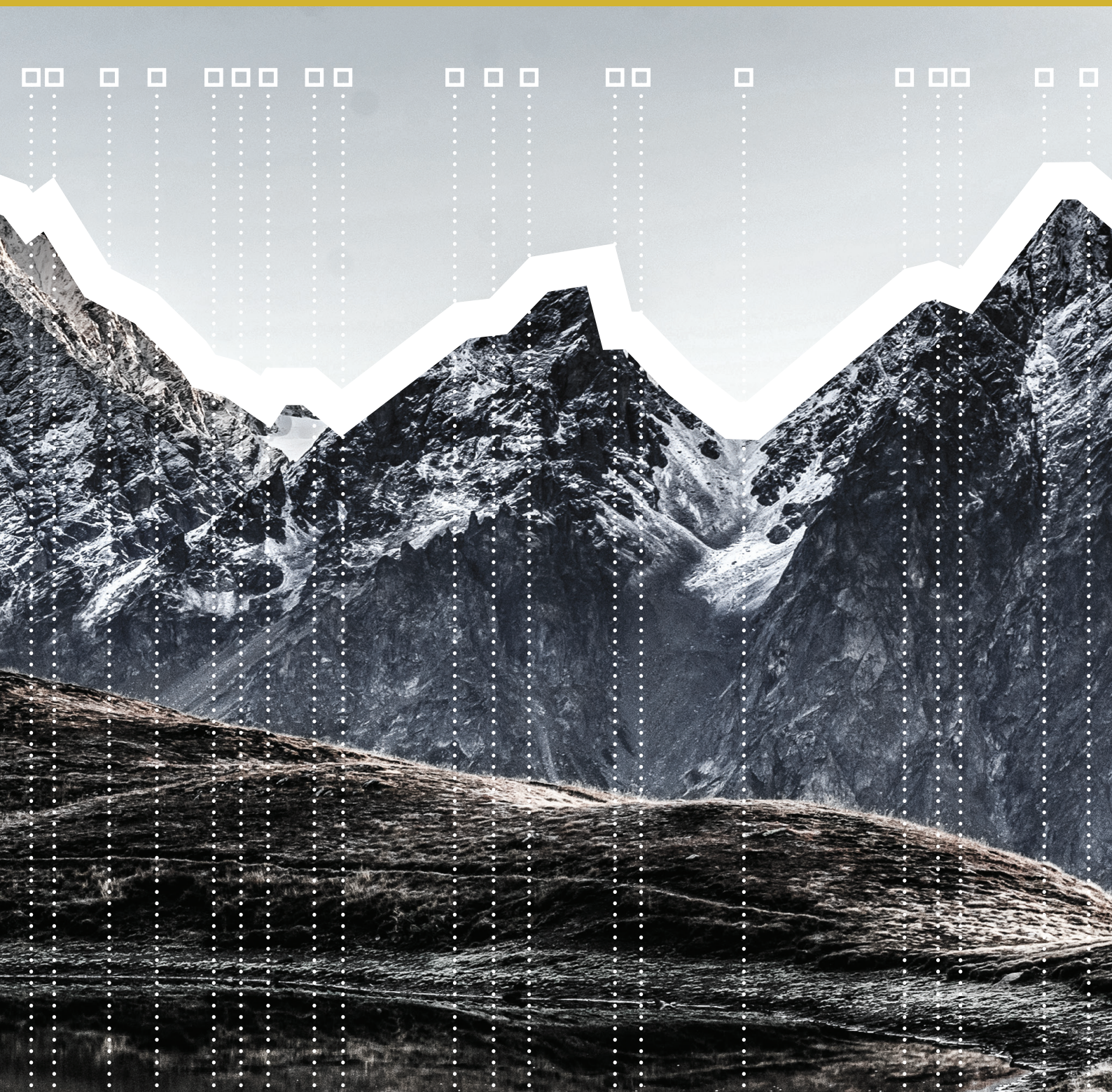




Central Bank of
The Republic of Armenia

Inflation Report

2023 / 1



*Approved
under the Central Bank Board
Resolution No. 33A, dated 27.03.2023*

Inflation Report/1

*Monetary Policy Program,
Q1, 2023*

✦
*Status Report on Implementation of the
Monetary Policy Program,
Q4, 2022*

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 presents the Monetary Policy Program that includes the directions of the monetary policy in the mid-term horizon as well as the scenario of inflation and other macroeconomic indicators under the directions. The latter is one possible scenario under consideration and is based on the Bank's assessment of the current situation and future assumptions, which also include the impact of the Bank operations.

The second section of the report includes the Status Report on implementation of the monetary policy program for the previous one-year period, which presents the results of monetary policy implementation and covers the actual developments in the domestic economy.

Publishing of inflation scenario and the underlying assumptions, along with the inflation target, makes the monetary policy of the Bank more transparent, understandable and predictable, which aims to increase 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 effectively minimizing the deviations between the 4% target and the inflation scenario. 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.

The scenario outlined in this report has been based on the actual information available by March 14, 2023, i.e. the day on which the refinancing rate was set, the results of 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 (www.cba.am) which also contains all press-releases and other monetary policy-related publications.

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1. Executive summary

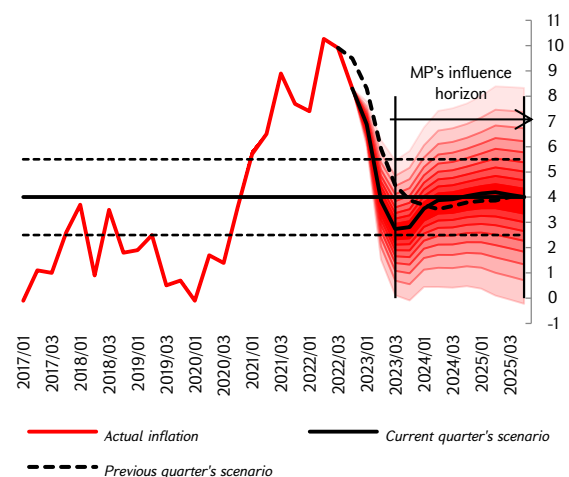
In the first quarter of 2023, the economic activity remains sluggish in the world economy and, particularly, the main partner countries to Armenia. In these countries, the 12-month inflation is gradually slowing down, largely owing to the continued decrease in the food and energy prices. However, the impact of high demand and inflation expectations on the inflation still prevailing; specifically, the growth of service prices in a number of advanced economies continues to stay significantly above the target value. Under these circumstances, the central banks of developed countries will carry on tightening the monetary conditions. This will lead to a further gradual weakening of demand and continue to reflect the decline in prices in commodity markets in the short-term perspective.

