THE CENTRAL BANK
OF THE
REPUBLIC OF ARMENIA

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Resolution No. 34A,
dated 20.02.2014

Inflation Report

Monetary Policy Program, Q1, 2014

✦

Status report on implementation
of the Monetary Policy Program
Q4, 2013

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Since January 2006, the Central Bank of Armenia has moved to a fully-fledged inflation targeting strategy, which highlights the importance of communicating of the Bank to the general public by publishing, inter alia, quarterly inflation reports. First section of the inflation report includes next quarter's monetary policy program that provides new forecasts of inflation and other macroeconomic indicators and main directions of the monetary policy in the forecast horizon. Second section includes status report on implementation of the monetary policy program of the previous quarter, which covers actual economic and monetary developments.

Publishing of inflation forecast and assumptions underlying it makes the monetary policy of the Bank more transparent, understandable and predictable, which considerably increases the public confidence in the Bank. The Bank believes that a clear and trusted monetary policy positively affects the anchoring of inflation expectations and maintaining financial stability in terms of cost reduction.

Starting from the second quarter of 2012, the Bank has been publishing forecasts of non-conditional inflation in a 3-year time horizon, in implementation of the inflation targeting strategy, whereby the monetary policy is steered to minimize any deviations of potential inflation from a 4 % target. Projections in this report are based on the factual information available by February 11th, 2014, i.e. the approval of the refinancing rate, the results of a survey conducted by the Bank and the judgment made pursuant to the information on future macroeconomic developments.

All inflation reports which have been published to date are available on the Bank's website which also contains monetary policy-related publications.

1. EXECUTIVE SUMMARY [1]

The 12-month inflation would keep on reducing to the lower bound of the confidence band in the short run.

The Central Bank forecasts tell the 12-month inflation would keep on reducing up to the lower bound of the confidence band in the short run and would approach the target in late 2014 and stabilize around it in the medium run. The economic growth would speed up in 2014 and stabilize around its long-term equilibrium.

In the 4th quarter, economic activity somewhat recovered and inflationary environment eased significantly. Yet, ***economic growth*** was lower than expected and the ***12-month inflation*** rested around the upper bound of the confidence band. Macroeconomic environment of 2013 was marked by a set of peculiarities. Early in the year ***economic growth rates further slowed down*** mainly due to the slump in construction, increased energy prices and contractionary fiscal policy implementation. Also, following a relatively stable path until May, ***the inflation environment has expanded markedly*** mostly driven by direct and second-round effects from energy price-rise (a total of around 3.0 pp) and inflationary expectations caused by adverse weather conditions. However, inflation has subdued again starting from September when tightening of monetary conditions by the Central Bank somewhat mitigated the inflationary expectations amidst persisting sluggishness of economic activity and implemented contractionary fiscal policy. Based on annual results, ***the 12-month inflation reached 5.6%,*** almost hitting the upper bound of the band. In 2013, the core inflation indicator went a similar path, with the 12-month indicator having reached 5.7% in August from 3.5% early in the year and then reduced to 3.7% by the end of the year.

The 12-month inflation reached 5.6%, almost hitting the upper bound of the band.

A slow growth rate in private consumption persisted in the 4th quarter of 2013, under which condition the private consumption growth for the period January-December is estimated 1.8% y/y compared to 9% reported for the same reference period of the previous year. In the 4th quarter, the investment environment came in weaker than anticipated, mainly driven by contracted investment in construction, with private investment having declined by 13.1% y/y in late December in comparison with 3.0% decline reported in the end of December of the previous year. It is expected that economic growth in the period January-December 2013 will be in the range of 3.3-3.6%.

According to short-term forecasts, private consumption in 2014 will grow by 5.3%, private investment by 3.9% and, in anticipation of expansionary fiscal policy during the year, the fiscal impulse will leave some 1.5 pp of expansionary impact. Based on the 2014 results, the real growth of export of goods and services will be in the range of 11-13%; the real growth of import within 3-5% and the growth rate of remittances of individuals within 7-9%.

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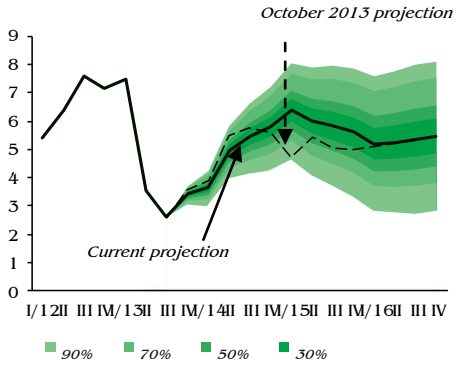
[1] *The monetary policy program was prepared using basic preliminary macroeconomic indicators that describe the socio-economic situation of Armenia for the period January-December 2013, provided by the Republic of Armenia National Statistics Service as of January 31, 2014.*

Economic growth in 2014 is estimated in the range of 5.4-6.1%.

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



The ***economic growth in 2014 is estimated in the 5.4-6.1% range*** mainly attributable to the growths in industry and services (a total of nearly 3.5 pp of contribution). ***In the forecast horizon*** the economic growth will stabilize within 5-6% and rest around its long-term equilibrium, reflecting steady private consumption growth rates and slowly rebounding private investment. Thus, **in *the forecast horizon***, stabilizing private demand as well as neutral impact of the fiscal policy is expected to create ***non-inflationary effect on domestic demand.***

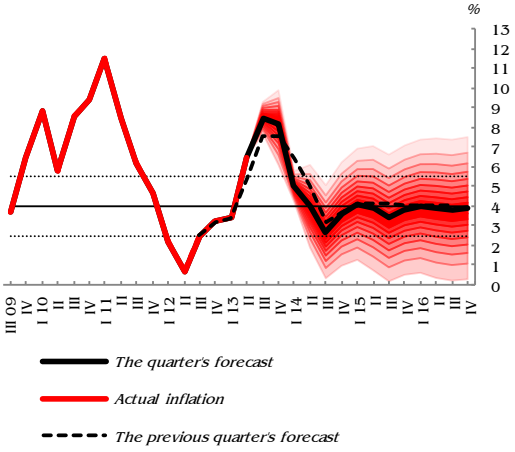
In the 4th quarter of 2013, ***external demand*** remained sluggish chiefly due to economic developments in emerging countries. A non-inflationary environment has persisted in ***international markets of basic commodities and food products***.

In the forecast horizon a slow pace of recovery in global economic growth rates is anticipated, under which conditions notable inflationary pressures are not likely to be discernable in international markets of basic commodities and food products.

In the 4th quarter of 2013, as was already mentioned, the ***12-month inflation*** trended downward, approaching the upper bound of the band in the yearend. In consideration of the lack of inflationary pressures from external and domestic economies in the short run as well as supply shock-driven inflation expectations already anchored in the 4th quarter, the Central Bank eased the ***monetary conditions*** by reducing the refinancing rate by 0.75 pp to 7.75% late in the year (see details in section 3.1.1 Actual inflation and attainment of target).

In 2014, inflation will continue to decline, according to the Central Bank projections, and is expected in the 2.5-5.5% range.

Inflation forecast probability distribution chart (12-month)



Inflation in 2014 will continue to decline, according to the Central Bank projections, and in the 3rd quarter of the year it is estimated to be closer to the lower bound of the band as the effect of energy prices risen in July of 2013 phases out. At the end of the year the 12-month inflation is expected to stabilize around the target, mostly driven by the lagged impact of loosened monetary conditions and as a result of expansionary fiscal policy implementation. In the ***forecast horizon***, however, inflation would stabilize around the target. In the first quarter of 2014, ***the Central Bank will further relax monetary conditions to be consistent with the slowing of economic activity and mitigation of inflationary environment***. In the context of easing of monetary conditions, the Central Bank has decided to lower the reserve requirement standard to 2% from 4%.

Further directions of monetary policy of the Central Bank will depend largely on how uncertainties over external and domestic economic developments will show up (see details in section 2.3 Inflation forecasts and monetary policy directions in 3-year forecast horizon).

Risks to inflation deviating from the ***projected value*** are estimated as balanced in both short and medium-term perspectives. The primary risks are associated with the development perspectives in emerging economies and the change in domestic demand, and uncertainties over the projected value of inflation are persisting. If such risks materialize, the Central Bank will react accordingly by maintaining the inflation figure in the medium run.

2. FORECAST, FORECAST CHANGES, RISKS

2.1. External environment[2]

With a global economy rebounding, inflationary pressures will not be observable in the external sector in the forecast horizon.

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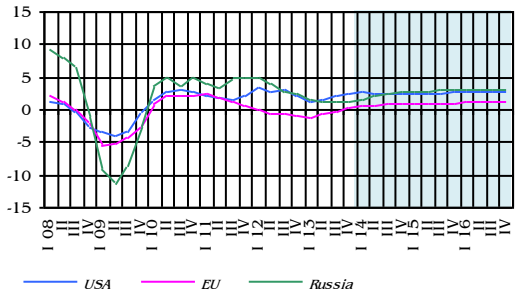
In early 2014, the IMF readjusted world growth outlook indicator upside, predicting economic growth of 3.7% for 2014, with a 0.1 pp of upside adjustment totally owing to developed countries.

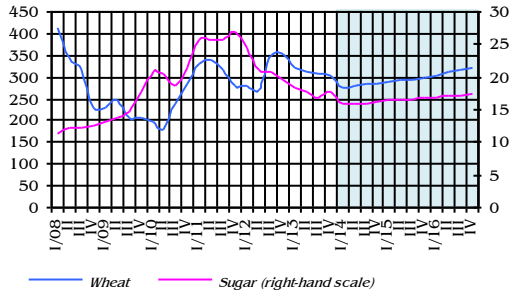
Economic growth in partner countries (%)



In the ***U.S.A.*** the Federal Reserve System will continue implementing a low-interest-rates policy during 2014, too, in spite of tapering of indicators in the program of quantitative easing. At the same time, less gloomy uncertainties associated with the fiscal policy will boost up economic growth rates. Economic growth is estimated to be 2.6% in 2014 and 2.9% in 2016.

In the ***Euro-area,*** economic recovery resumed in 2014 will carry on in 2014, with the economic growth to reach 1.3% in 2016. In pursuit of economic stimulation, the European Central Bank will continue a low-interest-rates policy.

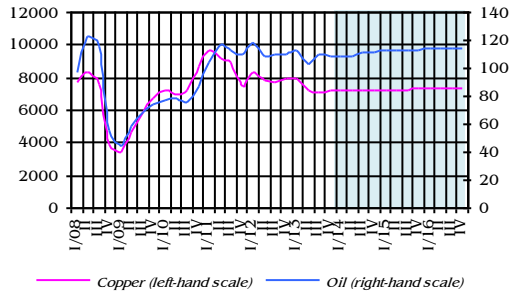
Food commodities, USD



The forecast of economic growth in ***Russia*** in a medium-term perspective was revised downside due to reduced investment and declined economic activity, as a result. Economic growth is estimated to reach 2.2% in 2014 and 3% in 2016.

Uncertainties and risks about the further pace of global economy ***are more essential*** for developing countries as these are associated with capital flight and a resultant slowing of economic activity in such countries.

Raw materials, USD



With sluggishness in global economic recovery, no significant inflationary trends will be observed in the world's ***basic commodity and food product markets***, but rather deflationary patterns will be discernable in food prices thanks to rich harvest expected in the 2013/2014 marketing year. In the meantime, individual commodity markets are predicted to develop under the influence of fundamental factors inherent in any such markets. Risks associated with energy price developments will be determined by geopolitical events, whereas prices of food products will depend largely on weather conditions.

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[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.*

Box 1

Developments in commodities markets in the forecast horizon

According to International Energy Agency's January estimates, in 2014 about 61% of global oil demand will be met by producing oil by non-OPEC countries (the growth was 3.1% 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 2014-2016 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.

In 2014-2016, moderate inflationary patterns will be discernable in base metals markets, as the recovery of global economy is back on track.

