

THE CENTRAL BANK
OF THE REPUBLIC OF ARMENIA

*Approved under Board of the Central Bank Resolution
No. 251A, dated November 25, 2016*

Inflation Report

Monetary Policy Program, Q4, 2016



*Status Report on Implementation of the Monetary
Policy Program, Q3, 2016*

Table of Contents

1. Executive Summary	4
2. Forecast, Forecast Changes and Risks	7
2.1. External environment	7
2.2. Aggregate supply and aggregate demand	9
2.3. Inflation forecasts and monetary policy directions in 3-year forecast horizon	17
3. Actual developments in Q3, 2016	21
3.1. Inflation	21
3.1.1. Actual inflation and fulfilment of the inflation target	21
3.1.2. Import prices and producer prices	23
3.1.3. Inflation and interest rate expectations	24
3.2. Aggregate supply and aggregate demand	25
3.2.1. Aggregate supply	25
3.2.2. Aggregate demand	26
3.2.3. Labor market	27
3.2.4. Fiscal policy	28
3.3. Money and financial market developments	30
3.3.1. Financial market, money and credit	30
3.3.2. Exchange rate	32
3.4. Balance of payments	34
3.5. External environment	35
4. Conclusion	37

The Central Bank of Armenia has, starting from January 2006, 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 CBA 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 November 15, 2016, i.e. the day on which the refinancing rate was set, the results of a survey conducted by the CBA and the judgment made pursuant to the information on future developments of the macroeconomic environment.

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

The economic growth, published as of the first half of 2016, was much lower than expected. In the third quarter trade turnover volumes remained low and risks to reduced output in agriculture and mining materialized. In view of such developments, the CBA has revised the 2016 economic growth forecast downward. In the rest of the forecast horizon, however, the growth rates will speed up to gradually approach the long-term equilibrium.

In the coming months, the deflationary environment will persist due to low economic activity and expected gas and electricity tariff reduction in the first quarter of 2017. In the rest of the forecast horizon the 12-month inflation rate will gradually return to the target.

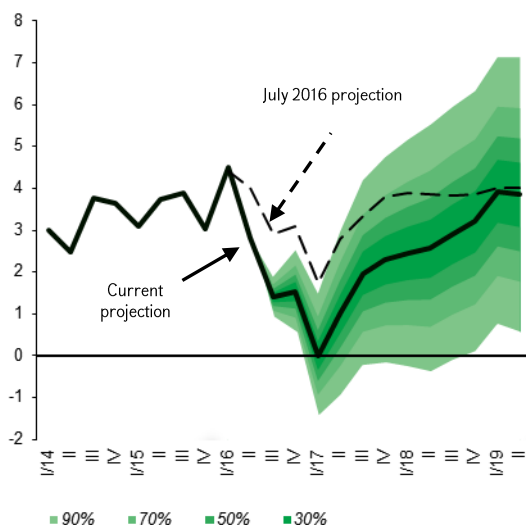
Notwithstanding continued sluggishness in global economic growth rates, main trade partner countries to Armenia saw their economic activity further accelerating in the third quarter of 2016, reflecting an increased external demand for export goods from the Republic of Armenia and positive developments in Armenia's tradable sector of the economy. Yet, the economic growth reported for the first half of the year was considerably lower than expected in the third quarter. Also, trade turnover volumes remained low and risks to reduced output in agriculture and mining materialized during the quarter. In view of such developments, the Central Bank of Armenia (the CBA) has revised the 2016 economic growth forecast downward. In the rest of the forecast horizon, however, the growth rates will speed up to gradually approach the long-term equilibrium. In the course of the past nine months deflationary patterns have prevailed – the 12-month inflation rate fluctuated around an average value of -1.7%. In the coming months, the deflationary environment will persist due to low economic activity and expected gas and electricity tariff reduction in the first quarter of 2017. In the rest of the forecast horizon the 12-month inflation rate will gradually return to the target.

Sharply deteriorated economic activity in the third quarter of 2016 was mainly determined by supply factors, particularly slower growth rates in agriculture and industry sectors, while domestic demand continued to remain weak. Driven by more-than-expected contraction in trade volumes, lower economic activity and construction still at a decline, about 2% growth of **real private consumption** but 1.0% decrease in **real private investment** are estimated for the third quarter of 2016. The adverse effect of low economic activity was in part cushioned by expansionary fiscal and monetary policy implementation by the CBA and the Government of Armenia since early 2015 to date on the one hand, and relatively sizable investment in the tradable sector, on the other. Influenced by the latter, net real exports kept on improving this quarter, too: in the third quarter real growth of export of goods and services is estimated at 10.5% y/y and real growth of import of goods and services, merely 3.1%. So, based on the past nine months' results, the **economic activity indicator amounted to 1.6% y/y**, in which case the January-September **economic growth is estimated in the range of 1.3-1.5% y/y**.

There was 2.7% deflation in the third quarter of 2016 compared to that of 1.9% in the same period of the previous year, in which case the **12-month inflation rate** reached **-1.9%** at the end of September. In view of the inflation environment to persist at a low level in the upcoming months, sluggish domestic demand and the inflation expectations further mitigating, the CBA continued to loosen monetary conditions in the third quarter as well: the refinancing rate was lowered

Economic growth in 2016 is estimated to be within 1.3-1.8%.

Real GDP Cumulative Growth Projection Probability Distribution Chart for a 3-year horizon



Economic growth at the end of the forecast horizon will be within 2.8-4.3%.

According to the CBA forecasts, the deflationary environment is expected to mitigate significantly at the end of the year. The deflationary environment will still be maintained in the first quarter of 2017, then it will generally phase out, and the 12-month inflation rate will return to target in the forecast horizon.

The CBA reckons that easing of monetary conditions to some extent in the fourth quarter of 2016 is appropriate.

by a total of 0.75 pp to 6.75% in late September (see details in section “3.1.1. Actual inflation and fulfillment of the inflation target”).

According to the CBA forecasts, in the external sector in 2016 slow economic growth rates will continue and mainly weak inflationary developments will be seen in international commodity markets. As the Russian economy declines at a slower pace there will be much less narrowing of inflow of seasonal work income and private transfers, but its impact on the recovering of domestic demand thus private consumption will be largely offset by an anticipated low domestic economic growth effect. In this circumstance, private consumption will grow by about 0.8% but private investment shrink by nearly 3.5%, according to the 2016 forecast. The consumption growth will be sustained thanks to an expansionary monetary policy conducted since 2015, fiscal stimulus provided by the Government of Armenia in 2016 and the currently deflationary environment in the economy. The decline in investment will be attributable to low activity in the construction sector. In the light of these developments, **the 2016 economic growth is estimated to be within 1.3-1.8%**. It will be fuelled primarily by **net exports** as economic activity accelerates in main partner countries on the one hand, and external demand brings in positive developments in the tradable sector, on the other, which was in turn fostered by a **consistent monetary policy by the CBA and risen competitiveness of firms that benefited a lower inflation compared with trade partner countries**.

In 2017 the economic growth rates will speed up, bearing the influence of effective implementation of the Government of Armenia program, steered to gradual recovery of domestic demand and export and investment promotion, and the effect of continued improvement in external economic environment and structural reforms. Driven by these developments, it is expected that **economic growth at the end of the forecast horizon will be within 2.8-4.3%**.

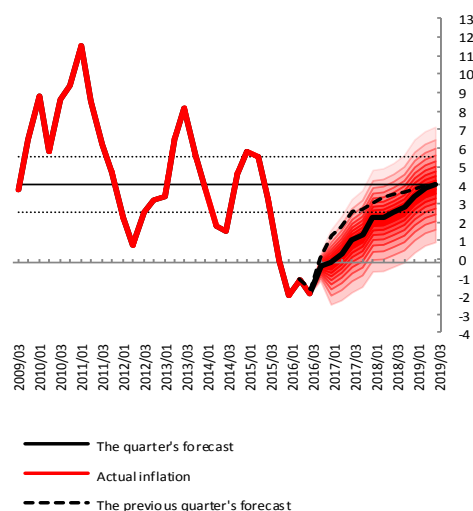
Thus, **in the forecast horizon up until the second quarter of 2018, the impact of domestic demand on prices will be deflationary; then in the end of the forecast horizon it will turn into that of inflationary**.

According to the CBA forecasts, the deflationary environment is expected to mitigate significantly at the end of the year. The first quarter 2017 inflation forecasts took into account the factor of lowering of gas price (see details in section “2.3. Inflation forecasts and monetary policy directions in 3-year forecast horizon”). On the back of these developments, the CBA estimates that the deflationary environment will still be maintained in the first quarter of 2017, then it will generally phase out, and the 12-month inflation rate will return to target in the forecast horizon.

As a result, the CBA believes that medium-term deflation risks largely persist, and the 2017 fiscal policy factor has now been added to them. So, **further easing of monetary conditions to some extent by the CBA in the fourth quarter of 2016 is relevant**.

Risks that inflation will deviate from the projected value are estimated to follow a downward path in both short and medium-term perspectives. Risks deriving from external sector are somewhat inflationary and pertinent to capital outflows from developing countries and, consequently, volatilities in financial markets, the processes in the European Union, a likely slowdown of global

Inflation (12-month) Forecast Probability Distribution Chart for a 3-year horizon



economic growth resulting from structural reformation of the Chinese economy as well as risks related to developments in international prices of raw materials and food products. ***Risks deriving from the domestic sector are estimated to be deflationary***, with the 2017 fiscal policy factor and possible reduction of electricity tariff in the first quarter the same year now added to the existing ones. Risks outlined in the previous forecast carry on and are associated with the extent to which external environment's deflationary impact will spill over to the domestic prices, developments in agriculture, a sector greatly depending on weather conditions, the pace at which domestic demand and private investments will recover, as well as the Government-led structural reforms. If the aforementioned risks materialize, the CBA will react accordingly by maintaining the inflation target in the medium run.

2. FORECAST, FORECAST CHANGES AND RISKS

2.1. External environment¹

In 2016 the global economy and economies in main partner countries to Armenia in particular will continue growing at a slower pace.

Inflationary patterns will prevail in international markets of raw materials and food products, except for the wheat market.

In 2016 trends of slow economic growth will continue to be observable in the global economy and, in particular, main partner countries to Armenia.

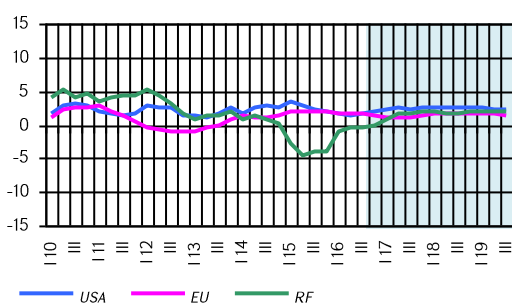
Inflationary patterns will prevail in international markets of raw materials and food products, except for the wheat market.

Economic growth in the **U.S.A.** was revised downside for 2016 and is now forecast to be 1.5%². However, the economic growth rate in the medium-term is expected to accelerate to 2.5%³. On the back of improving labor market, a lowering rate of unemployment and inflation recovering to a certain extent, the raising of the policy rate by the US Federal Reserve System is expected in December of 2016. Then, in the medium term, the Fed will, most probably, gradually tighten its monetary policy.

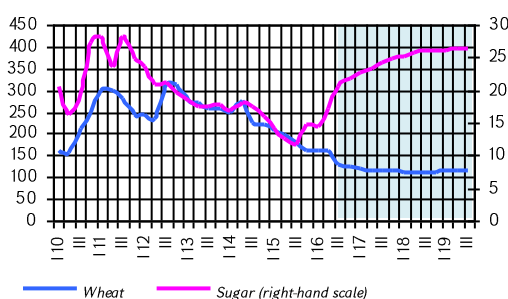
Economic growth in **Eurozone** in 2016 is predicted to be 1.6% versus the previous 1.3% growth forecast. The growth will be mostly attributable to the increasing net exports; the domestic demand bouncing back will also contribute to such growth. In the medium term, no change in growth rates is anticipated, so these will be averaging around 1.5%. Although the euro's exchange rate remains depreciated against the US dollar, the Eurozone inflation runs below the target, further carrying the influence of fallen oil prices as well as lower prices for some raw materials. The Eurozone's inflation will approach the target only at the end of the forecast horizon; this will be bolstered by the ECB's expansionary policy under which the quantitative easing program will continue up until the second half of 2017.

In 2016 economic decline in **Russia** is anticipated to slow down to 0.6% against the previously predicted slowing of 0.8%. International oil prices tending to bounce back help curtail the decline. The economy is expected to return to positive growth as soon as the first quarter of 2017, with the medium-term growth prediction in the region of 1.5-2.0%. Recovery of domestic demand will be an impetus for the economic growth. On the other hand, continued slowing of inflation expectations will contribute to the reduction of inflation; later this year it is expected to make up 6% and to approach the 4% target in the second half of 2017. In view of such inflationary risks, including those associated with a slower decline in inflation expectations and a rise in real wages, and expected inflation developments, the Central Bank of Russia will avoid a short-term adjustment of the policy rates.