High rates of growth of economic activity are persisting in Armenia in the beginning of the year, which is considerably backed by strong external demand in the service sector, as well as high growth registered in the construction branch. The elevated activity is accompanied by increased export and GDP potential observable in the industry and services sectors. This is also demonstrated by the appreciation of real and nominal exchange rate of the Armenian dram. The overall inflation environment in Armenia continues to mitigate as a result of the implemented contractionary monetary policy, the dram appreciation and weakened inflationary influence from the external sector. However, strong demand and the declining but still high inflation expectations contribute to the growing of wages and prices of individual goods and services.

In general, with uncertainties carrying on, the Central Bank of Armenia attempts to reduce the possible risks arising therefrom by building and discussing different scenarios for the situation development, the most likely of which is outlined in detail in this monetary policy program.

In the first quarter of 2023, the 12-month inflation reduced to a certain extent but still remains high, making up 8.1% in February. According to the scenario presented by the Central Bank of Armenia, the headline inflation will, mainly owing to the above-mentioned supply factors, decrease rapidly in the near future, yet the prices of some goods and services (especially unregulated services) will continue to increase, incurring the effects of the established high demand and inflation expectations. Based on what was mentioned above, the Central Bank of Armenia found it reasonable to stick to relatively tight monetary conditions at this stage, taking into

Chart 1
Inflation (12-month) scenario probability distribution for the 3-year policy horizon



Source: Armenia Statistics Committee, Central Bank of Armenia scenario

consideration that the inflation was still high in commodity groups which stand out primarily with rigid prices (see Box 1).

In view of the monetary policy implementation and expected macroeconomic developments, the 12-month inflation will decrease in the course of the year and stabilize at a later point in time around the 4% target.

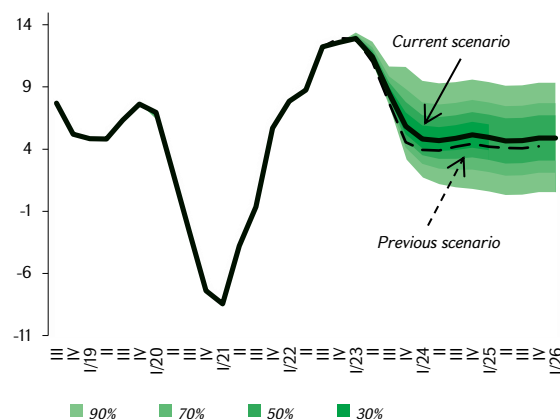
According to the scenario presented by the Central Bank of Armenia, high economic activity will be sustained in the near future, whereas the growth in 2023 is expected to be higher relative to the one outlined in the scenario of the previous program. In the latter part of the mid-term horizon, the growth will gradually slow down and stabilize around the long-term equilibrium.

The economic growth expected in 2023 will mostly be driven by rather high growth in services and construction. In turn, the growth of construction will notably be determined by construction activities related to the operation of the Amulsar gold mine. The operation of the Amulsar gold mine will positively contribute to the growth of the GDP potential in 2024 and, to a certain extent, in 2025, thus helping to maintain a high level of economic growth. Nevertheless, in the medium term, the economic growth will slow down as the positive GDP gap will gradually close along with the adjustment of high demand. At the end of the horizon, the economic growth will shape near its long-term sustainable level of 4.0%.

In the 3-year policy horizon, the risks of inflation and economic growth deviating from the projection paths are mostly balanced (see subsection 2.2.4). In the case of risks emerging in any direction, the Board of the Central Bank of Armenia will adequately respond and ensure the fulfilment of the price stability objective.

Chart 2

Real GDP growth (cumulative)¹ scenario probability distribution for the 3-year policy horizon



Source: Armenia Statistics Committee, Central Bank of Armenia scenario

¹ Each quarter's growth rate is calculated as the cumulative growth rate of the last four quarters.

2. Scenario presented, scenario changes and risks

2.1. External environment developments

The economic activity in the world and, in particular, the main partner countries to Armenia remains sluggish, with the 12-month inflation gradually slowing down, largely owing to the continued drop in food and energy prices. However, in a number of developed economies, demand is still high, and the trends of “overheating” of the labor market continue. Under these conditions, the prices of products that stand out with rigid prices persist at a high level, and even go up in some cases, contributing to the expansion of the overall inflation environment. As a result, it is expected that the central banks of developed economies will continue to pursue a policy of tightening monetary conditions, which will be reflected in the slowdown of economic activity in the world and a certain decrease in prices in commodity markets.

In the global economy, and in Armenia's main partner countries in particular, the economic activity remains sluggish, with the 12-month inflation gradually slowing down largely due to the continued decrease in food and energy prices.

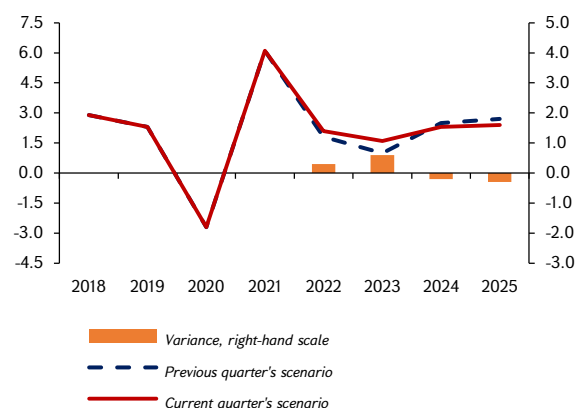
The central banks of developed economies will continue to pursue a policy of tightening monetary conditions, which will be reflected in the slowdown of economic activity in the world and a certain decrease in prices in commodity markets.