According to January estimates of the U.S. Department of Agriculture, in the 2013/2014 marketing year some 712.7 million tons of wheat crops is expected (the volume of crop has increased by about 56.3 million tons in comparison with the previous year). Furthermore, some growth of stock is expected in the forecast horizon, reflecting faster production rates over consumption (the supply will increase by 9.3 million tons compared to the previous year). In spite of deflationary trends reported in late 2013 and early 2014, average international wheat price will follow a steady path in the medium run.

In the 2013/2014 marketing year, world production of rice will amount to 471.2 million tons (about 1.7 million tons more compared to the previous year). On the back of increased consumption however, the world rice stock may come in at somewhat reduced volumes (roughly 2 million tons less in comparison with the previous year). Average international rice price will mostly behave stably, as a result.

International sugar price may trend downward in short run due to rich crops expected in the 2013/2014 marketing year. Nevertheless, the prices are predicted to stabilize in the medium run.

2.2. Aggregate supply and Aggregate demand

Aggregate supply

Accelerated economic activity in 2014 will result in an economic growth in the range of 5.4-6.1% y/y.

The 1st quarter 2014 forecasts did not change much from those of made in the 4th quarter of 2013 mainly since macroeconomic developments had been in line with the projections. In the outcome, driven by accelerated economic activity in 2014, the growth in the period January-December will be in the range of 5.4-6.1% y/y[3] and **in the forecast horizon** it will stabilize within 5-6%, resting around it long-term equilibrium.

[3] *See the 30 % interval in the Real GDP Growth (Cumulative) Projection Probability Distribution Chart in this paper.*

The following developments are expected in the sectors of the economy:

For ***Industry***, value added is forecast to grow in 2014 in the range of 6-8%, which will be mainly attributable to the current level of prices of non-ferrous metals in global markets as well as expected growth in ore mining and metallurgy in the event of exploitation of Teghout mine, expected growth in food and beverage production, pharmaceutics and energy industry as a result of previous investment in these sub-branches, and expected growth in production of building materials as certain construction projects commence. In ***forecast horizon***, the industry growth will stabilize in the range of 5.7-6.3% and will be closer to its long-term equilibrium.

For ***Construction***, the growth of value added in 2014 is predicted within 6.5-8.5%, mainly driven by construction activities in such infrastructures as roads, irrigation systems, water supplies, improvements of northern terminals and Yerevan underground upgrades, which will be funded by central and local government budgets as well as resources of international organizations. In the ***forecast horizon***, the growth is expected to stabilize within 1-3% as the supply and demand disequilibrium in construction phases out.

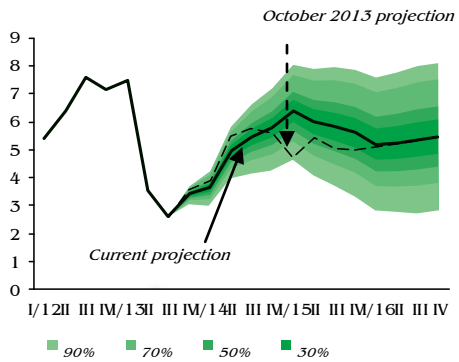
For ***Services***, the real growth of value added is expected in the range of 5-6.5%, driven mainly by expected increases in private and public spending, which would foster both trade turnover and volumes of other services. In the ***forecast horizon***, underlying growth rates in services will be persisting, whilst staying in line with the medium-term domestic demand forecasts.

For ***Agriculture***, the real growth of value added in 2014 is predicted in the range of 4.5-6.5%, driven by expected increases in plant and animal growing fuelled by public and private sector investment in the expansion of house farming, sowing areas and more harvesting and grown headcount in recent years. In the ***forecast horizon***, underlying growth rates in agriculture will be persisting.

Under the baseline scenario, risks to the economic growth are dual sided and depend on how the external and domestic economies will develop further.

Under the baseline scenario risks to the economic growth are dual sided and depend on how the external and domestic economies will develop further. In particular, risks arising from the domestic economy depend on the course of implementation of the fiscal policy and the recovery of private investment growth rate.

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



Real GDP Growth (Cumulative) Projection Probability Distribution				
Period	90% probability interval		30% probability interval	
	Min	Max	Min	Max
January-December 2013 / January-December 2012	3.3%	3.6%	3.1%	3.7%
January-December 2014 / January-December 2013	5.4%	6.1%	4.3%	7.2%
January-December 2015/ January-December 2014	5.1%	6.1%	3.3%	7.9%
January-December 2016 / January-December 2015	4.9%	6.1%	2.8%	8.1%

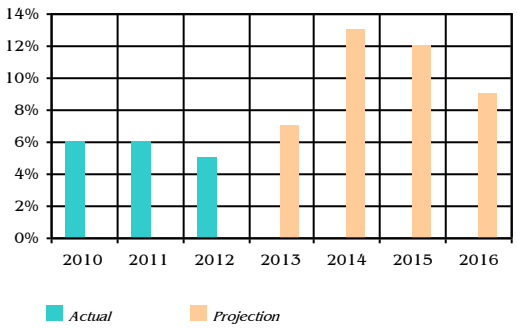
Labor market:[4] Forecasts of labor market indicators for 2014-2016 did not change much in relation to previous ones. Given the economic growth and inflation developments follow a path as projected in the baseline scenario, with the Government implementing a policy steered to stimulate wage increases, the growth rates in nominal wage will speed up and the unemployment decline stably.

In 2014, average nominal wage in the economy is expected to grow by nearly 13% against 6.5% growth reported in 2013.

In particular, in 2014 ***average nominal wage is expected to grow by nearly 13% compared to 6.5% growth recorded in 2013.*** The wage increase during the year will be attributable to the minimum wage threshold to rise to AMD 50000 from AMD 45000 and sizable wage increases in the public sector most likely to happen in the second half of the year. Note that wages increases in the public sector will possibly trigger some rise in wages in the private sector, reflecting the wage competition across segments between the public and private sectors. In the second half of the year, some minor inflationary pressures (about 0.2 pp) will be observable in the consumer market due to added unit labor costs in the private sector companies.

The unemployment rate is likely to further reduce as economic growth in 2014 is anticipated. According to Central Bank estimates, average unemployment rate in 2014 will reduce by 0.9 pp, compared to the previous year, to 14.9%. The unemployment will further trend downward steadily concurrent with expected economic growth in the period ***2015-2016.***

Average nominal wage growth, y/y



In 2015-2016, nominal wages will keep on increasing at a faster rate in relation to 2013 on the back of anticipated economic growth, inflation, reducing unemployment and the Government's policy further steered to foster wage growth. Note that the effect of sizable wage increment in the public sector in the second half of 2014 will be persisting in the course of the first half of 2015, which will lead to maintaining high gross wage growth rates for that period.

In the second half of 2014, driven by the wage increase in the public sector, the growth rate in wage in the private sector will be somewhat faster; this will lead to increased costs companies in the private sector will have to incur. As a result, the consumer market will be going to feel minor inflationary pressures, to the extent of 0.2 pp, which will phase out in the first half of 2015. In the forecast horizon, inflationary pressures from the labor market are not anticipated[5]***.***

Aggregate demand[6]

In 2014, aggregate demand will grow at a rate above average to amount to 6.1%.

Expansionary fiscal policy implementation will push aggregate demand to grow at a faster rate to reach 6.1% in 2014. However, starting from the second half of 2015, given the

[4] *The labor market data for 2013 are the Central Bank estimates which are based on Q3, 2013 data and actual October-November figures. The growth indicators presented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.*

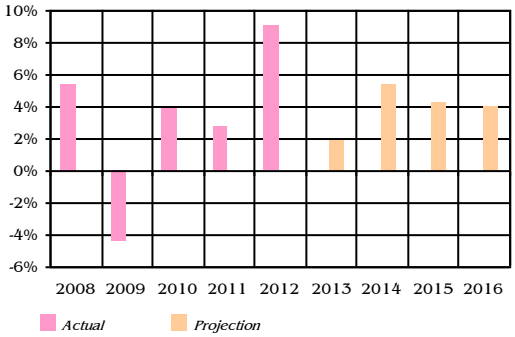
[5] *The wage increase in the medium run will also lead to demand-pull inflation (see details in the section "Aggregate demand").*

[6] *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 Q3, 2013 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.*

impact of the fiscal policy weakens, aggregate demand will grow at a slower but steadier pace, concomitant with the economic growth rates.

Relative to previous forecasts, the estimation of growth rate in ***private consumption*** for 2014 remained the same, 5.3%, which is considerably higher the 1.8% growth recorded in 2013.

Private consumption growth, y/y

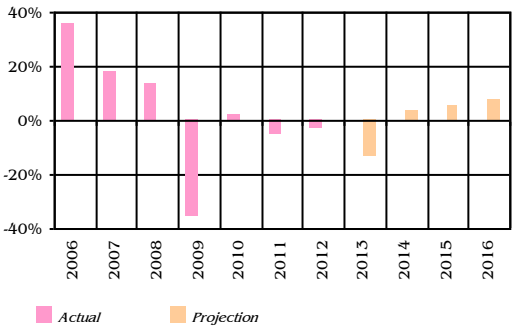


High inflation driven by increased energy prices as well as the slowing of credit growth rates are among factors that determined the sluggish real private consumption growth rates in the second half of 2013 and early 2014.

In line with economic developments under the baseline scenario, a significant increase in wage in the public sector and pensions is expected in 2014, which will contribute to the growth of disposable income of households. Driven by such an increase in disposable income, the private consumption growth rates will accelerate considerably to gradually stabilize around 4.0% in 2015-2016.

In the 4th quarter of 2013, ***investment activity*** in the economy was somewhat weaker than anticipated, reflecting some contraction in the output volumes in construction in the period October-December[7] as well as the Central Bank surveys on investment[8]. In consideration of the above mentioned developments, the growth rate in private investment ***for 2014*** will reach 4%. The introduction of the new pension scheme in 2014 will somewhat stimulate savings in the economy hence private investment. ***In 2015-2016,*** private investment will rebound slowly as economic activity in construction recovers.

Private investment growth, y/y



In view of the developments with private consumption and investment mentioned above, in 2014 growth rates in private spending will accelerate and stabilize around 4.5% in the end of ***forecast horizon.*** As a result, the private spending gap is estimated to be negative at the opening of horizon; it will wane out to zero at the end of 2014 and eventually turn into a positive value in the first half of 2015 only to return to zero at the end of the horizon.

In the first half of 2014, the private spending will create 0.8 - 0.9 pp of contractionary impact on inflation. In consideration of the increased public expenditures mentioned above, deflationary pressures of private spending observable since the second half of 2014 will diminish and phase out late in the year. At the beginning of 2015, the impact of private spending on inflation will be minor inflationary, 0.2-0.3 pp, which will phase out in the period 2015-2016.

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[7] *See http://www.armstat.am/file/doc/99479513.pdf.*
[8] *See http://www.cba.am/AM/Economic%20Activity%20and%20Business%20Climate% 20Indices/BAI,%20BCI2013.2.pdf.*

In 2014, real growth of export of goods and services in 2014 will amount to 11-13%.

With all aforementioned developments in external and domestic environment, preliminary estimation is that ***Current Account Deficit/GDP ratio*** in 2013 will persist within 8.5-8.8%.

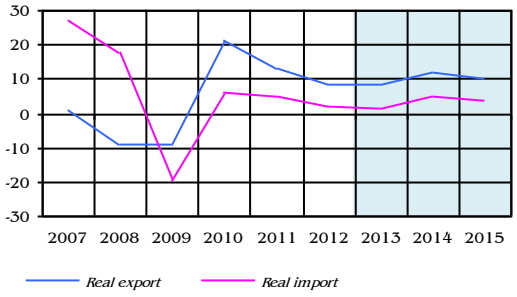
The export growth indicator was revised in light of new forecasts of global economy for 2014 as well as expected additional growth of ore mining and metallurgy as a result of exploitation of Teghout mine. The Current Account Deficit/GDP ratio in 2014 will drop in relation to the previous year's figure.

