

THE CENTRAL BANK
OF THE REPUBLIC OF ARMENIA

*Approved under the Central Bank Board
Resolution No. 19A, dated February 23, 2018*

Inflation Report

Monetary Policy Program, Q1, 2018



*Status Report on Implementation of the Monetary
Policy Program, Q4, 2017*

The inflation targeting strategy of the Central Bank of Armenia highlights the importance of communicating of the Bank to the general public by publishing, inter alia, quarterly inflation reports.

The first section of the inflation report includes the Monetary Policy Program that provides main directions of the monetary policy in the forecast horizon as well as forecasts of inflation and other macroeconomic indicators. These forecasts are based on the Bank's assessment of the current situation and future assumptions by the Bank, which also include the impact of the Bank operations.

The second section includes status report on implementation of the monetary policy program of the previous quarter, which presents the results of monetary policy implementation and covers the actual developments in the domestic economy.

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.

According to the rule of monetary policy, the policy is aimed at minimizing the deviations between the 4% target and the inflation forecasts. The path to inflation rate shaped as a result of projected policy directions is published as a forecast probability distribution chart for the 12-quarter time horizon.

Projections in this report are based on the actual information available by February 13, 2018, i.e. the day on which the refinancing rate was set, the results of a survey conducted by the Bank 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 all press-releases and other monetary policy-related publications.

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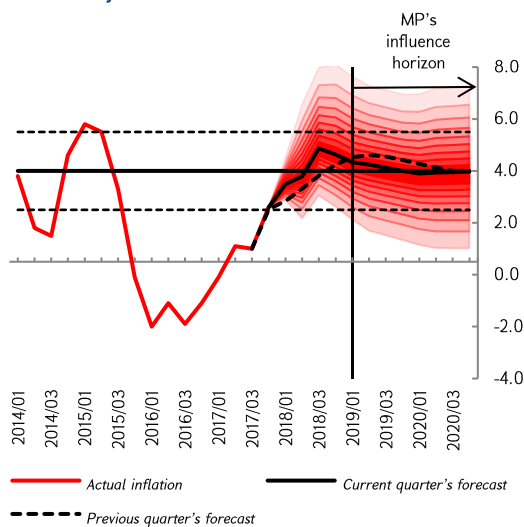
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1. EXECUTIVE SUMMARY

According to the Q1, 2018 Monetary Policy Program of the Central Bank, inflation will somehow expand in the upcoming months, fluctuating within the confidence band; in the medium-term perspective it will stabilize around the 4% target.

Chart 1

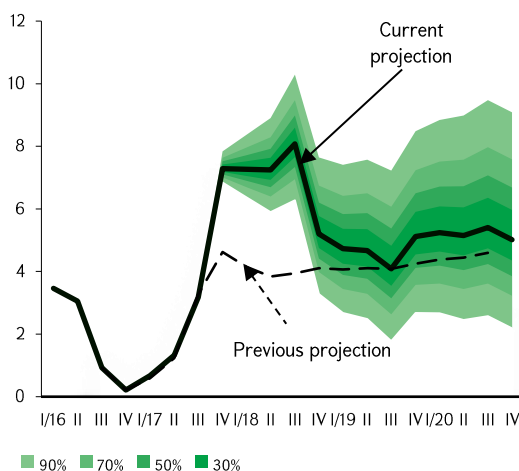
Inflation (12-month) Forecast Probability Distribution Chart for 3-year horizon



In view of high economic activity that also persisted in the fourth quarter of 2017, the Central Bank estimates a higher rate of economic growth for 2017 against the previous forecast.

Chart 2

Real GDP (cumulative)¹ projection probability distribution chart for 3-year horizon



According to the Q1, 2018 Monetary Policy Program of the Central Bank of Armenia (“the Central Bank”), inflation will somehow expand in the upcoming months, fluctuating within the confidence band; in the medium-term perspective it will stabilize around the 4% target.

Positive developments in the macroeconomic environment expected in the short run will largely facilitate the fulfilment of the 12-month inflation target, owing to still visible influence of expansionary monetary policy implemented by the Central Bank and relatively robust demand recovery expected both in the external and domestic economic environment. The Central Bank’s expansionary monetary policy conducted in 2017, aimed at facilitating the recovery of domestic demand and inflation, will be also persisting over the first quarter of 2018 to enhance sustained recovery of domestic demand. That is, in the last quarter of 2017 the Central Bank estimated that short-term inflation expectations of the public would somewhat soften at the start of 2018 as they are mainly conditioned by supply factors. In the first quarter of 2018, as was expected, additional inflation expectations mitigated, so there is no need for a faster policy response. However, in the light of predicted macroeconomic developments **expansionary monetary conditions to phase out gradually will be needed** in the medium run in fulfillment of the inflation target.

High economic activity persisted over the fourth quarter of 2017 too, and the Central Bank estimates a higher rate of economic growth for 2017 against the previous forecast. Compared to the previous forecast, a higher level of aggregate demand is also expected, explained by both increased core inflation and high import growth. The expectation is that temporary factors that determine acceleration of economic growth in the forecast horizon will gradually eliminate, and it will hover around its long-term equilibrium.

In the short run, risks to inflation and economic growth are mainly dual-sided, and are determined by possible developments in the agricultural sector. **In the medium run**, risks to inflation and economic growth are mostly upside – they will be attributable to quicker recovery of external demand, faster rising prices in international commodity and food product markets against previous forecasts, and a longer-term nature of domestic demand, consumption growth in particular.

¹ The growth rate of each quarter is calculated as the cumulative growth rate for the last four quarters.

2. FORECAST, FORECAST CHANGES AND RISKS

2.1. External environment

The 2017 trend of rapid global economic growth will continue in 2018. Strong growth rates are expected to persist in economies of principal trade partners to Armenia – the USA and Eurozone in particular.

In 2018, as the global demand recovers, mainly inflationary patterns will be observable in commodity markets, while significant inflation developments in food products markets are not anticipated.

Economic developments in the external sector: According to preliminary estimates of the Bureau of Economic Analysis of the U.S. Department of Commerce, economic growth in the **United States** in the fourth quarter of 2017 was 2.5% y/y, with average economic growth projected at 2.25% for 2017; it is predicted to reach 2.4% for 2018 owing to the increase in the volume of investments anticipated in the short-term perspective as part of implementation of the US President's tax reduction program. The main factor contributing to the economic growth in the fourth quarter of 2017 included increased private consumption and more public expenditures spending for reconstruction efforts in the aftermath of storms in previous quarters. In the fourth quarter of 2017 the unemployment rate slightly decreased to 4.1%.

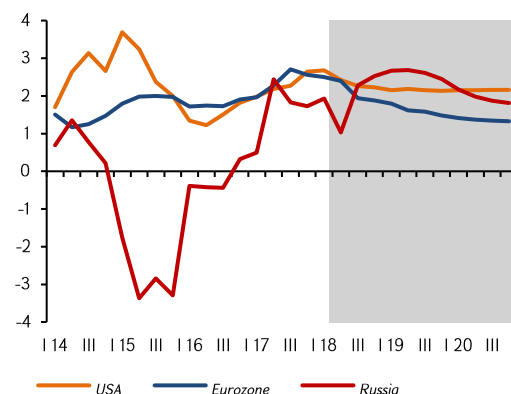
According to preliminary estimates provided by the Eurostat, economic growth in the **Eurozone** in the fourth quarter of 2017 amounted to 2.7% y/y and 2.5% for the year's growth, owing to improved growth recorded in major member states. Note that average economic growth in the Eurozone in 2018 is projected 2.4%, which will continue to be driven by expansionary monetary policy, recovering global economy, as well as favorable conditions in the labor market where the unemployment rate has dropped; in December of 2017 it amounted to 8.7%.

According to preliminary estimates provided by State Statistics Service of the **Russian Federation**, economic growth in the fourth quarter was 1.5% y/y; it somewhat decelerated from the previous quarter's respective indicator of 1.8% and averaged 1.5% for 2017. The 2018 economic growth is forecast to reach 1.9%, which will further be driven by recovering domestic demand as a result of monetary policy which remains moderately tight². Under such conditions of economic activity, the unemployment rate remained not very high in the fourth quarter of 2017.

The 2017 trend of rapid global economic growth will continue over 2018, too. In 2018, as the global demand recovers, mainly inflationary patterns will be observable in commodity markets, while significant inflation developments in food products markets are not likely.

Chart 3

Economic growth in trade partner countries (%)

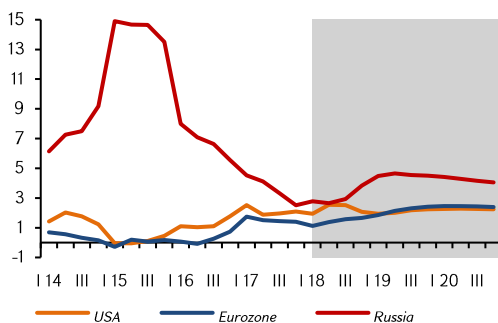


² http://cbr.ru/press/PR/?file=09022018_133031_keyrate_2018-02-09T13_29_29.htm.

Price and financial developments in the external sector: In the fourth quarter of 2017 external factors unfolded mostly in line with the previous forecast, with the only exception of prices of commodities, as their current and projected levels have increased.

In the United States in the fourth quarter of 2017, compared to the previous quarter, the average quarterly inflation has accelerated to 2.1%, and it ran slightly above its long-term target. In view of such economic and price developments, the US Federal Reserve System rose the policy rate by 0.25 pp in the fourth quarter, as was expected, in the range of 1.25 to 1.5%. The US inflation, predictions suggest, will be around its target over 2018, in which case, taking into account the economic developments described above, the FRS will further pursue a gradually tightening monetary policy. The latter has already affected long-term interest rates of US Treasury bonds, which constitutes the risk to capital outflows from emerging economies and subsequent volatilities in the financial markets.

Chart 4
Inflation in trade partner countries (%)



The average quarterly inflation in the Eurozone in the fourth quarter of 2017 was 1.4%, still running below its target. It is expected to reach its target only in the medium run. In the short-term perspective, appreciated exchange rate as well as reduced inflationary expectations will keep inflation low. Under these conditions, the European Central Bank will further conduct a low interest rate policy, while the asset purchases program will continue up until the end of 2018, with EUR 30 billion a month instead of EUR 60 billion previously.

The average quarterly inflation in the **Russian Federation** continued a declining path: in the fourth quarter of 2017 it was 2.5%, still below its target of 4%. The decline in seasonal prices of agricultural goods has been the main contribution to the decrease in inflation. In the fourth quarter of 2017, therefore, the Central Bank of Russia lowered the policy rate by 0.75 pp to 7.75%. Although inflation is below the target, it is expected that the CBR will nevertheless pursue a moderately tight policy aimed at reducing inflation expectations and anchoring the inflation around the target.