Economic developments in the United States:

According to the U.S. Bureau of Economic Analysis estimate, in the fourth quarter of 2022 the US economy posted a growth of 0.9% y/y, which is somewhat higher than the indicator presented in the previous MP program of the Central Bank of Armenia. The growth of private consumption and net exports contributed positively to the fourth quarter's economic growth. It should be noted that the US economic growth in 2023, bolstered by strong growth of private consumption, will also come about higher than the estimate of the previous program, shaping around a 1.6% indicator. However, there is estimation that economic growth in the US will remain relatively low because of the anticipated tightening of monetary policy and will only approach a long-term sustainable level at the end of the mid-term horizon.

According to the estimates of the Bureau of Economic Analysis of the US Department of Commerce, in the United States in the fourth quarter, the personal consumption expenditure price index² slowed at a faster pace than expected under the previous program, falling to 5.7% from 6.5% in the previous quarter, and the annualized rate of consumer price inflation amounted to 7.1% in the fourth quarter. The slowing of personal consumption expenditures and consumer price inflation was mainly determined by a decrease in energy prices and prices of used cars, but note that the **services sector is reporting acceleration of price growth**. At the start of 2023, the

Chart 3
The USA economic growth scenario (%)



Source: Bureau of Economic Analysis, Central Bank of Armenia scenario

² The personal consumption expenditure price index target is 2%, which on average is commensurate with consumer price increase of 2.3%.

decreased energy and used car prices also contributed to the slowdown of personal consumption expenditure price index in the US, which was 5.4% y/y in January, with consumer inflation slowed down to 6.0% in February. However, the headline inflation continues floating well above the US Federal Reserve's target, which is fueled by the inflation on items standing out with relatively rigid prices in the consumer basket.

The US labor market continues to be overheated. Unemployment in the fourth quarter remained below the pre-pandemic level, at the rate of 3.6%, while the figure of job vacancies almost doubled the number of the unemployed. These factors transmit significant inflationary pressures from the labor market to the economy.

Given the aforementioned developments, it is expected that the US Federal Reserve will continue tightening the monetary conditions, but at an easier rate. In the outcome, inflation will decline more slowly than previously expected, approaching the target only at the end of the policy horizon.

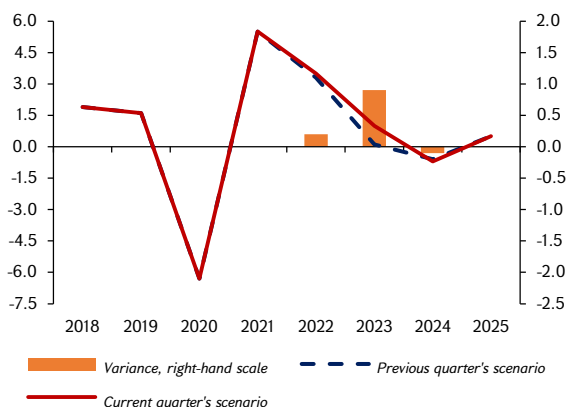
Economic developments in the Eurozone: In the fourth quarter of 2022, the Eurozone economy grew faster, compared to the scenario of the previous MP program of the Central Bank of Armenia, as negative spillover effects from the energy market proved milder. According to the Eurostat's estimate, in the fourth quarter of 2022 the economic growth in the Eurozone was 1.8% y/y, which was positively shored up by the growth of private consumption and investments, while the contribution of net exports was negative, as in the previous quarter. This was determined by the influence of sanctions imposed as a consequence of the Russian-Ukrainian conflict, with the influence still persisting in the course of the upcoming quarters.

The positive developments of the Eurozone economy were largely attributable to the natural gas consumption, markedly less than the average thanks to favorable weather conditions. This allowed, especially in energy-intensive industries, to avoid possible forced restrictions on gas supply, which would, naturally, result in a decline in output and further inflation. On the other hand, by directly affecting the natural gas prices, it has contributed to weakening of the inflation environment.

As a result, in the short term, the rate of economic growth of the Eurozone will be somehow higher from the previous estimate, and in the medium term, given the repeatedly tightened monetary conditions as well as how the

Chart 4

The EU economic growth scenario (%)



Source: Eurostat, Central Bank of Armenia scenario

strict restrictions imposed on Russia affect the Eurozone economy, the growth will be in line with the previous estimate, i.e. at a lower level.

Inflationary pressures persist in the Eurozone. As much as 10.0% y/y inflation was recorded in the Eurozone in the fourth quarter of 2022, which was largely due to high energy – oil and gas prices, as well as their secondary effects. In early 2023, the rate of inflation has somewhat slowed down, but remains significantly above the European Central Bank's target: in February it was 8.5% y/y. The slowdown in the rate of inflation was mainly determined by the decrease in energy prices. It should be noted that, unlike the slowing of headline inflation, the rate of core inflation continues to accelerate; in February, the 12-month inflation, excluding energy and food index, amounted to 7.4%. A particularly high rise was reported for prices of industrial goods and services.

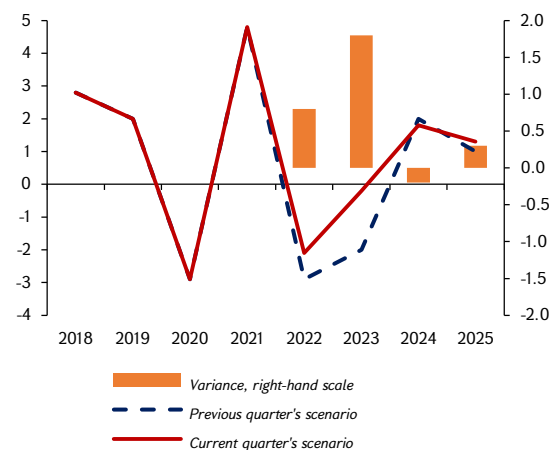
In the Eurozone, just as in the United States, the labor market is overheated. The unemployment is at its historical low (around 6%), and the labor force participation rate has also increased notably, surpassing the pre-pandemic rate. These trends are estimated to be maintained, and some acceleration of salary growth, especially in certain branches of the economy, will be observable as a result.

Thus, in view of the aforementioned developments, the anticipation is that the ECB will continue to tighten monetary conditions, while ensuring that the inflation environment will further be easing and the inflation rebounding to the target at the end of the policy horizon.