Economic growth in main trade partner countries (%)



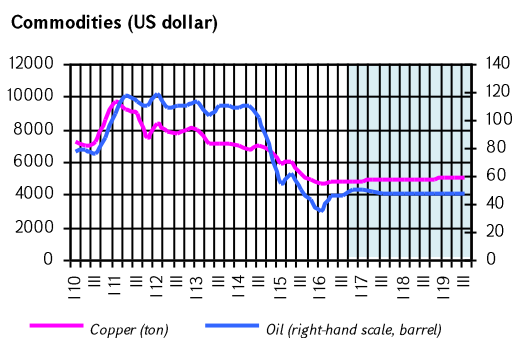
Food products (US dollar)



¹ The forecasts of external sector were based on the information provided from international reputable analytical, research, ratings organizations and financial institutions as well as various news agencies worldwide (including the IMF, the World Bank, The Economist, Economist Intelligence Unit, the Global Insight, the Financial Times, and so on).

² The adjusted forecast is due mainly to the revision of US historical economic growth data series by the US Office of Economic Studies Review.

³ All forecasts for the external environment are based on the information available as of 25.10.2016.



According to the IMF October 2016 report “World Economic Outlook”, world economic growth forecast remained at a 3.1% level, which is the same indicator compared to the previous publication of the report in July.

There might be some upward revision of prices in the **world commodity and food product markets** in the fourth quarter of 2016, which will be mostly driven by supply factors. Some inflationary trends are also likely on the back of recovering demand.

Risks to the developments in global economy persisted in general. More prominent risks include the capital outflow from developing countries and, consequently, further volatilities in financial markets, because of uncertainties about the US monetary policy, a likely slowdown of global economic growth resulting from structural reformation of the Chinese economy, continued sluggishness in economic activity in developing countries and Russia, risks associated with geopolitical developments, and volatile international oil prices.

Box 1

Developments in commodities markets in the forecast horizon

The October 2016 report of the **oil** market published by OPEC predicts that the global oil demand will grow in 2016 by 1.24 million b/d and consumption will average 94.4 million b/d. The report also foresees that oil production outside OPEC in 2016 will reduce by 0.68 million b/d to 56.3 million b/d on average. Oil production by non-OPEC members in 2017 will go up by 0.24 million b/d. to 56.54 million b/d. Oil production by OPEC is predicted to grow by 0.16 million b/d in 2016 and 0.15 million b/d in 2017. However, international oil prices will behave somewhat volatile in the short run, depending on the outcome of the upcoming OPEC meeting on the one hand, and the likely dollar swings in anticipation of changes in policy interest rates by the US Fed, on the other. In the medium run, prices will be in the range of USD 45-50 a barrel in the light of a still plenty supply in the oil market.

Prices in world **metals** markets will continue trending upward, conditional on the gradual recovery in demand. In 2017, the world copper market anticipates a sizable increase in consumption notwithstanding an expected augmenting of production volumes. Yet, in a setting like this, any significant change in international copper prices is not expected. The medium term risks to international copper prices are estimated upside, mostly owing to a possible rise in copper demand amid increasing activity in construction and renewable energy sectors in China and more costs for infrastructure improvement according to the US president-elect's plan. It is noteworthy that short-term speculative expectations regarding the said factors invoked some rising of prices between October and November 2016.

According to the October estimates of the U.S. Department of Agriculture, in the 2016/2017 marketing year the world **wheat** harvest will reduce by 1.6 million tons to some 744.4 million tons. However, despite reduction by 4.1 million tons, world wheat stock will reach 248.4 million tons for the 2016/2017 marketing year, according to estimations. International wheat prices will continue dropping in the short term as a result of abundant harvest. However, modest price growth will be observable in the medium term amid some contraction in the production as well as gradual recovery of the global demand in that period of time.

World **sugar** prices will continue growing, although at a slower pace, as a result of reduced sugarcane harvest due to bad weather in Brazil and Thailand, the world's leading manufacturers and exporters of sugar.

2.2. Aggregate supply and aggregate demand

Aggregate supply

The CBA forecasts of economic growth for 2016 were revised downside determined by lower-than-expected growth in the second quarter, a sluggish trade turnover in the third quarter and emerged risks to reduced output in the agricultural and mining sectors, which had been outlined in previous monetary policy programs. As a result, the **2016 economic growth is estimated in the range of 1.3-1.8%**⁴.

The narrowing of private transfers from Russia to Armenia is expected to slow down considerably in 2016 yet the effect of contracting remittances of individuals on the domestic demand will be seen further. This will, however, be cushioned by the influence of expansionary monetary and fiscal policies conducted in 2015-2016 and a low inflationary environment in the economy. Under such conditions, the **domestic demand is expected to grow by 0.4%**, which will still be smaller from its equilibrium.

Thus, with the domestic demand persisting at a low level, the 2016 economic growth will be underpinned by **net exports** thanks to higher economic activity in the main partner countries and, amid a healthy external demand, positive developments in the tradable sector, greatly assisted by the **CBA's consistent monetary policy and increased competitiveness of firms that benefited a lower inflation compared with trade partner countries**.

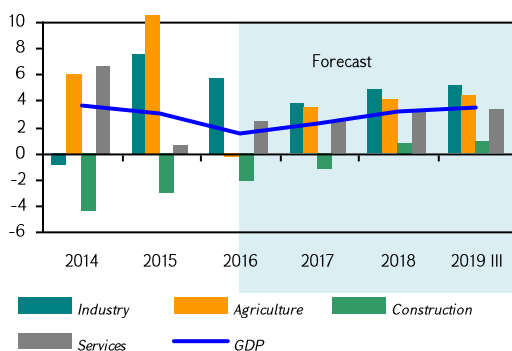
Anticipated rebounding of the domestic demand, effective implementation of export and investment promotion policy of the Government of Armenia, improving external economic environment and structural reforms are among key factors that will accelerate the economic growth in the forecast horizon. So, gradually accelerating starting from 2017, **at the end of the forecast horizon the growth indicator will be within 2.8-4.3%**⁵, which will occur by broadening export capacities, identifying new export markets in the context of export-promotion policy of the Government of Armenia.:

Also, taking into account long-term economic developments anticipated in partner countries to Armenia as well as structural shifts in the domestic economy, **Armenia's long-term economic growth equilibrium is estimated within 4-5%, and now it is estimated to be 1.0-1.5%**. It should be noted, however, that both estimated long-term GDP growth rate and medium-term forecast of the economic growth rate may decelerate if the structural reforms are pushed ahead slowly and investment in the tradable sector grows insufficiently. It is worth mentioning that investments in the tradable sector will prove rather effective in the forecast horizon, if they come as foreign direct investment or are funded through domestic savings, since investment made at the expense of credit resources in the domestic economy approached their efficacy caps.

Economic growth in 2016 is estimated in the range of 1.3-1.8%.

At the end of the forecast horizon the economic growth will be within 2.8-4.3%.

GDP growth by sectors of economy



⁴ See the 30% range in the Real GDP Growth (Cumulative) Projection Probability Distribution Chart.

⁵ See the 30% range in the Real GDP Growth (Cumulative) Projection Probability Distribution Chart.

The following developments are expected in the sectors of the domestic economy in the forecast horizon:

For **Industry**, the forecasts were revised downside due to a lower growth of value added against the second quarter's economic activity as well as risks to a decline in the mining sector in the third quarter because of lower metals prices in international markets. As a result, **in 2016 the value added in industry is forecast to grow within 5.5-6.1%**. The expected growth in industry sector in the fourth quarter of 2016 will be bolstered by implementing a handful of investment projects and broadening export capacities in the context of export-promotion policy of the Government of Armenia.

For **Construction**, the 2016 forecasts of value added were revised slightly downside after reported value added in the construction sector for the second quarter. As a result, the decline in value added in construction in 2016 is expected in the range of **1.8 to -2.6%**. The decline is mostly attributable to reduced construction funded by households and companies. This will, however, be cushioned by construction to be financed by increased lending on the one hand and relatively high investment activity in the tradable sector of the economy, on the other. The decline in the construction sector in 2016 may also be mitigated by increased volumes of construction funded by municipal budgets and international loan resources.

In the **forecast horizon**, the growth is expected to **stabilize in the range of 0.5-1.0%** as the supply-and-demand imbalance in the construction sector phases out. The growth will be fostered primarily by construction projects designed for infrastructure improvement and investment projects in the private sector.

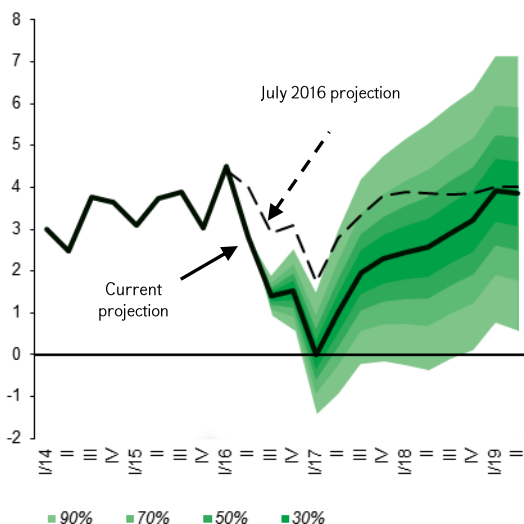
For **Services**, the 2016 forecasts of value added were revised downside determined by lower-than-expected activity in trade in the third quarter. In which case, the annual growth in the sector is estimated within **2.2-2.6%**. With a sluggish activity in trade, the growth of services in 2016 will be bolstered by increasing volumes of services connected with export businesses.

In the **forecast horizon**, the growth in services is predicted to **stabilize within 3-4%** in view of gradually recovering domestic demand and expected tourism growth.

For **Agriculture**, the forecasts of value added were revised downside in relation to the previous forecasts. This is explained by lower-than-expected output in plant growing in the third quarter, which is but materialization of risks pointed out in previous forecasts for the sector. The decline in the sector in 2016 is estimated in the range of 0.7-0.1%.

In the forecast horizon, the growth in agriculture will accelerate to stabilize within **4.0-5.0%**. The growth rates in the sector can be expected in the forecast horizon as the Government of Armenia carries on conducting a consistent policy to expand house farming and refrigerator facilities, arable land, crops and cattle, and to engage extra means of transportation for exports and boost up competitiveness in the agriculture.

Real GDP Cumulative Growth Projection Probability Distribution Chart for a 3-year horizon



In the forecast horizon, risks to the economic growth are dual-sided and balanced. The risks to the economic growth are associated with uncertainties in global and domestic economic environments.

Among upside risks, most prominent are the expanding and using of export potential in certain sectors of the economy and exploring of new export markets amid gradual recovery of global economy and growing competitiveness of Armenia.

Downside risks include a possible decline in value added in plant growing later the year, a slower-than-expected recovery of private demand in the medium run, and a lingering pace of pushing ahead with structural reforms for economic growth.

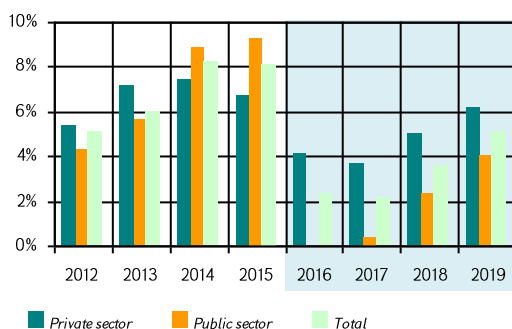
Real GDP Growth (Cumulative) Projection Probability Distribution				
Period	30% probability interval		90% probability interval	
	Min	Max	Min	Max
January-December 2016 / January-December 2015	1.3%	1.8%	0.5%	2.5%
January-December 2017 / January-December 2016	1.7%	2.9%	0.2%	4.5%
January-December 2018 / January-December 2017	2.5%	3.9%	0.3%	6.1%

Labor market:⁶ The average nominal wage⁷ forecasts for 2016-2019 were adjusted downside in consideration of downward revision of economic growth for that period of time and an anticipated slow growth rate in average nominal wage in the public sector in 2017.

With the economic activity indicator below the projections since the second quarter of 2016, about an annual 4.1% increase in average nominal wages is anticipated **in the private sector**, which is however 2.4 pp lower from previous forecasts. Nevertheless, real wages in the private sector will grow by around 5.4% owing to a price deflation recorded in 2016. Note that the minimum wage threshold, currently at AMD 55,000, did not rise in 2016. Because more increases of the threshold are not scheduled in 2017 too and in view of the policy steered to economic growth and fulfillment of the inflation target, the average nominal wage is expected to grow by 3.7% in 2017, 5% in 2018, and nearly 6.2% in 2019.

A slowing in the public sector wage growth since October 2015 persisted and even deepened in 2016. As a result, in 2016 the **public sector** will face a 0.3% decline in average nominal wage in relation to the 2015 high base. On the premise of a more streamlined public administration policy adopted by the Government, the public sector wage is expected to grow a moderate 0.4% in 2017. The private sector wage growth in 2018-2019 will, together with inter-branch competition

Average nominal wage growth, y/y



⁶ The labor market data for 2016-2019 are the CBA projections which are based on the second quarter of 2016 data and actual January-August of 2016 figures. The growth indicators presented in this sub-section are relative to the same reference period last year, unless otherwise specified.

⁷ Average nominal wage constitutes a grand sum of salary and salary equivalents (premiums, allowances, bonuses, one-time incentive pays, etc.).