Depreciation of the US dollar continued in the fourth quarter of 2017. Specifically, in the fourth quarter, the euro exchange rate versus the US dollar appreciated by 9% y/y to 1.18 dollars per euro. Such tendency of the exchange rate reflects economic growth developments in the Eurozone, as well as expectations about the future monetary policy in both the USA and Eurozone. In the fourth quarter of 2017 the Russian ruble appreciated by 7.8% y/y to an average RUB 58.4 per dollar. The ruble's appreciation was mainly determined by the rise in international oil prices. As the dollar depreciation accelerated in the first quarter of 2018, the euro and ruble are predicted to remain appreciated against the dollar in the short run.

The rise in prices in commodity markets, a trend observable since the third quarter of 2017, continued during the fourth quarter. The expectation for the forecast horizon is that both oil and copper prices will remain elevated. Specifically, the rise in international oil prices occurred in the third and fourth quarters of 2017 will, according to forecasts, will continue in the short run as well, explained by the prolongation of the OPEC+ deal on the reduction of oil production and in expectation of supply reduction on the back of political situation in Iran. The rise in international copper prices in the fourth quarter of 2018 was driven by an increase in China's demand for copper, as well as by suspension of major copper mining operations in China for environmental considerations. In the medium-term, a slight decline in prices from current high levels is expected.

In the world food product markets in the fourth quarter of 2017, the price growth rates decelerated. In particular, the decrease in prices for sugar, vegetable oil and dairy products has resulted in slower growing food prices. In the first half of 2018 however, international prices are expected to stabilize at current levels.

2.2. Forecasts

2.2.1. Inflation and monetary policy

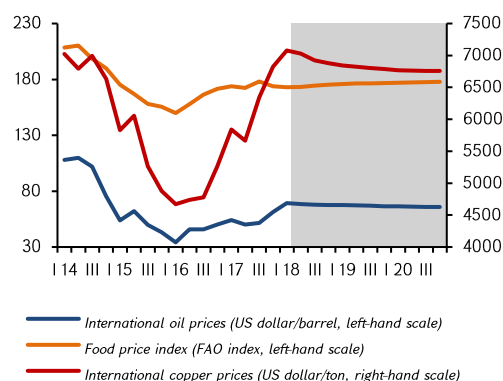
Given the current monetary policy conditions, inflation will continue expanding in 2018, staying within the confidence band and stabilizing around the target afterwards.

In the fourth quarter of 2017, core inflation rate increased notably as demand accelerated and inflation spilled over from international commodity markets. However, with still low prices for seasonal agricultural products and regulated services, headline inflation remains lower. Based on the January 2018 data, the impact of the change, whether directly or indirectly, in the customs duty and excise tax rates on certain goods has been in line with the forecast³. On the other hand, the deflationary effect resulted from reduced tariffs for regulated services, particularly electricity and gas, in early 2017 will eliminate over the first quarter of 2018, which will positively influence the 12-month inflation rate.

On the back of expansionary monetary environment, robust lending to the economy and growing private remittances from abroad, steadily recovering domestic demand, so observable since the beginning of the year, reported sharp growth rates at the end of the year. As a result, the GDP gap is estimated to be considerably positive in the fourth

Chart 5

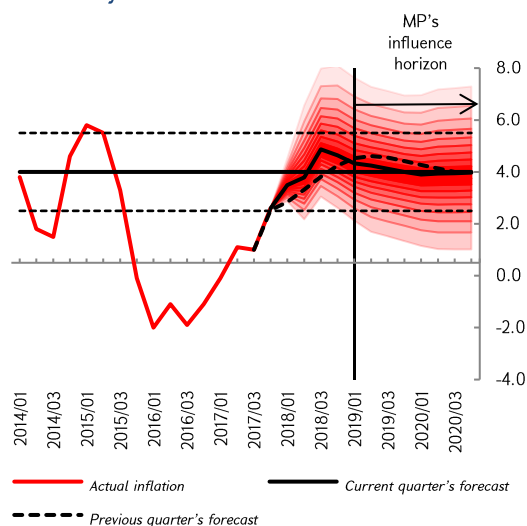
International prices for raw materials and food products



Given the current monetary policy conditions, inflation will continue expanding in 2018, staying within the confidence band and stabilizing around the target afterwards.

Chart 6

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



³ January saw a 0.4 pp contribution, mainly owing to the direct impact of the excise tax.

quarter of 2017, which will somewhat shrink over the first half of 2018 however. With a positive GDP gap, an expected aggregate demand growth and expansionary fiscal policy in 2018, reducing the extent of expansionary monetary policy gradually will be needed, under which the GDP gap will eliminate in the mid-term, stabilizing inflation around the target. In the fourth quarter of 2017 the Central Bank considered that short-term inflation expectations of the households would somewhat soften in early 2018 as these were mainly conditioned by supply factors. As expected, additional inflation expectations mitigated in the first quarter of 2018, so a faster policy response is still unnecessary.

Nevertheless, demand- and inflation-related risks are projected upside, and if such risks materialize, the Central Bank will react by adjusting the monetary conditions accordingly.

Table 1

Period	Inflation interval forecast probability distribution				
	<1.0%	1.0-2.5%	2.5-5.5%	5.5-7.0%	>7.0%
Q1, 2018	0.0%	0.3%	99.6%	0.1%	0.0%
Q2	0.2%	6.8%	73.5%	16.0%	3.6%
Q3	0.0%	1.2%	52.1%	30.2%	16.5%
Q4	0.1%	2.9%	54.0%	26.5%	16.5%
Q1, 2019	0.5%	6.2%	59.9%	22.7%	10.8%
Q2	1.5%	10.0%	61.6%	19.6%	7.2%
Q3	2.2%	11.9%	62.0%	17.9%	6.0%
Q4	3.1%	13.8%	62.0%	16.2%	4.9%
Q1, 2020	4.0%	15.2%	60.4%	15.5%	5.0%
Q2	4.6%	15.1%	57.8%	16.2%	6.3%
Q3	4.6%	15.0%	57.3%	16.4%	6.6%
Q4	4.7%	14.9%	56.8%	16.7%	7.0%

2.2.2. Economic activity⁴

Aggregate demand: Continued expansionary monetary policy implementation by the Central Bank and growth of lending to the economy as well as recovering external demand and private remittances from Russia are the main factors that determined the strong growth of domestic demand in 2017, in which case high economic growth is estimated for 2017.

In light of the aforementioned developments, economic growth in 2017 is expected in the range of **7.2-7.4%** which will be driven mainly by 10.2% growth in private consumption and 13.4% growth in investment. Nonetheless, net exports will have a negative impact on economic growth. Public spending will have a 0.7 pp positive impact on economic growth.

Continued expansionary monetary policy implementation by the Central Bank and growth of lending to the economy as well as recovering external demand and private remittances from Russia are the main factors that determined the strong growth of domestic demand in 2017, in which case high economic growth is estimated for 2017.

⁴ For a detailed account of economic growth forecasts, see the GDP projection probability distribution chart.

An expansionary fiscal policy expected in 2018, a lagged impact of expansionary monetary policy carried out in 2017, as well as favorable developments in external sector will continue to contribute positively to the aggregate demand, under which circumstance the economic growth is predicted in the range of **4.7-5.8%** in 2018. The economic growth will largely depend on robust private spending and export growth.

In the medium run, economic growth developments are largely determined by the potential of the economy. The economic growth is estimated in the range of **4.5-5.9%** in 2019, and **4.4-6.0%** in 2020. Such medium-term economic growth will depend not only on the implementation of investment projects, but also on the pace of structural reforms by the Government as well as expected potential economic growth in trade partner countries to Armenia.

External demand: Increased income in partner countries, the growth in tourism, as well as the Government-led export promotion policy all contributed to the economic growth in 2017. However, contribution of net export to economic growth is estimated negative since the growth in consumption and investment in the domestic economy has been concurrent with a significant increase in import volumes.

The previous year's negative contribution of net export to real GDP will phase out to some extent during 2018, as was estimated in the previous quarter. The real growth of import of goods and services is forecast in the range of 6.0-8.0%. The real growth of export of goods and services has been revised upside thanks to positive developments in global economic growth, in which case the real growth of export of goods and services in 2018 will be in the range of 9.0-11.0%. Growth of money transfers has also been revised upside to be commensurate with the scenario of the ruble appreciation and estimated economic growth in Russia; in this case, net growth will be anticipated between 7.0-9.0%. As a result, the current account will remain at the medium-term equilibrium of 3%.

Fiscal policy: Actual developments in the fiscal sector in 2017 are in line with the Central Bank forecasts outlined in the Monetary Policy Program for the fourth quarter. By the annual results, the fiscal policy's impact was 3.0 pp⁵ contractionary, as projected, determined by a contractionary impact of expenditures.

Based on the Republic of Armenia State Budget 2018 indicators and the Central Bank forecasts of the GDP, in 2018, relative to 2017⁶, the Revenue-to-GDP ratio is expected to increase by 0.1 pp and the Expenditures-to-GDP ratio to decrease by 2.1 pp. It should be noted that the reduction of the shadow economy and tax reforms in 2018 will

Chart 7

Demand components contributing to the growth (percentage point)

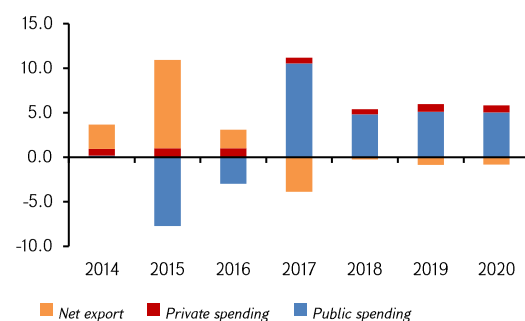
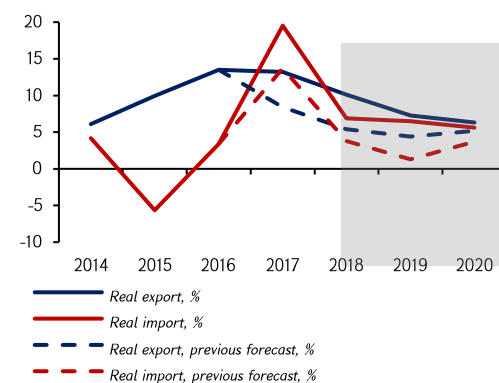


Chart 8

Changes in real export and import of goods and services in the medium term (%)



⁵ In the fiscal sector's impact assessment, the fourth quarter 2017 figures, hence annual indicators, do not include AMD 82.2 billion-worth Russian Commodity Loan received at the end of the year, since it is not an actual flow.

⁶ The amount of Commodity Loan entered in late 2017 has been included in state budget expenditures and, consequently, the deficit, to ensure comparability.