Economic developments in Russia: According to the estimates of the State Statistical Service of Russia, in 2022 Russia's economy reduced by 2.1%. According to the Central Bank of Armenia estimates, the economic decline in Russia in the fourth quarter was 4.2%, a slightly more positive development relative to the previous program. The slowdown of the Russian economy was mostly attributable to the manufacturing industry as well as the wholesale and retail trade, reflecting especially the shrinking volumes of natural gas export. On the other hand, the economy branches such as agriculture, construction, accommodation, and public catering continued to contribute positively to the growth.

According to the Central Bank of Armenia scenario, the economic developments in Russia in 2023 will be more positive compared to the previous program: an economic contraction of

Chart 5
The Russia economic growth scenario (%)



Source: Rosstat, Central Bank of Armenia scenario

around 0.2% will be registered during the year, which will be driven by a more stimulative fiscal policy and a faster recovery of private demand. The latter will also be reflected in faster-than-expected import substitution processes. It is expected that the Russian state budget will have deficit both in the current year and over the mid-term horizon (up to 2% of GDP in 2023 and up to 1.4% in 2024)³.

The current ban on import of the Russian oil by the EU as well as the established “price ceiling” policy have affected the nominal volumes of the Russian oil and gas exports, nonetheless the actual export volumes have even increased to some extent in recent months because of grown Russian oil export volumes to Asian countries. According to estimations, the restrictions announced by the EU on the Russian economy will not have a significant impact on international oil prices. On the other hand, the imports recovering at a rapid pace, a process greatly facilitated by the reopening of the Chinese economy, also points to the positive developments in the Russian economy.

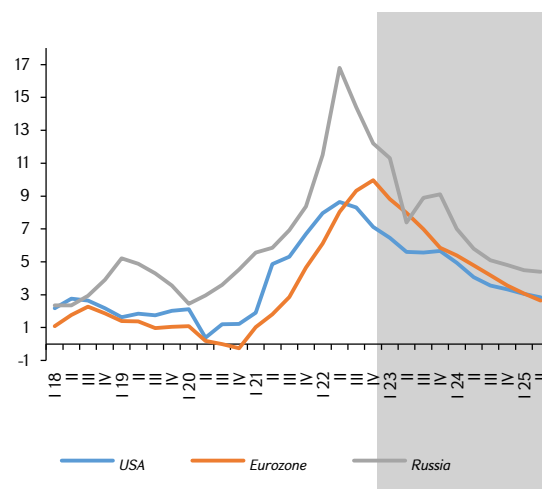
With all these factors mentioned above, the estimation is that Russia’s current account has reduced faster, which led to the depreciation of the ruble and a certain increase in inflationary pressures. In the fourth quarter of 2022 the 12-month inflation was 12.2% (remaining well above the 4% target value). However, the slowing of inflation continued early in 2023 as well, making up 11.0% y/y in February. It is worth noting that despite the decelerated 12-month inflation, the monthly inflation rate has been positive already in recent months, reflecting the impact of the above factors.

According to the current estimates of the Central Bank of Armenia, to neutralize risks of acceleration of inflation and inflation expectations, the Central Bank of Russia will proceed to tighten monetary conditions to a certain extent while making sure the inflation approaches the target at the end of the policy horizon.

Developments in commodity and food product markets:

Almost all international commodity markets posted price decreases, as financial conditions are tightened much around the globe. On the other hand, the significant easing of pandemic restrictions in China and expectations for demand recovery have a certain positive effect on the prices of raw materials and food products. This is especially noticeable in the

Chart 6
Inflation in trade partner countries (%)



Source: Bureau of Labor Statistics, Eurostat, Rosstat,
Central Bank of Armenia scenario

³ Russia Federal Budget, 2023-2025, Ministry of Finance of the Russian Federation.

global copper market where China is a world leader in copper consumption. The oil and food prices are expected to continue to decline in the short run as global demand slows amid tightening of financial conditions. In the case of copper, following a sharp short-term acceleration, the price growth will slow.

In the international copper market in the fourth quarter of 2022, prices fell determined by continued tightening of monetary conditions in the world and economic restrictions still in effect in China at the end of the year. As a result, over the fourth quarter of 2022 international copper prices decreased by about 16.5% y/y, reaching USD 8,000 per ton. On the policy horizon, despite maintaining monetary conditions contractionary in advanced economies, copper prices have been revised upside compared to the previous Central bank of Armenia program in anticipation that demand for copper would grow amid China's economic reopening. In the medium-term perspective, as global demand and financial conditions get back to normal, international copper prices are expected to somewhat stabilize, approaching the price level of USD 9,500 per ton at the end of the horizon.

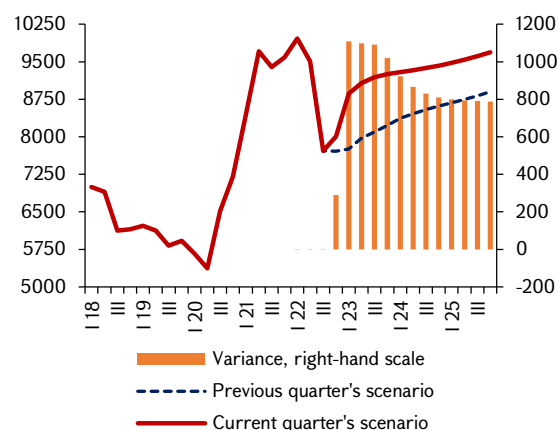
The international oil market, too, is incurring the impact of tightening global financial conditions. On the other hand, the restrictions applied to the Russian oil did not lead to reductions in oil supply in the world, as Russia, as was expected, managed to effectively redistribute the extracted oil to new areas – the countries in the Asian region. As a result, over the fourth quarter of 2022 the prices plunged by 9.3% q/q, settling on the level of USD 89 per barrel.

In the fourth quarter of 2022 the OPEC+ member countries decided to reduce oil production by 2 million barrels a day starting from November, and by the first quarter of 2023 that decision remained unchanged which, according to the OPEC estimates, will offset the expected slowdown in global demand.

In view of the developments in oil market, oil prices will keep on dropping slightly in the near future but then will increase somewhat, approaching the threshold of USD 98 USD per barrel at the end of the horizon, according to the scenario presented by the Central Bank of Armenia.