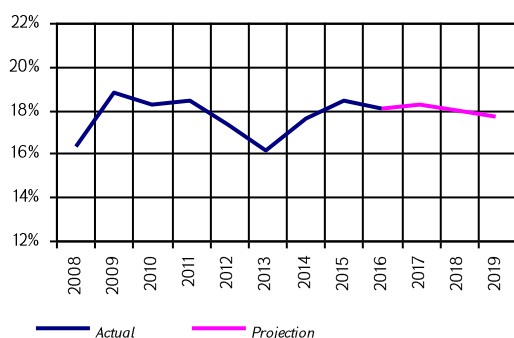
in the labor market for private and public sectors, lead the public sector wages to grow by 2.3% in 2018 and 4% in 2019.

On the back of the aforementioned developments, the **average nominal wage growth in 2016 is expected around 2%; it will persist over 2017 and speed up to 5% in 2019.**

In 2016 the unemployment rate is expected at 18.1% on average, which is somewhat higher from the previous forecasts. In 2016 the unemployment rate will reduce in relation to 2015 but to a lesser extent than it was predicted, due to lower-than-expected economic activity. The productivity growth rate which came after a downward revision of the figure of economically active population by the National Statistics Service of Armenia was running high in the first half of 2016, and although it started slowing down in the third quarter, the effect of productivity will linger on the unemployment rate during 2017. As a result, the unemployment rate will amount to nearly 18.3% in 2017. Given the slowdown in productivity growth and the acceleration of economic growth in the forecast horizon, the unemployment rate in 2018-2019 will fall by around 0.2-0.4% annually. Note that up until the first half of 2018 the unemployment rate will be above its equilibrium, reflecting the negative GDP gap and deflationary pressures it will have created. By the end of the forecast horizon the unemployment rate will approach its medium term equilibrium.

As a result of the developments mentioned above, the productivity growth in the latter half of 2016 will outpace the wage growth and leave some 0.4-0.6% of deflationary pressures in the consumer market. The deflationary pressures will persist over the first half of 2017 at 0.2-0.3%. In the forecast horizon the labor market's impact on the inflation is estimated to be neutral.

Unemployment rate



Aggregate demand⁸

The decline in remittances from Russia, a principal trade partner, will probably continue in 2016 but to a lesser extent compared to the respective trend reported in 2015, and it will amount to 6-8%. The expansionary monetary policy conducted in 2015-2016, a deflationary environment in the domestic economy and a large budget deficit in the same period of time will significantly soften the negative impact of private remittances on domestic demand in 2016. The rise in disposable income in the economy in 2016 will be driven by positive influence from the growth in the tradable sector. As a result, after a decline in 2015, the domestic demand is expected to gradually bounce back in 2016 yet it will still be below the equilibrium.

The domestic demand will continue growing to get closer to its equilibrium in 2017-2019 as economic activity revives in partner countries to Armenia and the lagged impact of the expansionary monetary policy in the Armenian economy persists.

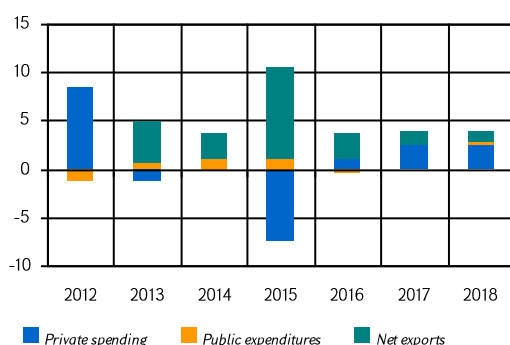
⁸ The data of real growth of private consumption and investments for 2016-2019 are the CBA estimates. These actual figures are as of the second quarter of 2016 published by the National Statistics Service of Armenia. The real growth indicators represented in this subsection are relative to the same reference period last year, unless otherwise specified.

Though a slower-growing domestic demand will negatively affect the economic growth in the forecast horizon, it will however help to eliminate the imbalances – particularly the decreasing of the negative gap between savings and investments – observable in the domestic economy in recent years. This boosts up competitiveness of the Armenian economy, strengthens the macroeconomic stability and provides for long-term, sustainable investment and economic growth prospects.

The domestic economic growth in 2016 will further be achieved by contributing to net exports. Improved competitiveness in recent years determined rapid rates in productivity growth in the tradable sector of the Armenian economy, which will, in turn, secure growths in agriculture and services sectors in 2016. Given that the global demand expands and investments in the tradable sector increase in 2017–2018, net exports will continue to largely contribute to the economic growth. Furthermore, investments will prove highly effective, if they are funded from domestic savings rather than through foreign debt instruments, or if they come as foreign direct investment, since financing through loans increases companies' susceptibility to risk.

In the forecast horizon, revenues generated in the tradable sector will, in turn, serve another source to finance gross private expenditures and will bolster the recovery of domestic demand and economic growth on the whole.

Demand components contributing to the economic growth



Final consumption expenditures of households are expected to grow in 2016 by roughly 0.8%.

Private sector spending

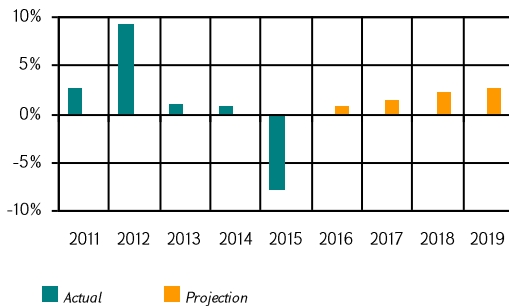
An anticipated shrinkage in private transfers from Russia will negatively affect household incomes in 2016. There is expectation, however, that final consumption expenditures of households will grow in 2016 by roughly 0.8%, which is slightly lower compared to previous forecasts as the third quarter saw smaller-than-expected trade volumes. An anticipated increase in private spending during the year will be underpinned by expansionary monetary policy implementation since 2015, expansionary impact of the fiscal policy conducted in 2015–2016, a deflationary environment in the economy, as well as positive influences the economic growth brings to disposable income by contributing to net exports. Despite an expected private consumption growth in 2016, estimates suggest that it will still be below the equilibrium.

Weak investment activity persisting in non-tradable sectors of the economy will adversely affect private investment in 2016. On the other hand, a relatively high investment activity in the tradable sector of the economy is possible thanks to an increase in relative competitiveness of the sector. These developments denote that gross private investment in the economy in 2016 will shrink by about 3.5%, which is smaller from the previous projection, due to lower than expected economic activity in the construction sector.

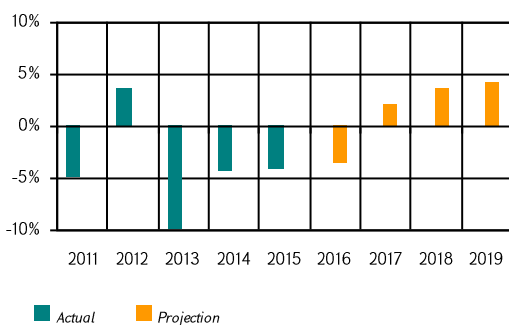
Gross private investment will reduce by about 3.5% in 2016.

Considerable easing of monetary conditions in 2015–2016 and growing budget deficit are among the factors which not only softened

Private consumption



Private investment



the negative impact of decline in private transfers from Russia on private consumption and investment in 2016, but are expected to stimulate their growth in 2017-2018. It should be mentioned, however, that fiscal policy's expansionary impact on aggregate demand will weaken starting from the first quarter of 2017. This pinpoints the consistent budget deficit cutting in view of maintaining the sustainability of public debt in the medium run. The increase of household incomes, which will be a result of improved economic environment in trade partner countries and continued growth in exports, will also help the private sector demand to rebound. It is expected that private consumption will grow by 1.1-1.5% in 2017 and 2.4-2.9% in the end of the forecast horizon.

Given the incentives described above work out well, private investment is predicted to grow by around 2% in 2017. Expanding of capacities in the tradable sector and continued structural reforms in the domestic economy will also promote a moderate growth in investment. On the back of these developments, a non-tradable sector of the economy – construction and trade sectors in particular – may anticipate a slowly rebounding investment activity in 2018-2019, but the growth there is expected to be smaller than in the tradable sector. As a result, the growth of private investment in 2018 and 2019 is forecast at 3.4-3.8% and 4.0-4.5%, respectively.

In view of the aforementioned developments with private consumption and investment, in 2016 private sector expenditures will remain unchanged in relation to 2015. Starting from 2017, private spending will grow faster, in the range of 1.2-1.6%, and at the end of the forecast horizon it will stabilize within 2.6-3.0%. In the outcome, private spending gap for the period 2016-2017 is estimated to be negative although the level of private spending is set to rebound gradually in the forecast horizon.

The fiscal and monetary stimulus provided to the economy, resurging investment activity in the domestic economy in 2015-2016, as well as acceleration of economic growth in partner countries to Armenia will gradually reduce the negative private spending gap and help this imbalance phase out at the end of 2017. In the span of the first quarter of 2018 to the end of the forecast horizon, the private spending gap is estimated to be positive.

From the end-2016 to the start-2018, the **private spending will create an average 0.8-1.0 pp of contractionary impact on the inflation**. As domestic demand recovers thanks to an expansionary monetary policy, the abovementioned deflationary pressures will gradually vanish. From the second quarter of 2018 to the end of the forecast horizon, the impact of private spending will be 0.9-1.1 pp inflationary.

Current account

The 2016 current account deficit-to-GDP ratio will remain within 2.0-3.0%, the same in relation to the previous forecast. With a persistently weak demand in the global economy, positive developments

for exports continued in the third quarter of 2016, although at somewhat a slower pace. The growth was fuelled largely by high growth in item “Precious stones and metals and articles thereof”. Export of brandy and tobacco as well as commodities continued growing. Given these developments persist in the tradable sector over 2016, the real growth of export of goods and services in 2016 is estimated to be around 14.0%. As for imports, the growth in the third quarter of 2016 was driven mainly by increased import of intermediate goods. The item “Products of prepared food” also contributed to the import growth positively. In case such dynamics is maintained, there will be a zero real growth in import of goods and services for 2016.

The developments with remittances are in line with the forecasts, which means that the narrowing of net inflow of remittances will be in the range of 6.0-8.0% for 2016.

In 2017, weak global demand, international metal prices persistently at low levels and slackening of high growth rates in industry will lead to a slowdown in export growth of goods and services, which is forecast to be in the range of 4.0-6.0%. The growth of import of goods and services will remain low, 0-2.0%, under persisting weak domestic demand.

The inflow of remittances of individuals will be restored in 2017 after predicted recovery of the Russian economy. In this case, the growth of remittances is forecast to be within 4.0-6.0%.

In view of the forecasts mentioned above, the current account deficit-to-GDP ratio will run in the range of 1.5-2.5% in 2017. Given the domestic demand slowly recovers in the medium run, the current account deficit-to-GDP ratio is expected to stabilize within 1.0-2.0%.

The **fiscal policy's forecast horizon** is based on the macroeconomic indicators which underlie the Republic of Armenia “Medium-Term Public Expenditures Program for 2017-2019” and on the draft law on “State Budget 2017”.

For 2016, the fiscal policy is predicted to leave 0.8 expansionary effect on the aggregate demand, unlike the contractionary impact outlined in the previous MP program, which is attributable to the implementation of the policy aimed at restoring economic growth and to the increase in the deficit. According to the CBA estimates, the deficit-to-GDP ratio is expected at 5.4% (5.9% estimated in the draft law on the state budget 2017) which is 0.6 pp higher than the same indicator for 2015 and 1.9 pp higher than the figure provided for in the law.

For 2016 the tax-to-GDP ratio is anticipated at 20.8%. This is 0.4 pp lower from the level in 2015 and is explained by under-collected taxes due to sluggish economic activity. As a result, revenues will have 0.5 expansionary impact.

In the medium run, in pursuit of debt sustainability, the fiscal policy aims at gradual reduction of the deficit, as a result of which the fiscal policy's impact on aggregate demand will first be contractionary then neutral.

Based on the 2017 indicators of draft law on “State Budget 2017”, the tax-to-GDP ratio is expected to increase by 0.2 pp and the deficit-to-GDP ratio to decrease by 2.6 pp in relation to the CBA's 2016

Real export and real import of goods and services (y/y, %)



estimates. The fiscal policy's impact on aggregate demand is forecast to be 2.8 contractionary in 2017 due to contractionary effect of revenues (0.5) and of expenditures (2.3).

The fiscal policy's impact in the medium-term perspective is ***non-inflationary***.

Medium-term fiscal policy impact assessment					
% of GDP	2015	2016	2017	2018	2019
Budget revenues ⁹	22.4	21.9	22.4	21.7	21.8
Budget expenditures	27.2	27.3	25.2	23.7	23.5
Debt interest payment	1.5	1.9	2.2	2.0	2.0
Budget balance	-4.8	-5.4	-2.8	-2.0	-1.7
Primary balance*	-3.3	-3.5	-0.6	0.0	0.3
One-off flows **	-0.6	0.3	0.4	-0.6	-0.8
Adjusted balance ***	-2.7	-3.8	-1.0	0.6	1.1
Cyclical balance ****	-0.3	-0.5	-1.0	0.1	0.6
Cyclically adjusted primary balance (structural balance sheet)	-2.4	-3.2	0.0	0.5	0.5
Fiscal stance *****				-0.5	0.0
* Budget balance less debt interest payments. ** Temporary or one-off budget entries. In this case net lending is considered; the sign "+" means resources allocated and the sign "-" means resources repaid. *** Primary balance sheet adjusted by temporary or one-off entries. **** The CBA 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. ***** The CBA 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).					