Chart 9

Nominal wage growth in private sector, y/y (%)

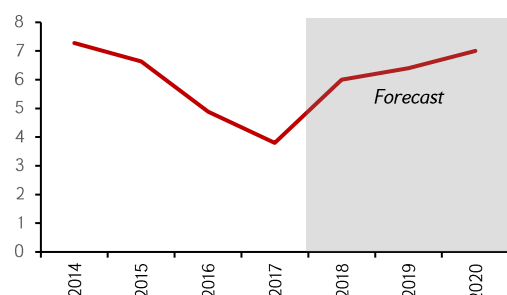


Chart 10

Unemployment rate (%)

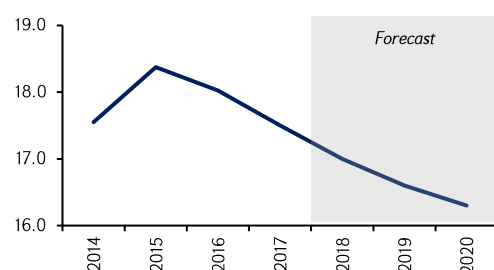


Chart 11

Unit labor costs growth, y/y (%)

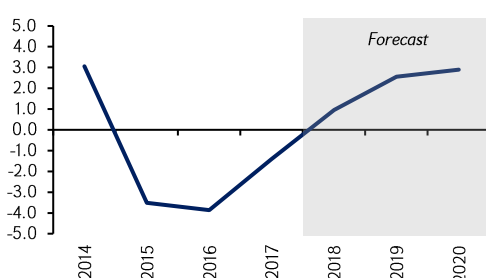
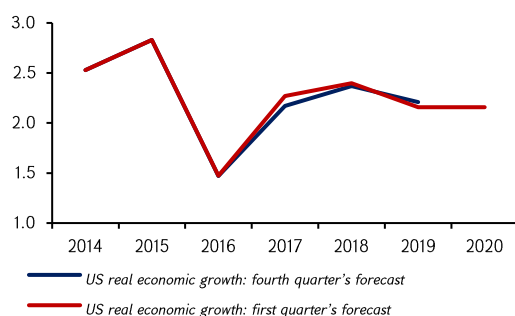


Chart 12

The US economic growth forecasts (%)



neutralize each other by maintaining the same level of taxes-to GDP ratio in 2017.

There is expectation that in 2018⁷, relative to 2017, the deficit-to-GDP ratio will drop by 2.2 pp to 2.6%. The deficit reduction notwithstanding, the 2018 fiscal policy's impact on aggregate demand will amount to 0.9 pp expansionary, in comparison with 2017, which is totally due to an expansionary impact of expenditures and of net lending⁸. The expansionary effects will be observable in the first three quarters of the year.

The 2019-2020 fiscal policy impact has not been considered in the Central Bank forecasts.

Labor market: In 2018 the private sector's nominal wage⁹ growth rate will accelerate to about 6.0%. In the medium term, the growth of nominal wage in the private sector will be consistent with fundamental economic growth and inflation developments. The wage growth is forecast to reach 6.4% 2019 and nearly 7.0% in 2020.

In the event of such economic growth developments and Government-led investment promotion policy and structural reforms, the rate of unemployment is expected to amount to 17.0% in 2018, which will gradually decline by 0.3-0.5% annually to reach its mid-term equilibrium at the end of the forecast horizon.

In the medium run, companies' unit labor costs will grow faster to reach 3% y/y at the end of the forecast horizon.

2.2.3. Comparison with the previous forecast

Trade partners' medium-term economic growth indicators have been adjusted upward against the previous forecast.

A slightly upward adjustment in the US economic growth forecasts has been made in anticipation of increased investment in the short run. The 2018 upward revision of economic growth forecasts in Eurozone has been driven by continued consumption growth. The 2018 economic growth forecasts for Russia have been revised slightly downside compared to the previous forecasts, largely due to the slowdown in industry growth in the short run. In the medium-term perspective, however, because of higher oil price forecasts, economic growth will be higher in comparison with the previous one.

⁷ Based on the draft law on the Republic of Armenia State Budget 2018 indicators.

⁸ Net lending is considered expansionary when provided and contractionary when recovered. Provision of net lending is anticipated in 2018-2019 and recovery of funds in 2019.

⁹ The labor market data for 2017-2020 are the Central Bank projections which are based on the third quarter of 2017 data and actual January-November 2017 figures. The growth indicators presented in this sub-section are relative to the same reference period last year, unless otherwise specified.

In the world's commodity markets, inflationary patterns are most likely, as compared to previous forecasts; in food product markets in the forecast horizon, prices will shape at lower levels than forecasted previously.

Particularly, in the world's food product markets, prices are expected to shape at lower levels in comparison with the previous program as the 2017 actual indicator was lower-than-predicted. Nevertheless, the price growth rate will accelerate in the forecast horizon, yet their overall level will be below the previous forecast.

Relative to previous forecasts, oil prices will rest on somewhat a higher level because of an extended OPEC+ deal on the reduction of oil production, expected reduction in supply volumes by Iran and a recovering global demand for oil.

Compared to the previous forecast, international copper prices will shape higher levels, determined by the actual high indicator reported in the fourth quarter, which was attributable to somewhat limited supply volumes by China.

Armenia's economic growth rate has been revised upside against previous forecasts, both in 2017 and along the forecast horizon.

Higher-than-expected economic activity in 2017 has prompted an upside revision of growth expectations for all sectors of the domestic economy. The 2017 economic growth, however, has been mostly due to industry and services sectors, with their growth indicators driven by more favorable developments in both domestic and external demand. Whereas agriculture and construction sectors had negative and some positive contributions, respectively.

Actual and expected higher growth rates in industry are determined by higher-than-expected growth rates in the economies of Armenia's trade partner countries, as well as high metals prices in international markets.

Both actual and projected higher growth rates in services sector are reflecting an upside revision of growth in private sector spending as well as more favorable developments in the tourism industry.

The anticipation is that high growths in industry and services will decrease to a certain extent in 2018 but will nevertheless persist at high levels in the forecast horizon. As a result, the economic growth of 2018-2020 will be higher compared to previous forecasts, and at the end of the forecast horizon it will be close to its potential.

Chart 13

The EU economic growth forecasts (%)

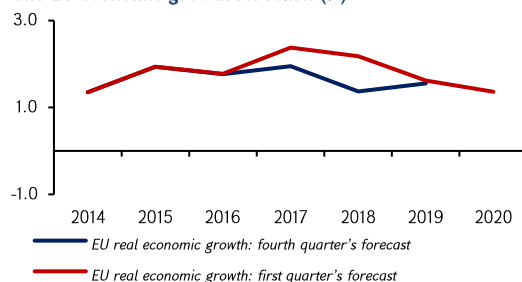


Chart 14

Russia economic growth forecasts, (%)

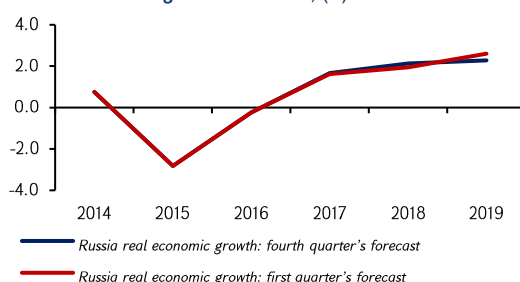


Chart 15

International food price forecasts

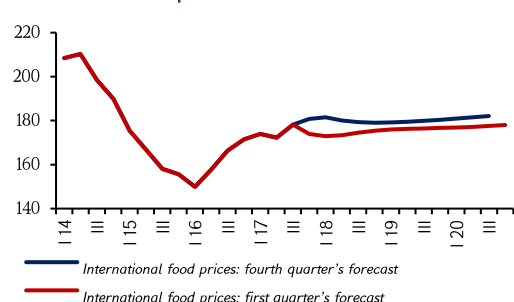


Chart 16

International oil price forecasts

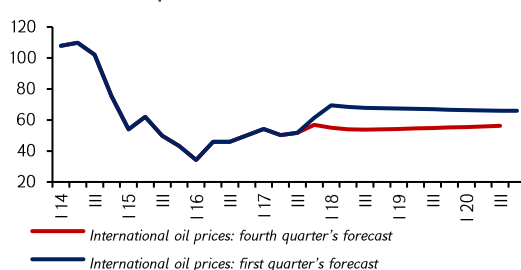


Chart 17

International copper price forecasts

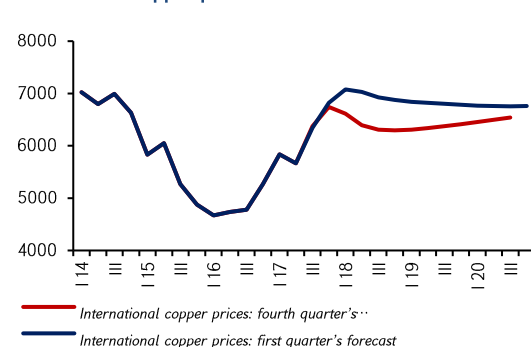


Table 2

Real GDP growth (cumulative) projection probability distribution		
Period	30% probability interval	90% probability interval
January-December 2017 / January-December 2016	7.20 - 7.40	6.80 - 7.80
January-December 2018 / January-December 2017	4.70 - 5.80	3.30 - 7.60
January-December 2019 / January-December 2018	4.50 - 5.90	2.70 - 8.50
January-December 2020 / January-December 2019	4.40 - 6.00	2.20 - 9.10

Chart 18

Real GDP (cumulative)¹⁰ projection probability distribution chart for 3-year horizon

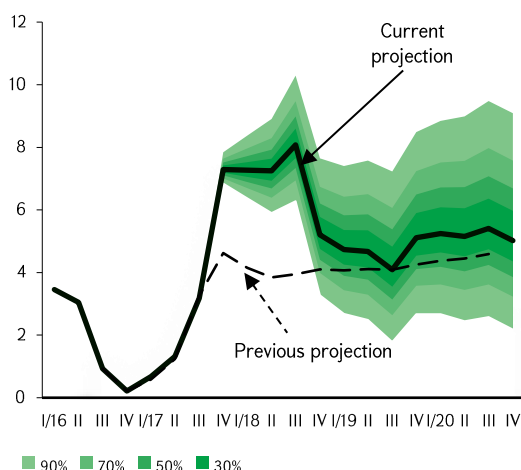
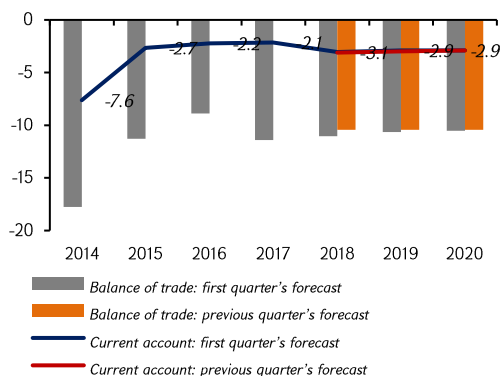


Chart 19

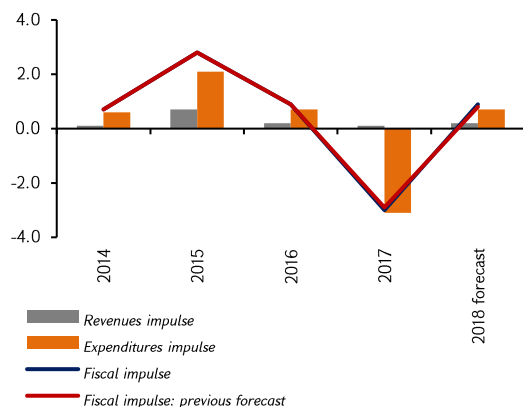
Mid-term current account / GDP forecasts (%)



Additional growth in inflation expectations on the back of speculations in the mass media about high inflation phased out in the first quarter of the year.