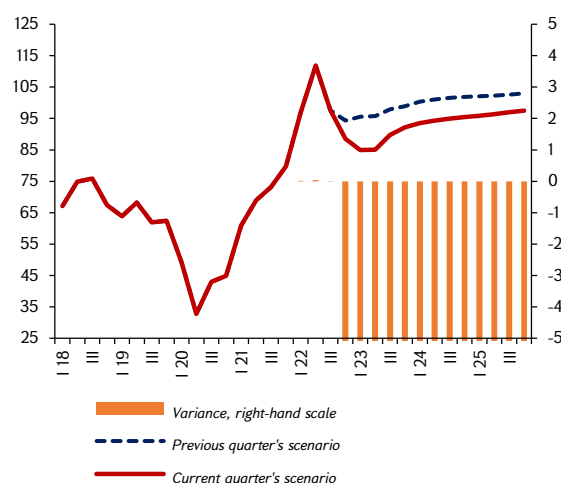
In food product markets, driven by optimistic expectations for the volume of supply of individual products and abated disruptions in supply chains, on the one hand, and tightening of global financial conditions, on the other, the prices

Chart 7
International copper price scenario



Source: World Bank, Central Bank of Armenia scenario

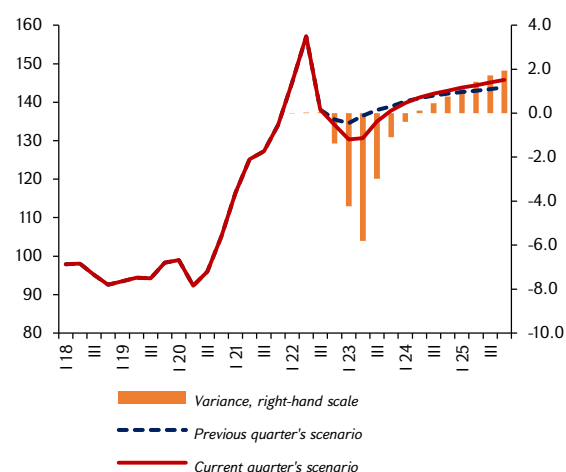
Chart 8
International oil price scenario



Source: World Bank, Central Bank of Armenia scenario

of all food product groups decreased during the fourth quarter of 2022, standing a little below the previous estimates by the Central Bank of Armenia. The downward trend in the prices of almost all product groups continues over the first quarter of 2023. Thus, based on the February 2023 results, the prices of items in food basket reduced by about 8.0% compared to the respective levels reported for the previous year. This was attributable to a considerable decrease in vegetable oil prices by more than 32% y/y, and dairy product prices, by about 7% y/y. Small price decreases on other product groups were recorded as well. Along the entire policy horizon, driven by continued tightening of financial conditions, as well as favorable supply conditions, the prices in the food markets will still be decreasing in the short term, staying at levels lower than the previous estimates, and in the medium run they will rebound to levels close to the previous estimates, according to the current scenario of the Central Bank of Armenia.

Chart 9
International food price scenario



Source: FAO, Central Bank of Armenia scenario

2.2. Scenario presented

2.2.1. Inflation and monetary policy

Sluggish economic growth recorded in the main partner countries to Armenia over the first quarter of 2023 is accompanied by easing of the overall inflation environment, and yet the prices of some goods and services remain high. In this situation, the inflationary effects transmitted from the external sector to the Armenian economy are further weakening.

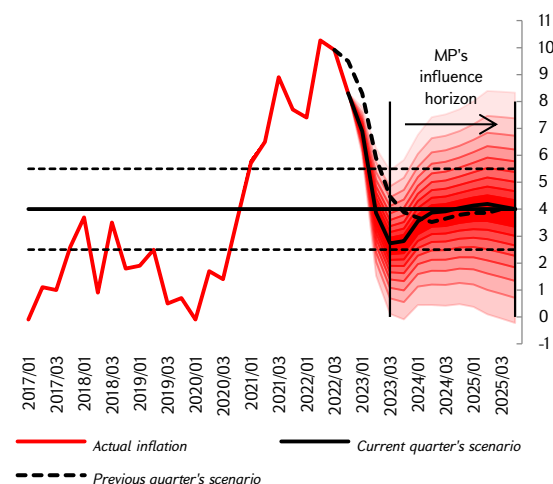
High activity in the Armenian economy is maintained, and this continues to be supported by strong external demand, especially in the services sector. Demand pressures continue to increase in the labor market. A slower rise in the prices of imported goods and, in some cases, even a decrease in prices is observable in Armenia as a result of the contractionary monetary policy implemented by the Central Bank of Armenia, the appreciation of the dram, and the weakening of the inflationary effect transmitted from the external environment. At the same time, with strong demand and inflation expectations persisting, the prices in individual product groups are still seen growing. In the current situation, the Central Bank of Armenia considers it appropriate to leave the policy rate unchanged.

In the first quarter of 2023, the strong external demand in the services sector and positive developments in the construction sector continue to significantly contribute to high economic activity in Armenia. It is estimated that domestic demand recovering to a certain extent, as well as the import of intermediate goods designed for the operation of the Amulsar gold mine will provide a positive contribution to high demand observable in the current year. At the same time, there is an increase in export and GDP potential in the services and industry sectors, which will continue in the course of the coming years, mainly owing to the Amulsar gold mine operation. As a result, the estimation suggest, the gap in demand will close more slowly compared to previous expectations, still lingering within a notably positive territory. This will continue to create inflationary pressures and contribute to maintaining high inflation expectations. According to the scenario presented by the Central Bank of Armenia, the overall inflation will subdue in the near future, but the prices of some goods and services, especially those of standing out with rigid prices, will keep on rising, while incurring the effects of the high demand and inflation expectations.

The Board of the Central Bank of Armenia decided to leave the policy rate unchanged in the current situation. As a result, in view of weaker inflationary impact spilling over from the external sector, the contractionary monetary policy the Central Bank implements, the appreciation of the dram, and the aggregate demand weakening gradually, the inflation in 2023 will subdue, stabilizing later on around the target.

The Board of the Central Bank estimates that the risks of inflation deviating from the projection path are mostly balanced. In the event risks emerge in any direction, the Board will react adequately in fulfilment of the price stability objective.