The 2014 real growth of export of goods and services indicator was revised upside and is estimated to reach 11-13%. On the back of recovering private investment, an expansionary fiscal policy, the real growth of import of goods and services indicator in 2014 will be in the range of 3.0-5.0%.

The real growth of import of goods and services indicator in 2014 is estimated in the range of 3.0-5.0%.

In 2014, the growth rate of private remittances of individuals will be in the range of 7.0-9.0% as Russia's economic growth forecasts were revised downside.

Real export and import, (y/y %)



All above-mentioned developments denote that Current Account Deficit/GDP ratio will reduce to 7.0-8.0% in 2014 and will reach 5.0-6.0% in the medium run.

The ***fiscal policy's impact on aggregate demand was estimated*** using the indicators in the Republic of Armenia draft law on the budget 2014, which projects a zero growth for the Tax/GDP ratio and 0.8 pp of growth for the Expenditures/GDP ratio. The expenditures growth will be due to both capital[9] and current expenditures. The latter is driven by the planned increases of pensions, wages of power enforcement authorities since the start of the year and, effective July 1st, wage of public servants. In 2014, Deficit/GDP ratio is expected to reach 2.3%.

In 2014, the fiscal impulse indicator will be expansionary, 1.5.

In 2014, the fiscal policy is predicted to leave an expansionary impact on aggregate demand, totally driven by an expansionary effect of expenditures: the impulse indicator will reach 1.5[10], which will contribute to boosting up economic activity in 2014. Moreover, expansionary impact will come in more pronounced in the second half of the year. Domestic economic developments will perhaps be conditioned by the performance of the state budget.

The ***fiscal policy in forecast horizon*** will be based on the main indicators as outlined in the Republic of Armenia Medium-Term Public Expenditures Program, 2015-2016, which is steered to provide for deficit adequate to public debt sustainability in the ***medium run***. The impact of fiscal policy in the medium run is estimated to be ***non-inflationary***.

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[9] The increase of capital expenditures is determined by an investment project "North-South Road Construction Project" and other investment projects.
[10] The 2013 state budget figures are shown as cash flows.

Estimated medium-term impact of fiscal policy					
	2012	2013	2014	2015	2016
Budget revenues	23.7	23.9	24.0	23.6	23.9
Budget expenditures	25.2	24.1	26.4	25.6	25.9
Debt interest payment	1.01	1.09	1.34	1.17	1.18
Budget balance	-1.5	-0.2[11]	-2.3	-2.0	-2.0
Primary balance*	-0.5	0.8	-1.0	-0.8	-0.8
One-off flows**	-0.3	0.5	-0.2	-0.4	-0.3
Adjusted balance***	-0.2	0.3	-0.8	-0.4	-0.5
Cyclical balance****	0.3	-0.2	0.0	0.0	0.0
Cyclically adjusted primary balance (structural balance sheet)	-0.5	0.5	-0.8	-0.4	-0.5
Fiscal stance*****		-1.0	1.3	-0.4	0.1

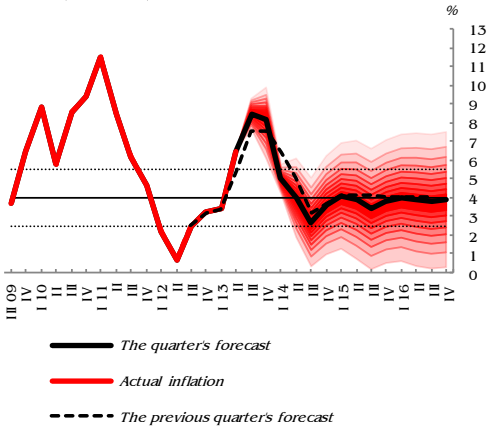
** Budget balance minus debt interest payments.*
*** Temporary or one-off budget entries. In this case net credit is considered; the sign "+" means resources allocated and the sign "-" means resources repaid.*
**** Primary balance sheet adjusted by one-off entries.*
***** Central Bank estimate: a part 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/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).*

To sum-up, the combined impact of the fiscal sector, private demand and labor market on domestic prices in the first half of 2014 will be deflationary, 0.4-0.5 pp, which will phase out in the second half of the year; in the period from late 2014 through H1, 2015, the combined impact of the aforementioned factors is estimated to be minor inflationary, 0.6-0.7 pp, driven by an expansionary fiscal policy and expected developments in the labor market. Starting from the second half of 2015, the impact of domestic demand and labor market on inflation is estimated as neutral.

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

Forecast of the main quarterly macroeconomic indicators and estimation of the monetary policy directions were based on the actual macroeconomic environment of the 4th quarter of 2013 and all available information on the future developments.

Inflation forecast probability distribution chart (12-month)



Period	Inflation Forecast Probability Distribution Chart				
	< 2.5%	2.5 - 5.5%	5.5 - 7.0%	7.5 - 9.0%	> 9.0%
Q1 2014	0.0%	85.1%	14.9%	0.0%	0.0%
Q2	12.1%	75.9%	11.7%	0.3%	0.0%
Q3	44.5%	52.9%	2.5%	0.0%	0.0%
Q4	24.6%	63.7%	11.0%	0.7%	0.0%
Q1 2015	17.6%	61.6%	18.4%	2.2%	0.2%
Q2	23.3%	56.5%	17.2%	2.6%	0.4%
Q3	32.3%	53.5%	12.4%	1.6%	0.2%
Q4	25.8%	54.4%	16.6%	2.7%	0.5%
Q1 2016	23.3%	53.3%	18.9%	3.7%	0.8%
Q2	25.8%	51.2%	18.2%	3.9%	0.9%
Q3	27.5%	50.7%	17.3%	3.6%	0.9%
Q4	26.2%	50.4%	18.3%	4.1%	1.0%

[11] *The 2013 deficit figure is preliminary.*

In the times of persisting uncertainties over debt problems and geo-politics in the world, ***growth of developed countries in the forecast horizon*** is predicted to recover at a slow pace. Developing countries face uncertainties over economic problems associated with capital flights. Under such conditions, demand-pull inflationary pressures from the ***main commodity and food product markets*** are not likely to appear. However, individual product markets may run into certain supply-driven problems attributable primarily to geopolitical, climatic and other events.

In the 4th quarter, signs of rebounding economic activity were discernable, with such activity ***slower than expected,*** however. Construction's decline at an unexpectedly slower pace as well as increased value added in agriculture helped to shore up economic activity. From the demand standpoint, a ***stimulating fiscal policy implementation*** proved effective. Loosened monetary conditions facilitated acceleration of growth rates in dram lending in the 4th quarter, which also had a positive impact on aggregate demand. The GDP gap remained negative in the 4th quarter too, which contributed to more-than-expected reduction in the core inflation rate. The latter, coupled with shrinking inflationary expectations and further falling of food prices, has resulted in an abrupt reduction in headline inflation rate, which amounted to 5.6% at the end of the year, getting very close to the upper bound of the confidence band.

According to the Central Bank projections, in 2014 inflation will keep on subsiding and in the third quarter of the year it will be near the lower bound of the band, which will be attributable gradually phasing out impact from energy price increase since July of 2013. In the meantime, relaxed monetary conditions, lowered reserve requirement standard (from 4% to 2% in February)[12] and expected stimulating fiscal policy will contribute to the contraction of the negative GDP gap and creation of a positive gap already in the second half of 2014. Affected by the latter, inflation will stabilize around its target late in the year.

The start of 2014 saw more uncertainties over future developments in both external and domestic economic environments.

The start of 2014 saw more uncertainties over future developments in both external and domestic economic environments. In the outside world, uncertainties are due to development prospects in developing countries (more importantly, Russia). In the domestic economy, uncertainties are mostly associated with how quickly private capital investment will rebound and how effectively the state budget will perform.

In the outside world, uncertainties are due to development prospects in developing countries (more importantly, Russia). Tapering of indicators in the program of quantitative easing by the U.S. Federal Reserve System has triggered a capital flight from developing countries, which ***has resulted in currency depreciation and some slowing of economic activity there.*** Currently, uncertainties prevail in the area of financial market stabilization and prospects of economic growth in developing countries amid capital flights and how the impact of such factors could be spilled over to raw material and food markets.

[12] *The Central Bank Board Resolution No 299-N, dated 24.12.2013.*

The potential impact of joining the Customs Union on economic developments is not clear yet, as negotiation of the terms of membership is still on. The Central Bank will only assess the impact after the terms will have been ascertained.

In the domestic economy, uncertainties are mostly associated with ***how quickly private capital investment could rebound*** *and* ***how effectively the state budget could perform****,* which could essentially affect the aggregate demand and inflation developments.

Also, the potential impact of joining the Customs Union on economic developments is not clear yet, as negotiation of the terms of membership is still on. The Central Bank will only assess the impact and have it publicly available after the terms will have been ascertained.

On the back of all aforementioned factors, it is predicted that the ***12-month inflation*** in 2014 will be within ***2.5-5.5%*** whilst ***economic growth*** in the range of ***5.4-6.1%****,* pursuant to the 2014 results.

Concurrent with expected macroeconomic environment, in the 1st quarter of 2014 the Central Bank will continue loosening monetary conditions in response to the slowing of economic activity and mitigation of inflationary environment whilst further directions of monetary policy will depend on how uncertainties over external and domestic economic developments will show up.

In ***forecast horizon,*** credit growth rates will remain the same. The Central Bank will adequately react to changes in liquidity demand to ensure money supply is in line with demand.

Risks to inflation deviating from the ***projected value*** are estimated as balanced in both short and medium-term perspectives. The primary risks are associated with the development perspectives in emerging economies and the change in domestic demand, and uncertainties over the projected value of inflation are persisting. If such risks materialize, the Central Bank will react accordingly by maintaining the inflation figure in the medium run.

3. ACTUAL DEVELOPMENTS IN Q4 2013

3.1. Inflation

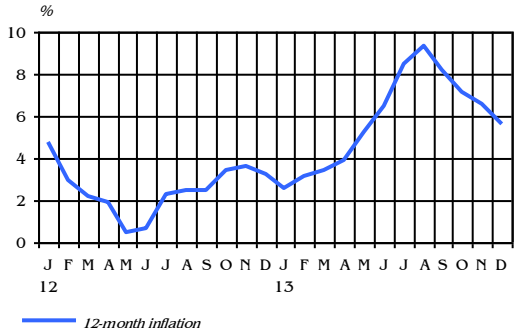
3.1.1. Actual inflation and attainment of target

Given the macroeconomic environment in the third quarter of 2013, which was marked by even more sluggish domestic demand but some easing of the inflation environment, and the impact of tightened monetary conditions aimed to anchoring inflation expectations during the quarter, ***inflation was supposed to moderate during the final quarter of the year*** and the 12-month inflation to rest within ***6.5-7.0%*** and return to its target already in the first half of 2014.

The 12-month inflation was 5.6% in late 2013, very close to the upper bound of the confidence band.

Based on the actual results, until yearend the 12-month inflation has subdued at a faster rate and in late December it was more than 1.0 pp lower from the expected value. The 4th quarter saw 2.3% inflation compared to 4.8% recorded in the same period of the previous year. In the outcome, ***the 12-month inflation at the end of the year reached 5.6%.*** The quarter's inflation was fuelled by price increases due largely to prices in item 'vegetable and potato'. Contrary to the seasonal increase, prices in item 'fruit' fell at the end of the year.