Chart 20

Fiscal impulse forecasts for 2018 (percentage point)



In 2018 the current account deficit-to-GDP ratio will be in line with previous forecasts. In the medium run too, the forecasts of this indicator will be commensurate with the previous program.

Compared to the previous forecast, the 2018 fiscal sector impact assessment did not change; it will be 0.9 pp expansionary against 2017.

According to the current forecast, although running higher in the short run compared to the previous forecast, the inflation will however decline in the future as very strong growth rates of demand are anticipated to slow down and expansionary monetary policy conditions gradually phase out in the medium-term perspective. As a result, in the medium run the inflation will be slightly lower from the previous forecast, stabilizing around the target.

In short-term, higher inflation was mainly driven by strong growth rates of demand and higher international prices for raw materials in the fourth quarter, while no substantial changes in seasonal commodity prices and administrative regulation tariffs were observable. In the first quarter of 2018, core inflation will also accelerate as a result of change in tax and customs legislation recently, the expected extent of which has been provided in the Inflation Report for the fourth quarter of 2017. It should be noted that, according to January data, there was contribution adequate to that estimation. The seasonal agricultural price inflation is lower than anticipated, despite a certain increase. The latter will somewhat increase over 2018 and in the medium run also in anticipation of gradual increase in export volumes. In any case, the developments in the agricultural sector remain overly volatile and uncertain. In the medium term perspective, the inflation will slow down compared to the previous forecast as aggregate demand declines and the expansionary monetary policy gradually relents to that of neutral (see the Inflation Forecasts Probability Distribution Chart).

On the back of speculations in the mass media about high inflation, additional growth in inflation expectations phased out in the first quarter but the growth of short-term inflation expectations will continue, gradually decreasing concomitant with developments in core inflation.

2.2.4. Main assumptions and risks

This section contains the main assumptions underlying the Monetary Policy Program for the first quarter of 2018 and the risks to implementation of the program, which derive from the external sector developments, the fiscal policy, basic trends and short-term forecasts.

¹⁰ The growth rate of each quarter is calculated as the cumulative growth rate of the last four quarters.

Demand growth rates slow down: There is expectation that growth rates of aggregate demand, which were strong in late 2017, will slow down over 2018. Reported strong growth of this indicator embraces the effect of reduced propensity to consume in the previous years and of a number of short-term factors. On the other hand, this is one of the important assumptions of the current program and is viewed as an upside risk to the inflation deviation and economic growth forecasts, as rapid recovery of demand in a sustainable and continuous way can also be likely. In case this risk materializes, the Central Bank will react accordingly, while ensuring price stability in the medium run.

Impact of change in tax and customs legislation on inflation: The assessment of the effects from a change in excise tax and customs duty on a bunch of commodities since 2018 remained unchanged this quarter too, and it is expected that the overall impact on inflation will be up to 1.0 pp.

Expectations: According to the Central Bank estimates, the household expectations in the fourth quarter of 2017 and the first quarter of 2018 kept on growing as risen prices for several goods in the external environment transmitted onto domestic prices and the year started with changes in tax and customs legislation. Taking into account all this, the Central Bank reckons that inflation expectations have grown by 2.9% over the quarter while existing additional inflation expectations have phased out on the whole¹¹. In the upcoming period, as expected, these will continue to grow, anchoring around the inflation target in the forecast horizon.

Chart 21

Short-term core inflation expectations estimated by Quarterly Projection Model (%)

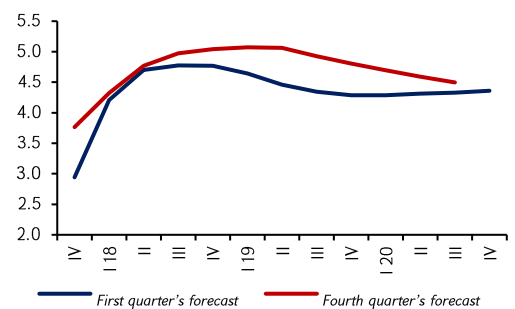
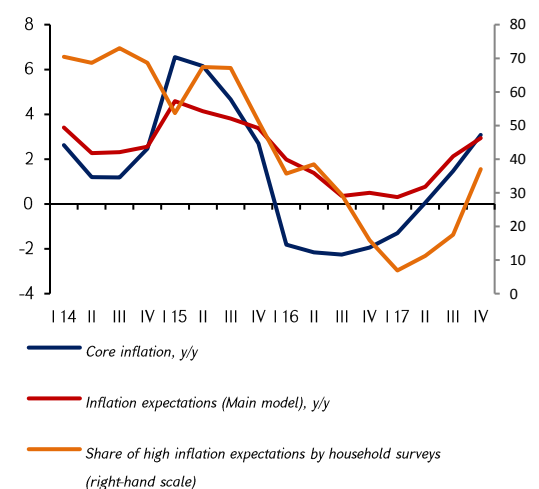


Chart 22

In the fourth quarter of 2017 inflation expectations grew to some extent



Box 1

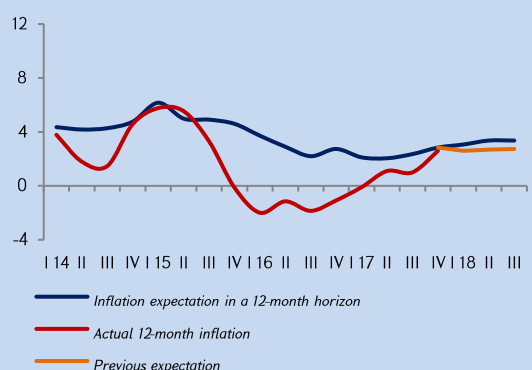
The results of survey on expectations by the households and the financial system

The inflation expectations have somewhat increased, according to the results of the Q4, 2017 survey on selected macroeconomic indicators, conducted by the Central Bank with households and organizations of the financial sector. Thus, 37.0% of the households surveyed believe that inflation will be high, will be very high in the coming year, or they find it difficult to respond, whereas only 18% of the households had such responses in the previous quarter. This is a significant increase over a quarter, in which circumstance even the 12-month inflation rate would stay within the confidence band.

The **average level of inflation expectations of the financial system** in the upcoming one-year horizon is **3.4%** against that of **2.8%**, as provided in the previous survey.

Chart 23

Average level of financial system's inflation expectations (%)



¹¹ The additional inflation expectations in this case refer to expectations that are not conditioned by actual and rational forecasts of inflation but rather other factors – political speculations, for example.

Table 3

Main judgments and assumptions	
Main judgments and assumptions	Possible developments in case this assumption proves to be correct
In the external sector economic activity keeps on recovering at steady rates	• Demand will keep on recovering and economy invigorating in trade partner countries. • With demand recovering, as well as in a limited supply, accelerated inflation on raw materials will continue. • As economy rebounds, gradual monetary tightening is anticipated in developed countries.
Change in tax and customs duty rates	• There will be direct and indirect effects on inflation, up to 1 pp, of which 0.4 pp falling upon the first quarter of 2018.
Inflation expectations grow	• Short-term inflation expectations will persist in line with current growth trends, as core inflation recovers; but additional inflation expectations have phased out, as the mass media actively invited a debate over inflation on selected goods/products.
Fiscal policy conditions	• The fiscal sector's impact on aggregate demand will be small, an estimated 0.9 pp expansionary, in 2018.
Action to tackle the growth of potential GDP ¹²	• The Armenia Government will further push ahead with structural reforms as a result of which investments in the private sector will gradually expand, providing up to 4.5-5% growth annually. • Increase in investment in private sector and the potential GDP growth will largely be reflected in the tradable sector of the economy, in terms of both export goods and services.

In the short run, the risks to inflation and economic growth forecasts are generally dual-sided, depending on the developments in the agricultural sector.

In the medium run, the risks to inflation are mostly upside (see the Inflation Forecasts Probability Distribution Chart). This is determined by a bunch of key factors and developments taking place in relevant sectors of the economy.

First group factors are pertinent to the acceleration of economic recovery in the external environment and its impact spillover to the Armenian economy. Specifically, the following key factors can be highlighted:

- Quicker recovery of external demand and inflationary risks resulting therefrom, including faster-than-expected rise in international prices in raw materials and food product markets.
- Risks to capital outflow from developing countries on the back of further tightened monetary policy conditions in developed countries.

If the aforementioned risks materialize, the inflation will incur an added impact of inflationary pressures from the external sector, in which case more tightening of monetary conditions would be needed.

¹² The results of the Amulsar mine investment program not considered due to the lack of information on the operations dates and extraction volumes.

Second group factors derive from the developments in the domestic economy:

- A lasting growth of demand and, particularly, consumption

According to the assumptions underlying the Central Bank forecasts, currently high indicators of rebounding consumption and demand partly owe to the offset for reduced consumption in recent years, so they will have a short-term nature. Nevertheless, there is likelihood that the current level of indicators reflects a steadier growth of demand, in which circumstance further inflationary pressures are possible.

In the forecast horizon, the risks to economic growth are dual-sided; upside risks prevail, however.

In addition to the above medium-term cyclical risks to inflation and economic growth, more mid-term risks associated with economic growth potential include:

- the extent and impact of the Government-led structural reforms and investment promotion policies,
- economic effect from the Amulsar mine operation,
- uncertainties over exploring new export markets and creating new products by businesses.

3. ACTUAL DEVELOPMENTS IN Q4, 2017

3.1. Inflation

3.1.1. Fulfilment of the inflation target

For the previous one-year horizon, which covers the entire year 2017, the inflation environment would continue to expand, in line with anticipated macroeconomic developments, but **the 12-month inflation rate** would still be running below the lower bound of the confidence band over the year, according to Monetary Policy Program for the first quarter of 2017. At the same time, in consideration of core inflation, revised downside in comparison with the previous forecast, expectation of lower prices for some non-food goods, as well as natural gas and electricity tariffs, lowered for the households since January and February of 2017, respectively, the Central Bank estimated that the path to fulfilling 12-month inflation target would take slightly longer than predicted previously. In this case, the deflationary environment was to gradually eliminate by the end of the year and inflation was to return to its target in the forecast horizon.

On the back of the aforementioned factors and the Government's contractionary fiscal policy, as opposed to the previous year, the Central Bank believed that easing of monetary conditions in the first quarter of 2017 was still reasonable and possible. Also, it was estimated that the monetary policy implemented previously had been stimulating enough to end the deflationary environment and facilitate the fulfilment of the target in the forecast horizon.

