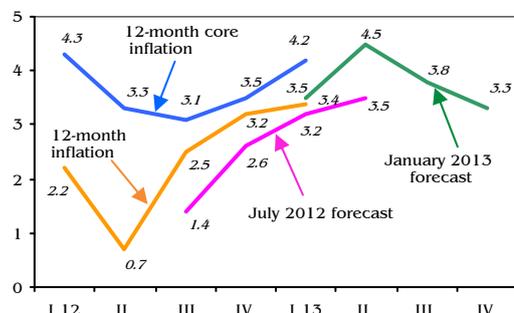
As envisaged by the monetary policy program, the 12-month inflation will show stable behavior, resting within the confidence band throughout the year. A baseline scenario like this suggested leaving monetary policy directions unchanged by further carrying out a neutral monetary policy. The program provided for dual-sided risks either.

The first half of 2012 developments showed that risks to the downsloping path of inflation prevailed in the domestic environment, determined by the *supply shock as a result of increased output in agriculture*. Under this circumstance the 12-month inflation amounted to 0.7 percent as of end-June, somewhere below the lower bound of the confidence band (in the same period of 2011 and 2010 the 12-month inflation was 8.4 percent and 5.8 percent, respectively). A low inflationary environment as this one was driven exclusively by the drop in food prices. Pronounced seasonality of food prices is also explained by the fact that back in mid-2010 a lesser seasonal drop in prices of products of domestic agriculture created high levels of 12-month inflation. However, an increased supply of domestic agricultural products reported in the next two years (13.7 percent growth in 2011 and 9.3 percent growth in 2012) pushed agricultural prices down and prompted they resting at levels below historical average.

In the first half of 2012 the Central Bank left the refinancing rate unchanged (8 percent), mostly explained by the dram

exchange rate depreciation in May-June, which already meant an easing of monetary conditions, and by the behavior of the 12-month core inflation that has all the time been within the headline inflation target.

In end-2012 the 12-month inflation neared the target and rested within it in the first quarter of 2013 as the temporary agricultural supply shock phased out



In the first quarter of 2013 the Central Bank further carried out a neutral monetary policy, in consideration of non-inflationary effects from external and domestic sectors on the domestic prices in the forecast horizon.

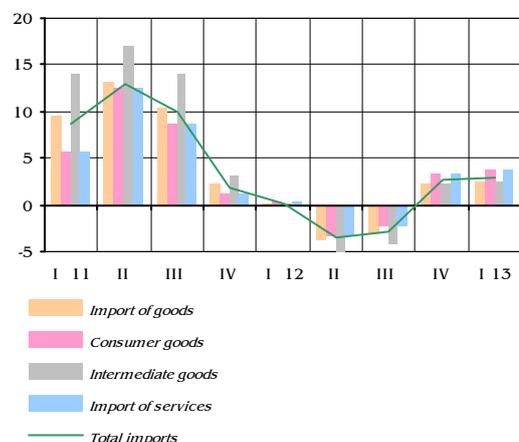
The Central Bank somehow adjusted the inflation forecasts of the second half of 2012 on a basis of much lower level of inflation and in anticipation of a moderately expanding inflation environment, meaning that the inflation would go an up sloping path by the end of the year.

In fact, as expected, in the second half of the year the 12-month inflation rate gradually increased from 0.7 percent at end-June to 3.2 percent at end-December, having reached the 4 percent target. This was fuelled mainly by increased food prices which, virtually, were recovering from their low levels caused by the second quarter decline in agricultural prices, on the one hand, and influence of inflationary behavior in the world wheat market on domestic prices, on the other.

Under such conditions, in the second half of the year the Central Bank further implemented monetary policy without changing the policy rate in consideration that the influence from pronounced seasonal fall in prices of agricultural products would phase out, the 12-month inflation would gradually increase and a low inflationary environment would persist in external sector and domestic economy throughout the entire forecast horizon.

The Central Bank kept on implementing a neutral monetary policy in the first quarter of 2013, too, in consideration of non-inflationary effects from external and domestic sectors on the domestic prices in the forecast horizon.

Prices of import goods continued growing, y-o-y, %



3.1.2. Import prices and producer prices

Import prices: the US dollar's depreciation in the first quarter of 2013 pushed the dollar prices of import goods up. In the first quarter of 2013 the dollar prices of import further increased to 2.8 percent y-o-y, according to the Central Bank estimates.

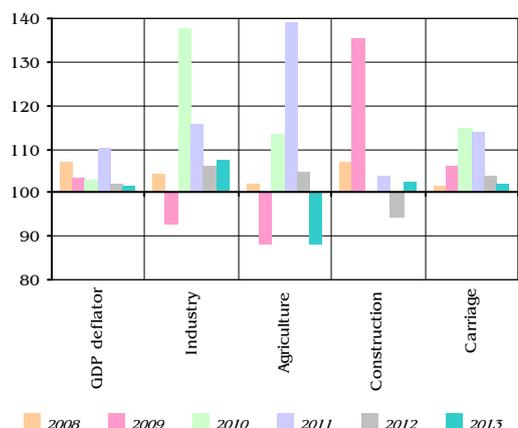
The growth of import prices was mainly attributable to consumer prices having increased in relation to the same period of the previous year. The increase of prices of consumer goods was mainly determined by high y-o-y increase in dollar prices in Eurozone, Belarus, Russia, and Turkey.

The dram prices of imported goods included in consumer basket grew an average by 7.1 percent y-o-y as the dollar prices of import goods rose by 2.8 percent y-o-y and the average nominal AMD/USD exchange rate depreciated by 5.1 percent y-o-y in the first quarter of 2013.

Producer prices¹⁵: in the first quarter of 2013 the GDP deflator was nearly 102 y-o-y, according to the Central Bank

¹⁵ The price index change as presented here is relative to the same period of the previous year unless otherwise specified.

In the first quarter of 2013 highest prices were reported in industry



estimates, which is a result of increased index of producer prices, construction prices and carriage costs.

The highest price increases were reported in *industry*, with the quarterly growth of 7.4 percent y-o-y owing to increased prices in *processing industry* (10.6 percent) and *energy and gas production and distribution* (7.2 percent).

Agriculture reported 11.8 percent y-o-y decline in prices¹⁶ due to 24.5 percent and 8.5 percent drop in prices in *plant growing* and *animal breeding*, respectively. The reduction in prices in plant growing was driven by 28.4 percent and 17.8 percent decline in prices of potato and melons and gourds, respectively. The reported price decrease in animal breeding is attributable to milk and dairy products and meat prices, having reduced by 9.4 percent and 8.4 percent, respectively.