Inflation environment in the 4th quarter moderated at a faster pace, and the 12-month inflation neared the upper bound of the band a half-year sooner, as a result



12-month inflation by commodity group as main contributors						
Commodity group	September 2013, y/y		December 2013, y/y		Q4, 2013	
	Growth	Contribution	Growth	Contribution	Growth	Contribution
CPI	**8.2**		**5.6**		**2.3**	
Food products	**8.0**	**4.3**	**4.0**	**2.1**	**4.0**	**2.2**
bread products	6.1	0.6	1.6	0.2	-0.1	0.0
dairy products	12.2	0.5	10.9	0.5	1.0	0.0
meat products	4.0	0.4	2.3	0.2	0.1	0.0
fruits	20.6	0.8	0.9	0.0	-0.6	0.0
vegetables and potato	12.4	0.8	1.7	0.1	57.6	3.6
eats and oils	12.5	0.4	3.3	0.1	-2.1	-0.1
eggs	38.6	0.5	24.6	0.3	-1.6	0.0
Non-food products	**3.4**	**0.5**	**3.5**	**0.5**	**1.8**	**0.3**
Services	**10.9**	**3.4**	**9.7**	**3.0**	**-0.6**	**-0.2**

In the 4th quarter, the 12-month core inflation also followed a down-trending path, from 5.3% in September to 3.7% in late December.

Below are the arguments and expectations which were used to predict inflation in a previous one-year horizon, as well as significant deviations in that period, which necessitated further adjustments in forecasts. There was a low inflationary environment ***in early 2013,*** i.e. the start of the previous one-year horizon, while phased out supply shock in agriculture and non-inflationary effects anticipated from the external sector portended a moderately expanding inflation environment and

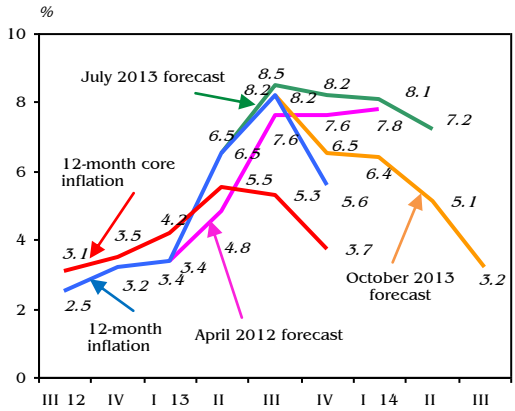
gradually increasing 12-month inflation rate. Furthermore, ***the 12-month inflation was meant to speed up in the first half of 2013 and stabilize around the target thereafter.*** Under such conditions, the Central Bank envisaged to implement ***a neutral monetary policy***[13].

In fact, until May the inflationary environment has developed in line with the projected path, as ***the 12-month inflation has risen from 3.2% late in the previous year to 3.9% in April,*** nearing the target.

However, the situation changed significantly in May as the economy had a considerable amount of inflation potential primarily due to such events as ***heavy hails, partly postponed vegetation period in agriculture and price increases on some services*** as well as ***possible revision of energy prices*** starting from the 3rd quarter.

These factors were, in fact, a supply shock, which contained serious inflationary risks. In the period May-August, the inflationary environment has expanded significantly, posting 0.6% of inflation instead of 4.5% of deflation recorded in the same period last year. As a result, the 12-month inflation in August was 9.3%, the highest level in the last two years (with about 3.0 pp of contribution to the increase in energy prices, 0.7 pp to the increase in food prices and 0.7 pp to the increase in prices of some services).

At end-year, forecasts of 12-month inflation were revised steeply downside as inflation environment moderated and inflation expectations were anchored in the 4th quarter 2013



The inflation forecasts made in April and July ***were revised upside:*** up until the second half of 2014 the inflation rate will vary within an 8.0% level then it will decline to enter the confidence band and will rest within the 4% target in the medium run.

Indeed, when direct and second-round effects of the energy price increase are excluded from the 12-month inflation rate, one may see it has been near the upper bound of the confidence band.

The Central Bank reacted to the aforementioned inflation developments from the start of 2013 until August that year ***by leaving the policy rate unchanged, at an 8% level.*** Anticipated abolishing of the effect of seasonal price drop in agricultural products in summer of 2012 on general prices as well as the 12-month inflation starting to demonstrate expanding patterns was the underlying argument. ***Acceleration of inflation in the period May-July of this year notwithstanding, the Central Bank carried on implementing a neutral monetary policy, maintaining the point that the inflation would return its target value in the medium run as core inflation rested at a low level and inflation expectations remained anchored.***

In ***August*** the Central Bank raised the refinancing rate by 0.5 pp to 8.5% which was maintained over September, too. This was the Bank's response to the continuous expanding of the inflation environment (the 12-month core inflation also expanded to 5.7% in end-August from 3.5% late in the previous year) and

[13] *A neutral monetary policy involves a policy rate matched with an estimated neutral interest rate under which condition the inflation is within the target and GDP in equilibrium. Currently, the neutral interest rate is estimated around 8%.*

elevated inflation expectations in a short-term perspective. ***Keeping real interest rates positive*** was aimed at anchoring inflation expectations resulted from domestic developments and easing second-round effects from the increase of energy prices.

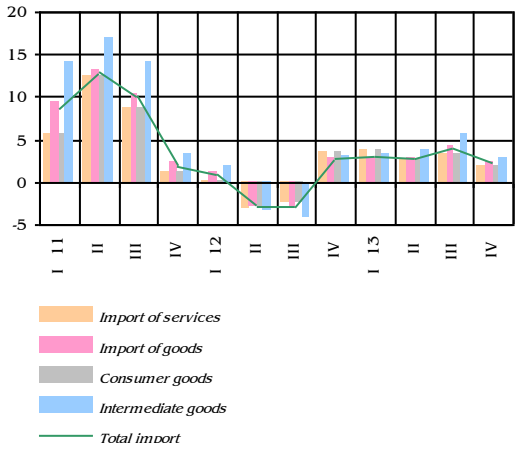
Staring from **September** the inflation environment gradually eased, attributable to economic growth persisting at low levels amid sluggish investment and slowing private consumption growth rates, to tightened monetary policy as well as little seasonal rise in prices of some food products late in the year. In the last four months of the year there was only 2.0% of inflation compared to 5.7% in the same period of the previous year, and the 12-month inflation rate in December fell to 5.6%, nearing the upper bound of the band. Further, over the same period of time, the core inflation has subdued by 2 pp. As a result, average inflation in 2013 amounted to 5.8%.

All in all, with an inflation environment even more moderate than expected, the effect of energy price increases on domestic prices phased out as well as the expectations of non-inflationary impact from external and domestic environment in the medium run, the Central Bank gradually loosened the monetary conditions by reducing the refinancing rate a total of 0.75 pp to 7.75% in end-December.

3.1.2. Import prices and producer prices

Import prices: save gold and oil prices, the dollar prices of import of intermediate goods grew in the 4th quarter of 2013. The dollar prices of import of consumer goods also trended upward. As a result, the dollar prices of total imports have grown by 1.1% q/q, with economic growth of 2.2% y/y compared to 1.9% y/y in the 3rd quarter. The y/y growth rate in import prices of intermediate goods is mainly determined by a low level of gas prices recorded in the 4th quarter of the previous year. However, the dollar prices of gold, wheat, sugar and oil remain below the fourth quarter's average of the previous year, thus making a negative contribution to the prices of intermediate consumption goods. The y/y price rise in consumer goods has been mainly due to the increase in the dollar prices in Euro-area.

Import price growth rates slowed down in the 4th quarter of 2013, y/y, %



Producer prices[14]***:*** in the 4th quarter of 2013, almost all sectors of the economy posted increased price indices, and the GDP deflator in the period January-December has been an estimated 103.2 y/y.

Industry posted a quarterly growth of 4.5% y/y, with the January-December growth having amounted to 4.7% y/y, owing to increased prices in *processing industry* (3.8%) and *energy and gas production and distribution* (20.6%). The latter is a result of continued recovery in the global and domestic demand and energy price rise since July of 2013.

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

Agriculture reported 1.8% y/y increase in prices[15] during the 4th quarter in spite of 1% y/y decline in the period January-December due to 2.9% y/y rise in prices in *plant growing* and 3% y/y drop in prices in *animal breeding*, respectively. The increase in prices in plant growing was driven by 10.1%, 14.1%, 2.5% and 80.1% increment in prices of "potato and vegetables", "mushroom", "grains" and "water melons", respectively. Heightened price increase in "water melons" was due to reduced sowing area because of hailstorm in April-May, whilst price decreases in animal breeding was mainly attributable to 5.5% drop in meat price.

In January-December 2013, prices were highest in industry and carriage sub-sector

Construction reported 2.7% y/y growth of prices in the 4th quarter, with the January-December price increase having reached 2.5% y/y, mainly attributable to the wage increment and increased prices of building materials.

Carriage reported 15.6% y/y rise in prices in the 4th quarter, with the January-December price increase having reached 8.4% y/y, owing to risen tariffs on *railroad transport* (0.9%), *air transport* (3.1%), *truck transport* (2.2%) and *pipeline transportation* (20.4%). Note that the pipeline transportation rates, as high as these, are mainly due to the increase in energy prices.

3.1.3. Inflation and interest rate expectations

In the 4th quarter of 2013 the Central Bank continued its regular surveys on what kind of expectations organizations in the financial sector and households have about selected macroeconomic indicators.

The results of current survey suggest that inflationary expectations in the financial system remained stable, according to recent survey results, in the face of notable moderation of the inflationary environment in the 4th quarter. Indeed, such stability of prediction about the financial system was in line with current developments in inflation as in the last two quarters inflation followed a stable path on average. Based on the 4th quarter results, most banks anchored their expectations of the 12-month inflation around 5.3% range; credit organizations in the region of 4.2%. The 4th quarter survey results suggest that households' inflationary expectations have moved downward as they chose a 4.9% range from the previous quarter's 5.2% for the 12-month average inflation.

According to the survey results, banks and credit organizations will further anticipate stable market interest rates for the upcoming one-year horizon.

[15] *Sales prices of producers of agricultural product are presented.*

3.2. Aggregate supply and Aggregate demand

3.2.1. Aggregate supply[16]

The indicator of ***economic growth*** published by the National Statistics Service of Armenia for the 3rd quarter of 2013 was merely 1.4% y/y, with the January-September growth having amounted to 2.6% y/y. The acceleration of economic growth rates in the 3rd quarter against the 2nd quarter's 0.6% growth was mainly a result of reported growth in industry, faster growth rates in agriculture as well as somewhat a slower decline in construction.

With economic activity somewhat accelerated in the 4th quarter of 2013, Economic Activity Indicator in the period January-December has been 3.5% y/y against 3.2% y/y recorded for the period January-September.

With economic activity slightly accelerated in the fourth quarter compared with the previous quarter, it is still estimated to be slow. Economic activity in the second half of 2013 has been sluggish in part due to weaker growth of the global economy, declined investments in the domestic economy and a negative impact from an increase in energy prices. Specifically, increased gas and electricity prices have pushed up operational costs of businesses in different sectors of economy, thus resulting in diminished funds for investment by, and reduced profitability of, companies in the face of limited financial resources. This has caused contraction in investment and supply. A general rise in prices driven by increased energy prices has reduced the real volumes of consumption, reflecting the weakening of the domestic demand in the second half of the year[17], which has also contributed to the slowing of economic activity.

The economic growth in the period January-December 2013 is expected in the range of 3.3-3.6%.

Economic growth forecasts under the baseline scenario were revised downside in consideration of major road infrastructure projects fulfilled partly as well as slow growth rates in domestic demand. As a result, economic growth in the period January-December 2013 is expected in the range of 3.3-3.6%.

In view of output growth of 6.8% y/y reported in ***Industry*** over 2013, the growth of value added in the period January-December 2013 is estimated in the range of 3.8-4.8%, mainly due to the increased volumes in *metal ore mining* (8.6%), *food production*[18] (3%), *metallurgy* (9.2%), *beverage production*[19] (17.9%), and *tobacco production* (19.6%).