Summary: from the third quarter of 2016 to the beginning of 2018 the combined impact of the fiscal policy, private demand and labor market on domestic prices will be deflationary, in the range of 1.7-1.9 pp. This will be determined by predominantly deflationary pressures from private spending amid stabilizing inflation expectations. Also, given the 0.3-0.5 pp inflationary impact of net external demand, one may conclude that overall aggregate demand and labor market developments in the above-mentioned period will create an average 1.1-1.3 pp of deflationary pressures in the consumer market.

In the above-mentioned period, the easing of monetary conditions and the lagged impact of fiscal incentives will facilitate the recovery of aggregate demand; in the meanwhile the said deflationary pressures will phase out gradually. Starting from the second quarter of 2018 up until the end of the forecast horizon, the overall aggregate demand and labor market will create an average 1.9-2.1 pp of inflationary impact.

⁹ The state budget indicators presented here exclude records of off-budgetary funds.

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

With the global demand still sluggish, there was ***some acceleration in economic activity in the main partner countries to Armenia*** in the third quarter of 2016. In the meantime, notwithstanding reduced supply factors in the external environment, ***inflation developments were mostly consistent with the previous program forecasts, although price inflation in respect of a number of food products somehow exceeded the expectations.***

In the forecast horizon global economic growth will continue at a slow pace. While economic growth rates are predicted to somewhat accelerate in developing countries, growth rates will remain sluggish in developed countries. Meanwhile, risks and uncertainties about further pace of the global economy, pinpointed in the previous forecast, will most likely persist.

A weak inflationary environment will be observable in international markets of commodities and food products, except wheat market, due to supply factors. In the forecast horizon international prices of commodities and food products will trend slowly upward as global demand recovers gradually and output volumes reduce.

Economic growth reported as of the first half of 2016 has been 2.8%.

The economic growth rate published as of the first half of 2016 has been 2.8%, which is 1.2 pp smaller from the previous CBA estimate. Relatively high economic growth expectations by the CBA in previous forecasts was due to earlier reported 4.7% growth in economic activity for the first half of the year. In this case, the economic growth in January-September is expected below the prediction, in the range of ***1.3-1.5%***, with industry and service sectors as the main driving force to the growth.

As the slump in the Russian economy decelerated and base impact of the ruble exchange rate depreciation vanished, the decline in ***dollar value of net inflow of private remittances and seasonal worker pays*** slowed down considerably in the third quarter of 2016, as was expected, amounting to -0.9% y/y. This has contributed to the further narrowing of the negative gap of real private transfers, which is now within the forecast. With private transfers declining at a slower rate and lending growth accelerating, the private consumption growth rates rebounded in the third quarter of 2016; these lagged behind the forecast, however, as the quarter saw lower-than-expected trade turnover and economic growth rates. In the meantime, investment activity has been much weaker than anticipated, primarily reflecting even a greater decline in construction. This prompted the private spending and domestic demand to recover at a slower pace than expected. At the same time, expansionary monetary and fiscal policy implementation in 2015-2016 as well as low inflation environment in the economy have largely facilitated the recovery of domestic demand. Note

also that net external demand carried on improving in the third quarter. This progress was underpinned by strong growth of export in real terms amid a low real growth of import of goods and services.

As a result of the aforementioned developments **this quarter's negative GDP gap has broadened in comparison with the second quarter and is estimated more negative than expected.** In this circumstance, the **core inflation rate fell somewhat faster during the quarter than expected**, and the 12-month indicator reached **-2.2%** in late September. In the outcome, a deflationary environment persisted over the third quarter and was in line with the forecast indicator, in which case the **12-month deflation rate** amounted to **1.9%** at the end of September.

In view of the inflation environment, low at the time and expected to remain such in an upcoming period, a significant decline in inflation expectations and more risks to deflation due to weak demand, the **CBA kept on loosening monetary conditions in the third quarter by cutting the refinancing rate** in August and September **for a total of 0.75 pp to 6.75% in late September.** Both short and long-term interest rates in the financial market have reacted to a consistent monetary policy conducted by the CBA, while reduced inflation expectations helped private consumption and domestic demand to recover gradually.

Macroeconomic forecasts by the CBA: the economic growth forecasts were revised considerably downward, taking into account a slower economic growth in the first half of the year, and the macroeconomic developments. As a result, the **economic growth in 2016 is expected in the range of 1.3-1.8%**, with the tradable sector (particularly mining and services) as the main driver to growth.

Economic growth in 2016 is expected in the range of 1.3-1.8%.

In consideration of a slower decline of the Russian economy and vanishing impact of the ruble exchange rate depreciation against the U.S. dollar, the **dollar value of net inflow of remittances will reduce at a lesser speed** in 2016, generally in line with previous forecasts. In a low inflationary environment, the private spending in 2016 will restore to a certain extent but run below the previous forecasts however, due to a lower-than-expected growth in the volume of trade turnover and weak economic activity. Moreover, investment activity will remain slackened in which case private investment will decrease by 3.5% against a prediction of increase in 2106, due to lower than expected activity in the construction sector. It is therefore estimated that the domestic demand will come in weaker compared to a previous forecast and, albeit set to recover to some extent in 2016 after a reported contraction in 2015, it will still run below its equilibrium. Considerable easing of monetary conditions, expanding of budget deficit and a low inflation environment in 2015-2016 will somewhat facilitate the recovery of domestic demand in 2016.

As Armenia's external demand bounces back and productivity in the tradable sector continues growing, net external demand may improve in 2016. This advancement will be conditional on strong growth rates of

Starting from 2017, the economic growth rates will somewhat accelerate to be within 2.8-4.3% at the end of the forecast horizon.

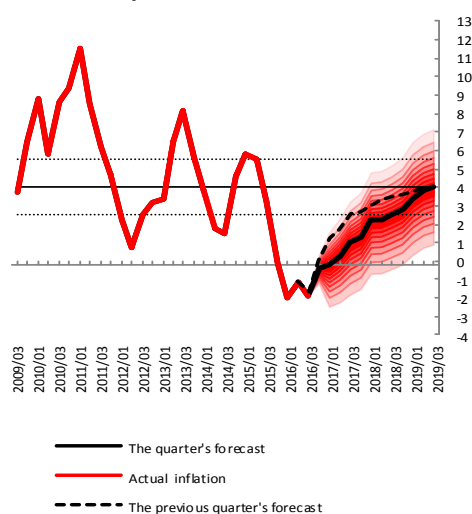
real export under zero growth in real volumes of import of goods and services. However, with a projected decline in remittances in 2016, the current account deficit-to-GDP ratio will not change against previous prediction, running within 2.0-3.0%. As a result of these developments, the GDP gap, still negative in the third quarter, will somehow reduce by the end of 2016.

The prediction of the period **2017-2019** is that loosened monetary conditions will help the domestic demand rebound gradually amid improving external economic environment, recovering growth rates in private remittances and implementation of a number of projects by the Government of Armenia to promote the tradable sector. In the meantime, external demand will continue fostering the economic growth. This will lead the GDP gap, still negative, to reduce further in 2017, as the fiscal policy's expansionary impact on the domestic demand is predicted to weaken starting from the first quarter of 2017. According to expectation, **starting from 2017, the economic growth rates will somewhat accelerate to be within 2.8-4.3% at the end of the forecast horizon.** This will be primarily driven by the tradable sector **as Armenia's competitiveness rises in an inflation environment which is lower compared with trade partner countries.** The economic growth forecasts, nevertheless, greatly depend on investments in the private sector, the scale, directions and effectiveness of the projects carried out by the Government of Armenia, as well as on how the developments in the external sector will unfold.

The end-year forecast of the inflation rate was revised downside relative to the estimation in the previous program, mainly due to the adjusted forecasts of the core inflation rate under a persisting negative GDP gap and to actual inflationary developments in the third quarter of this year. Nonetheless, estimations suggest that the deflationary environment will mitigate significantly at the end of the year. The inflation forecasts for the first quarter of 2017 considered an expected drop in natural gas tariff¹⁰ for households and major consumers for the same period of time, the combined effect of which on inflation has been estimated by the CBA to be around -0.54 pp (direct impact: -0.32 pp). In view of the above developments, the CBA estimates that the deflationary environment will gradually phase out in the first months of 2017. In the forecast horizon, the 12-month inflation rate will return to the target.

The CBA reckons that risks to deflation are to persist in the medium run, with the 2017 fiscal policy factor now added to such risks. **The CBA considers that certain easing of monetary conditions in the fourth quarter of 2016 is appropriate.**

Inflation (12-month) Forecast Probability Distribution Chart for a 3-year horizon



¹⁰ The letter of November 1, 2016 to the Public Services Regulatory Commission requested a revision of tariffs on natural gas "Gazprom Armenia" sells to consumers (<http://www.psrc.am/images/News/2016/Gas/1.Dimum.pdf>). In particular, it anticipated a decrease in gas tariff by AMD 7.7 per cubic meter for those consuming up to 10,000 cubic meters a month, and gas tariff to reduce from USD 257.6 per 1000 cubic meters to USD 242.1 per 1,000 cubic meters for those consuming over 10,000 cubic meters a month.

The CBA considers that certain easing of monetary conditions in the fourth quarter of 2016 is appropriate.

Period	Inflation interval forecast probability distribution				
	<1.0%	1.0-2.5%	2.5-5.5%	5.5-7.0%	>7.0%
Q4, 2016	99.9%	0.10%	0.00%	0.00%	0.00%
Q1, 2017	89.0%	10.5%	0.5%	0.00%	0.03%
Q2	75.8%	21.3%	2.9%	0.00%	0.04%
Q3	56.5%	32.1%	11.4%	0.03%	0.03%
Q4	46.8%	34.7%	18.3%	0.1%	0.02%
Q1, 2018	26.4%	33.7%	38.3%	1.5%	0.1%
Q2	25.6%	33.1%	39.3%	1.8%	0.1%
Q3	21.3%	31.4%	44.3%	2.7%	0.3%
Q4	17.0%	28.3%	49.4%	4.7%	0.6%
Q1, 2019	10.2%	21.7%	55.5%	10.1%	2.5%
Q2	7.0%	17.7%	57.2%	13.7%	4.3%
Q3	5.7%	15.8%	57.0%	15.8%	5.7%

Risks that inflation will deviate from the projected value are estimated to be downward in both short and medium term. Risks deriving from the external sector are somehow inflation-pertinent and are, in particular, related to capital outflows from developing countries and, consequently, volatilities in financial markets, the processes in the European Union, a likely slowdown of global economic growth resulting from restructuring of the Chinese economy as well as risks related to developments in international prices of raw materials and food products. ***Risks deriving from the domestic sector are deflationary***, with the 2017 fiscal policy factor and possible reduction of electricity tariff in the first quarter the same year now added to the existing ones. Risks outlined in the previous forecast carry on and are associated with the extent to which external environment's deflationary impact will spill over to the domestic prices, developments in agriculture, a sector greatly depending on weather conditions, the pace at which domestic demand and private investments will recover, as well as the Government-led structural reforms.

If the aforementioned risks materialize, the CBA will react accordingly by maintaining the inflation target in the medium run.

3. ACTUAL DEVELOPMENTS IN Q3, 2016

3.1. Inflation

3.1.1. Actual inflation and fulfilment of the inflation target

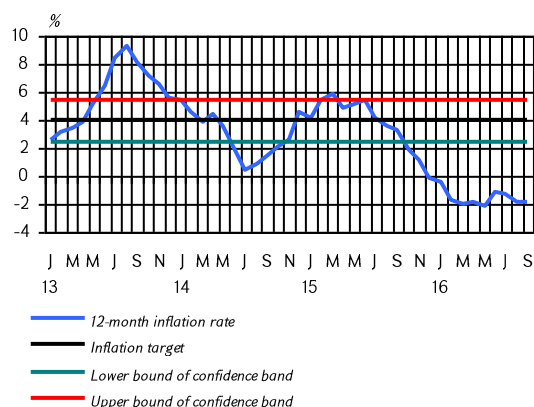
There was **2.7% deflation** in the third quarter of 2016. This was driven, as it was expected, by seasonal decrease in food prices, with fruit and vegetable prices having fallen by 22.8% and 31.1%, respectively (contribution to the quarter's deflation: 2.3 pp). In the time of relatively stability in world commodity markets and the GDP gap running far broader from the estimation, **the core inflation rate declined slightly faster than expected to 0.8% in the third quarter**, while the 12-month rate reached -2.2% in late September. The latter was mainly due to lower-than-expected rise in domestic food prices, dairy and meat products in particular, and in fees of unregulated services (air transport, -15.0% q/q), (health care, 0.3% q/q) and (public catering, 0.1% q/q). In addition, non-food price deflation was in line with forecasts, making up 1.4% in the quarter. It was mainly driven by a decrease in prices of import goods, particularly clothing and textiles, medicines, detergents and cosmetics.

The third quarter's deflation, as was estimated, was determined to some extent by a drop in tariffs of regulated services, due to 6.0% decrease in natural gas price (contribution to headline inflation: -0.36 pp), which had been partly offset by 4.3% increase in the electricity price (contribution to headline inflation: 0.28 pp).

Triggered by the developments mentioned above, the deflationary environment persisted over the third quarter of 2016, under which the **12-month deflation rate amounted to 1.9% in September**, quite close to the projected value.