Construction reported 2.3 percent y-o-y growth of prices in the first quarter, mainly attributable to the prices of building materials and wages having increased in response to a certain revival in the branch.

Carriage reported some 2.1 percent y-o-y increase in prices the first quarter, determined mostly by increased tariffs on *railroad transport* (1.4 percent), *air transport* (8.2 percent) and *truck transport* (3.5 percent).

3.1.3. Inflation expectations

In the first quarter of 2013 the Central Bank continued its regular surveys of inflationary expectations among organizations in the financial sector and households.

The financial sector saw steadier expectations for low inflation in the first quarter. Based on the first quarter results, about 86 percent of banks (18 banks) anchored their expectations of the 12-month inflation in the range of 2.5–5.5 percent, in comparison with 95 percent or 20 banks in the previous quarter. Two banks are expecting the 12-month inflation below the 2.5 percent level. The share of credit organizations having chosen the range of 2.5–5.5 percent was again large (more than 53 percent) whereas the share of those organizations anchoring their expectations in the higher range, 5.5–8.5 percent, has further reduced to 27 percent. The first quarter survey results suggest that households' inflation expectations remained at the previous quarter's level of 4.3 percent.

According to the survey results, banks and credit organizations will further anticipate stable market interest rates for the upcoming one-year horizon; in the upcoming quarter, however, they anticipate some rise in interest rates but somewhat a steady behavior in the next three.

¹⁶ Sales prices of producers of agricultural product are presented.

3.2. Aggregate supply and Aggregate demand

3.2.1. Aggregate supply¹⁷

Economic activity in the first quarter of 2013 remained strong enough, and the economic growth is expected in the range 7.4 – 7.7 percent for Q1 2013.

Economic growth indicator published by the National Statistics Service of Armenia was 6.2 percent y-o-y for the fourth quarter of 2012, as was expected, with the January-December growth having amounted to 7.2 percent.

Economic activity in the first quarter of 2013 remained high enough, 8.7 percent y-o-y.

Economic growth forecasts under the baseline scenario were revised upside based on high-than-expected output volumes in industry, strong trade turnover volumes observable from the beginning of the year and high level of net indirect taxes collected. So, economic growth in the first quarter of 2013 is predicted within 7.4 – 7.7 percent¹⁸.

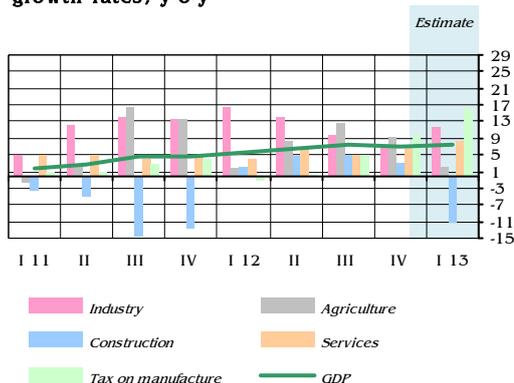
In view of high output growth of 15.8 percent in **Industry** in the first quarter of 2013, the growth of value added is estimated in the range of 11.5–12.0 percent y-o-y mainly due to the increased volumes in metal ore mining (16.5 percent), food production (as much as 26.4 percent growth against the yearend's contraction¹⁹), metallurgy (14.5 percent), beverage production²⁰ (22 percent), and tobacco production (a 3-fold increase), which is a result of consistent improvement in external demand as domestic and world economies recover.

In consideration of 6.5 percent decline in **Construction** in the first quarter of 2013, the decrease of value added for the same period of time is estimated within 9 - 11 percent y-o-y. Note that the decline in construction volumes financed by organizations (-24.6 percent), international loans (-25 percent), state budget (-12.3 percent) and humanitarian aid (-24.5 percent) has not been offset by construction financed by households (53.9 percent growth) and local budgets (14.9-fold growth).

In **Services** the growth of value added for the first quarter of 2013 is estimated in the region 8.0–8.5 percent y-o-y as a result of volumes of services rendered and trade turnover having increased by 7.1 percent and 6.5 percent, respectively. The increase in the volume of services rendered was driven by growth recorded in information & communication (12.9 percent), events, leisure and rest (36.8 percent), public catering (31.4 percent), and healthcare (19.6 percent). The growth of trade was totally due to retail trade and wholesale trade, having increased by 5 percent, 10.5 percent, respectively.

In **Agriculture** the growth of value added for the first quarter of 2013 is estimated in the range of 2.3–2.8 percent y-o-y, owing to increased outputs in animal breeding, fishing and plant

Actual real GDP growth and economic sector growth rates, y-o-y



¹⁷ The indicators of real growth of value added in branches of the economy for the first quarter of 2013 are the Central Bank estimates whereas the indicators of sub-branches represent y-o-y growth rates in output volumes for January-March, unless otherwise specified.

¹⁸ See the 50 percent interval in the Real GDP Growth (Cumulative) Projection Probability Distribution Chart in this paper.

¹⁹ The contraction was mostly due to introduction of somewhat stricter quality requirements to dairy and meat producers.

²⁰ Growth in beverage production was mainly owing to increased production volumes of champagne (a 3-fold increase), wine (18.8 percent), vodka (16.2 percent), spring water (11 percent), and non-alcoholic beverage (75.8 percent).

growing by 1.6 percent, 36.2 percent and 31.9 percent, respectively. A reported 4 percent increase in milk production has totally contributed to the overall growth in animal breeding sub-branch.

3.2.2. Aggregate demand²¹

In the fourth quarter 2012 private consumption grew by 7.3 percent, with an annual estimated private consumption growth indicator having reached 9 percent. High growth of private consumption in 2012 was fuelled by growth in agriculture and persistently strong lending volumes. In the first quarter of 2013 private consumption kept on growing, which amounted to 6.9 percent, according to the Central Bank estimates. In spite of the estimated growth, however, the private consumption growth slowed down in the first quarter of 2013 against the fourth quarter of 2012.

The deceleration of growth rates in private consumption was in turn attributable to the economic effects of dramatic growth in agriculture, having phased out gradually, and to the credit growth rates having decelerated to some extent.

The decline of 3.0 percent in private investment in January-December 2012 has been consistent with the Central Bank forecasts, reflecting negative developments in construction over the first half of the year. However, private investment declined at somewhat a slower pace in the third quarter and even reported a 6.0 percent increase in the fourth owing to the growth in construction as well as company needs to acquire machinery and equipment in industry and services.