Chart 10
Inflation (12-month) scenario probability distribution for the 3-year policy horizon



Source: Armenia Statistics Committee, Central Bank of Armenia scenario

The Board of the Central Bank of Armenia decided to leave the policy rate unchanged in the current situation.

Table 1

	Inflation interval forecast probability distribution				
	<1.0%	1.0-2.5%	2.5-5.5%	5.5-7.0%	>7.0%
Q1, 2023	0.0%	0.0%	0.4%	56.7%	42.8%
Q2, 2023	2.1%	14.4%	70.1%	11.7%	1.6%
Q3, 2023	13.6%	29.8%	51.8%	4.3%	0.5%
Q4, 2023	14.9%	27.2%	50.6%	6.1%	1.1%
Q1, 2024	8.7%	19.8%	55.4%	12.2%	3.9%
Q2, 2024	8.3%	16.8%	52.0%	15.4%	7.5%
Q3, 2024	8.4%	16.5%	51.2%	15.8%	8.1%

Q4, 2024	7.9%	15.6%	50.4%	16.7%	9.4%
Q1, 2025	8.4%	15.0%	48.1%	17.2%	11.3%
Q2, 2025	9.8%	14.7%	44.7%	17.1%	13.8%
Q3, 2025	10.9%	15.1%	44.2%	16.5%	13.3%
Q4, 2025	12.0%	15.6%	43.6%	15.9%	12.9%

Box 1: Inflation in product groups standing out with rigid prices in Armenia

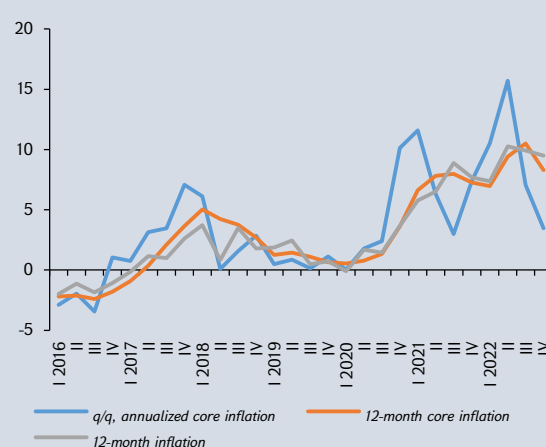
Starting from the fourth quarter of 2022, a slowing in both the 12-month and quarterly inflation rates is observable; this is attributable to the weakening of inflationary effects transmitted from the outside world, the dram appreciation and the consistently tightened monetary policy. It is noteworthy that weakening of the core inflation rates, as calculated by the Central Bank of Armenia, is recorded along the way (see Chart 11). It should also be noted that according to the scenario presented in the current program, in the course of the next quarters the headline inflation will continue to rapidly reduce also because the baseline effects phase out and the share of food products considerably grows in the consumer basket, and will settle at levels somehow lower than the target.

Looking closely at how the main elements of inflation develop individually, one may notice that there are currently significant differences in their behavior (see Chart 12 and Chart 13). Specifically, the falling rate in both headline and core inflation is largely determined by the decrease in energy prices and imported food prices, which mainly reflects the weakening of the inflation environment in the world economy and the impact of dram appreciation.

On the other hand, the growth of prices of non-regulated services and non-food products (excluding fuel) continues to remain elevated. These product groups, which one may call, with certain reservation, product groups that stand out with rigid prices in Armenia, deserve special attention from the monetary policy side, because they best express the terms of demand and inflation expectations in the economy.

Chart 11

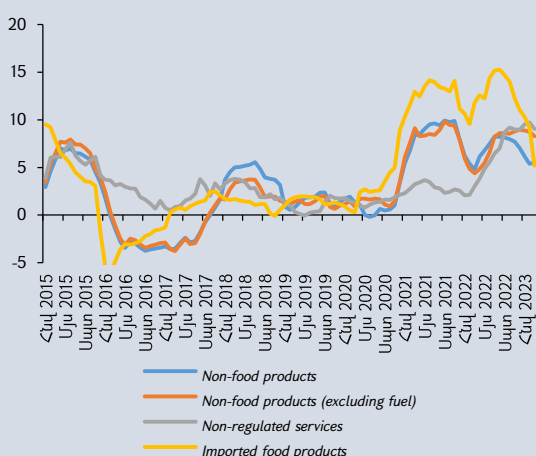
Headline and core inflation dynamics



Source: Armenia Statistics Committee, Central Bank of Armenia

Chart 12

Dynamics of individual elements of inflation, y/y growth⁴



Source: Armenia Statistics Committee, Central Bank of Armenia

⁴ The first quarter 2023 indicator is an estimate based on actual developments in January-February.

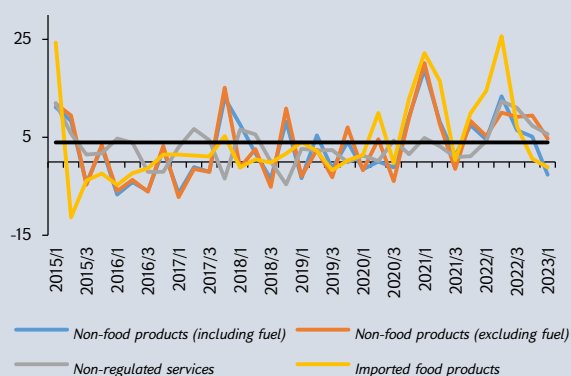
Moreover, despite the fact that the share of the mentioned product groups in the consumer basket has reduced since 2023 (and therefore their impact on the overall inflation), the importance of these product groups remains intact in the monetary policy point of view, as it essentially points to the level of anchoring of inflation in the economy.

In general, the prices of goods and services standing out with rigid prices usually do not immediately respond to temporary supply and demand shocks. This may be due to a variety of reasons, including the fixing of prices and production costs under the contracts in effect, as well as driven by the desire to maintain customer loyalty. Therefore, the inflation trends observed in these product groups may denote to more long-term inflationary factors in the economy, such as the persistently high demand, a heated labor market, or high inflation expectations.

It is noteworthy that at the current stage of economic development, the above-mentioned developments are not unique to the Republic of Armenia. In many developed countries, the headline inflation is weakening, but prices in commodity groups with rigid prices continue to settle at high levels or even go up, reflecting the still high demand and the effects of a heating labor market in that particular economy (US, EU, etc.).