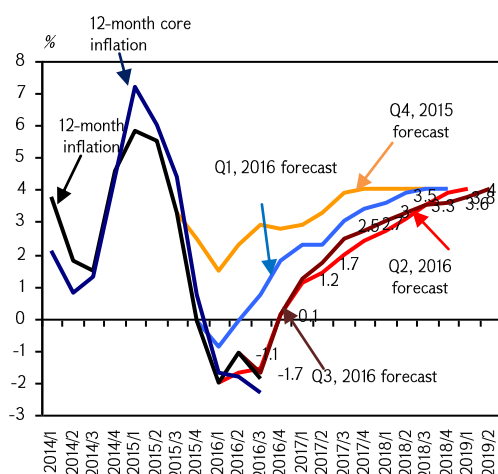
There was 2.7% deflation in the third quarter of 2016 while the core inflation rate declined a bit faster than expected, amounting to 0.8%.

In the third quarter of 2016 the deflationary environment persisted



Price inflation by groups serving as key contributors						
Group	June 2016 (y/y)		September 2016 (y/y)		Q3, 2016	
	Growth (%)	Contribution (%)	Growth (%)	Contribution (%)	Growth (%)	Contribution (%)
CPI	-1.1		-1.9		-2.7	
Food products	-2.5	-1.3	-3.3	-1.5	-4.7	-2.1
Bread products	-3.2	-0.3	-3.0	-0.3	-0.3	-0.03
Meat products	-4.5	-0.5	-4.1	-0.4	-0.2	-0.02
Dairy products	-3.8	-0.2	-4.3	-0.2	-3.1	-0.1
Fats and oils	-2.7	-0.1	-2.7	-0.1	-0.6	-0.02
Fruit	-12.7	-0.5	2.0	0.1	-22.8	-0.6
Vegetable and Potato	21.4	1.3	-19.0	-1.0	-31.1	-1.7
Eggs	-21.5	-0.3	15.5	0.2	29.8	0.4
Sugar	-3.2	-0.02	9.8	0.1	7.4	0.1
Non-food products	-2.8	-0.43	-3.8	-0.9	-1.4	-0.3
Services	2.1	0.64	1.4	0.5	-0.7	-0.2

In case of a low inflationary environment, the last two forecasts suggest that the 12-month inflation rate will enter a positive territory at the end of 2016 and in the rest of the forecast horizon is expected to stabilize around the 4% target.



For the previous one-year horizon which takes a timespan between the fourth quarters of 2015 and 2016, low inflation environment was forecast to persist, with the 12-month inflation rate to drift around a lower bound of the confidence band. Furthermore, inflation expectations were to diminish gradually by the time, as they would for the core inflation. The CBA was considering **to further ease monetary conditions in the fourth quarter of 2016** which, coupled with monetary conditions loosened earlier the year and an expansionary fiscal policy, would prompt the aggregate demand to expand and inflation to stabilize around the target in the forecast horizon.

As actual developments showed, **in the fourth quarter of 2015 the inflation environment continued softening**, at a rapider-than-expected pace, though. This was determined by even more falling of prices of agricultural products at the time when the agriculture sector reported relatively strong growth rates and because of some influence from continued decline in external sector prices on domestic prices. The fourth quarter saw only 1.9% inflation compared to 5.4% reported in the same reference period last year, in which case the **12-month inflation rate** took a negative value of **-0.1%** at the end of the year.

In view of such inflation developments, the CBA notably eased monetary conditions in November-December **by reducing the refinancing rate by 1.5 pp to 8.75% at the end of December**. It was estimated that inflationary risks arisen from the previous year-end had been largely overcome, and abrupt easing of monetary conditions made it possible to return to the normal situation that existed before November of 2014.

The deflationary environment intensified **in the first quarter of 2016**, as was anticipated, and its influence persisted over the next two quarters. This was largely attributable to deflationary patterns in international commodity markets, with their impact spilled over to the domestic prices, weak domestic demand as well as lower food prices in relation to the same reference period last year thanks to strong growth in agriculture sector. As a result, there was a mere 0.5% of deflation in the first five months of 2016 compared to 1.5% of inflation reported for the same reference period last year, leaving the 12-month inflation rate to reduce by 2.0 pp to -2.1% in late May (contribution of decreased food prices to headline deflation: 1.8 pp). Then, the deflation in June-September was 3.2% against that of 3.4% reported in the same reference period last year, while the 12-month inflation rate remained virtually unchanged, amounting to -1.9% at the end of September.

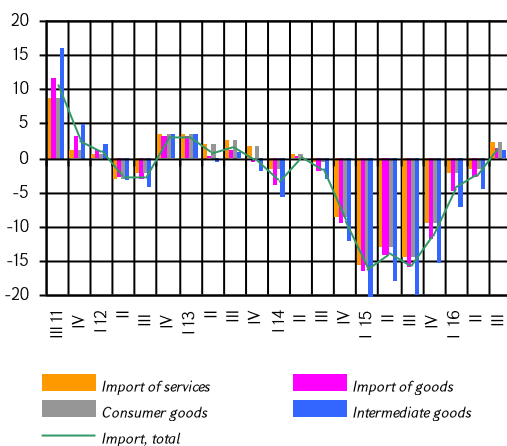
The CBA carried on implementing an expansionary monetary policy over the first nine months of the year, in consideration of the inflation developments. Reckoning that an abrupt easing of monetary conditions at the end of the previous year was quite enough to neutralize the deflationary pressures during the year and that **gradual** easing of monetary conditions at the time was most relevant, the CBA cut the refinancing rate by 0.25 pp each month. May and September when the policy rate was lowered by 0.5 pp each time were exceptions supported by considerable reduction in inflation expectations as a result of

consistent monetary policy by the CBA and expected falling of natural gas price since the second half of the year on the one hand, and deteriorating of economic growth outlook since the third quarter and inflationary risks increasing due to a sluggish demand, on the other.

Over the last nine months the refinancing rate was lowered a total of 2.0 percentage points to **6.75%** in late September. The transmission mechanism was highly effective in that time as market rates notably reduced in line with the falling of the policy rate, while the government bond yield sloped down all along the curve.

3.1.2. Import prices and producer prices

In the third quarter of 2016 the dollar prices of import of goods and services grew (y/y, %)



Import prices: commensurate with inflationary trends in the external sector, the dollar prices of import of goods and services grew in the third quarter of 2016 by an average 0.3% q/q, after a reported decline in the past two years. The growth over the same period last year amounted to 1.5% y/y.

The y/y increase in dollar prices of import was determined by prices of goods and services, which rose by 1 pp and 0.5 pp, respectively. The y/y growth in dollar prices of import of goods was equally driven by increased prices of final consumption and intermediate goods. In the latter case, the price rise was somehow curbed by a decline in oil and gas prices but depended primarily on increased sugar price and the y/y appreciation of the partner countries' currencies versus the US dollar.

The y/y increase in dollar prices of consumer goods owed to y/y increase in dollar prices in a number of partner countries. Consumer goods had a 0.5 pp of positive contribution.

Producer prices¹¹: the GDP deflator in January-September of 2016 has been virtually unchanged in relation to the same period last year, according to CBA estimates. Price developments in different sectors of the economy underlie the estimates, as follows:

Industry reported 0.1% y/y drop in prices in January-September. The 1.5% price rise in mining notwithstanding, the drop owed to the reduced prices in processing industry (0.8%), energy, gas production and distribution (2.2%) and waste management and processing (0.2%). The above price developments, in turn, are due to stagnation in prices in world ore and minerals markets as well as weak external and domestic demand.

Agriculture posted 2.4% price deflation in the same period of time after a 7.8% decrease in prices in animal breeding amid a price rise in plant growing (4.2%). The fall in prices is due to a sluggish domestic demand whereas price inflation in plant growing is a result of reduced output there in comparison with the previous year.

Construction reported a 1.6% y/y price deflation in January-September on the back of reduced costs in construction and assembly

¹¹ The price index change for January-September 2016 is relative to the same reference period last year, unless otherwise specified.

works (1.8%), capital investment (1.6%), equipment and materials (0.7%) and other expenditures (0.6%). The price deflation is a result of contracted output and reduced wages in the construction sector.

Carriage service¹² reported a 5.2% y/y drop in tariffs in January-September as a result of reduced fare of railroad transport (2.1%) and motor transport (5.3%). The price deflation was driven by contracted trade volumes and fallen prices of petrol and diesel in the period under review.

3.1.3. Inflation and interest rate expectations

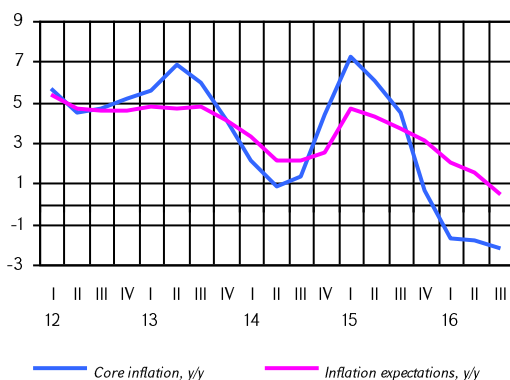
The financial sector survey by the CBA for the third quarter of 2016 shows that households' inflation expectations for an upcoming one-year horizon have reduced notably as the prices of goods, net of seasonal agricultural products, followed a downward path. Estimations produced on the CBA's core model suggest that inflation expectations reduced faster this quarter than expected, amounting to 0.4%, mostly driven by the consistent monetary policy of the CBA and in anticipation of gas and electricity price reduction in the first quarter of 2017.

In the third quarter of 2016 the CBA continued its surveys with the financial sector and households to figure out their expectations of a selected number of macroeconomic indicators. The results of the survey denote that the **average level of inflation expectations in the financial system is 2.8% for the upcoming one-year horizon** compared to the relevant indicator of **3.0%** reported in the previous survey, with insurance companies accounting for most of the change in inflation expectations from an average **3.7%** indicator in the previous survey to **2.7%** now. The **commercial banks' and credit organizations'** expectations remained virtually unchanged, averaging at **2.5%** and **3.3%** of the 12-month inflation rate, respectively. Households had their inflation expectations of the 12-month inflation rate around a **0.9%** level, which is reduction from **1.2%** reported in the previous quarter's survey.

In the financial market in the third quarter of 2016, interest rates continued trending downward, carrying the influence of loosened monetary conditions. There was a fall in interest rates for all funds, both attracted and allocated, and all maturities. In the government bond market, the yield has declined substantially along the curve's long-term segment (see details in section "3.3. Money and financial market developments").

The financial market's expectations for interest rates followed a downward path this quarter, too, which points to the continued reduction in inflation expectations. According to the survey results, the financial system anticipates a gradual decrease in interest rates on funds attracted and allocated, for a one-year perspective.

Inflation expectations



¹² The tariff index does not cover the trunk pipeline.

3.2. Aggregate supply and aggregate demand

3.2.1. Aggregate supply¹³

The economic growth indicator published as of the first half of 2016 was 2.8% y/y.

The **economic growth indicator** published by the National Statistics Service of Armenia for the first half of 2016 was 2.8% y/y, which is 1.2 pp smaller from the former forecast value of the CBA. Higher expectations of the CBA for economic growth in the previous forecasts were fuelled by an earlier published figure of 4.7% economic activity growth¹⁴ for the first half of the year.

In the third quarter of 2016 economic activity grew at a slower rate in relation to the first half of the year. As a result, the growth of economic activity in January-September has been 1.6% y/y.

Given the aforementioned developments, the January-September economic growth forecast was revised downward, in the range of 1.3-1.5%¹⁵. Note, however, that the monetary policy implemented by the CBA as well as fiscal incentives provided to the economy have cushioned the slowdown of economic activity, pointing to the 2.6% growth in lending volumes in the period under review and the expected 5.4% budget deficit in 2016.

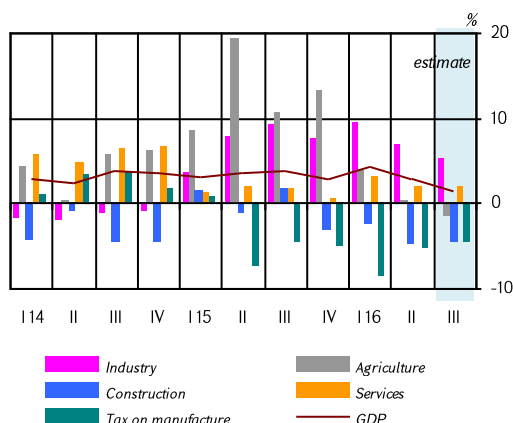
Taking into account an increased output of 7.1% y/y reported in **Industry** in January-September 2016, the growth of value added there for the same reference period is estimated within 5.0-5.6% y/y. This is mainly attributable to the growing domestic demand in partner countries and structural improvements in the Armenian economy.

In view of an actual decrease in output volumes (9.3% y/y) reported in **Construction** for January-September 2016, the decline of value added for that period is estimated within 4.2-4.8% y/y. The slowing of the economy is due to reduction in domestic demand and persisting demand-and-supply disequilibrium in the construction sector.

The growth of value added in **Services** for January-September 2016 is estimated in the range of 1.8-2.2% y/y, which is explained by an 8.1% increase in services provided but 0.1% contraction in trade volumes. The decline in the trade depended on a 4.4% decrease in retail trade turnover, which has been a result of a weak domestic demand in the period under review.