In the first quarter of 2013 the investment climate was somewhat weaker as was expected, reflecting the 6.5 percent decline in construction. However, in consideration of strong investment activity in industry as well as a low base due to declined private investment reported for the same period of the previous year, investment is expected to grow by 6.2 percent in the first quarter, which is below the previous forecasts. Credit provided by local banks to companies continued to be an important source of investment financing at the beginning of 2013.

Composite economic indices²² as calculated and published by the Central Bank point out to the above developments with private spending. In the first quarter of 2013, relative to the fourth quarter of 2012, the consumer confidence sub-index dropped by 3.5 percent.

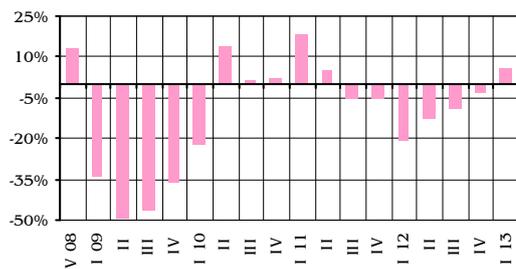
In the first quarter of 2013 the share of companies that invested with the industry increased by 8 pp to 24 percent; as much as 61 percent of the investing companies purchased machinery and equipment.

In the first quarter of 2013 private consumption kept on growing, which amounted to an estimated 6.9 percent, according to the Central Bank.

Private consumption growth, y-o-y



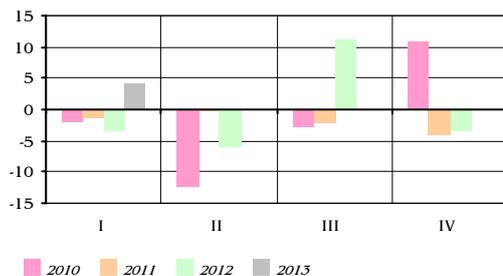
Growth of private investment, y-o-y



In the first quarter of 2013 investment is expected to grow by 6.2 percent, according to the Central Bank estimates.

Net exports position has improved in the first quarter of 2013

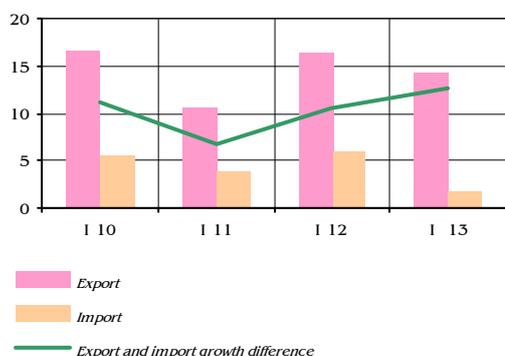
(net real exports, y-o-y, %, positive sign denotes improvement)



²¹ The private spending data for 2013 are the Central Bank estimates based on actual fourth quarter of 2012 data. Growth estimates in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.

²² See <http://www.cba.am/am/SitePages/statsscci.aspx>.

Real growth of export of goods and services well outpaced real growth of import of goods and services (y-o-y, %)



The growth of private spending over 2012 has been 5.9 percent in contrast to 5.6 percent reduction in public expenditures. This has pushed the domestic demand to grow by 4.4 percent. In the first quarter of 2013 private spending grew by 6.8 percent and domestic demand, by 6.4 percent.

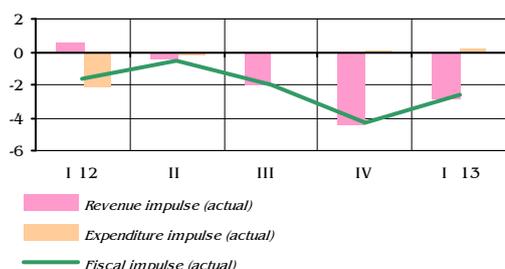
Strong private consumption and recovering private investment in the second half of 2012 generated a positive gap of private spending. In the first quarter of 2013, driven by the slowing of the consumption growth rate, the gap somewhat narrowed but is still estimated to be positive. It had a 0.4 – 0.5 pp of positive impact on the inflation.

In the first quarter of 2013 y-o-y growth rates of export of goods and services in real terms well outpaced y-o-y growth rates of import of goods and services in real terms²³. In the first quarter real growth rates of export of goods and services were quite strong (14.3 percent y-o-y), conditioned by persisting high growth rates in industry.

With the increase of dollar prices of import and continued buoyancy in domestic economic activity the real growth in import of goods and services slowed down according to the Central Bank estimates to 1.7 percent y-o-y in the first quarter of 2013.

In the first quarter of 2013 the inflow of non-commercial remittances of individuals grew by 10.2 percent y-o-y compared to 15.3 percent y-o-y growth of outflow. As a result, the growth rate in net inflow amounted to 8.7 percent y-o-y.

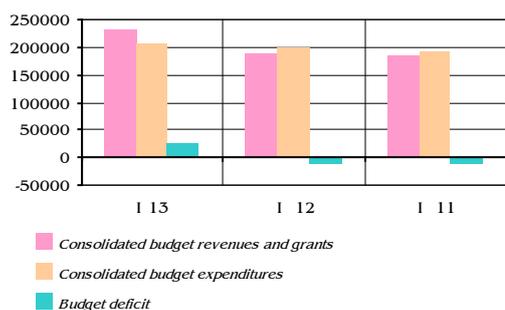
The fiscal policy's contractionary impact is due to the contractionary impact of revenues



3.2.3. Fiscal policy²⁴

In the first quarter of 2013 the state budget performance was as follows: revenues were over-collected and savings on some expenditures items were accomplished. Under such conditions, the fiscal sector's impact on aggregate demand was 2.6 contractionary instead of 1.0 expansionary projected for the first quarter. This is mainly explained by the deviation reported with regard to the quarterly expenditures performance, as a mere 0.2 expansionary impact was reported instead of the projected 3.4. The revenues impact has been in line with the projection, i.e. 2.8 contractionary.

Consolidated budget indicator dynamics in first quarters of 2011-2013

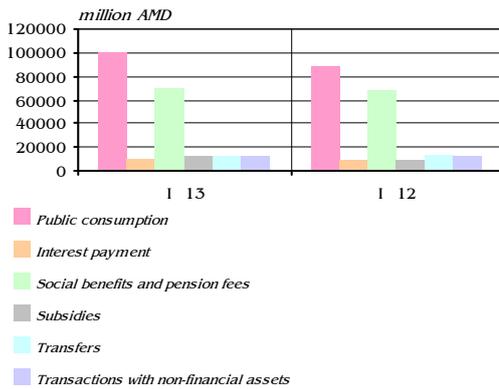


It is noteworthy that high economic activity in the first quarter of 2013 again positively affected collection of revenues in line with program proportions, which secured roughly AMD 11.5 billion more collections.