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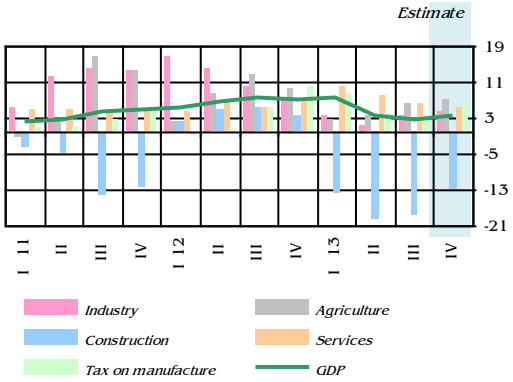
[16] The indicators of real growth of value added in branches of the economy for the first three quarters of 2013 are the Central Bank estimates whereas the indicators of sub-branches represent y/y growth rates in output volumes for January-September, unless otherwise specified.
[17] See section "Aggregate demand" in this paper.
[18] Growth in food production was mainly owing to increased production volumes of vegetable oil (75.1%), macaroni (15.4%), canned food (8%), confectionery (14.6%), meat (9.9%), meat products (27%), curd (19%), yogurt (13%), milk (6.2%), sour cream (1.5%) and ice-cream (13.6%).
[19] Growth in beverage production was mainly owing to increased production volumes of champagne (12%), wine (12.3%), beer (45.2%), brandy (9.6%), natural juice (16.7%), spring water (31%) and non-alcoholic beverage (36.2%).

In view of 8.1% y/y decline in ***Construction*** in the period January-December 2013, the decrease of value added for the same period of time is estimated within 13-15% y/y. Note that there has been a slump in sources of construction financing with exception of such sources as *households* (31.6% growth) and *humanitarian aid* (11.7% growth). In particular, decline was posted in regard to construction financed by organizations (-22.5%), international loans (-9.6%), state budget (-6.8%) and local community budgets (-46.1%).

In ***Services*** the growth of value added in the period January-December 2013 is estimated in the region 5-5.5% y/y as a result of volumes of services rendered and trade turnover having increased by 3.6% and 1.2%, respectively. The increase in the volume of services rendered was driven by growth recorded in information & communication (10.2%), financial and insurance activity (9.5%), events, leisure and rest (15.6%), public catering (18.6%) and healthcare (13.3%). The growth of trade was totally due to retail trade and wholesale trade, having increased by 1% and 3.2%, respectively.

Actual real GDP growth and economic sector growth rates (%)



In ***Agriculture*** the growth of value added in the period January-December 2013 is estimated in the range of 6.5-7.5% y-o-y, owing to increased outputs in animal breeding, fishing and plant growing by 7.8%, 30.4% and 6.6%, respectively. Reported 6.3% and 12.7% increases in milk production and slaughtered animal and poultry production, respectively, have totally contributed to the overall growth in *animal breeding*. The growth reported in *plant growing* has been driven by increased output in grain and legume (20.3%), potatoes (2.1%), vegetables (3.2%), water melons (1.5%) and fruits and berries (1.9%).

3.2.2. Aggregate demand[20]

In 2013, the annual growth rate of private consumption amounted to 1.8%.

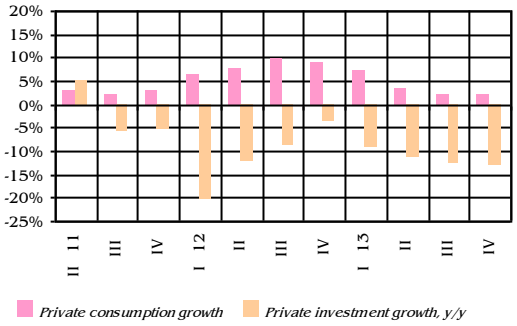
In the 4th quarter of 2013, a slowing growth rate in private consumption further trended down to 1.8%, under which circumstance the annual growth rate of private consumption amounted to 1.8%, significantly lower from the 9% growth indicator of private consumption recorded in 2012.

A slower growth in private consumption in comparison with the previous year has been attributable to gradually phased out economic effects of strong growth in agriculture in 2012, a feeble credit growth as well as inflation driven by increased gas and electricity prices in the second half of the year. Unsurprisingly, an expanded inflationary environment fuelled by higher gas and electricity prices has negatively affected people's real incomes and caused private spending to shrink.

[20] *The private spending, private consumption and private investment data for the 4th quarter of 2013 are the Central Bank estimates based on actual 3rd quarter of 2013 data. Growth estimates in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.*

In 2013, private investment contracted by 13.1%.

Private consumption and investment growth, y/y



A Consumer Confidence Index[21] as calculated by the Central Bank points to the above developments with private spending. In the 4th quarter of 2013, relative to the same period of the previous year, the CCI has dropped by 7.8% to 40.9, showing a further tendency of decline during the quarter.

In the 4th quarter of 2013, the investment climate was somewhat weaker than expected, reflecting persisted decline in construction as well as slower-than-expected economic activity in the same period of time. In the 4th quarter, investment reduced by 13.7%, while the decline in investment in the period January-December has been an estimated 13.1%.

The results of the Central Bank surveys[22] of Armenian companies point to the low investment activity during the 4th quarter.

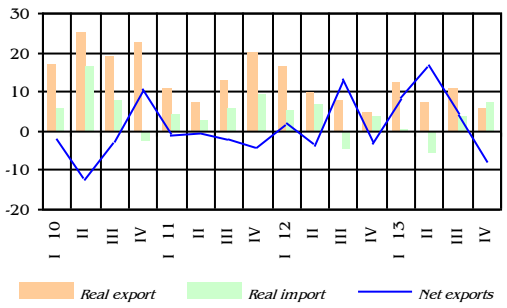
In the 4th quarter of 2013, 23% of the companies surveyed invested in industry; this is 3 pp lower from the figure recorded in the same period of the previous year. According to the survey, the share of companies having invested in the total survey has shrunk in all sectors of the economy except for industry. The share of companies invested in industry during the 4th quarter reached 32%, up by 2 pp against the respective figure of the 4th quarter of the previous year.

Credit provided by local banks to companies remained an important source of investment financing during the 4th quarter of 2013.

In the face of slower private consumption growth rates and contraction in investment, private spending has declined by 2.2% in relation to the 4th quarter of the previous year, which has resulted in 1.6% shrinkage of the domestic demand amid 2.5% increase in government spending. In the outcome, private spending in 2013 contracted by 1%, which left the domestic demand unaffected in relation to the previous year in the face of 6.4% increase in government spending.

On the back of the aforementioned developments with private consumption and investment, the private spending gap in the 4th quarter of 2013 is estimated largely negative, with a 0.9-1.0 pp of contractionary impact on the inflation.

Negative balance in net exports increased in the 4th quarter of 2013
(net real exports, y/y, %, positive sign means improvement)



In the 4th quarter of 2013, the growth rates of export of goods and services in real terms decelerated to 6.0% y/y, which was attributable to some slowing of growth rates in processing industry. The volume of import of goods and services in real terms[23] has grown to 6.9% y/y.

In the 4th quarter of 2013, growth rates of net inflow of non-commercial remittances of individuals remained strong, amounting to 11.3% y/y.

[21] *See https://www.cba.am/am/SitePages/statsscci.aspx.*
[22] *See https://www.cba.am/am/SitePages/statsseabci.aspx.*
[23] *The real export and import growth indicators are the Central Bank's estimates.*

3.2.3. Labor market[24]

The developments in the period October-November of 2013 suggest that the growth rate in nominal wage in the 4th quarter was consistent with previous forecasts and was an estimated 6.9%, with an average nominal wage growth having been an estimated 6.5% in the period January-December. Moreover, the private sector wage growth in the public sector was quite high compared to the wage in the public sector. In the 4th quarter of 2013, the private sector wage growth is estimated at 8.6%, and in the public sector, 5.8%.

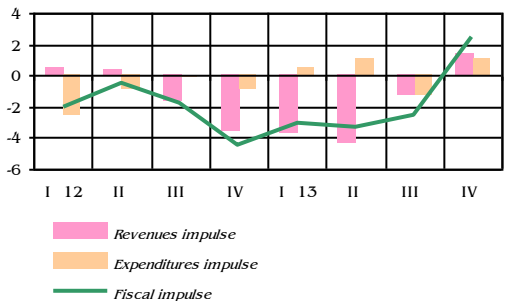
The increasing of the minimum salary threshold as well as continued reduction in the unemployment rate in the 4th quarter of 2013 largely contributed to the nominal wage increases in the private sector.

In the 4th quarter of 2013, the average unemployment rate subdued in line with the Central Bank projections, by 0.6 pp to 15.4%. In the period January-December 2013 the average unemployment rate has amounted to 15.8%, representing 1.5 pp of drop compared to the same period of the previous year.

Significant imbalances in the economy were not observed during the 4th quarter of 2013, and the impact of the labor market on inflation has been neutral, as a result.

3.2.4. Fiscal policy[25]

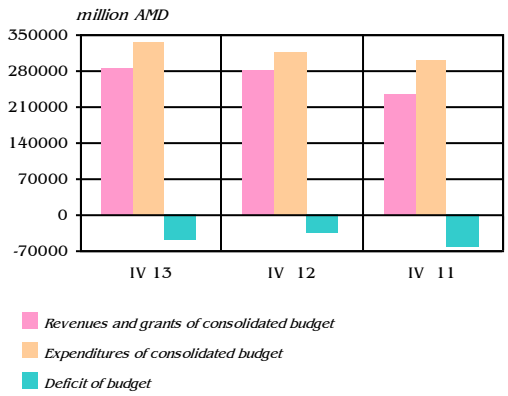
In the 4th quarter of 2013, expansionary impact of the fiscal policy is attributable to revenues and expenditures both carrying expansionary effects



In the 4th quarter of 2013, performance against the state budget involved accumulating of smaller grown revenues but more expenditures in relation to the performance in previous three quarters. The fiscal sector, therefore, had slightly more expansionary impact on aggregate demand: the fiscal impulse was 2.5 expansionary instead of projected 2.2. The expansionary impact, as it was predicted, arrived in regard to both revenues and expenditures.

Revenues of the consolidated budget have grown by 4.6% in relation to the 4th quarter of the previous year, with tax revenues having increased by 3.7%. In the structure of taxes, relative to the 4th quarter of the previous year, the share of indirect tax has shrunk by 5 pp to 49% of tax revenues but the share of direct tax has risen by 4 pp to 42% of tax revenues. In the structure of direct taxes, the income tax[26] has grown by 14.5%. As a result, the growth rate of direct tax amounted to 14% and y/y decline rate of indirect tax amounted to 6%.

Performance of main indicators of the consolidated budget



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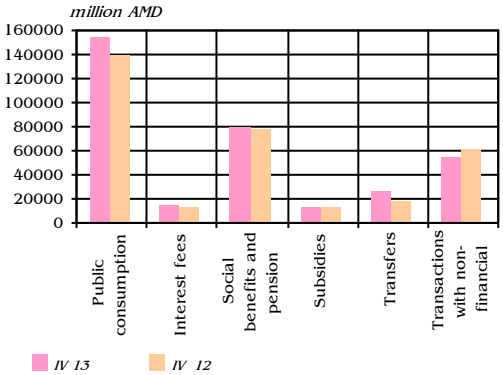
[24] The labor market data for 2013 are the Central Bank estimates which are based on the 2nd quarter data and actual July-August 2013 figures. The growth indicators represented in this sub-section are relative to the same quarter of the previous year, unless otherwise specified.

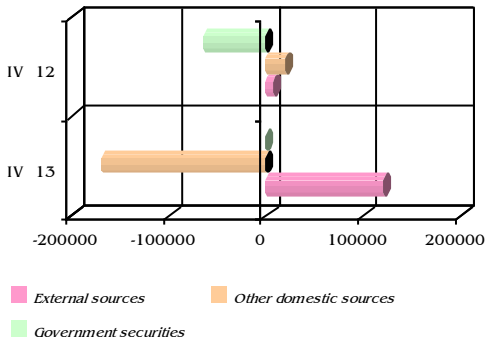
[25] Consolidated budget indicators which were prepared on the basis of preliminary actual data of the 4th quarter of 2013 (PIU funds included) were used for the review of the fiscal sector. The impact of revenues was calculated in respect of the nominal GDP indicator while the impact of expenditures in respect of the estimated potential GDP indicator.