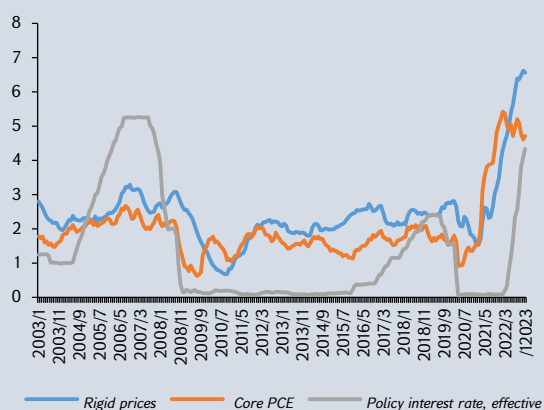
Thus, as it is the case with a number of developed countries, in the Republic of Armenia too, despite the falling of the headline inflation rate, the inflation of products with rigid prices is still high, incurring the effects of a strong demand and inflation expectations. In such a situation, the main task of central banks will be to regulate the inflation in commodity groups with rigid prices, which is more important from a monetary point of view, in order to effectively ensure the goal of price stability in the medium term.

Chart 13
Dynamics of individual elements of inflation, q/q annualized percentage growth⁵



Source: Armenia Statistics Committee,
Central Bank of Armenia

Chart 14
Dynamics of individual elements of inflation and policy response in the USA, y/y percentage growth



Source: Federal Reserve Bank
of St. Louis

⁵ The first quarter 2023 indicator is an estimate based on actual developments in January-February.

2.2.2 Economic activity⁶

The economic activity has been rather strong since the beginning of 2023. Compared to the previous monetary policy program, the projection of economic growth for the year has been revised upside and is estimated at around 5.8%, as well as the components of economic growth have changed to some extent. Specifically, the projection of private expenditures has been revised upside. In view of the accumulation of savings, mainly in private enterprises, the intensity of construction permits issued, as well as the program related to the operation of Amulsar⁷, private investment is expected to accelerate remarkably over the current year. Although the high rates of growth of private investment will weaken to a certain extent, they will remain elevated in the medium run, contributing to the increase of GDP and export potential. Private consumption will continue to remain somewhat subdued in comparison with economic growth, albeit it will slightly accelerate.

The expectation is that public capital investment will increase significantly over the current year, leaving a considerable impact on the economic growth. Though the growth of public investment will remain at a high level in the course of years following (way lower from the current year's indicator), the contribution to economic growth will therefore be notably smaller.

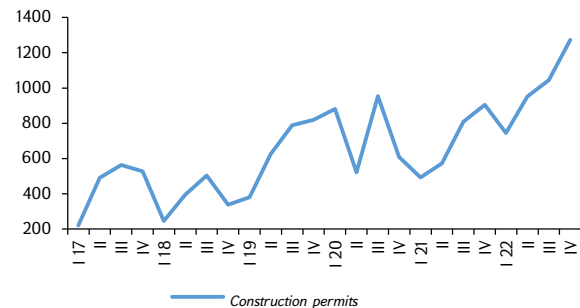
Over the policy horizon, the potential GDP and export levels are also estimated to be slightly higher thanks to continued increases in output primarily in the IT services and manufacturing sectors. The increased output was bolstered largely by the inflow of capital and labor (mainly from Russia), as well as even more positive developments in export and investment activity in the manufacturing industry. As a result, the economic growth will be slightly higher in the medium run (see Chart 2).

External demand: During the fourth quarter of 2022 the positive effects of the external sector on the Armenian economy further exceed expectations. This was observable owing to an increased potential of export of goods and, particularly, reported

Compared to the previous program, the economic growth projection for the year has been revised upside and is estimated at around 5.8%

Chart 15

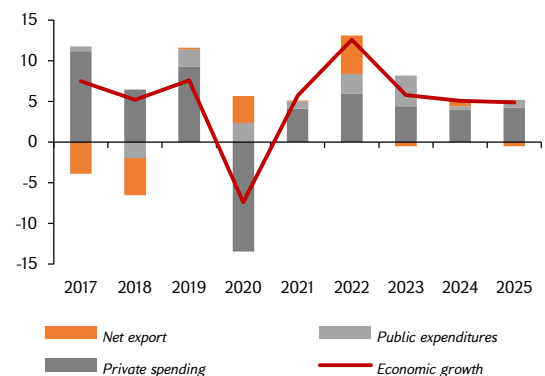
Construction permits



Source: Armenia Statistics Committee, Central Bank of Armenia

Chart 16

Demand components contributing to the growth (percentage point)⁸



Source: Armenia Statistics Committee, Central Bank of Armenia scenario

⁶ For a detailed numerical description of the economic growth scenario, see Chart 22, Table 2.

⁷ See <https://www.yerevan.am/am/quarterly-statistics/>.

⁸ The change in tangible working capital inventories is not included in demand; it is considered by the RA Statistics Committee as a balancing item and does not show the true level of investments, so supply and demand-side calculated economic growths may vary from each other. See https://www.armstat.am/file/article/sv_04_19a_112.pdf.

high volumes of export of tourism. The expectations on the part of import of tourism are still reported to be low. With such developments in external demand, the growth of export of goods and services is estimated to be higher compared to the previous estimate. At the same time, although the growth of import of goods and services lags somehow behind the expectations on the back of high economic activity, it is still estimated to be high. The real growth of export and import of goods and services in 2022 was 54.4% and 33.8%, respectively. As a result, the impact of external demand on GDP in 2022 is estimated as more positive than outlined in the previous scenario.

The net inflow of total transfers (inclusive of seasonal workers' income and private remittances) will increase by 32.0% in 2022, in line with the previous scenario, owing to a reported high nominal growth in dollar terms in the non-tradable sector (construction and trade) of the Russian economy.

In view of the aforementioned developments, the estimation of the current account balance in 2022 is 0.1%.