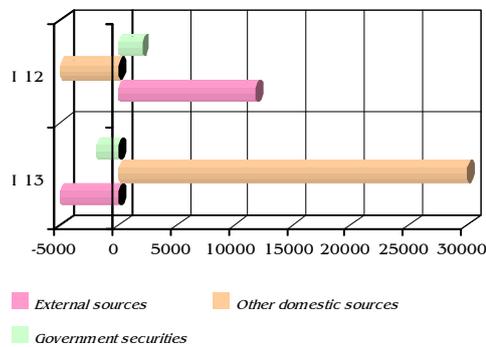
Revenues and grants of the consolidated budget have grown by 23.3 percent or AMD 45.4 billion in relation to the first quarter of the previous year, mostly owing to increased tax revenues and indirect taxes, in particular. The growth of indirect taxes was 35 percent y-o-y, with their share having increased by 4 pp to 52 percent relative to the previous year. This increase is

²³ The real export and import growth indicators are the Central Bank's estimates.
²⁴ Consolidated budget indicators which were prepared on the basis of preliminary actual data of the first quarter of 2013 (PIU funds included) were used for the review of the fiscal sector. The impact of revenues was calculated in respect of the nominal GDP indicator while the impact of expenditures in respect of the estimated potential GDP indicator.

In budget expenditures structure, current expenses have grown, capital expenses have reduced



Budget posted a surplus in the first quarter of 2013



due mainly to more collecting of value added taxes and customs duties. In the structure of direct taxes, the growth of income tax²⁵ is prominent as it outstripped the income tax and mandatory social charges by 21.4 percent relative to the previous year.

The first quarter of 2013 saw low performance on public expenditures: the quarterly expenditures plan was executed by about 88 percent. In the meantime, current expenditures have increased but capital expenditures have reduced. In the first quarter of 2013 expenditures of the consolidated budget grew by 8 percent in comparison with the same period of the previous year. Current expenditures have grown by about 10.3 percent; almost all items have posted increases. Public consumption has grown by 11 percent y-o-y. Expenditures on item *transactions with non-financial assets* have reduced by 28 percent, due to programs incurring shortfalls of external financing by PIU projects.

With revenues and expenditures figures shown above, the consolidated budget generated surplus of AMD 25.9 billion. The state budget surplus amounted to AMD 18.0 billion instead of the projected deficit of AMD 17.9 billion.

3.2.4. Labor market²⁶

In the period January-December of 2012 there has been 5.1 percent increase in average nominal wages, according to the Central Bank estimates, reflecting an increase in productivity in the private sector and moderate growth in some budget-supported organizations. Under such conditions, there has been 2.5 percent real increase in wages. The growth of nominal wages in private sector stood somewhat below the previous forecasts and was 3.3 percent. The real wages did not change much in relation to the same period of the previous year, in spite of the 2.9 percent inflation in the first quarter of 2013.

Strong productivity growth led to the increased wages in agriculture and growing demand for labor all have contributed to the moderate growth of the nominal wages in the private sector.

In the period January-December of 2012, relative to the previous reference period, average unemployment rate has reduced by 1.1 pp, as demand for labor increased, and it reached 17.3 percent. The unemployment further subsided during the first quarter down to 19.4, representing a 0.7 pp reduction in relation to the previous year.

Material imbalances in the economy have not been observed in the period January-December 2012 and the first quarter of 2013. The impact of the labor market on inflation has been neutral, as a result.

²⁵ An income tax has been introduced that replaced the former income tax and social security fees, as part of the legislative amendment effective from 2013. The said growth is due to AMD 10.4 billion worth and 6.8 billion worth of entries on social security fees and income tax, respectively.

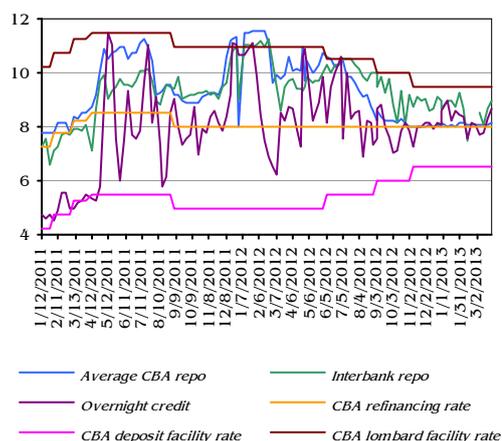
²⁶ The labor market data for 2013 are the Central Bank estimates which are based on the fourth quarter data and actual January-March 2013 figures. The growth indicators represented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.

3.3. Money and financial market developments

3.3.1. Financial market, money and credit

In the first quarter of 2013 interest rate of repo agreements, a principal instrument of the Central Bank, was 8.09 percent.

Short-term interest rates, except overnight credit rates, trended downward



In view of the developments in the domestic and external sectors, the Central Bank further conducted a neutral monetary policy during the first quarter of 2013 by leaving Refinancing Rate unchanged, at an 8 percent level, while expecting that the 4 percent target for the 12-month inflation might be possible to achieve in the forecast horizon by dint of the policy rate.

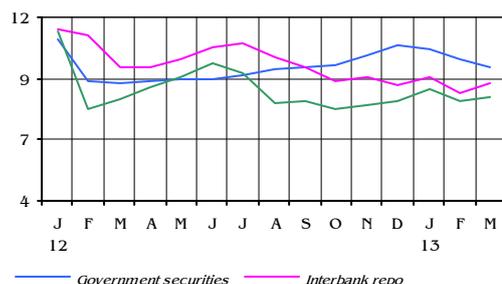
In the first quarter of 2013, interest rate of repo agreements, a principal instrument of the Central Bank, was 8.09 percent, again close to the interest rate of the Refinancing Rate.

In the first quarter of 2013 commercial banks carried on managing their liquidity positions effectively, reflecting as small as AMD 23 billion growth of funds attracted by standing facilities and roughly 6-fold contraction of funds under lombard repo facilities of the Central Bank.