[26] 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.

In the 4th quarter of 2013, almost all expenditures items of the budget posted increases



Unlike previous quarters, the 4th quarter of 2013 stood out with a deficit of budget
(million AMD)



During the year, the fiscal policy's impact on aggregate demand was 1.2 pp contractionary.

Almost all budget expenditure items have posted increases when compared with the previous reference period. In the 4th quarter of 2013, expenditures of the consolidated budget grew by 6.5% against the same period of the previous year. Current expenditures have grown by 10.7%, with ***public consumption*** having increased by 10.4%. ***Capital expenditures (item "transactions with non-financial assets")*** have declined by 11.1% against the same period of the previous year. In the 4th quarter, the level of expenditures reached 31.3% of annual expenditures, which is above the quarterly plan's indicator (part of expenditures saved during the previous quarter was executed in the reporting quarter). However, there were shortfalls on expenditures disbursable from external sources due to the slow pace of the North-South Highway Investment Project. In the 4th quarter, public spending (net credit included) had 1.6 pp of expansionary impact on aggregate demand.

In the 4th quarter of 2013, with revenues and expenditures figures shown above, the consolidated budget posted a deficit of AMD 48.3 billion. The deficit was financed mostly by external sources, in which AMD 279.9 billion[27] worth of proceeds from placement of Eurobonds.

Based on the ***annual results***[28]***,*** the state budget generated revenues of AMD 1037.5 billion, which exceeded the statutory figure by 0.5%. Tax revenues have amounted to AMD 999.5 billion, outperformed by AMD 6.4 billion. Relative to the same period of the previous year, growth of tax revenues has been 13.8% or AMD 121.1 billion, which is largely due to increased value added tax, customs duty, and environmental and natural resources fees. The growth of public expenditures (PIUs included) over the same period of the previous year has been 6.4%.

During the year, the fiscal policy's impact on aggregate demand was 1.2 pp contractionary, owing to revenues (1.6 pp contractionary impact) and expenditures (with 0.4 pp expansionary impact).

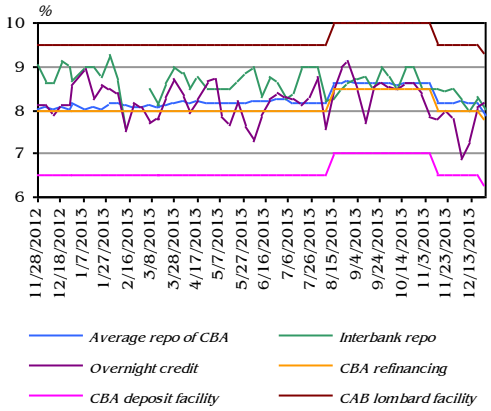
3.3. Money and financial market developments

3.3.1. Financial market, money and credit

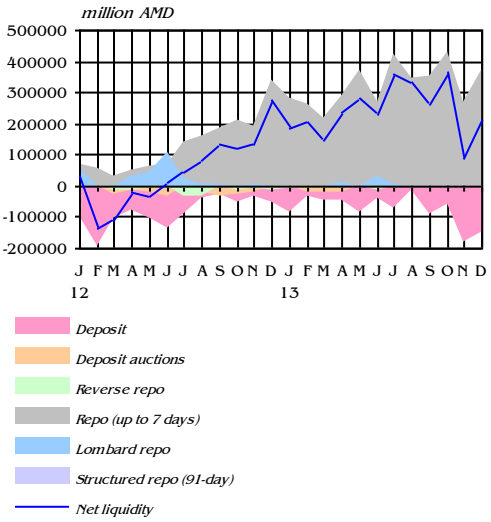
In the 4th quarter of 2013, the Central Bank reacted to the down-sloping inflation and slowing economic growth rates by gradually lowering the refinancing rate by 0.5 pp in November and 0.25 pp in late December to 7.75%.

[27] *AMD 195.7 billion out of the said proceeds was used to fully repay the credit disbursed under an agreement "Provision of Credit to the Republic of Armenia" as concluded by and between the Government of the Republic of Armenia and the Government of Russian Federation in 2009.*
[28] *Without account of extra budgetary funds.*

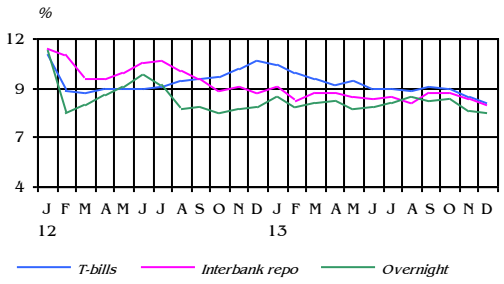
Short-term interest rates dropped during the quarter



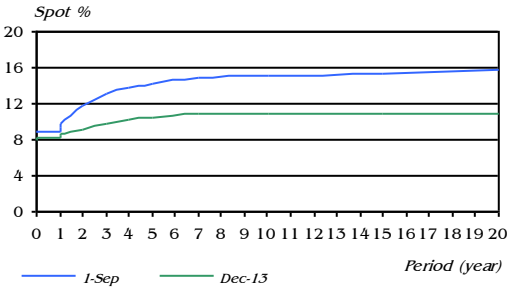
Operations carried out by the Central Bank



During the quarter, short-term interest rates trended down amid lowered CBA refinancing rate



During the quarter, interest rates of T-bills fell



Interest rate of repo agreements, the principal policy instrument of the Central Bank, has fallen as well, by 0.6 pp to 8.0% in December in relation to September average.

Operations carried out by the Central Bank

Period	Repo (up to 7 days)		Funds attracted		Lombard repo	
	Value (million AMD)	Weighted average %	Value (million AMD)	Weighted average %	Value (million AMD)	Weighted average %
I 2012	151932.32	11.15	387600	5.00	59093.88	11.00
II	185000.00	10.29	317950	5.05	179437.37	10.77
III	488921.68	9.03	158200	5.51	32524.98	10.50
IV	741880.51	8.09	140150	6.22	5631.79	9.50
I 2013	763825.90	8.09	163700	6.50	944.60	9.50
II	929077.62	8.19	176300	6.50	38652.30	9.50
III	1121106.19	8.42	176300	6.75	5278.56	9.50
IV	1064987.41	8.31	392.300	6.71	500.00	10.00

In the 4th quarter of 2013, the change in Refinancing Rate of the Central Bank was concurrent with gradually dropping short-term interest rates in the financial market. The falling of interest rates was most highlighted in average December figures. As a result, the average quarterly overnight loan interest rate has dropped by 0.43 pp in relation to the previous quarter; relative to September, it has fallen by 0.66 pp to 7.74% in December. In December, relative to September, the market repo rate has reduced by 0.56 pp to 8.20% (average quarterly indicator has dropped by 0.1 pp). A similar behavior of rates was seen in the T-bills market; they incurred not only the influence of the Central Bank's policy impulse but also the public debt management policy's.

Box 2

Government securities market

T-bill rates reacted to the change of the Refinancing Rate. The public debt management policy has also contributed to the downward trend in T-bill rates. As a result, the average quarterly rate of up to 1-year bills has fallen by 0.3 pp to 8.66% against the previous quarter. In December, relative to September, the average rate has dropped by 0.83 pp to 8.22%.

The yield curve analysis shows that yields in the secondary market sloped down all along the curve, with most pronounced falls in medium- and long-term segments. The long-term rate of spot yield curve has reduced by 4.8 pp to 10.9%. The spread between long-term and short-term rates in December was 2.98 pp, down by 3.86 pp against September.

In the banking sector in the 4th quarter of 2013, variation in interest rates and volumes of deposits and loans in the banking sector was mainly attributable to the change introduced to the reserve requirement ratio since June 2013 as well as stronger competition in the financial sector on the whole. The reserve requirement ratio against dram funds lowered to 4% from a former 8% level has brought AMD 20 billion of extra liquidity to

In the banking sector in the 4th quarter of 2013, variation in interest rates and volumes of deposits and loans in the banking sector was mainly attributable to the change introduced to the reserve requirement ratio since June 2013 and increased competition in the financial sector.

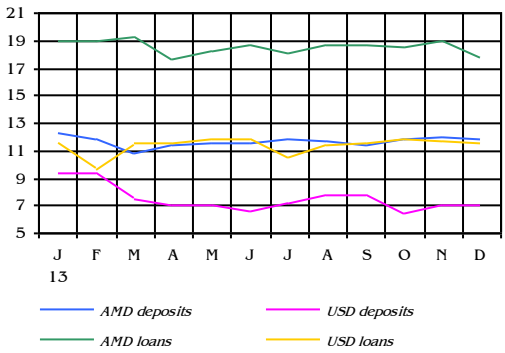
the banking sector and made financial intermediation in dram more affordable and less costly to banks.

Relative to the previous quarter, the average quarterly interest rate of dram deposits has risen by 0.2 pp to 11.9%, further following an upward trend observable from the previous quarter (in December, the average rate rose by 0.5 pp against September). The volumes of dram deposits have increased by 14.5% over the quarter, mostly owing to term deposits in dram.

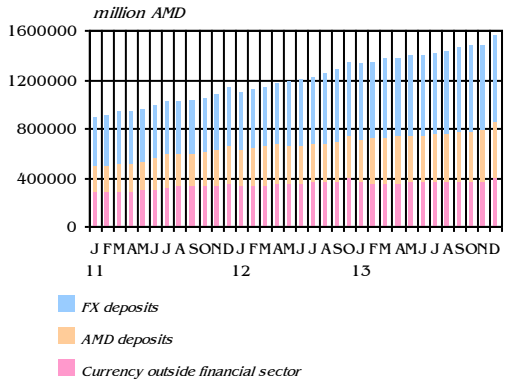
Besides the change mentioned above, the dram lending rate has incurred the impact of structural change in the volumes of loans. In the dram loan portfolio, business loans came in with lower interest rates this quarter in contrast to consumer loans that were prevailing in the previous quarter. Average quarterly dram lending rate has reduced by 0.1 pp to 18.4%; in December, average rate fell by 0.9 pp against September and amounted to 17.8%. The fourth quarter saw some acceleration in credit growth by 5.3% (with y/y growth of 16.4%) against 2.2% or by AMD 99.3 billion in absolute terms compared to AMD 39.7 billion in the previous quarter. By currency structure, growth of dram lending (8.0%) has outpaced that of foreign currency loans.

Credit volumes and interest rate behavior have been congruent with the results of survey on the terms of lending provided by banks and credit organizations functioning in Armenia.