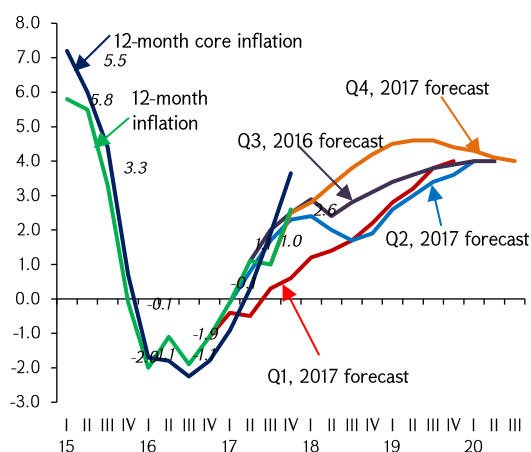
According to the actual first quarter 2017 results, the 12-month inflation rate has increased, as was expected, **amounting to -0.1% at the end of March**, influenced largely by the expansionary monetary policy implemented by the Central Bank. In view of a still sluggish domestic demand in that period, the deflationary effects from the external sector transmitted onto food products and, later on, non-food products, as well as the anticipated impact of the Government's contractionary fiscal policy in 2017, the Central Bank kept on mitigating the lending terms by reducing the refinancing rate by 0.25 pp in February to **6.0%** at the end of the month.

Taking into account registered high economic activity and moderate inflationary effects expected from world commodity markets, the Central Bank has, starting from the second quarter of 2017, revised the short-term inflation forecasts for faster recovery.

In the second quarter of 2017 inflation expanded considerably, largely due to high levels of prices for agricultural products, and **the 12-month inflation rate has entered a positive territory since April** as a result, fluctuating within **1.3%** on average during the quarter. In

Chart 24

According to the Central Bank forecasts, inflation will fluctuate within the confidence band in the forecast horizon, stabilizing around the 4% target since 2019



the meantime, the 12-month core inflation rate has also increased, to 0.3% from the previous quarter's indicator of -0.9% owing to an expansionary monetary policy. In the third quarter the 12-month growth rates in fruit and vegetable prices slowed down; this has halted the recovering of inflation which averaged 1.0%, while the 12-month core inflation rate continued growing rapidly, amounting to 1.9% by the end of the quarter. Nonetheless, the Central Bank saw the slowing of growth rates in seasonal prices of agricultural products a temporary phenomenon, anticipating that such growth rates would accelerate and certain inflation risks accumulate up until the end of the year. The anticipation materialized in the fourth quarter when both headline and core inflation rates increased notably to 2.6% and 3.7%, respectively. At the same time, relatively high inflation observed during the quarter was largely attributable to inflation expectations that were growing even faster with the population due to increased prices for some products in food markets in the world.

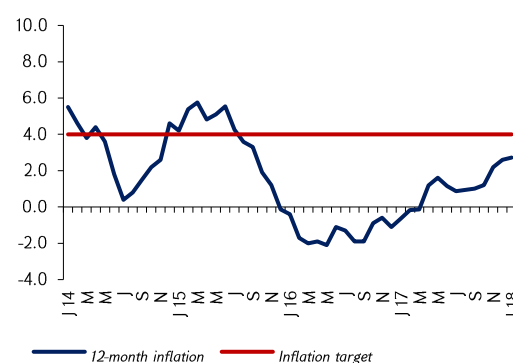
In such a situation, the Central Bank reckons, the monetary policy implemented previously proved rather expansionary for the inflation to recover and would still have its impact transmitted up until the end of the year. Therefore, the Central Bank has left the monetary conditions unchanged in the period March-December, **keeping the refinancing rate at 6%**. In the fourth quarter, as the inflation environment expanded and inflation expectations grew, this also justified the need to ensure sustained recovery of demand. At the end of the year the Central Bank signaled the financial market **that stimulating monetary conditions would need to phase out gradually** in the light of forecast developments. As a result of such a monetary policy, inflation will be shaping within the confidence band in the forecast horizon and, starting the end of 2019, it will stabilize around the target.

3.1.2. Prices

Consumer prices: There was **4.3% inflation** recorded in the fourth quarter of 2017, as was expected, mostly due to high seasonally-sensitive prices of food products, particularly **vegetables** and **potatoes** (74.8%), **fruits** (6.5%) and **eggs** (19.5%) (combined contribution to the quarter's inflation: about 4.5 pp). Meanwhile, core inflation rate has accelerated (1.8%), driven by increased prices for **oils** and **fats, dairy products, meat products, clothes** and **footwear** by 7.2%, 5.4%, 4.3%, 11.1% and 7.1%, respectively (combined contribution to the quarter's inflation: about 1.2 pp). Such high price inflation owed to persisting inflationary developments in the world's food markets on the one hand and the impact of recovering demand in the domestic economy on the other.

Chart 25

In the fourth quarter of 2017 inflation accelerated



With the developments mentioned above, the inflation accelerated in the fourth quarter of 2017; as a result, in December the 12-month inflation rate amounted to 2.6% instead of predicted 2.5%.

Table 4

Price inflation by commodity item as key contributors ¹³						
Commodity item	September, 2017 (y/y)		December, 2017 (y/y)		Q4, 2017	
	growth	contribution	growth	contribution	growth	contribution
CPI	1.0		2.6		4.3	
Food products	2.9	1.2	5.2	2.4	8.4	3.8
Bread products	-1.2	-0.1	-1.1	-0.1	-0.5	0.0
Meat products	6.6	0.6	11.1	1.0	4.3	0.4
Dairy products	1.7	0.1	5.3	0.2	5.4	0.2
Oils and fats	7.9	0.2	13.3	0.4	7.2	0.2
Fruit	-0.6	0.0	0.8	0.0	6.5	0.2
Vegetable and Potato	7.8	0.4	8.2	0.4	74.8	4.0
Fish	27.5	0.2	24.8	0.2	1.4	0.0
Eggs	-8.0	-0.1	10.2	0.1	19.5	0.3
Sugar	3.4	0.0	-6.0	-0.1	-4.5	0.0
Non-food products	-0.8	-0.2	1.6	0.3	2.5	0.5
Services	-0.5	-0.2	-0.5	-0.2	0.0	0.0

According to the data issued by the National Statistics Service of Armenia, there was 2.7% inflation in January of 2018, mainly due to increased prices of **fruits** (10.0%), **vegetables** and **potatoes** (34.3%), and **fuel** (11.2%) (combined contribution to inflation: 2.54 pp). The rise in fuel prices has been primarily attributable to the change in the excise duty rate since January of 2018.

It should be noted that the direct and indirect effects of change in tax and customs duties introduced since January 2018 have been within the estimation by the Central Bank (see Box 2).

Box 2

Impact of change in tax and customs codes on the inflation

The direct and indirect impact of tax and customs duty rates since 2018 has been estimated to be up to 1.0 pp (see Inflation Report: Monetary Policy Program for Q4, 2017, Status Report on Implementation of the Monetary Policy Program, Q3, 2017).

¹³ In the table the y/y data of structural elements of food products are calculated by the Central Bank on the basis of the National Statistics Service of Armenia data.

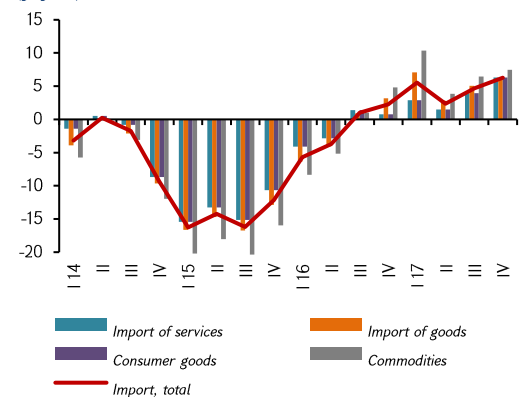
The direct impact of price increases resulting from the change in tax and customs duty rates in January of 2018 has amounted to 0.4 pp, while the indirect effect has not been observed yet; in particular, the increase in transportation service tariffs in January amounted to 0.2%, which was totally due to a 0.5% increase in airfare (contribution to inflation: 0.004 pp). The latter is attributable to significant appreciation of the euro exchange rate against the US dollar, as this exchange rate is traditionally used in quoting international air freight fees.

Import prices: Although the dollar prices of import of goods and services to Armenia somewhat stabilized during the fourth quarter of 2017, posting a 0.7% growth q/q on average, growth rates have, nevertheless, accelerated compared to the fourth quarter of the previous year, largely due to faster grown oil prices.

The rise in dollar prices of import of consumer goods in the fourth quarter of 2017 has been driven mainly by increased dollar prices in Russia and the European Union, reflecting appreciation of their exchange rates against the US dollar. Their total contribution to the y/y rise in dollar prices of import amounted to 1.4 pp.

Chart 26

In the fourth quarter of 2017 the growth of dollar prices of import of goods and services speeded up (y/y, %)



3.2. Economic developments

3.2.1. Economy position

For the fourth quarter, the GDP gap is estimated as positive. In the light of high economic growth observable since the start of 2017, the actual GDP was gradually approaching the potential; in the fourth quarter the GDP gap was estimated to be positive, about 2.0%, creating significant inflationary pressures in the consumer market. Expansionary monetary policy which the Central Bank has been implementing since 2016 and the stimulating impact of which is persisting, has facilitated a notable reduction in the GDP gap. In the reporting period, higher-than-expected growth in lending, recovered remittances and stronger-than-expected activity in construction¹⁴ all contributed to the shaping of a positive GDP gap. As well as accelerated core inflation rate observed at the end of 2017 (see section 2.2.1) points to the positive GDP gap. Nevertheless, as such positive gap is more believed to be attributable to the rebounding of demand, which had been sluggish over the previous years, it will decline in the upcoming quarters.

¹⁴ Works carried out at Amulsar mine construction stage in 2017 have started to be registered in the Armenia National Statistics Service reports since November 2017, which has significantly added to the indicator of construction industry output for 2017.

3.2.2. The expenditures aspect of the economy

Chart 27

Structure of private spending (y/y, %)

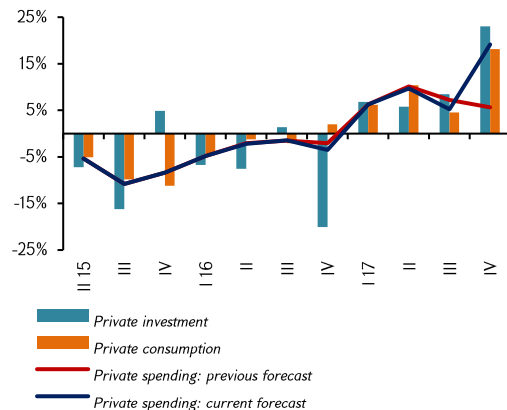


Chart 28

In the fourth quarter of 2017 the real decline in net exports slowed down
(net real export, y/y, %, positive sign = improvement)

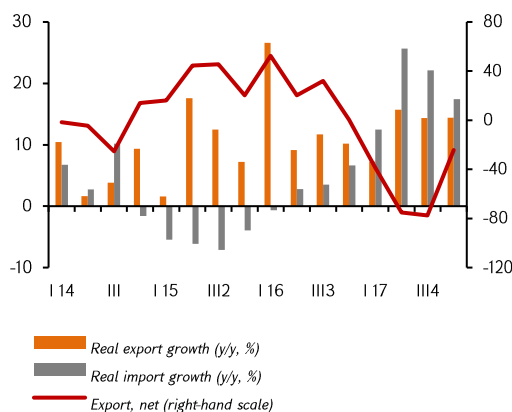
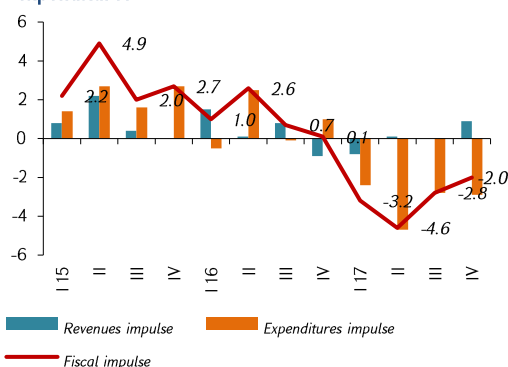


Chart 29

In the fourth quarter of 2017 the contractionary effect of fiscal policy owed to the contractionary effect of expenditures



In the private sector in the fourth quarter of 2017, growth rate of demand accelerated, exceeding expectations of the Central Bank. With an estimated 12.5% y/y increase in value added in the reporting period, a 19.1% increase in private spending will be recorded. Under such conditions, the growth of private spending for 2017 will be 10.7%.