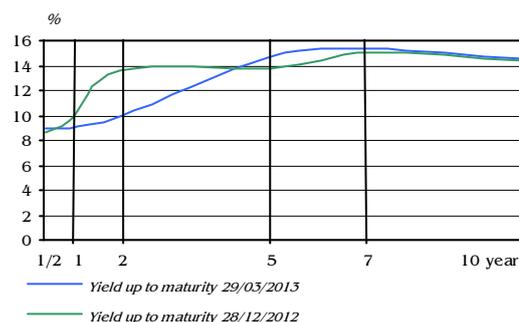
Period	Repo (up to 7 days)		Funds attracted		Lombard repo	
	Value (million Dram)	%	Value (million Dram)	%	Value (million Dram)	%
QI 2012	151932.32	11.15	380600	5.00	59093.88	11.00
QII	185000.00	10.29	317950	5.05	179437.37	10.77
QIII	488921.68	9.03	158200	5.51	32524.98	10.50
QIV	741880.51	8.09	140150	6.22	5631.79	9.50
QI 2013	763825.90	8.09	163700	6.50	944600	9.50

The drop of interest rates of repo agreements prompted reduction in short-term market repo rate during the first quarter of 2013.

Interest rates of government securities dropped, and interbank repo and overnight loan rates neared the Central Bank refinancing rate



In secondary market interest rates of government securities tended to fall mostly in the 1-2-year maturity segment



The drop of interest rates of repo agreements prompted reduction in short-term market repo rate during the first quarter of 2013 (by 0.17 pp down to 9.44 percent). The repo rate could have fallen further had the AMD / USD depreciation in March not prompted interest rates to rise to some extent, which in part had determined a 0.34 pp rise of interbank overnight loan market rate to 8.24 percent.

Box 2

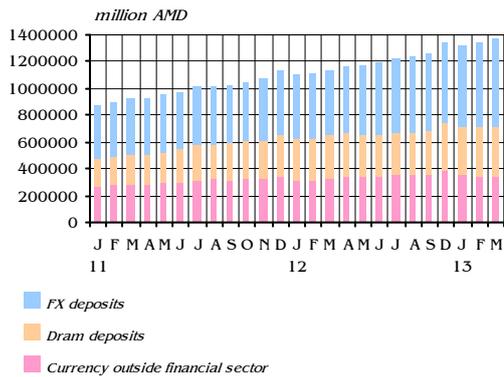
Government securities market

Bringing short-term interest rates around the Refinancing Rate began influencing the interest rates of treasury bills as early as January of 2013. Grown demand for short-term bonds in the primary market was reflected in their yield indicator which has dropped by 0.18 pp relative to the previous quarter to 9.77 percent. In March of 2013, relative to December of 2012, average interest rate of treasury bills has fallen by 0.93 pp to 9.46 percent.

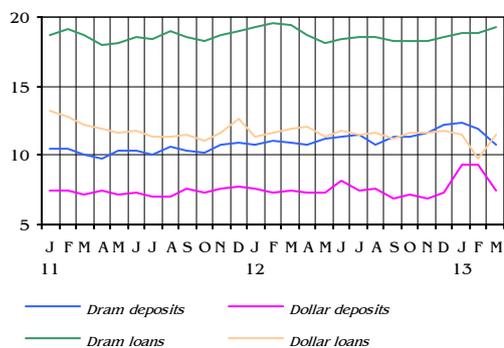
The yield curve analysis shows that in the secondary market the yield of treasury bills with 1-2-year of maturity has dropped whereas the yield of long-term treasury bills did not change much. The convexity of the curve has moved from 0.28 in the previous quarter to 0.36 this quarter.

In the banking sector in the first quarter of 2012, average interest rates of deposits in Armenian dram dropped a little to 11.67 percent (-0.03 pp). The volumes of dram deposits have increased by 4.4 percent, owing almost totally to the growth of term deposits in Armenian dram. Interest rates of foreign deposits have increased by 1.57 pp to 8.67 percent, as opposed to the general trend observed over 2012. Foreign currency depo-

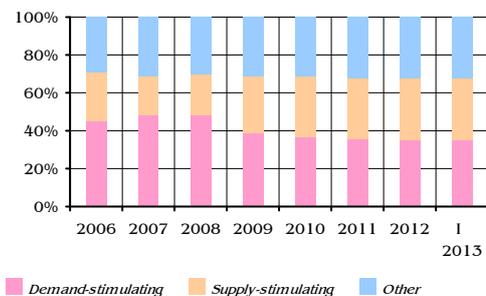
Foreign currency deposits outpaced dram deposits during the first quarter



Interest rate spread between dram loans and dram deposits grew in the first quarter



The share of loans that stimulate supply remained strong in total loan portfolio



Foreign currency loans again prevailed in total lending in the first quarter



sits have grown by 6.9 percent (3.1 percent, if the impact of change in the exchange rate is excluded), mainly owing to term deposits in foreign currency attracted from households. Interest rates of foreign currency deposits have increased mostly determined by interest rate rise on deposits with up to 1-year of maturity, attracted from households. At the end of the quarter, however, the interest rates dropped back where they were.

Average monthly interest rates of dram loans have grown by 0.67 pp to 19 percent, reflecting somewhat a slower easing of lending conditions offered by banks and credit organizations. This contributed to the broadening of interest rate spread between loans and deposits in Armenian dram after a long while. A narrowing trend was discernible in respect of interest rate spread between loans and deposits in foreign currency, from 4.5 pp in December of 2012 to 4.1 pp at the end of the first quarter of 2013.

Despite the slowing of credit growth compared to the previous quarter, the volumes of credit have increased by 6.0 percent (25.8 percent growth y-o-y) or AMD 101.1 billion in absolute terms against AMD 89.7 billion reported in the previous quarter. The growth of credit stimulating aggregate supply persisted this quarter, too.

In the first quarter of 2013 the nominal exchange rate pressures were somehow reflected in the dollarization indicator. The dollarization of the economy (measured as a ratio of foreign currency deposits to broad money) has grown by 2.5 pp.

The growth of foreign currency credit was 9.1 percent (5.2 percent, when impact of change in foreign exchange rate is excluded). FX loans were provided mostly to private companies whereas dram loans, which posted a quarterly growth of 3.3 percent, were made predominantly to households.

Box 3

The assessment of loan supply and demand, loan accessibility and borrower credibility indexes suggest that growth rates in demand for all types of credit slowed down during the first quarter of 2013. Though lending procedures were further eased, major business loan terms became stricter, and this is going to be the case in the second quarter as well. Easing of the terms of SME lending is expected during the second quarter. As for mortgage loans and consumer loans, terms became easier for the former but somewhat deferred for the latter, respectively. Overall, household lending procedures are expected to be simplified. The demand for such loans is expected to grow, either.