Given the decreased output of 3.2% y/y in **Agriculture** recorded for January-September 2016, the diminishing of value added in the sector in the same reference period is estimated within 1.2-2.0% y/y. This was driven by reduced output in plant growing (6.0%), caused by less favorable weather conditions this year in comparison with the previous year, but by increased output reported in animal breeding and fish growing, by 4.0% and 2.3%, respectively. Note also that the risks to reduced output in agriculture were outlined in previous monetary policy programs published by the CBA.

Actual real GDP and sector cumulative growth rate, y/y



¹³ The indicators of y/y real growth of value added in sectors of the economy for January-September 2016 are the CBA forecasts, whereas the indicators of sub-sectors represent y/y growth rates in output volumes for January-September 2016, unless otherwise specified.

¹⁴ http://www.armstat.am/file/article/sv_06_16a_111.pdf.

¹⁵ See the 30% range in Real GDP Growth (Cumulative) Projection Probability Distribution Chart.

In the third quarter of 2016 private consumption costs grew by around 2% y/y.

3.2.2. Aggregate demand¹⁶

In the third quarter of 2016 private spending was estimated to be lower compared to the previous forecast, growing by around 2% relative to the same reference period last year. This was due to greater shrinking of trade turnover and lower-than-expected economic activity in the third quarter.

A narrowing inflow of remittances from Russia, a trend observable since end-2014 and persisted in 2015-2016, has negatively affected the households' disposable income, which led to reduced private consumption costs throughout 2015 and in the first quarter of 2016. It should be noted, however, that the decline in private spending has diminished considerably thanks to the CBA policy steered to ease monetary conditions since 2015, as well as a low inflationary environment. The above-described developments contributed to a moderate increase in private consumption in the second quarter of 2016, speeded up in the third quarter. Yet private consumption is still below its equilibrium because of deep downturns reported in the previous year.

The surveys conducted by the CBA and trade turnover indices calculated by the National Statistics Service of Armenia for the third quarter of 2016 are indicative of still a sluggish consumption in the private sector: the Consumer Confidence Index was 43 this quarter, which is below its stability range of 45-55 and points to a low level of final consumption costs of households. Then again, the CCI has increased by nearly 6% relative to the same reference period last year, which in turn showed that private consumption was slowly recovering from low levels. In the third quarter of 2016, compared to the same period of the previous year, trade turnover has decreased by 0.3%, which lagged behind the CBA expectations. It should also be noted that narrowing of the inflow of remittances (employee remuneration and private transfers) halted in the third quarter of 2016. In 2016 the impact of remittances on consumption was somewhat mitigated by growth in lending to the economy.

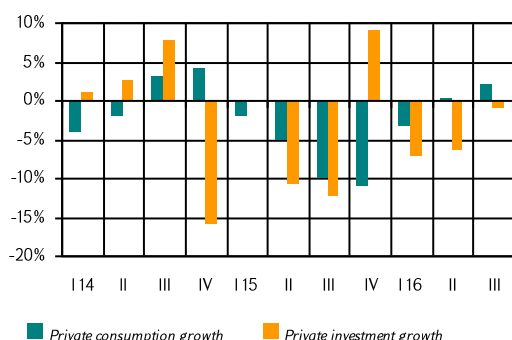
In the third quarter of 2016 the investment climate in the economy was weaker than predicted, with private investment having reduced by about 1% in relation to the same reference period last year. Sluggish investment climate in the period under review was due to an inadequate level of domestic demand and persistently low construction activity. As it was outlined in the CBA's previous forecasts, the decline in investment had been more pronounced in non-tradable sector of the economy as opposed to a relatively high growth in the tradable sector.

The CBA surveys on business environment conducted at companies point to the aforementioned developments in investment climate in the period under review. According to the survey results, in the third

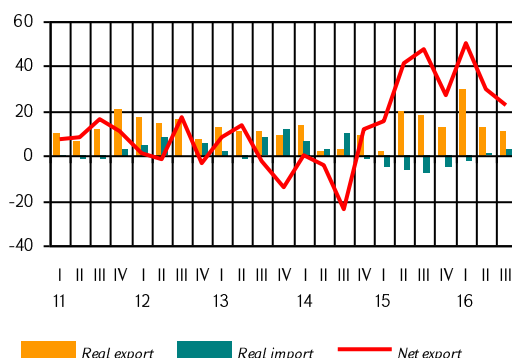
In the third quarter of 2016 the investment climate in the economy was weaker than predicted, with private investment having reduced by about 1% in relation to the previous reference period last year.

¹⁶ The private spending, private consumption and private investment indicators for the third quarter of 2016 are the CBA estimates which are based on the actual second quarter 2016 data. The growth estimates provided in this sub-section are relative to the same reference period last year, unless otherwise specified.

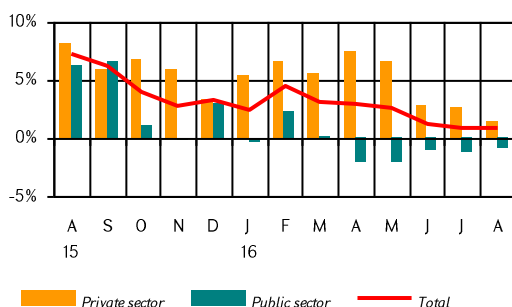
Private consumption and investment growth, y/y



In the third quarter of 2016 net real export improved
(net real export, y/y %, positive sign means improvement)



Nominal wage growth, y/y



quarter of 2016 the Business Activity Indicator was 46.8, which is a 6.9% decrease compared to the same reference period last year; the BAI in non-tradable construction sector was 40.0, which is below its stability value of 50. On the other hand, the BAIs in industry as a tradable sector amounted to 50.8, running above the stability value of 50.

The aforementioned developments with private consumption and investment led to an estimated 1.6% growth in private spending in the third quarter. With somewhat a subdued rate of public spending, the domestic demand grew by around 1% in the period under review. The monetary conditions eased by the CBA, the fiscal policy at the time expansionary in response to a large budget deficit as well as the low inflationary environment in the economy have substantially contributed to the growth of domestic demand.

Despite a recorded growth, the private spending gap in the third quarter of 2016 is estimated as negative, which created **2.2-2.6 pp of deflationary pressures** in the consumer market.

According to the CBA estimates, real net export continued improving at higher rates in the third quarter, which was determined by strong growth of real export of goods and services amid a modest growth of real import of goods and services. In the third quarter of 2016 growth rates of real export of goods and services amounted to 10.5% y/y versus 3.1% y/y growth in real import of goods and services¹⁷.

The third quarter of 2016 saw the inflow of remittances persisting almost at the level reported for the same reference period of the previous year, as the Russian economy began recovering and the effect of depreciation of the ruble exchange rate vanishing.

3.2.3. Labor market¹⁸

In the third quarter of 2016 the **average nominal wage growth rate** ran below the previous forecast of the CBA, and is estimated at 0.9%. The deviation from the previous forecast is due declined average wage in the public sector and slowed growth rate in the private sector wage.

In the third quarter of 2016 the nominal wage growth in the private sector slowed down to 2%, reflecting a slackened economic activity. However, given the 1.7% price deflation recorded in the third quarter, the private sector's real wage growth rate amounted to 3.7%.

Starting from October 2015, the wage growth in the public sector slowed down and the trend persisted over 2016 too. In the third quarter of 2016 the nominal public wage growth rate decelerated by 1% in relation to the previous reference period.

¹⁷ Real export and import growth indicators are the CBA estimates.

¹⁸ The labor market data for the third quarter of 2016 are the CBA estimates which are based on the second quarter 2016 data and actual January-August 2016 figures. The growth indicators provided in this sub-section are relative to the same reference period last year, unless otherwise specified.

After a downside revision of the number of economically active population by the National Statistics Service of Armenia, the productivity growth rate was still strong in the first half of 2016. It began subduing only in the third quarter, resulting in the 2016 labor demand indicator slightly below the previous projections. In light of these changes as well as more-than-expected slowdown in economic activity, the third quarter's **unemployment rate** is an estimated 17.4%, running a little above the previous forecasts.

In the third quarter of 2016 the productivity growth rate again outweighed the growth rate in wages, exerting 0.6% of deflationary pressures in the consumer market.

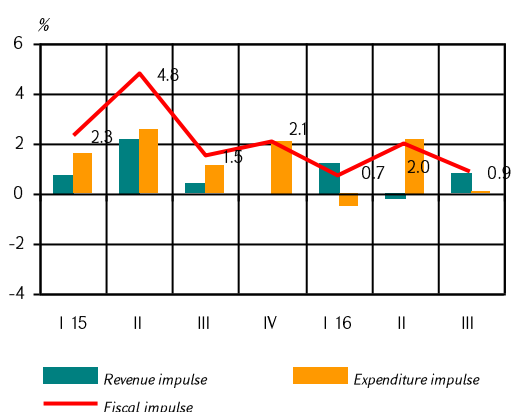
3.2.4. Fiscal policy¹⁹

In the third quarter of 2016 the Republic of Armenia State Budget was performed with revenues falling short of the CBA's estimates²⁰, somewhat increased expenditures and net lending in excess of the projected value. In view of such developments described above and the nominal GDP indicator for the third quarter, the fiscal sector's impact on aggregate demand is estimated 0.9 expansionary instead of the projected 1.0 contractionary. The deviation of the fiscal impulse is attributable to that of the expenditures which proved neutral instead of the forecast 1.8 contractionary, primarily due to deviated indicator of net lending.

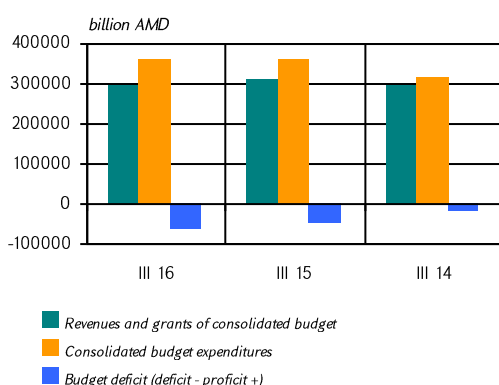
In the third quarter of 2016, relative to the same reference period last year, consolidated budget revenues and grants have decreased by roughly 5.0% as revenues from value added tax and customs duties narrowed amid continued reduction of import volumes in general. Revenues left 0.8 of expansionary impact – consistent with the projection. Although actual budget revenues were under-collected to constitute 97% of the CBA estimates, the revenues impulse indicator did not deviate however, which is attributable a lower nominal GDP indicator estimated for this quarter in comparison with the previous forecast.

In the third quarter the expenditures outgrew the CBA forecast by 1.1%. This quarter saw a 1.4% decrease in consolidated budget expenditures compared with the same reference period last year, which occurred to the expense of the item **“Transactions with non-financial assets”**.

The expansionary impact of fiscal policy in the third quarter of 2016 was mainly due to an expansionary effect of revenues



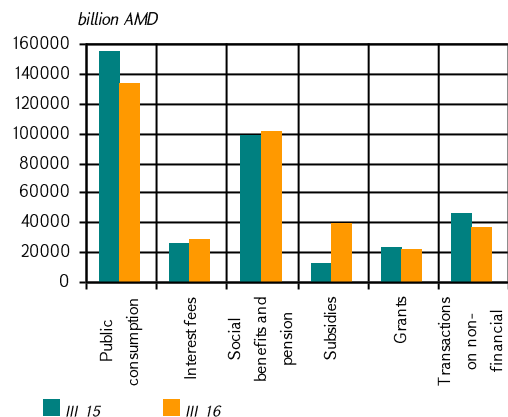
The second quarter 2016 saw a larger budget deficit relative to the past years



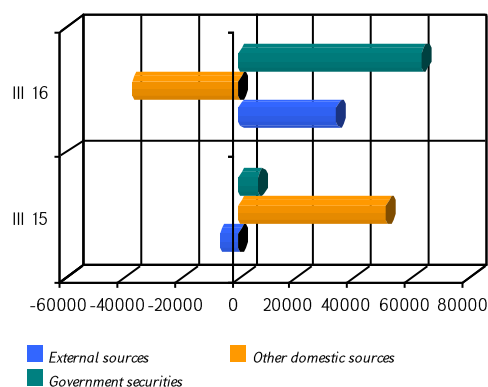
¹⁹ The review of the fiscal sector was done using preliminary actual consolidated budget indicators (local budgets as an estimate) prepared on the basis of preliminary actual indicators of the third quarter of 2016 (PIU funds included), excluding off-budgetary funds. The impact of revenues was calculated in respect of the nominal GDP indicator while the impact of expenditures, in respect of an estimated economic potential.

²⁰ Actual public sector indicators were compared with the CBA projections; note that the CBA projections on revenues were in line with quarterly revenue proportions.

Budget expenditures



In the third quarter of 2016 budget deficit was financed mostly at the expense of domestic resources (billion AMD)



Relative to the same reference period last year, the share of **public consumption** in current expenditures has decreased²¹ by 14.2% while the figure of subsidies has outgrown the previous year's indicator threefold due to increased water supply and transport subsidies.

The public debt interest payments outgrew the previous year's relevant indicator by 12.2%, primarily due to increased amount of servicing costs.

Relative to the same reference period last year, the item **"Transactions with non-financial assets"** has decreased by around 20% to the expense of reduced capital expenditures from domestic sources.

With revenue and expenditure performance described above, in the third quarter of 2016 the state budget generated a deficit of roughly AMD 61.0 billion, constituting 126.4% of the CBA projection. The deficit has been financed by domestic sources (44%) and external sources (56%).