The growth of private spending in the fourth quarter of 2017 is a result of increased private consumption (18.2%) and private investment (23%). Private consumption and investment growth in the fourth quarter of 2017 has been largely driven by an expansionary monetary policy carried out by the Central Bank, high lending growth rates and grown remittances from Russia. The indicator of faster grown trade turnover volumes publishable by the Armenia National Statistics Service, which was 17.4% in the fourth quarter, points to strong growth in consumption. High growth rate registered in construction has also contributed to the investment growth.

Continued growth in private spending observable since the beginning of 2017 brought in indicators slightly outstripping its potential level, therefore the fourth quarter's private demand gap is estimated as positive. In the outcome, in the fourth quarter of 2017 private spending created inflationary pressures.

In the fourth quarter of 2017, according to the Central Bank estimates, net real export had a negative impact on the GDP growth as a result of faster growth of real import over export. During the quarter, real growth rates of export of goods and services amounted to 14.4% y/y and real growth rates of import, 17.4% y/y¹⁵.

In the fourth quarter of 2017, the growth rates in dollar value of net remittances of individuals (seasonal workers' income and personal transfers inclusive) accelerated to 18.8% y/y, as the Russian economy recovered at a faster pace and the ruble exchange rate appreciated versus the US dollar.

According to the 2017 estimates, the impact of net external demand on real GDP is negative as real import of goods and services has been faster compared to that of export of goods and services, which was attributable to the domestic demand having recovered quicker than anticipated. It should be noted that the growth of domestic demand was reflected in the growth of import for all commodity groups. In addition to other factors, the domestic demand has been fuelled by high growth of private transfers of individuals thanks to faster-than-expected recovery of the Russian economy (in the fourth quarter of 2017 it exceeded the forecast, in which circumstance the growth of private transfers of individuals is estimated within 15.0-17.0%). In spite of the added foreign balance of trade deficit, the current account deficit-to-GDP ratio posted an improvement in 2017 (running at around 2.0%), compared to the previous forecast, as a result of actual current account developments and fourth quarter estimations. The

¹⁵ Real export and import growth indicators are the Central Bank estimates.

improvement of the ratio has also benefited the higher than expected estimates of GDP.

Fiscal policy¹⁶: In the fourth quarter of 2017 the State Budget was performed with expenditures made and revenues collected in line with the Central Bank's projections¹⁷. However, the impulse indicators came in somewhat deviated from the forecast after an upside adjustment to the estimates of nominal GDP and economic potential. The fiscal sector's impact on aggregate demand was estimated to be smaller – 2.0 pp contractionary¹⁸ – for the quarter, instead of the forecast 2.6 pp contractionary, which was primarily due to a deviated revenues impulse.

In the fourth quarter of 2017, consolidated budget revenues were over-collected by 1.4% against the projection. This was attributable to a 3% increase in tax revenues and 35% decrease in other revenues. However, the revenue impulse amounted to 0.9 pp expansionary instead of the forecast 0.4 pp contractionary, pointing to a higher nominal GDP indicator expected for the quarter.

In the expenditures structure in the fourth quarter of 2017, **government consumption** was below the predicted figure by 12.4% while expenditures on item **“Transactions with non-financial assets”** exceeded the projection by 30%. For the quarter, the expenditures impulse was 2.9 pp contractionary instead of the forecast 2.3 pp contractionary. The deviation is also explained by net lending after the quarter saw a recovered loan instead of provision of loan, as was anticipated for the quarter.

With revenues and expenditures performance described above, in the fourth quarter of 2017 the state budget generated a deficit of roughly AMD 90.0 billion, which is consistent with the Central Bank's projections.

3.2.3. The production aspect of the economy

Economic activity in January-December 2017 has increased by 7.7%, and the GDP growth for 2017 is an estimated 7.2-7.4%, which is considerably above the previous Central Bank forecasts.

The fourth quarter's economic growth largely benefited from the industry and services sectors, with their growths amounting to 14.9% and 14.2%, respectively. This is above the Central Bank estimations provided previously, which reflects more-than-expected positive developments in domestic and external demand.

¹⁶ 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 fourth quarter of 2017 (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.

¹⁷ The revenue projection was commensurate with the 2017 revenue estimate as outlined in the state budget draft.

¹⁸ In the fiscal sector's impact assessment, the fourth quarter 2017 figures, hence annual indicators, do not include AMD 82.2 billion-worth Russian Commodity Loan, which was received at the end of the year, since it is not an actual flow.

Chart 30

Main consolidated budget indicators (billion AMD)

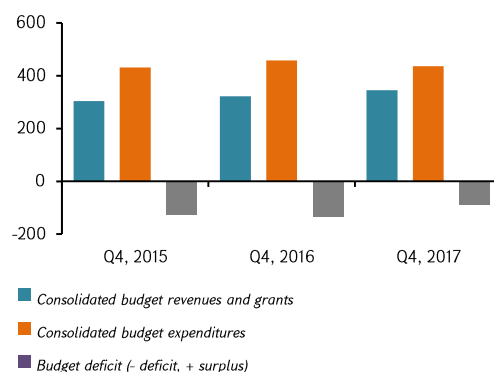


Chart 31

In the fourth quarter of 2017 the deficit was financed mostly to the expense of external sources (billion AMD)

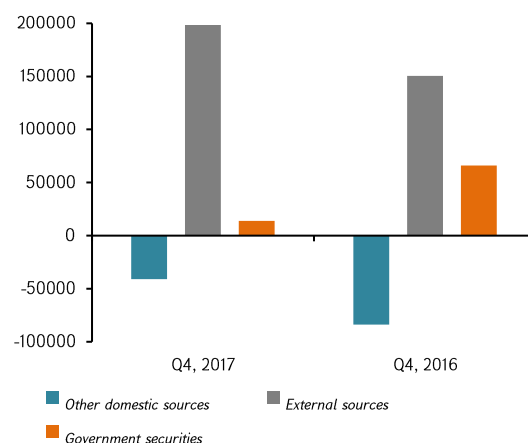
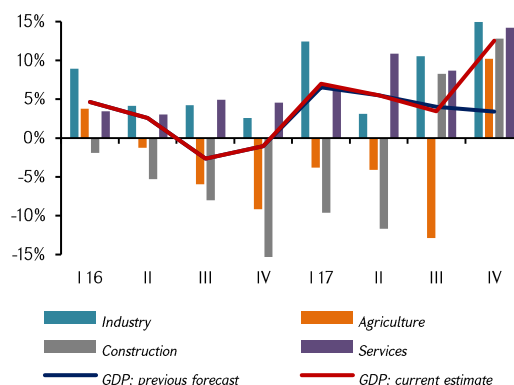


Chart 32

GDP sectoral structure (%)



There is an expected 10.2% increase in the value added in agriculture in the fourth quarter as a result of high economic activity recorded in the sector. However, the decline reported in agriculture since the beginning of the year has decreased the output indicator by an estimated 3.4% in 2017.

The forecast indicator of the construction sector has also been revised upside, amounting to 12.8% in the fourth quarter, which is driven by upside revision of the forecast for private investment.

The productivity, which was calculated as real output per worker per hour, has demonstrated strong growth rates since the start of 2017, which in part has determined a high level of economic activity. The productivity growth rate in the fourth quarter was nearly 6%, according to the Central Bank estimates.

Chart 33

Nominal wage growth in private sector, y/y (%)

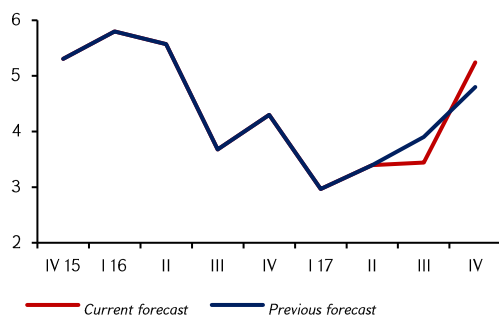


Chart 34

Unit labor costs growth, y/y (%)

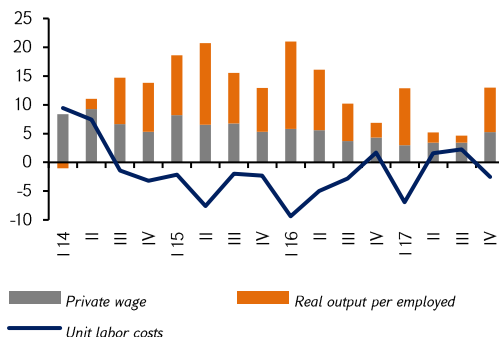
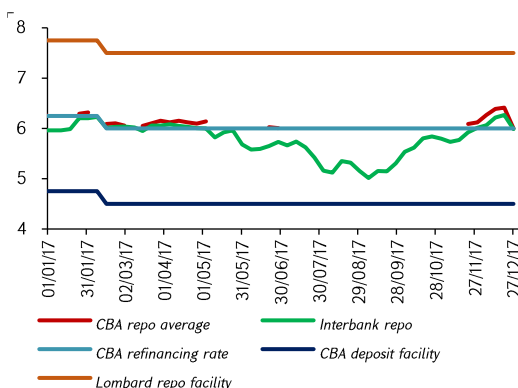


Chart 35

Over the quarter, short-term interest rates approached the Central Bank's policy rate (%)



3.2.4. Labor market¹⁹

Average nominal wage in the **private sector** has grown faster since the beginning of 2017, as the economy grew. The nominal wage growth rate in the private sector in 2017 was 3.8%, which is in line with previous forecasts by the Central Bank. As a result, the average nominal wage growth in the private sector amounted to 5.2% in the fourth quarter. In the context of these developments, the real wage growth in the private sector in the fourth quarter was 2.8%, which was lower than the productivity growth rate because of the rigidities in the labor market. The productivity growth rate running faster than that of the real wages has contributed to the growth of producers' profits, which in turn has led to a decline in unemployment.