Box 4

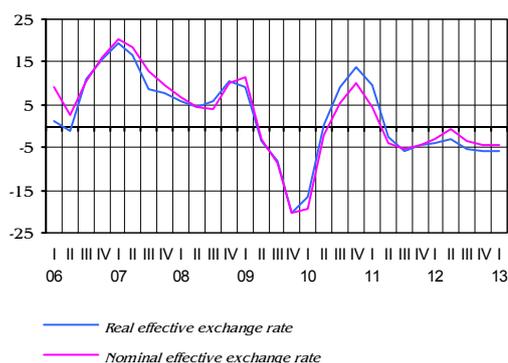
In the first quarter of 2013 broad money increased by 1.3 percent and reached AMD 1.364 trillion and dram broad money grew by 3.3 percent, amounting to AMD 713.4 billion.
The 12-month monetary indicators performed as follows: dram deposits grew by 12.4 percent and foreign currency deposits, by 34.2 percent (25.3 percent, when the impact of change in foreign exchange rate is excluded); currency grew by 7.1 percent. This resulted in the growth rate of broad money outpacing dram broad money (20.2 percent versus 9.8 percent). In the meantime, base money has increased by 16.5 percent and dram base money, by 7.5 percent. The money and dram multipliers in the first quarter of 2013 were 2.11 and 1.25 compared to 2.05 and 1.25 reported in the first quarter of 2012, respectively.

3.3.2. Exchange rate

The nominal exchange rate appreciation pressures reported in the second half of the previous year, which came in somewhat intensified in the fourth quarter, carried on in early first quarter of 2013. At the end of the quarter, however, depreciation of partner countries' currencies versus the U.S. dollar created expectations for the dram's nominal exchange rate depreciation in the domestic currency market, which in the short term prompted the participants of the financial market to change currency structure of their assets. With persistently high real exchange rate depreciation rates, the Central Bank decided to absorb the pressures in the currency market by acting as a net seller of foreign currency.

In the first quarter of 2013 the average nominal exchange rate depreciated by 0.7 percent q-o-q whereas the real exchange rate appreciated by 2.5 percent q-o-q.

In the first quarter real exchange rate further depreciated y-o-y



In the first quarter of 2013 the average nominal exchange rate depreciated by 0.7 percent q-o-q whereas the real exchange rate appreciated by 2.5 percent q-o-q, with the y-o-y 5.7 percent depreciation rate. The nominal exchange rate's appreciation was due to high seasonal inflation typical to the first quarter whereas the annual depreciation rate is a result of the supply shock in agriculture.

Growth, year-on-year	I 12	II 12	III 12	IV 12	2012	I 13
Real effective exchange rate (+ means appreciation) ²⁷	-3.8	-2.9	-5.1	-5.7	-4.4	-5.7
Average inflation in Armenia	3.3	1.0	2.4	3.4	2.5	3.0
AMD nominal exchange rate, average (+ means appreciation)	-5.7	-6.8	-10.2	-6.3	-7.3	-5.1
Average weighted inflation in partner countries	4.0	3.5	4.1	4.3	4.0	3.8
Partner countries' average weighted nominal exchange rate (+ means appreciation)	-2.9	-6.9	-7.6	-1.7	-4.7	-0.3

Real exchange rate appreciation = Inflation in Armenia + Nominal exchange rate appreciation - Partner countries' average weighted inflation - Partner countries' average weighted nominal exchange rate appreciation

Box 5

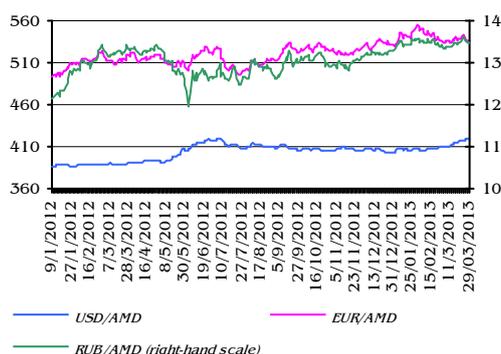
Exchange rate

At the end of the first quarter of 2013, relative to the end of the previous quarter, the average market exchange rate of the Armenian dram versus the U.S. dollar has depreciated by 3.58 percent to 418.58 drams for one dollar.

Look at the table below to see the dram's behavior versus the U.S. dollar, Euro and Russian ruble:

²⁷ In the previous report, the y-o-y growth of dram's nominal effective exchange rate was provided instead of the y-o-y growth of the AMD/USD nominal average exchange rate. Also, there were some adjustments made to historic statistical data, which are estimated to be neutral from the monetary policy point of view.

Dram exchange rate versus U.S. dollar, Euro and Russian ruble



Dram exchange rate dynamics in Q1, 2013			
Currency pair	Exchange rate as of 31.12.2012 (AMD)	Exchange rate as of 31.03.2013 (AMD)	% (appreciation +, depreciation -)
USD/AMD	403.58	418.58	-3.58
EUR/AMD	532.24	536.54	-0.80
RUB/AMD	13.27	13.49	-1.63

Average dram exchange rate dynamics in Q1, 2013			
Currency pair	Average quarterly exchange rate in Q1, 2012	Average quarterly exchange rate in Q1, 2013	% (appreciation +, depreciation -)
USD/AMD	388.43	409.47	-5.14
EUR/AMD	509.64	541.01	-5.80
RUB/AMD	12.91	13.47	-4.16

The aggregate volume of U.S. dollar/Armenian dram transactions in the foreign exchange market during the first quarter amounted to USD 2.6 billion, which represents 15.4 percent decrease in relation to the previous quarter (USD 3.1 billion).

The aggregate volume of Euro/Armenian dram exchange transactions reached EUR 231.8 million against EUR 273.3 million recorded in the previous quarter.

To tackle the dram exchange rate excess volatility against the U.S. dollar, the Central Bank sold foreign currency during the first quarter, with net sale of the dollar having amounted to USD 44.3 million.

3.4. Balance of payments²⁸

In the first quarter of 2013 the deficit of current account has reduced relative to the same quarter of the previous year, amidst persistently strong growth rates in domestic economy, deteriorated terms of trade and sluggish global economy.

In the first quarter of 2013, relative to the first quarter of 2012, the deficit of current account reduced amidst high growth rates in domestic economic activity, deteriorated terms of trade and sluggish global economy. Net inflow through capital and financial account has widened yet it has not been sufficient to finance the current account deficit. The balance of payments developments pushed the Central Bank net foreign assets down.