Specifically, net proceeds from placement of T-bills in the third quarter amounted to AMD 63.7 billion which has been a source of deficit financing amid narrowing tax revenues. The expansionary monetary policy of the CBA led market rates to slope down along the entire yield curve which enabled the Government of Armenia to finance the budget deficit by increasing the volume of government securities. In the third quarter of 2016 the fiscal policy left an expansionary impact on the aggregate demand.

Overall, the fiscal policy conducted over the first nine months of 2016 has had 1.2 of expansionary impact on the aggregate demand, primarily owing to the expansionary effect of both the revenues and expenditures.

Summary: reduced private transfers from Russia and sluggish investment activity in the domestic economy dampened consumption in the private sector in the third quarter of 2016. However, fiscal stimulus delivered to the economy and continued easing of monetary conditions by the CBA between 2015 and 2016 secured a slower contraction of private spending while softening the domestic economy's slowdown and deflationary environment.

The private spending gap in the third quarter of 2016 is estimated as negative. Given the fiscal policy's inflationary behavior, neutral performance of net exports and deflationary patterns in the labor market, the aggregate demand and labor market are estimated to have jointly created 2.4-2.6 pp of deflationary pressures in the consumer market in the third quarter.

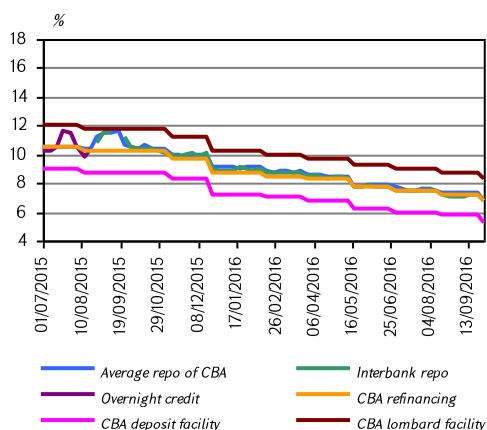
²¹ The indicator stood behind the previous year's figure due to the change in the principle of financing the preschool and general education establishments. Last year it was regarded as procurement of contractual services and, starting from 2016, as providing of subsidies to these organizations.

3.3. Money and financial market developments

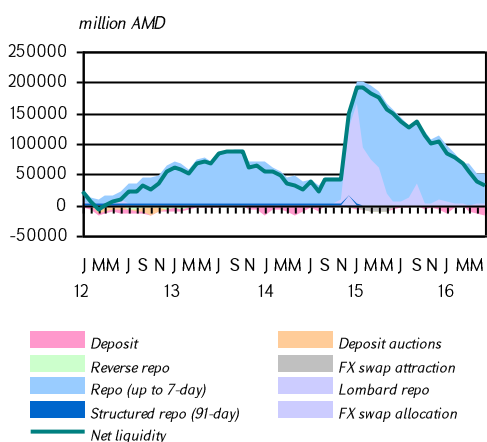
3.3.1. Financial market, money and credit

The CBA continued loosening monetary conditions in the third quarter of 2016. The CBA Board looked to cut the refinancing rate twice (in August and September) by a total of 0.75 pp.

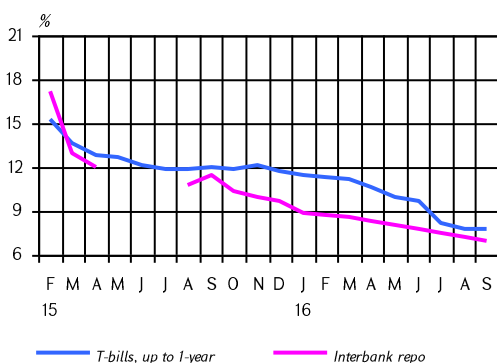
During the quarter short-term interest rates came in around the CBA's repo rate



Liquidity injection and absorption through the CBA operations (average monthly value)



Short-term market rates in the third quarter of 2016



The CBA kept on loosening monetary conditions in the third quarter of 2016. The CBA Board cut the refinancing rate twice (in August and September) by a total of 0.75 pp.

Inflation expectations subsided as a result of consistent monetary policy implementation by the CBA, pushing down long-term market rates as well. At the same time, expecting that a deflationary environment would be persisting in the upcoming period, the CBA further cut the refinancing rate by 0.25 pp in August and 0.5 pp in September to set it at 6.75% in late September.

Almost all segments of the domestic financial market reacted to the easing of monetary conditions during the quarter, reflecting market participants' expectations of both short and long-term interest rates. Interestingly, much greater reaction to the CBA policy signal this quarter came from long-term interest rates.

Average quarterly market rates in Armenia			
	Q1, 2016	Q2, 2016	Q3, 2016
CBA refinancing rate (end of quarter)	8.25	7.5	6.75
CBA repo rate	8.92	8.13	7.35
Interbank repo rate	8.73	8.01	7.27
T-bills yield	11.33	10.25	7.87
Medium-term notes yield	14.51	13.88	11.36
Long-term bonds yield	16,33	16,37	14,16

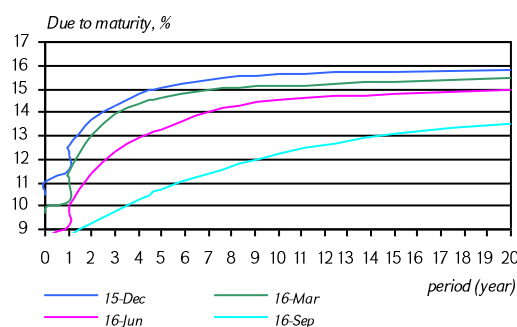
Average quarterly rate of 7-day repurchase agreements concluded by the CBA fell by 0.78 pp against the previous quarter to 7.35% this quarter; the average interest rate in September has dropped by 0.68 pp against June to 7.12%.

The falling of the interbank repo rate this quarter was in line with the CBA policy signal: it averaged 7.01% in September after having plunged by 0.74 pp from 7.75% in June.

Continued easing of monetary conditions by the CBA, reduced inflation expectations and persistently strong liquidity in the banking sector all have induced a greater effect in the T-bills market, causing yields to squeeze substantially and come closer to the money market rates during the third quarter of 2016. In the short-term segment the average quarterly yield has reduced by 2.38 pp against the previous quarter to 7.88%, with the average September yield slumped by 1.98 pp against June to 7.76%.

The trend of falling interest rates prompted the government bond yield curve to follow a downshift during the third quarter. The decrease was most pronounced in the short and medium-term yields, by 2.5 pp and 2.0 pp on average, respectively. The long-term (20-year) yield dropped by 1.4 pp to 13.5%. As a result, the slope contracted in September by 1.2% to 5.5 pp, owing to a sizable reduction in long-term rates.

In the government securities market in the third quarter of 2016, yields declined along the entire curve

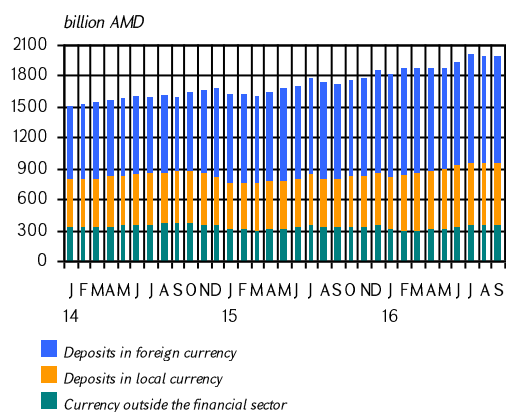


The CBA policy further steered to the easing of monetary conditions in the third quarter, the liquidity offered as a result of paid-in bank capital and fallen interest rates all placed influence on the funds borrowed and allocated by banks.

Interest rate on deposits in local currency	Q2, 2016	Q3, 2016	Change
Up to 1 year			
Non-financial corporations	9.04	9.07	0.03
Households	13.58	12.92	-0.66
Over 1 year			
Non-financial corporations	13.64	12.65	-0.99
Households	13.56	13.21	-0.35
Interest rate on loans in local currency			
Up to 1 year			
Non-financial corporations	13.73	14.17	0.44
Households	21.44	20.97	-0.47
Over 1 year			
Non-financial corporations	14.15	14.64	0.49
Households	18.63	18.23	-0.4

Interest rate on deposits in foreign currency	Q2, 2016	Q3, 2016	Change
Up to 1 year			
Non-financial corporations	4.92	4.9	-0.02
Households	5.4	5.15	-0.25
Over 1 year			
Non-financial corporations	7.94	7.27	-0.67
Households	6.65	6.75	0.1
Interest rate on loans in foreign currency			
Up to 1 year			
Non-financial corporations	8.5	8.8	0.3
Households	14.52	13.96	-0.56
Over 1 year			
Non-financial corporations	9.75	9.94	0.19
Households	14.29	14.02	-0.27

In the third quarter of 2016 deposits in local currency outweighed



In September of 2016 the 12-month growth of dram deposits was 28.7% and that of foreign currency deposits, 12%. The surpassing growth of dram deposits owed to reduced inflationary expectations, which led to a decline in the dollarization by 2 pp in the course of 12 months. As a foreign currency deposits-to-broad money ratio, the dollarization reached 50.6% in September.

During the quarter, lending rates decreased with regard to almost all types of credit, and the 12-month growth of total loans stood at 4.1% in September of 2016. The foreign currency loans remained prevalent, accounting for around 66.3% in total lending portfolio.

The decline in household income (narrowed inflow of funds from abroad) and increased loan burden affected the ability to attract new

loans hence the volume of lending²². Assessing the risk deriving from the real sector, lenders have been slow to lower interest rates. However, as was mentioned, there was some decline in lending rates amid increasing competitiveness, which led to a decrease in interest margin. Perhaps intensifying competitiveness is the reason why deposit rates are not falling in line with financial market rates.

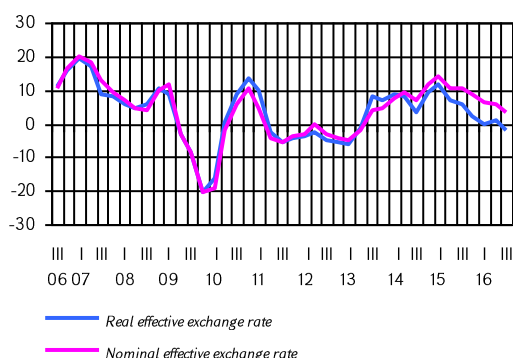
Box 2

Survey on the Terms of Lending by Banks and Credit Organizations in Armenia

According to the results of the third quarter 2016 survey on terms of lending by local banks and credit organizations, there has been further easing of terms virtually in all aspects of lending. Some deceleration in the easing of lending terms for business loans was observed. Increased competition between financial institutions and the revised terms in refinancing programs led to less strict requirements to loan interest rates, non-interest payments, maturity and collateral. Special loan promo actions, an initiative offered to the lending market a few months ago, is underway up until the end of the year. Demand for SME loans and mortgage loans have grown but demand for consumer loans and major company loans slackened.

For the fourth quarter of 2016, banks and credit organizations anticipate somewhat a modest easing of procedures for all types of credit, along with a growing supply of loans in the consumer market in the main. There is expectation that the demand for business loans would grow slightly but household demand for loans would grow significantly.

In the third quarter of 2016 the real effective exchange rate depreciated y/y, %



3.3.2. Exchange rate

In the third quarter of 2016 partner countries to Armenia reported some minor depreciation pressures in their foreign exchange markets. During the quarter the partner countries' average weighted nominal exchange rate depreciated versus the US dollar by 0.4%, which was largely driven by depreciated euro, Georgian lari and Chinese yuan (contribution: 0.3, 0.2 and 0.2 pp, respectively), whereas the Russian ruble and the Japanese yen appreciated during the quarter. With average weighted depreciation of partner countries' national currencies, the average nominal exchange rate of the Armenian dram appreciated versus the US dollar by 0.8% in the third quarter. To absorb short-term volatilities deriving from balance sheet seasonality, the CBA bought nearly USD 48.6 million in net terms in the foreign exchange market.

²² For more details see "Financial Stability Report of the Central Bank of Armenia", first half of 2016.

In the third quarter of 2016 the nominal effective exchange rate of the Armenian dram appreciated by 1.17% q/q on average as the partner countries' currency basket continued depreciating but the dram appreciating versus the US dollar. In the meantime, the real effective exchange rate of the Armenian dram depreciated by 2.43% q/q²³ owing to a deflationary environment in Armenia, which boosted up company competitiveness.

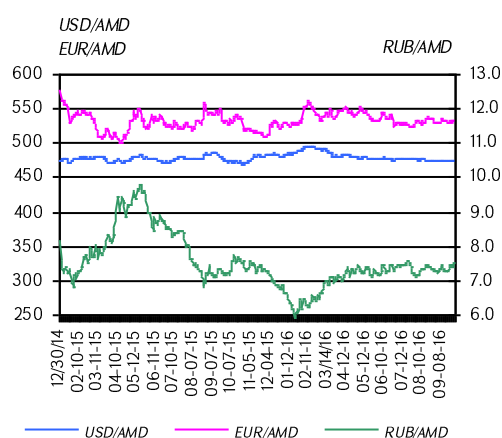
Compared to the same reference period last year, the real effective exchange rate has reported 1.86% of depreciation.