In 2017 the **unemployment rate** is an estimated 17.5%; in the fourth quarter of the year this indicator amounted to 16.7%, which is 0.7 pp smaller from previous forecasts by the Central Bank.

In the reporting period, unit labor costs of the firms have reduced, reflecting the acceleration of output growth rate per unit of labor in relation to private sector wage growth.

3.3. Financial market developments

In the fourth quarter of 2017 too, the Board of the Central Bank left the refinancing rate unchanged.

In spite of somehow intensifying inflation expectations and inflationary risks, the Board of the Central Bank has decided to leave the policy rate unchanged given the importance of sustained recovery of demand as well as a short-term nature of part of inflation

¹⁹ The labor market data for the fourth quarter of 2017 are the Central Bank estimates which are based on the third quarter 2017 data and actual January-November 2017 figures. The growth indicators provided in this sub-section are relative to the same reference period last year, unless otherwise specified.

expectations. In the meantime, the Board had signaled the market participants that gradual lifting of the refinancing rate was not ruled out in the light of predicted developments as well as in fulfillment of the inflation target (by way of bringing the 12-month inflation rate into the confidence band) in the medium run.

In spite of somehow intensifying inflation expectations and inflationary risks, the Board of the Central Bank has decided to leave the policy rate unchanged given the importance of sustained recovery of demand as well as a short-term nature of part of inflation expectations.

Table 5

Average quarterly interest rates in Armenia's financial market					
Instrument	Q4, 2016	Q1, 2017	Q2, 2017	Q3, 2017	Q4, 2017
Central Bank refinancing rate (end of quarter)	6.25	6.00	6.00	6.00	6.00
Central Bank repo rate	6.54	6.13	6.05	6.06	6.20
Interbank repo rate	6.19	6.06	5.86	5.33	5.90
Short-term treasury bill yield	6.65	7.21	6.56	6.19	5.93
Medium-term notes yield	10.13	9.97	8.76	8.45	8.03
Long-term bonds yield	13.65	13.18	13.03	10.03	9.90

Using an instrument in its toolkit to absorb excess liquidity in the banking system in the fourth quarter of 2017, the Central Bank have brought short-term interest rates closer to the policy rate. The quarterly interbank repo rate has increased by 0.57 pp against the previous quarter to 5.90%; the average monthly repo rate in December was 6.1%, up by 0.96 pp against September. Interest rates on up to 14-day interbank repo transactions were 0.15 pp higher from the refinancing rate of the Central Bank in December²⁰.

Box 3

Developments in the currency market

In the fourth quarter of 2017, interbank MM rates rose as compared to the previous quarter, tightly approaching the policy rate. At the same time, the US Federal Reserve System, further looking to the gradual tightening of monetary conditions, has lifted the federal funds rate by another 0.25 pp. On the back of domestic and external interest rate spread as well as reduced country risk premium for Armenia, one could see minor exchange rate appreciation²¹ (seasonally-adjusted) pressures, and the Central Bank purchased about USD 5 million (net) from the foreign exchange market in order to absorb short-term volatilities caused by the Balance of Payments seasonality. Under these conditions, the nominal exchange rate of the Armenian dram against the US dollar behaved mostly stable, depreciating only by 1%. The trade partners' currencies have also depreciated versus the US dollar generally, totally offsetting depreciation of the AMD against

²⁰ Repo transactions with 1-14-day maturities constituted 98% of interbank repo transactions in the fourth quarter of 2017.

²¹ The judgment on appreciation or depreciation pressures are based on the seasonally-adjusted demand for foreign currency.

Chart 36

Liquidity injection and absorption through the Central Bank operations (average quarterly), billion AMD

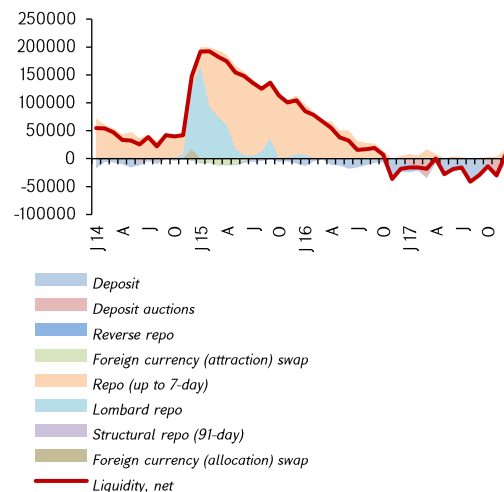


Chart 37

The behavior of short-term interest rates in the fourth quarter of 2017

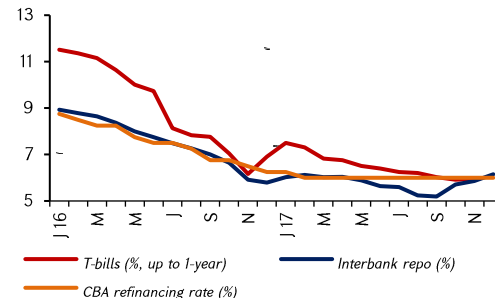


Chart 38

In the fourth quarter of 2017 yields in the government bond market dropped in mid-term and long-term segments of the curve

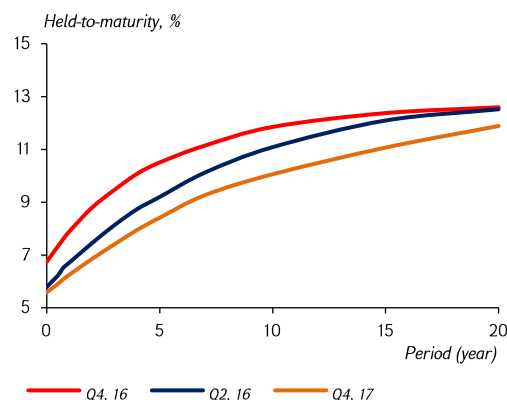


Chart 39

Interest rates on deposits of and loans to companies

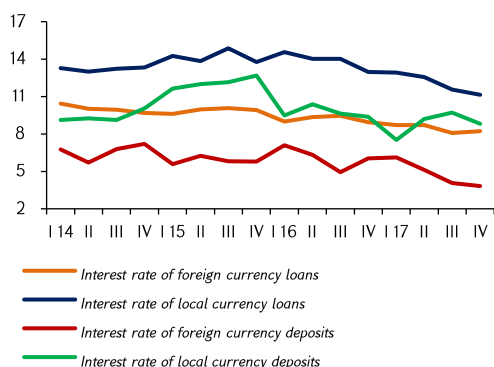


Chart 40

Interest rates on deposits of and loans to individuals

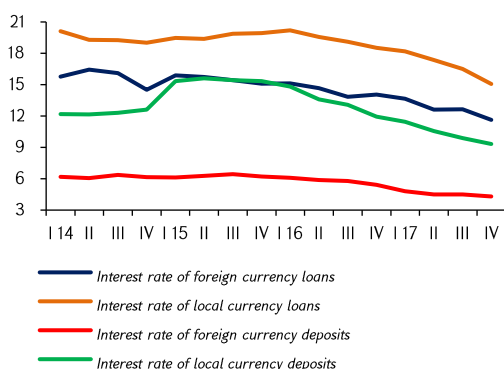
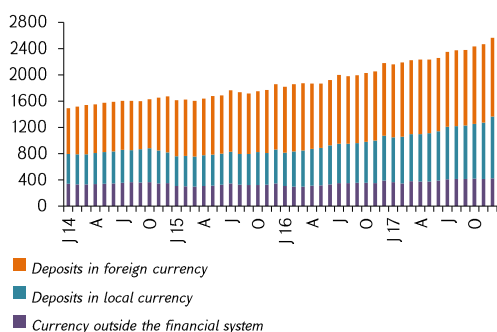


Chart 41

In the fourth quarter of 2017 the dram deposits outgrew foreign currency deposits



the US dollar, so in the fourth quarter of 2017, the nominal effective exchange rate of the Armenian dram remained at the previous quarter's level (appreciating merely by 0.1%). On the back of a stable nominal effective exchange rate, the real effective exchange rate has appreciated by about 1.5% due to acceleration of inflation rates in the Armenian economy relative to the previous quarter.

Yields in the government bond market further trended down over the quarter, which was also driven by reduced volumes of issuance. The average quarterly yield in the primary market of short-term bonds has dropped by 0.25 pp. The average yield of mid-term and long-term bonds has reduced to a greater extent, reflecting the yield curve of bonds – in late December, relative to late September, the yield curve (long term interest rate) has declined by 0.46 pp.

Expansionary monetary policy implementation by the Central Bank, competition between financial organizations and existing liquidity in the banking system further contributed to the increase in the volume of funds attracted and allocated by commercial banks and to the reduction of interest rates over the fourth quarter of 2017.

Despite the decrease in interest rates, the volume of attracted funds continued growing during the quarter. Dram deposits have grown by 15.5% and foreign currency deposits, by 4.3%. The level of dollarization – the ratio of foreign currency deposits to total deposits – has reached 55.2%, dropping by 1.8 pp compared to the previous quarter.

The growth of lending continued during the quarter. With interest rates reducing, lending terms and procedures further improving, the growth of lending amounted to 6.7% over the quarter. Specifically, dram loans have grown by 10.2% and foreign currency loans, by 5.4%. The 12-month growth of total lending to the economy in December 2017 amounted to 16.5%, which is above the Central Bank's estimation.

Box 4

Survey on the terms of lending by banks and credit organizations

According to the results of the fourth quarter 2017 survey on terms of lending by local banks and credit organizations, there has been further easing of terms in all aspects of lending. This quarter too, stronger competition between banks and other financial institutions, general expectations for further economic activity as well as an increased level of liquidity with banks all resulted in easing of terms. These factors have contributed to the reduced loan interest rates and non-interest payments as well as to extended loan maturities. Actual demand for all types of credit has grown.

For the fourth quarter of 2017 banks and credit organizations anticipate even more easing for both lending procedures and growing demand for loans. The results of the survey are in line with the Central Bank's estimations of recovery of demand in the economy.

BOARD OF THE CBA

MINUTES (13.02.2018)

Refinancing Rate of February 13, 2018

The CBA Board Meeting of February 13, 2018 attended by Chairman Arthur Javadyan, Deputy Chairmen Nerses Yeritsyan and Vakhtang Abrahamyan, and Board Members Ashot Mkrtchyan, Arthur Stepanyan, Armenak Darbinyan, and Oleg Aghasyan.

The Board meeting opened with presentation of Situation Report as of February 13, 2018. It addressed current developments on inflation, external environment and real, fiscal and monetary sectors of the economy.

In the yearend 2017, it was noted, the 12-month inflation rate has been near the lower bound of the confidence band, as was expected, amounting to 2.6% in late December. Inflation in December was mainly driven by the increase in seasonal agricultural products, which had been rather below the typical growth rates in the same month of the previous year. There was 2.7% inflation registered in January of 2018, which was mainly determined by the increase in food prices. Note that 0.4 pp of the month's inflation owed to the impact of risen fuel prices. It should also be noted that the actual impact of the change in excise and customs duty rates in Armenia since the start of the year is within the Central Bank's estimated benchmark. The Board expects that in the short-term perspective the inflation environment will grow slightly, as a result of which the 12-month inflation rate will fluctuate within the confidence band in the forecast horizon, stabilizing around the target beginning from 2019.