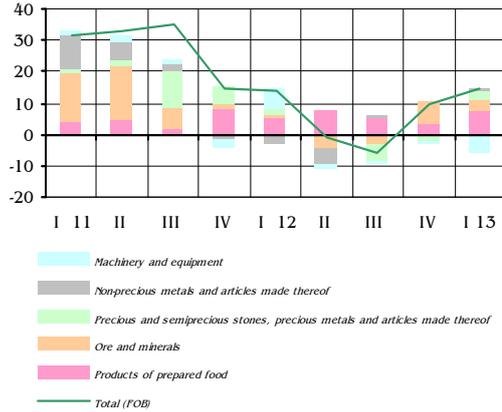
3.4.1. Current account

In the first quarter of 2013, relative to the first quarter of 2012, the Current Account Deficit/GDP ratio dropped. In the first quarter of 2013, relative to the first quarter of 2012, the deficit of current account reduced by USD 28.6 million and made USD 397.0 million amidst the slowing of the recovery of global economy and the continued growth of domestic economic activity.

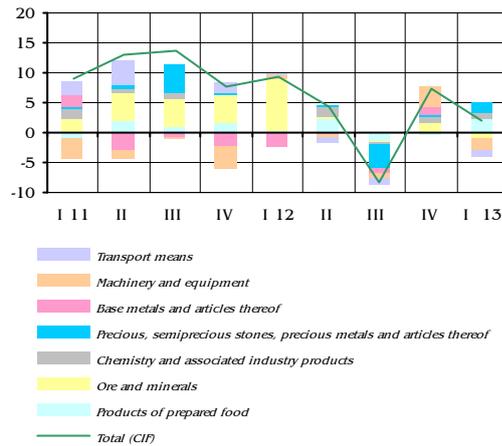
Real export of goods kept on increasing in spite of a sluggish external demand, and such increment was fuelled by persisted high growth rates in domestic industry. Under the conditions of y-o-y reduction of export prices in the first quarter the dollar value of export of goods has grown/grew by 13.0 percent y-o-y.

²⁸ The Q1 2013 indicators are the Central Bank forecasts and estimates.

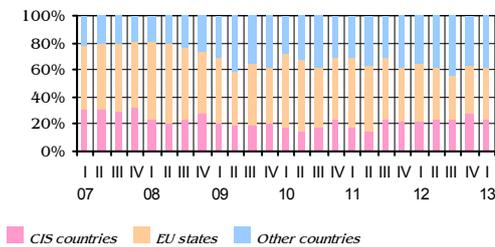
Y-o-y growth of dollar value of export, and contribution by main commodity group²⁹



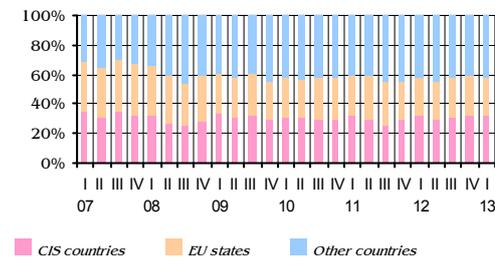
Growth of imports y-o-y and contribution by commodity group



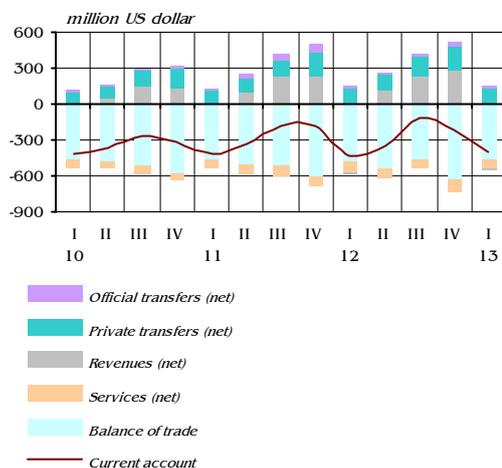
Structure of export, by country group



Structure of import, by country group



In the first quarter current account deficit has reduced relative to the same period of the previous year



The first quarter of 2013 saw real growth of import of goods amidst high growth rates in domestic economic activity and increased dollar prices on import y-o-y. The dollar value grew by 2.4 percent y-o-y.

The deficit of balance of services somewhat reduced to USD 72.6 million. The y-o-y growth rates of export and import of services were, respectively, 7.1 percent and 3.5 percent in the first quarter of 2013.

In the first quarter of 2013 the y-o-y growth rates in remittances³⁰ of individuals persisted. During the quarter net inflow of seasonal worker income has grown by 8.6 percent y-o-y and amounted to USD 121.5 million, which is below the net outflow figure in item "income on investment". Net inflow of private transfers has grown by 7.2 percent y-o-y and reached USD 206.5 million. The net inflow of private transfers has increased by 8.5 percent and amounted to USD 145.6 million for the first quarter of 2013.

3.4.2. Capital and financial account³¹

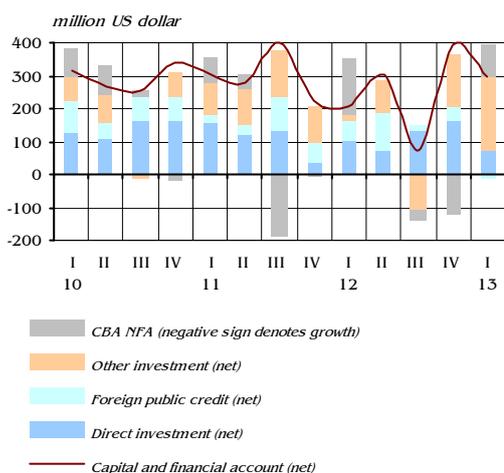
In the first quarter of 2013 net inflow of the funds through the capital and financial account increased by USD 94.3 million y-o-y and totaled USD 299.2 million. It, however, was not sufficient to fund the current account deficit. Net foreign assets of the Central Bank of Armenia have decreased by USD 98.1 million.

²⁹ There were adjustments made to the Armenia's foreign trade databanks for 2012 (annual, by month) and for January-March 2013.

³⁰ The first quarter of 2013 posted an 8.7 percent y-o-y growth of net inflow of non-commercial remittances by individuals via the banking system.

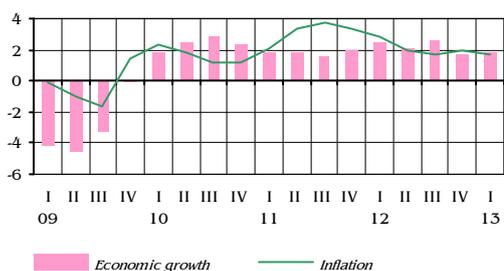
³¹ The Q1, 2013 capital and financial account figures are the Central Bank forecasts and estimates.