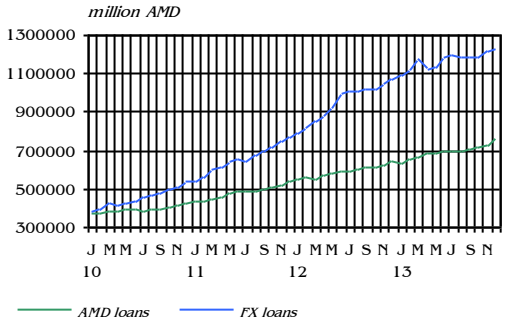
Dynamics of interest rates of funds in AMD and foreign currency



In the 4th quarter of 2013, AMD deposits grew while FX deposits stayed much on the same level



In the 4th quarter of 2013, FX loans outnumbered in total lending portfolio, yet growth of AMD loans outpaced that of FX loans



Box 3

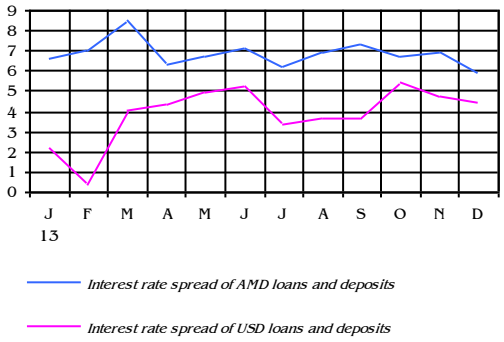
The results of the 4th quarter 2013 survey on terms of lending provided by Armenian banks and credit organizations show there has been further easing of the terms of lending not only to small and medium-size businesses but major businesses as well, as was opposed to the previous quarter when the terms of lending to major business came in much stricter. New terms involved offering a longer period of average maturity for the loan along with extended maturities for other types of loan (mortgage and consumer). Demand for business loans has increased significantly in contrast to the slump recorded in the 3rd quarter. Furthermore, demand for loans to finance capital investment, current assets and working capital grew in the 4th quarter. Household lending procedures (consumer and mortgage loans) were further eased at even a faster pace than it had been in the previous quarter. Yet, consumer crediting procedures were eased in the face of reduction in demand due to a decline in household creditworthiness. Demand for mortgage loans remained unchanged. In the 4th quarter of 2014, terms and procedures on all types of loans are expected to loosen in line with growing demand for consumer loans. However, demand for business and mortgage loans is expected to be slower in relation to the 4th quarter of 2013.

The reserve requirement ratio against dram funds to be lowered to 4% in February 2014 from the current level of 4% will bring about AMD 10 billion of extra liquidity to the financial sector while further facilitating lending terms and procedures.

Unlike interest rates and volumes of dram deposits, interest rates of foreign currency deposits fell during the quarter by 0.8 pp to 6.8% in the face of an almost unchanged level of the volume of foreign currency deposits. Decrease in company deposits has offset the growth of household deposits. Interest

Share of supply-stimulating credit has grown

In the 4th quarter, the spread of interest rates of AMD loans and deposits shrank



rates of foreign currency loans have risen fuelled by increased demand for business loans during the quarter: the average quarterly rate has risen by 0.5 pp compared with the previous quarter to 11.7%. Growth of foreign currency loans amounted to 3.16% (3.07% if the impact of change in exchange rate is excluded).

The share of supply-stimulating loans[29] continues increasing in the lending portfolio at a slow pace, though.

The spread between interest rates of dram and foreign currency loans and deposits further trended down during the 4th quarter. The spread between interest rates of dram loans and deposits narrowed to 5.9 pp in December from 7.3 pp in September, whereas the spread between interest rates of foreign currency loans and deposits grew to 4.5 pp in December.

In the 4th quarter of 2013, the level of dollarization (foreign currency deposits to broad money ratio) subdued by 2.73 pp. Performance of the indicator of lending in foreign currency, with growth rates lagging behind those of dram credit also points to the reducing dollarization.

Box 4

On the back of the developments in the financial market and financial sector on the whole, broad money grew during the quarter by 6.0% to AMD 1.545 trillion and dram broad money, by 11.6% to AMD 848 billion.

The annual performance of monetary indicators was as follows: relative to the end-2013, dram deposits have grown by 31.0%, foreign currency deposits, by 14.6% (14.0%, if the impact of change in foreign exchange rate is excluded), which pushed the dollarization down by 0.1 pp. The growth of currency outside the financial sector remained almost unchanged. The 12-month growth rates in broad money and dram broad money followed more or less a similar path, reaching 14.8% and 14.9%, respectively. In the meantime, base money has increased by 12.9% and dram base money, by 8.6%. The money and dram multipliers in late 2013 were 1.74 and 1.31 compared to 1.97 and 1.23 reported for the same period of the previous year.

3.3.2. Exchange rate

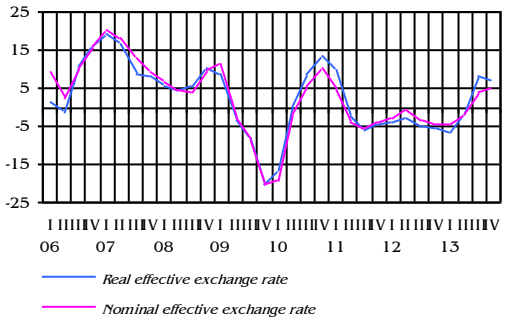
In the 4th quarter of 2013, Armenia's trade partners' average weighted exchange rate appreciated by 0.8% q/q, primarily fuelled by the Euro and Russian ruble exchange rates' average quarterly appreciation. The dram's nominal exchange rate further tended to appreciate during the 4th quarter. In the meantime, the Central Bank acted as a net buyer of foreign currency in the foreign exchange market to smooth out sharp currency fluctuations.

So, in the 4th quarter the dram's average nominal exchange rate appreciated by 0.8% q/q versus the US dollar, with the real exchange rate[30] having appreciated by 0.4% in relation to the

[29] *These are loans, conventionally taken from the overall lending portfolio, provided to industry, agriculture, transport and communication sectors.*
[30] *The Q4, 2013 real exchange rate indicator is the Central Bank estimate.*

3rd quarter. As for the change in relation to the same period of the previous year, the real exchange rate posted strong appreciation, 7.3% y/y, which was driven by high y/y depreciation of the Iranian rial along with high inflation in Armenia, compared to trade partners' inflation.

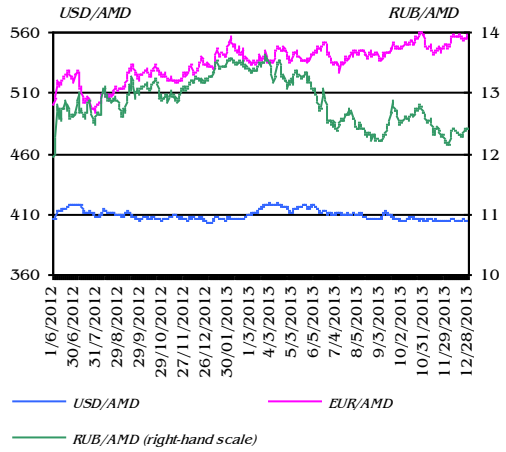
In the 4th quarter of 2013, y/y appreciation of real effective exchange rate slowed down to some extent, % (positive sign means appreciation)



y/y growth, %	Q1 12	Q2 12	Q3 12	Q4 12	2012	Q1 13	Q2 13	Q3 13	Q4 13
Real effective exchange rate (+ means appreciation)	-3.8	-2.9	-5.1	-5.7	-4.4	-6.4	-1.6	7.9	7.3
Average inflation in Armenia	3.3	1.0	2.4	3.4	2.5	3.0	5.2	8.7	6.5
AMD/USD average nominal exchange rate (+ means appreciation)	-5.7	-6.8	-10.2	-6.3	-7.3	-5.1	-3.3	0.5	0.2
Average weighted inflation in trade partner countries	4.0	3.5	4.1	4.3	4.0	4.5	4.4	4.3	3.7
Partner countries' average weighted nominal exchange rate (+ means appreciation versus dollar)	-2.9	-6.9	-7.6	-1.7	-4.7	-0.4	-1.1	-3.2	-4.4

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

Dram exchange rate versus US dollar, Euro and Russian ruble in a year



Box 5

Exchange rate

At the end of the 4th 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 appreciated by 0.09% to 405.64 drams for one dollar. In 2013, relative to 2013, the average market exchange rate of the Armenian dram versus the U.S. dollar has depreciated by 1.92% to 409.63 drams for one dollar.

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

Dram exchange rate dynamics q/q in the 4th quarter of 2013			
Currency pair	Exchange rate as of 30.09.2013 (AMD)	Exchange rate as of 30.12.2013 (AMD)	% (appreciation "+", depreciation "-")
USD/AMD	405.29	405.64	-0.09
EUR/AMD	546.82	559.54	-2.27
RUB/AMD	12.51	12.44	+0.56
Dram exchange rate dynamics y/y in the 4th quarter of 2013			
Currency pair	Average exchange rate, Q4, 2012	Average exchange rate, Q4, 2013	% (appreciation "+", depreciation "-")
USD/AMD	406.45	405.48	+0.24
EUR/AMD	527.37	552.11	-4.48
RUB/AMD	13.09	12.46	+5.06

The aggregate volume of U.S. dollar/Armenian dram transactions in the foreign exchange market during the 4th quarter amounted to USD 2.7 billion, which represents an 8.0% increase in relation to the previous quarter's figure of AMD 2.5 billion.

The aggregate volume of Euro/Armenian dram exchange transactions reached EUR 325.4 million against EUR 245.9 million[31] recorded in the previous quarter.

To tackle the dram exchange rate volatility against the U.S. dollar in the market in the 4th quarter of 2013, the Central Bank bought dollar resources of USD 36.79 million from commercial banks; net purchase of dollar over 2013 amounted to USD 72.17 million.

[31] *The volume of Q3, 2013 Euro/Armenian dram exchange transactions of EUR 252.4 million was adjusted.*

3.4. Balance of payments

In the 4th quarter of 2013, the current account deficit widened mostly attributable to the growth rates in import outpacing those of export. During the quarter, net inflow through the capital and financial account declined amidst more repayment of public credit in comparison with disbursements. The balance of payments developments resulted in the decrease of the Central Bank's net foreign assets due to an extensive redemption of the public debt.

3.4.1. Current account[32]

In the 4th quarter of 2013, relative to the 4th quarter of 2012, the Current Account Deficit/GDP ratio has risen by an estimated 0.4 pp, with the current account deficit having grown by USD 57.4 million to USD 277.4 million amidst slowly rebounding global economy and revived activity in the domestic economy. For 2013, the Current Account Deficit/GDP ratio is estimated within 8.5-8.8%.

The y/y growth rates in real export of goods slowed down amid somewhat sluggish growth rates in processing industry. With export prices reducing at faster rates y/y, the dollar value of export of goods grew in the 4th quarter by a mere 1.6% y/y. Based on the 2013 results, the dollar value of export has grown by an estimated 7.0%.[33]

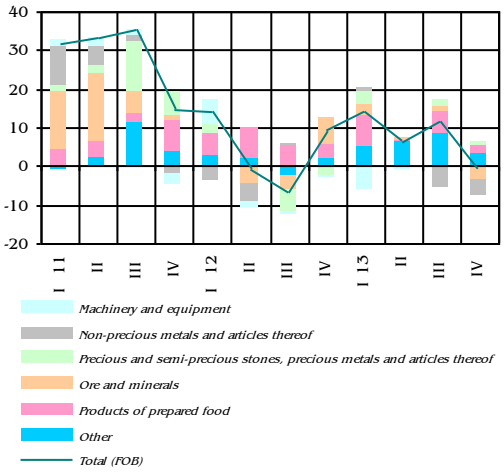
In the 4th quarter of 2013, export items marked the following developments: items "products of prepared food", "livestock and products of animal origin" made their positive contribution of 2.5 pp and 1.2 pp, respectively, whereas items "ore and minerals" and "non-precious metals and articles made thereof" posted 3.2 pp and 4.3 pp of negative contribution[34].

The real growth rates in import of goods accelerated in the 4th quarter of 2013 amidst faster growth rates in domestic economy activity and appreciating real effective exchange rate. The growth of dollar value of import fuelled by increased dollar prices of import amounted to 10.3% y/y in the 4th quarter of 2013 and to 4.4% annually.

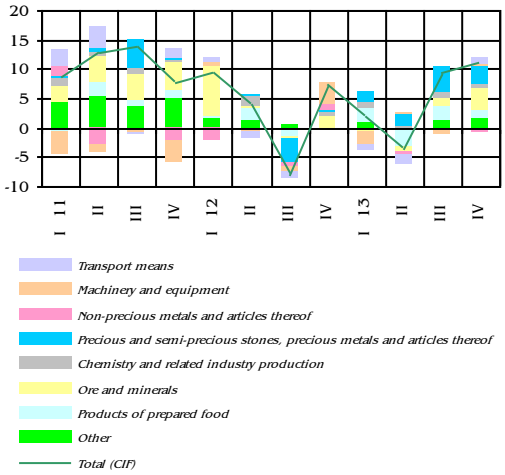
The y/y growth of dollar value of import in the 4th quarter of 2013 was mainly due to items "products of prepared food", "ore and minerals" and "precious and semiprecious stones, precious metals and articles made thereof", with their positive contributions of 1.5 pp, 3.6 pp and 2.8 pp, respectively.