Addressing the current economic situation, the Board stated that economic activity was strong enough in the fourth quarter of 2017, mainly driven by high growths registered in the industry and services sectors. Thus, by actual results of the quarter, the ***Economic Activity Indicator has been 7.7%*** in January-December compared to the same period of the previous year, which prompted the Central Bank to again revise the annual economic growth forecast: ***it is estimated within 7.2% - 7.4% instead of 6.3% - 6.5% as was estimated previously.*** High economic activity, it was recorded, has been attributable to domestic demand that recovered at accelerating rates, which continued to be driven by expansionary monetary policy implementation and strong growth in economy lending. Increased growth in imports as well as continued growth patterns in core inflation rate and inflation expectations are also pointing to a relatively high domestic demand.

The Board also discussed the external sector developments. In the fourth quarter, the pace of economic growth in the main partner countries exceeded expectations due to the rapidly recovering domestic demand. In the world commodity markets in the quarter, inflation

trends persisted, while the falling in prices for some products has been observable there. Taking into account the aforementioned developments as well as the trends that could be maintained in the upcoming months, the Board considers that minor inflationary effects from the external sector are likely.

The Board looked into the developments in the domestic financial market: it was noted that in view of high excess liquidity at the beginning of the year, the Central Bank used absorbing instruments, which facilitated the approaching of interest rates in the interbank market to the policy rate.

Following presentation of the Situation Report and the developments in external and domestic macroeconomic environments, the Board began addressing the monetary policy directions and making decision on the interest rate. Two options were to be considered – whether to leave the refinancing rate unchanged or to raise it. The Board preferred to decide on the current monetary conditions basing upon the need to enhance sustained recovery of domestic demand and in consideration of notable mitigation of previous inflation expectations shaped additionally due to high price increases on certain goods and the influence of expected change in tax and customs duties since the start of the year. The Board believes that, in the light of predicted developments, expansionary monetary policy conditions would need to phase out gradually ***in the medium run*** in order to fulfill the inflation target. As a result, ***the 12-month inflation rate will continue to gradually increase, fluctuating within the confidence band, and will stabilize around the target afterwards.***

The Board approved the decision on interest rates of monetary instruments of the Central Bank and the proposed press release, which are attached hereto.

THE CENTRAL BANK OF THE REPUBLIC OF ARMENIA

BOARD RESOLUTION

Interest rates of operations by the Central Bank in the financial market

By virtue of Article 20 (c) of the Republic of Armenia Law on the Central Bank, the Board of the Central Bank of the Republic of Armenia **enacts:**

1. Leave the refinancing rate of the Central Bank of the Republic of Armenia unchanged, at 6.0%.

2. To the Financial Department of the Central Bank of the Republic of Armenia to carry out operations in the financial market of the Republic of Armenia, using the interest rates, as follows:

2.1. Lombard facility rate offered by the Central Bank to be 7.5%.

2.2. Deposit facility rate offered by the Central Bank to be 4.5%.

3. This resolution shall take force on the day following the adoption thereof.

Arthur Javadyan,
Chairman of the CBA

February 13, 2018

PRESS RELEASE
13.02.2017

At the February 13th of 2018 meeting, the Board of the Central Bank of Armenia decided to leave the refinancing rate unchanged, at the level of 6.0%.

There was 2.7% inflation in January of 2018, almost as much as the indicator registered in the same month of the previous year, and the 12-month inflation rate amounted to 2.7% at the end of the month. Moreover, direct and indirect effects of change in tax and customs duties were within the estimation by the CBA.

Actual developments in the external environment have largely reflected continued trends for improving global economic growth and persisting inflationary patterns in some commodity markets of the world. In view of such developments, the CBA Board keeps anticipating minor inflationary effects from the external sector, as external demand recovers.

The CBA Board notes that economic activity was strong enough in the fourth quarter of 2017, driven primarily by high growths reported in services and industry. High economic activity was concurrent with rapid growth in domestic private demand, which continues to be promoted by expansionary monetary policy and a relatively high growth in lending to the economy by the financial system. Nevertheless, there is still a need for monetary stimulation to secure sustained recovery of demand, especially since additional inflation expectations have rather weakened.

Taking the abovementioned into account, the CBA Board finds it reasonable to maintain the current level of monetary conditions. At the same time, the Board believes that, in light of predicted developments, a gradual offsetting of expansionary monetary conditions would be needed in the medium run to fulfil the inflation target. As a result, inflation will continue to gradually increase, floating within the confidence band and stabilizing around the target afterwards.

Should there emerge risks to economic growth outlook and to the inflation deviating from its recovery path, the CBA would adjust the monetary policy directions accordingly.

Press Service of the Central Bank of Armenia

MAIN MACROECONOMIC INDICATORS OF ARMENIA

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	actual	actual	actual	actual	actual	actual	actual	estimate	program	program	program
Prices											
Inflation (y/y, end of period, %)	9.4	4.7	3.2	5.6	4.6	-0.1	-1.1	2.6	4.4	4.2	4.0
Consumer price index (y/y, average, %)	8.2	7.7	2.6	5.8	3.0	3.7	-1.4	1.0	3.9	4.3	4.1
Core inflation (y/y, average, %)	7.5	8.6	5.3	5.8	1.9	5.1	-2.0	0.8	5.1	4.6	4.2
Gross product											
GDP (billion Armenian dram)	3690.0	4028.9	4266.5	4555.6	4828.6	5043.6	5079.7	5515.6	5988.1	6545.3	7147.5
GDP (% real growth)	2.2	4.7	7.2	3.3	3.6	3.2	0.2	7.3	5.2	5.1	5.0
Supply											
Industry (% real growth)	9.2	13.6	6.4	6.3	-0.9	6.2	5.1	10.6	6.5	6.3	6.1
Agriculture (% real growth)	-16.0	14.0	9.5	7.6	6.1	13.2	-5.8	-3.4	4.8	3.8	4.2
Construction (% real growth)	3.3	-12.2	4.5	-7.4	-4.5	-3.1	-11.3	2.3	3.5	4.4	3.8
Services (% real growth)	4.1	4.7	6.3	3.1	6.7	1.6	4.1	10.2	5.0	5.2	5.1
Taxes, net (% real growth)	13.4	3.8	9.9	3.6	1.8	-5.1	-4.3	8.6	6.0	4.8	4.9
Demand											
Consumption (% real growth)	3.9	2.6	7.7	1.9	0.7	-6.2	-0.5	9.7	3.9	4.0	3.9
Public consumption (% real growth)	3.9	1.9	-1.4	8.7	3.4	4.7	5.8	6.8	3.3	2.2	2.0
Private consumption (% real growth)	3.9	2.7	9.1	0.9	1.0	-7.7	-1.2	10.2	4.1	4.3	4.2
Gross investment (% real growth)	0.5	-5.2	0.5	-10.5	-3.0	-1.2	-8.7	10.3	7.5	9.9	9.5
Public investment (% real growth)	-12.7	-6.1	-22.4	-13.8	10.0	13.6	5.6	-9.7	3.8	18.0	15.0
Private investment (% real growth)	2.6	-5.1	3.6	-10.0	-3.7	-3.6	-10.5	13.4	7.9	8.5	8.5
Export of goods and services (% real growth)	20.4	14.5	12.0	8.9	6.1	9.9	13.5	13.2	10.1	7.3	6.3
Import of goods and services (% real growth)	7.2	-0.1	4.7	5.5	4.2	-5.6	3.4	19.5	6.9	6.5	5.6
External sector											
Balance of trade (million US dollar)	-2065.7	-2109.8	-2111.9	-2196.2	-2055.4	-1186.4	-944.4	-1304.2	-1371.7	-1441.1	-1556.4
Balance of services (million US dollar)	-260.8	-65.8	-101.6	-124.3	-113.0	-94.5	-71.4	-67.8	-17.4	2.4	24.4
Remittances (million US dollar)	1421.9	1440.4	1539.8	1755.1	1616.1	1082.4	989.6	1140.7	1234.0	1324.4	1420.5
Current account (million US dollar)	-1261.4	-1058.9	-1057.9	-812.9	-883.1	-279.1	-238.1	-245.8	-380.9	-389.9	-437.3
Balance of trade (share in GDP, %)	-22.1	-20.8	-19.9	-19.7	-17.8	-11.3	-8.9	-11.4	-11.1	-10.7	-10.5
Balance of trade (share in GDP, %)	-2.8	-0.7	-1.0	-1.1	-1.0	-0.9	-0.7	-0.6	-0.1	0.0	0.2
Remittances (share in GDP, %)	15.2	14.2	14.6	15.8	14.0	10.3	9.3	10.0	10.0	9.8	9.6
Current account (share in GDP, %)	-13.5	-10.5	-10.0	-7.3	-7.6	-2.7	-2.2	-2.1	-3.1	-2.9	-3.0
Public sector											
Revenues and grants (billion Armenian dram)	780.4	880.9	946.2	1071.4	1144.8	1167.7	1171.1	1198.6	1307.3	-	-
Tax revenues (billion Armenian dram)	699.4	777.4	878.4	1000.9	1064.1	1067.9	1079.7	1156.4	1247.9	-	-
Expenditures* (billion Armenian dram)	954.3	986.5	1006.1	1142.9	1235.1	1409.0	1449.1	1464.9	1464.2	-	-
Deficit (billion Armenian dram)	-173.9	-105.6	-59.9	-71.5	-90.3	-241.3	-278.0	-266.3	-156.9	-	-
Revenues and grants (share in GDP, %)	22.6	23.3	22.2	23.5	23.7	23.2	23.1	21.8	21.8	-	-
Tax revenues (share in GDP, %)	20.2	20.6	20.6	22.0	22.0	21.2	21.3	21.0	20.8	-	-
Expenditures (share in GDP, %)	27.6	26.1	23.6	25.1	25.6	28.0	28.6	26.6	24.5	-	-
Deficit (share in GDP, %)	-5.0	-2.8	-1.4	-1.6	-1.9	-4.8	-5.5	-4.8	-2.7	-	-
Monetary sector											
Broad money (y/y, end of period, %)	11.8	23.7	19.5	14.8	8.3	10.8	17.5	18.5	-	-	-
Dram broad money (y/y, end of period, %)	15.7	26.4	11.9	14.9	-3.5	5.2	24.8	28.9	-	-	-
Loans to economy (y/y, end of period, %)	26.7	35.3	27.6	12.9	20.8	-3.3	6.0	16.5	-	-	-
USD / AMD (Armenian dram for one US dollar)	373.7	372.4	401.8	409.6	415.9	477.9	480.5	482.7	-	-	-

* The 2017 Expenditures and Deficit include the AMD 82.0 billion-worth Russian Commodity Loan received at the end of the year.

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