In the first quarter net inflow through item 'capital and financial account' has grown y-o-y

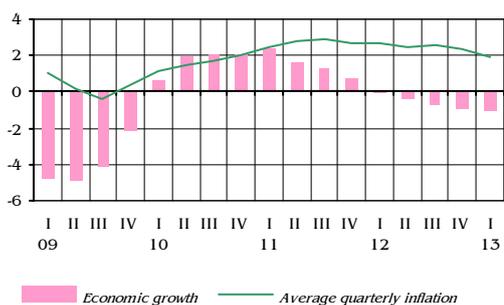


In early 2013 previous quarter's trends on economic growth persisted in the EU and Russia, two trade partners to Armenia, whilst some revitalization was reported in the U.S. economy.

Economic activity in the USA somewhat accelerated in the first quarter



Economic decline in Euro-area continued



In the first quarter net inflow of foreign direct investment reduced against the same period of the previous year and amounted to USD 74.0 million. The repayment on public credit exceeded the disbursements, resulting in net outflow of USD 10.7 million in contrast of net inflow of USD 60.8 million posted in the first quarter of 2012. The net inflow in item "other investment" has amounted to USD 220.3 million, with net foreign assets of banks having reduced by USD 91.8 million and net foreign assets in item "other private sector" contracted by USD 128.5 million.

3.5. External environment

In early 2013 previous quarter's trends on economic growth persisted in the EU and Russia, two trade partners to Armenia, whilst some revitalization was reported in the U.S. economy.

According to preliminary estimates of Economic Analyses Bureau of the U.S. Department of Commerce, in the first quarter of 2013 the annualized economic q-o-q growth in the *United States of America* made 2.5 percent (1.8 percent of y-o-y economic growth in the first quarter) against the previous quarter's 0.4 percent growth. Positive contribution to the growth came largely from private spending and investment, whereas public expenditures and net exports made a negative contribution. In the first quarter average quarterly inflation was 1.7 y-o-y percent compared to 1.9 percent reported in the previous quarter.

The economic decline in *Euro-area* in the first quarter of 2013 was 1.0 percent against the same period of the previous year, according to preliminary figures from the Eurostat.

In the first quarter consumer price index in Euro-area rose an average 1.9 percent y-o-y, which represents some 0.4 pp drop in relation to the previous quarter.

All the aforementioned developments notwithstanding, the European Central Bank left the policy rate unchanged during the quarter.

In the first quarter of 2013 the *U.S. dollar* kept on *depreciating* versus Euro. During the quarter Euro appreciated versus the U.S. dollar by 1.5 percent, with the dollar exchange rate making up 1.32 for one Euro (with y-o-y appreciation of 0.7 percent).

In the first quarter of 2013 economic growth in *Russia* slowed down amid accelerated inflation. Economic growth during the quarter reached 1.6 percent y-o-y, according to the preliminary estimates of the Russia State Statistics Service. Specifically, growth rates in industry posted 0.0 percent y-o-y compared to 1.7 percent recorded in the previous quarter. Growth rates in retail trade and construction sectors were 3.9 percent y-o-y and 0.6 percent y-o-y, respectively. In the meantime, agricultural sector posted some 2.3 percent growth y-o-y.

The rate of inflation accelerated as economic growth rates trended down. The consumer price increase was 7.1 percent y-o-y.

In the first quarter of 2013 the Russian Central Bank decided to leave the refinancing rate unchanged, at 8.25 percent.

In the first quarter of 2013, the *price of Brent crude* at Intercontinental Exchange rose an average 2.2 percent reaching USD 113 a barrel (with 4.8 percent y-o-y decline).

The *price of copper* at the London Metal Exchange grew by 0.4 percent to USD 7954 per ton (with 2.7 percent y-o-y decline). Note that the copper price started to fall at the closing of the quarter.

Export price of *hard red wheat* has dropped by 9.6 percent q-o-q to USD 8.7 a bushel (with 15.3 percent y-o-y growth), according to the U.S. Department of Agriculture data.

The *price index of unprocessed sugar* at the New York Board-Intercontinental Exchange has dropped by 6.2 percent, with an estimated 25 percent reduction against the same quarter of the previous year.

The *price of rice* at the Chicago Board of Trade has risen by 0.7 percent to USD 15.5 per U.S. hundredweight (45.4 kg) (with 6.4 percent y-o-y growth).

The global demand remains sluggish; no considerable inflationary trends are observable in basic commodities markets, either. Moreover, later in the first quarter certain deflationary patterns were noticed in some markets.

The global demand remains sluggish; no considerable inflationary trends are observable in basic commodities markets, either. Moreover, later in the first quarter certain deflationary patterns were noticed in some markets.

4. CONCLUSION

In the first quarter of 2013 demand in *external sector* remained sluggish and no considerable inflationary trends are observable in basic commodity and food markets. In the *forecast horizon* the global economic growth rates are expected to rebound slowly amid persisting uncertainties associated with political solution to debt problems of developed countries. On the back of a sluggish global demand, international prices of basic commodities and food products are going to perform relatively steady, staying at high levels, however. In the *forecast horizon* therefore primarily a *non-inflationary influence* will be expected from the external sector.

In the first quarter *economic activity* remained strong, concomitant with persisted growth rates in private consumption. In the light of these developments the **12-month inflation** performed relatively stable, reaching 3.4 percent in end-March.

In the *forecast horizon* therefore the surplus growth is expected to reduce while private investment to grow. Under such circumstances economic growth is predicted to slow to some extent, stabilizing around its equilibrium level. In the forecast horizon a *non-inflationary impact* on domestic prices is anticipated from the Armenian economy as a result of a weak private demand and implementation of neutral fiscal policy.

In the *forecast horizon* inflation will stabilize around the target level of 4 percent. Over the first half of 2013, however, the *12-month inflation* will speed up to a certain extent and rest within the upper bound of the confidence band in end-June. The inflation environment will expand under the influence from possible price increase on agricultural products due to the heavy showers in May and revision of energy prices perhaps effective from the third quarter. To tame high inflation and anchor its second-round effects and inflation expectations, the Central Bank will adjust its monetary policy by raising the Refinancing Rate. Afterwards, when inflation expectations are neutralized, the Central Bank will again lower the policy rate. In the outcome, the inflation will reduce starting the third quarter of 2014 and rest within the confidence band up until the closing of the forecast horizon.

In the *forecast horizon* risks to deviation of inflation from the forecast value are estimated as balanced, owing to development prospects in external and domestic environment.

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