In the 4th quarter of 2013, the deficit of trade balance grew by USD 106.0 million y/y to USD 750.5 million as a result of change in real volumes of export and import as well as deteriorated terms of trade.

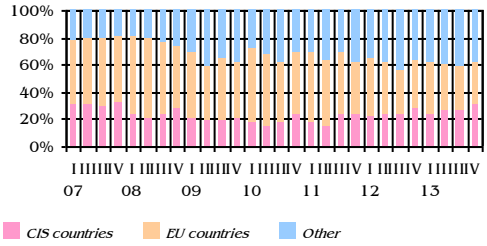
Change in export y/y and main commodities contribution, % [33]



Change in import y/y and main commodities contribution, %

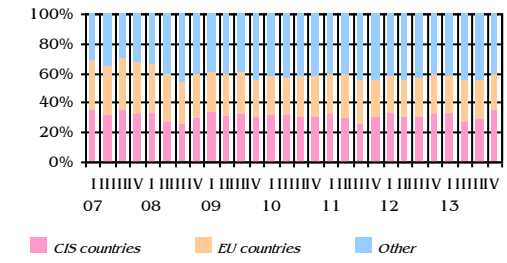


Exports by country group

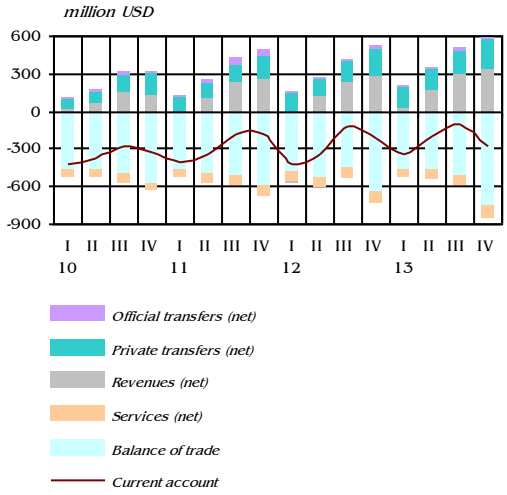


[32] *The Q4, 2013 current account figures are the Central Bank's forecasts and estimates.*
[33] *The export and import figures by commodity and by country are presented at FOB and CIF prices, respectively; the export and import figures of current account are presented as credit and debit, respectively.*
[34] *Some export items holding a small share posted positive contributions.*

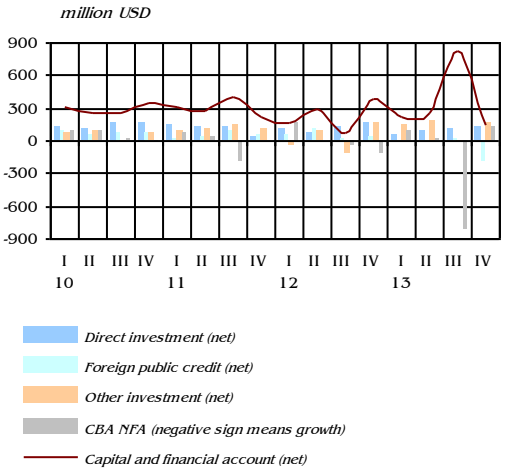
Imports by country group



In the 4th quarter of 2013, current account deficit grew



In the 4th quarter of 2013, net inflow through a capital and financial account narrowed



In the 4th quarter of 2013, economic recovery trends were observable in main trade partners to Armenia.

In the 4th quarter, the deficit of balance of services widened by USD 9.0 million y/y and amounted to USD 109.0 million. The y/y growth of export and import of services in the 4th quarter was 5.1 and 6.3%, respectively.

In the 4th quarter of 2013, the y/y growth rates in remittances of individuals remained strong. During the quarter net inflow of seasonal worker income grew by 15.2% y/y and amounted to USD 481.6 million, which is way above the net outflow figure in item "income on investment". As a result, item "income" posted net inflow of USD 325.7 million. In the 4th quarter, net inflow of current transfers grew by 15.4% y/y and reached USD 237.7 million.

3.4.2. Capital and financial account[35]

In the 4th quarter of 2013, net inflow through the capital and financial account decreased by USD 243.3 million y/y and reached USD 148.4 million. The decrease was primarily attributable to the repayment of the Russia debt, which exceeded the disbursement of public sector credit. As a result of balance of payments flows, the Central Bank's net foreign assets have decreased by USD 129.0 million. Notwithstanding reduced net financial inflow in the 4th quarter, the 2013 estimations suggest that net inflow through the capital and financial account has grown (mainly due to the inflow relating to issuance of Eurobonds in the previous quarter), which led to the increase of the Central Bank's net foreign assets by USD 560.8 million, in relation to 2012.

Net inflow of capital transfers in the 4th quarter of 2013 amounted to USD 24.4 million compared to USD 30.1 million reported in the same period of the previous year.

In the 4th quarter of 2013, net inflow of foreign direct investment declined by USD 32.3 million to USD 132.8 million. The repayment of public credit (most importantly, repayment of the Russia credit) outstripped the disbursement of public sector credit, which resulted in net outflow of USD 183.4 million compared to net inflow of USD 38.0 million reported in the 4th quarter of the previous year.

Net inflow through item "other investment" amounted to USD 173.9 million, with net foreign assets of commercial banks having reduced by USD 404.2 million. Net foreign assets of item "other private sector" have increased by USD 230.3 million.

3.5. External environment

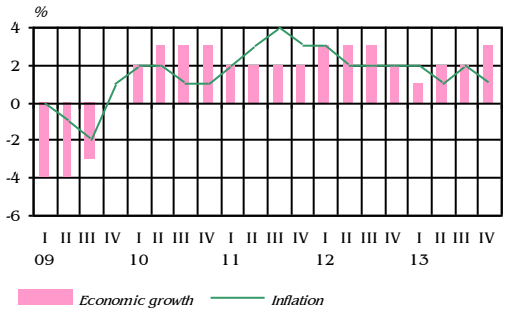
In the 4th quarter of 2013, economic recovery trends were observable in main trade partners to Armenia.

According to preliminary estimates of the U.S. Department of Commerce Bureau of Economic Analyses, in the 4th quarter of 2013 the annualized economic growth in the ***United States of***

[35] *The Q4, 2013 capital and financial account figures are the Central Bank's forecasts and estimates.*

America was 3.2% q/q (2.7% y/y economic growth was reported in the 4th quarter). Private spending, investment and net exports have contributed to the growth positively but government spending made a negative contribution.

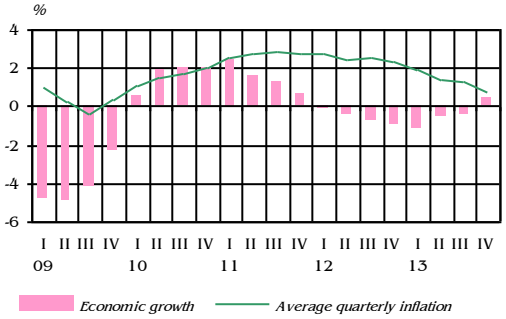
In the 4th quarter of 2013, economic growth in U.S.A. accelerated



In the 4th quarter of 2013, average quarterly inflation in the U.S.A. was 1.2% y/y compared to 1.6% reported in the previous quarter. ***In the U.S.A., economic growth is an estimated 1.9% and inflation, 1.5%.***

In Euro-area in the 4th quarter of 2013, there was 0.5% percent economic growth against the same period of the previous year, according to preliminary estimates provided by the Eurostat. Overall, economic decline in Euro-area was about 0.4% compared to 0.7% reported in the previous year. Consumer price index in Euro-area grew an average 0.8% y/y against the previous quarter's 1.4%.

In the 4th quarter of 2013, Euro-area posted a positive economic growth



In the 4th quarter of 2013, the European Central Bank cut the policy rate to 0.25%.

In the 4th quarter of 2013, Euro appreciated versus the U.S. dollar by 2.8%, with the average dollar exchange rate making up 1.36 for one Euro (y/y appreciation of 4.9%).

In the 4th quarter of 2013, economic growth in Russia was 1.3% y/y, according to the preliminary estimates of the Russia State Statistics Service. Specifically, industry posted some 0.3% growth compared to the previous quarter's zero growth. Growth rates in retail trade and agriculture were 4% y/y and 14.8% y/y, respectively[36]. Consumer prices persisted at the previous quarter's level, 6.4% y/y. ***In Russia, economic growth is an estimated 1.3% and inflation, 6.8%.***

In the 4th quarter of 2013, the ***price of Brent crude*** at Intercontinental Exchange fell by 0.6% against the previous quarter, reaching USD 109 a barrel (with 0.9% decline y/y).

The ***price of copper*** at the London Metal Exchange has increased by 1% to USD 7170 per ton (with 9% decline y/y).

Export price of ***hard red wheat*** has risen by 1.7% q/q to USD 8.5 a bushel (with 12.5% decline y/y), according to the U.S. Department of Agriculture data.

The price index of ***unprocessed sugar*** at the New York Board-Intercontinental Exchange posted a 6% increase (with 9.8% decline y/y).

The price of ***rice*** at the Chicago Board of Trade has risen by 0.2% to USD 15.6 per U.S. hundredweight (45.4 kg) (with 1.3% growth y/y).

As global demand rebounds, no considerable inflationary trends were observable in basic commodity and food markets. Although certain inflationary trends were discernable in some food markets at the end of the 4th quarter, the prices food products followed primarily deflationary patterns.

As global demand rebounds, no considerable inflationary trends were observable in basic commodity and food markets. Although certain inflationary trends were discernable in some food markets at the end of the 4th quarter, the prices of food products followed primarily deflationary patterns.

[36] *Robust economic growth in agriculture exceedingly incurs the previous year's low base effect.*

4. CONCLUSION

In the 4th quarter of 2013, global demand *in external sector* remained sluggish and no considerable inflationary trends were observable in basic commodity and food markets. In the *forecast horizon* the global economic growth rates are expected to rebound slowly. Therefore, in the *forecast horizon non-inflationary influence* will be expected from the external sector.

In the 4th quarter of 2013, economic activity rebounded to a certain extent, with the inflation environment having eased considerably. However, *economic growth* was lower-than-expected, in the range of 3.3-3.6%, while the *12-month inflation* was near the upper bound of the confidence band, 5.6%.

In the forecast horizon, real private consumption growth rates are expected to stabilize and private investment to rebound slowly. Under such circumstances economic growth will come closer to its equilibrium. Moreover, in 2014 an expansionary fiscal policy is expected to replace the contractionary fiscal policy of 2013. This would significantly contribute to the acceleration of economic growth and creation of some inflationary pressures. *In the medium run, non-inflationary impact* on domestic prices is anticipated amidst recovering demand as well as implementation of a neutral fiscal policy.

In the *forecast horizon,* inflation will stabilize around the target level of 4 percent. *Moreover, in 2014* inflation will keep on reducing to the lower bound of the band but will expand again late in the year, approaching its target. ***In the 1st quarter of 2014, the Central Bank will continue loosening monetary conditions in response to the slowing of economic activity and mitigation of inflationary environment whilst further directions of monetary policy will depend on how uncertainties over external and domestic economic developments will show up.***

Risks to inflation deviating from the *central projection values* are estimated as balanced in both short and medium-term perspectives. The primary risks are associated with the development perspectives in emerging economies and the change in domestic demand, and uncertainties over the projected value of inflation are persisting. If such risks materialize, the Central Bank will react accordingly by maintaining the inflation figure in the medium run.