Growth y/y, (%)	QIII 2014	QIV	QI 2015	QII	QIII	QIV	QI 2016	QII	QIII
Real effective exchange rate (+ means appreciation)	3.1	9.2	11.7	6.7	5.8	2.2	-0.1	1.02	-1.86
Average inflation in Armenia	1.0	3.2	5.2	5.1	4.4	1	-1.2	-1.6	-2.2
AMD/USD average nominal exchange rate (+ means appreciation)	0.0	-5.7	-13.9	-13.4	-14.8	-10.1	-2.3	-0.5	0.8
Average weighted inflation in trade partner countries	4.6	5.1	6.7	7.9	7.5	6.9	5.1	3.1	3.2
Trade partners' average weighted nominal exchange rate (+ means appreciation versus dollar)	-7.0	-18.5	-32.1	-27.2	-29.4	-20.7	-9.1	-6.5	-2.1

Real exchange rate appreciation = Inflation in Armenia + Nominal exchange rate appreciation – Trade partners' average weighted inflation – Trade partners' average nominal weighted exchange rate appreciation.

Box 3

Armenian dram's exchange rate versus US dollar, Euro and Russian ruble over a one-year period



Foreign exchange market

As of end of the third quarter of 2016 the average USD/AMD was 474.46, appreciated by 0.47 relative to the end of the previous quarter.

The aggregate volume of U.S. dollar/Armenian dram transactions in the third quarter of 2016 amounted to USD 2.35 billion, decreasing by 21.14% (AMD 2.98 billion) against the same reference period last year.

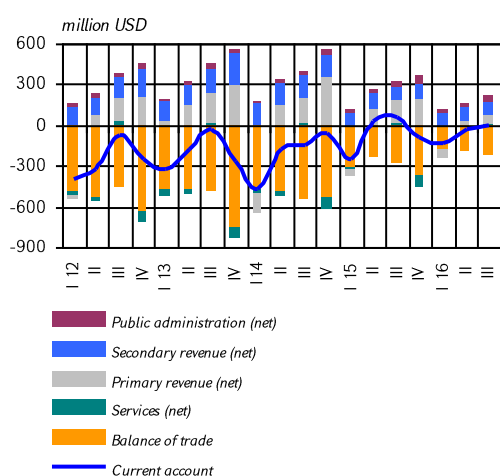
The aggregate volume of Euro/Armenian dram transactions carried out during the third quarter reached EUR 262.65 million, which is a 5.01% decrease against EUR 276.74 million reported in the third quarter of 2015.

The aggregate volume of Russian ruble/Armenian dram transactions in the third quarter of 2016 totaled RUB 21.38 billion, which represents a 25.69% (RUB 17.01 billion) increment compared to the relevant figure recorded in the third quarter of 2015.

²³ The third quarter 2016 indicator of the real exchange rate is the CBA estimate.

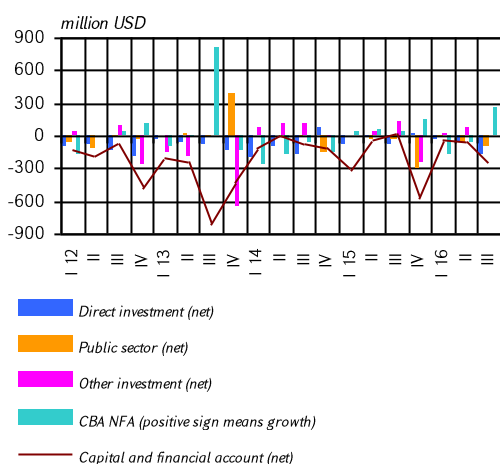
3.4. Balance of payments²⁴

In the third quarter of 2016 the current account run with a small deficit



In the third quarter of 2016 net borrowing grew considerably

(+ net lending, - net borrowing)



In the third quarter of 2016 the deficit of trade balance tended to narrow further in the light of somehow recovering Armenia's external demand and continued growth of productivity in the tradable sector of the domestic economy.

Thus, a 19.3% y/y increase in the dollar value of export²⁵ in the third quarter of 2016 was mainly due to the grown export of item "Precious and semiprecious stones, metals and articles thereof"²⁶. Consumer goods and intermediate consumption goods also contributed positively to the export growth.

Trends of recovering imports of consumer and investment goods persisted in the third quarter of 2016 amid gradually improving domestic demand. Import of raw materials had a negative contribution to imports, so the third quarter posted 4.8% y/y increase in the dollar value of imports.

In the third quarter of 2016 the deficit of trade balance²⁷ shrank by USD 47.4 million to USD 228.0 million as a result of outgrown export. The net inflow of remittances persisted almost at the same level reported for the third quarter of 2015, driven by the gradual recovery of the Russian economy and because the impact of the ruble exchange rate depreciation phased out. The increased negative balance on investment income of the current account contributed to the worsening of the current account deficit relative to the third quarter last year. As a result of the aforementioned developments, the current account posted a small negative balance of USD 5.0 million in the third quarter of 2016 compared to the USD 51.6 million surplus in the third quarter last year. In January-September, the current account deficit-to-GDP ratio has improved by 0.2 pp.

The growth of foreign direct investment almost doubled in the third quarter of 2016 against the third quarter of the previous year was remarkable. Its net inflow amounted to USD 157.7 million, of which nearly half is investment into the Vorotan hydropower project. The net inflow of loans in the public sector was also higher compared to the third quarter last year, amounting to USD 97.1 million. Net foreign assets of the private sector decreased slightly.

The developments with the balance of payment drove the CBA net foreign assets to increase by around USD 255.0 million. An increase in foreign currency correspondent accounts of commercial banks with the CBA secured the bulk of such NFA growth. In the third quarter the CBA acted as a net buyer of foreign currency.

²⁴ The third quarter 2016 balance of payments will be published at the end of December 2016, according to the timetable. The third quarter 2016 indicators are the CBA's forecasts and estimates.

²⁵ The export and import indicators are represented on a balance-of-payments basis, i.e. by credit and debit, respectively.

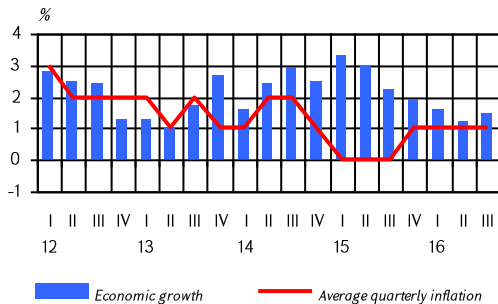
²⁶ A new sub-item "Other product of precious metals and metals" has been added to the export since December 2015.

²⁷ The deficit of trade balance was calculated on a balance-of-payments basis, where export is credit, import debit.

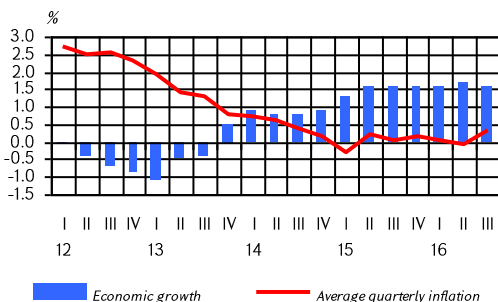
3.5. External environment

The main trade partner countries to Armenia saw their economic activity improving in the third quarter of 2016, with faster growth rates reported in the USA and Russia.

In the third quarter of 2016 economic growth in the USA accelerated



In the third quarter of 2016 inflation in the Eurozone speeded up



The main trade partner countries to Armenia saw their economic activity improving in the third quarter of 2016, with faster growth rates reported in the USA and Russia.

According to preliminary estimates of the Bureau of Economic Analysis of the U.S. Department of Commerce, the annualized economic growth in the **United States** in the third quarter of 2016 was 2.9% q/q compared to the previous quarter's 1.4% growth, and the economic growth amounted to 1.5% y/y against the previous quarter's 1.2% growth. The economic growth somehow accelerated on the back of some recoveries in external demand and investment. The third quarter's inflation rate averaged 1.1% compared to the relevant indicator of 0.8% reported in the previous quarter, yet it remains below its long-term target due to lower prices of import goods and oil products. In such circumstances, in the third quarter the US Federal Reserve System kept the policy rates in the range of 0.25-0.5%.

According to preliminary estimates provided by the Eurostat, economic growth in the **Eurozone** in the third quarter of 2016 was 1.6% (1.7% y/y in the previous quarter). The strengthening of domestic demand and some growth in exports were the main contribution to the economic growth. However, the inflation rate was still far below its target – in the third quarter it amounted to 0.3% against 0.1% of deflation recorded in the second quarter, which still carries the influence of low oil prices. In the third quarter too, the European Central Bank kept the policy rates at the level of 0.0% for refinancing rate and -0.4% for deposit facility rate. At the same time, the ECB continued its asset purchases program at the amount of EUR 80 billion a month.

In the currency market in the third quarter of 2016, the euro depreciated against the U.S. dollar by 1.2% q/q (with y/y appreciation of 0.4%); the average exchange rate reached 1.12 dollars for one euro.

According to the preliminary estimates of State Statistics Service of **Russian Federation**, economic decline in the third quarter of 2016 decelerated to 0.4% from the previous quarter's decline of 0.6%. With international oil prices posting some rise, the Russian ruble appreciated during the third quarter by 2.6% q/q but it remains depreciated, 2.4%, relative to the same reference period last year. In the third quarter the inflation slowed down to 6.7% from the previous quarter's relevant figure of 7.1% mostly because of a persisting weak demand and, consequently, fallen prices of non-food products and services. Under such circumstances as well as taking into account reducing inflation expectations, the Bank of Russia cut the policy rates by 0.5 pp to 10.0% in the third quarter.

In the third quarter of 2016 the **price of Brent crude oil** at Intercontinental Exchange remained almost unchanged against the previous quarter, averaging USD 45.8 a barrel (with 8.2% y/y decrease). The oil prices behaved this way primarily owing to supply

factors and because the OPEC reached an agreement to reduce oil production within its member states.

In the third quarter of 2016 the **price of copper** at the London Metal Exchange grew a negligible 0.9% against the previous quarter (with 9.2% price decrease y/y), which was mostly driven by somehow recovered demand in China.

The export price of **hard red wheat** followed a downward path during the third quarter too, owing to persisting huge worldwide output and sizable inventories. This quarter, the wheat price fell by 19.5% against the previous quarter (with 28.1% decrease y/y) to USD 3.5 a bushel on average.

In the third quarter of 2016 the price index of **unprocessed sugar** at the New York Board-Intercontinental Exchange rose again, reflecting contracted amount of harvest in Brazil and Thailand, main producer and exporter countries. As a result, price growth of sugar amounted to 20.5% q/q and 77.7% y/y.

In the third quarter of 2016 the price of **rice** at the Chicago Board of Trade kept on growing on the back of persistently low production volumes; the price rose by 3.9% to USD 18.9 per U.S. hundredweight (45.4 kg), with the y/y growth reaching 11.6%.

Summary: inflationary trends observable in the world's commodity and food product markets in the third quarter of 2016 were mostly in line with the previous program's forecasts, although food markets saw higher-than-expected price growth.

4. CONCLUSION

The **global economy** remained on a slow-growth track in the third quarter of 2016, too. Main trade partners to Armenia saw their economic activity further accelerating during the quarter, while minor inflationary developments were observable in world commodity markets. In the rest part of the forecast horizon, prices of goods in foreign markets will increase gradually owing to supply factors and somewhat recovering global demand. Therefore, in the **forecast horizon, considerable inflationary pressures** from the external environment **are not likely**.

The economic growth was considerably lower than expected in the third quarter. The economic activity indicator in the past nine months of 2016 was **1.6%**, due mainly to slower growth in agriculture and industry sectors. Under this circumstance, **economic growth** is estimated in the range of **1.3-1.8** at the end of 2016 and **2.8-4.3%** at the end of the forecast horizon.

In the forecast horizon, the impact of domestic aggregate demand on domestic prices will be deflationary up until the second quarter of 2018; then it will grow into inflationary by the end of the horizon.

At the end of September of 2016 the **12-month inflation rate was -1.9%**. **At the end of the forecast horizon** the 12-month inflation rate will stabilize around the 4% target. At the closing of 2016, the deflationary environment will mitigate considerably and is estimated to persist over the first quarter of 2017 due to reduced gas tariff. After, it will phase out in general and the 12-month inflation rate will gradually return to the target in the forecast horizon.

Medium-term deflation risks largely persist, with the 2017 fiscal policy factor now added to them. So, **further easing of monetary conditions to some extent by the CBA in the fourth quarter of 2016 is relevant**.

Risks that inflation will deviate from the projected value are estimated to follow a downward path in both short and medium-term perspectives. Risks deriving from external sector are somewhat inflationary and pertinent to capital outflows from developing countries and, consequently, volatilities in financial markets, the processes in the European Union, a likely slowdown of global economic growth resulting from structural reformation of the Chinese economy as well as risks related to developments in international prices of raw materials and food products. **Risks deriving from the domestic sector are estimated to be deflationary**, with the 2017 fiscal policy factor and possible reduction of electricity tariff in the first quarter the same year now added to the existing ones. Risks outlined in the previous forecast carry on and are associated with the extent to which external environment's deflationary impact will spill over to the

domestic prices, developments in agriculture, a sector greatly depending on weather conditions, the pace at which domestic demand and private investments will recover, as well as the Government-led structural reforms.

If the aforementioned risks materialize, the CBA will react accordingly by maintaining the inflation target in the medium run.