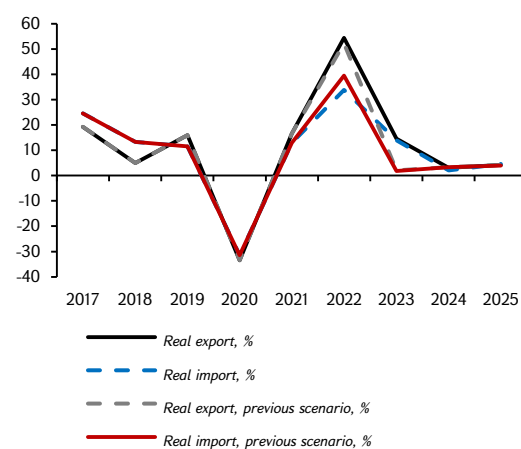
In the course of 2023, the current account deficit-to-GDP ratio will increase compared to the previous year to amount to 1.4%. In 2023 the growth of export and import of goods and services will somewhat stabilize after a reported high growth in the previous year. Armenia's export opportunities to Russia continue to widen in the light of the certain increase in export potential. In the export of services point of view, the expectation is that high influx of international visitors will continue in the short-term perspective. At the same time, the growth of export of IT services will further be strong. As a result, there will be an estimated 14.3% increase in real export of goods and services in 2023. In 2023 a 14.6% increase in real import of goods and services is anticipated in the light of persisting demand activity and incomes created during the previous year.

In 2023 the remittances of individuals from both the Russian Federation and the United States will reduce from their highs, partly incurring the effects of a slowdown in economic activity in partner countries.

In the medium run, gradual adjustment of strong external demand will be reflected in the increased current account deficit-to-GDP ratio, but in the mid-term perspective it will still be below the estimated equilibrium of 4.0-6.0%. The latter will be determined by the export of precious metals in 2024 after the Amulsar mine will be operated.

Chart 17

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



Source: Armenia Statistics Committee, Central Bank of Armenia scenario

Fiscal policy:⁹ With actual high economic growth registered in 2022, the impact of fiscal policy on aggregate demand has been neutral. The year saw both revenues and expenditures of the state budget overperformed against the State Budget Plan 2022, in which circumstance the state budget generated a smaller deficit than projected.

According to the Central Bank of Armenia estimate, in 2023 the tax-to-GDP ratio¹⁰ will be 23.9 percentage points, pointing to a slightly surpassing increase in taxes relative to GDP.

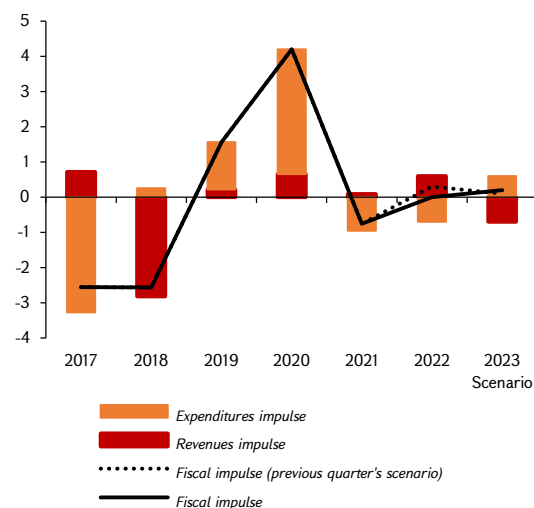
The growth rate of tax collection remained elevated at the beginning of 2023 on the back of continued high economic activity. As a result, tax revenues are expected to be about AMD 113.0 billion higher than the previous program of the Central Bank, which will amount to nearly AMD 2366 billion according to the year's results.

The state budget expenditures in January-February 2023 were underperformed relative to the projection mainly due to capital expenditures. The pace of spending in recent months has somewhat slowed down, having resulted in a 98.5% performance of the expenditures plan, or about AMD 39.0 billion less spending. In 2023 public expenditures will amount to about AMD 2541 billion. Nevertheless, according to the Central Bank's estimate, the expenditure-to-GDP ratio in 2023 will be 27.2%, increasing by 0.8 percentage points compared to the last year. As a result, the deficit-to-GDP ratio will be 1.9%, decreasing by 0.4 percentage points relative to 2022.

Thus, adjusting the state budget expenditures and revenues from the flows that have no impact on aggregate demand, the fiscal policy is estimated to have a weak stimulative effect of about 0.2 percentage points in 2023 in comparison with 2022. The effect will be attributable to expenditures' stimulative impulses and revenues' contractionary impulses.

Basing upon the draft to MTEF 2024-2026, the projection of the fiscal policy in the medium term is unchanged compared to the previous scenario and is estimated as minor stimulative owing to the large volume of capital expenditures and some

Chart 18
Fiscal impulse scenario (percentage point)



Source: Central Bank of Armenia scenario

In 2023, relative to 2022, the fiscal policy is estimated to have a weak stimulative effect of about 0.2 percentage points, and it will be attributable to expenditures' stimulative impulses and revenues' contractionary impulses.

⁹ The fiscal policy's impact on the 2023 aggregate demand was estimated taking into account the RA Law on the Budget 2023, the "Mid-Term Expenditures Framework, 2024-2026" estimates, the current program (quarterly and annual program as adjusted by respective Government decrees available at the time), current developments and the Central Bank estimates based thereon.

¹⁰ The GDP indicators used in the program are the Central Bank of Armenia estimates.

slowing in GDP growth rate expected to happen within that period of time. A gradual reduction of the budget deficit and debt burden is also anticipated thanks to the increase in tax revenues and improvement in the expenditure structure.

Labor market: The unemployment rate in 2023 is expected to remain below its long-term sustainable level, shaping at around 12.6%. The latter will demonstrate the gradual adjustment of positive demand in the short term, as well as the increase in employment concurrent with the increase in the GDP potential. In the medium run, as a result of some adjustment in demand and potential growth, the unemployment rate will stabilize around its estimated fundamental rate, amounting to 15%.

In line with the sustained high economic growth and inflation environment, the private wage growth is expected to be rather high, around 18% in 2023. In the medium term perspective, with demand and inflation stabilizing, the private wage growth is expected to stabilize around the fundamental estimate of 7-8%.

Thus, some inflationary pressures anticipated from the labor market will persist in the course of 2023 due to the surpassing growth rate of private wages over that of productivity. However, along with productivity growth, unit labor costs will decline in the medium term and stabilize around 4%.

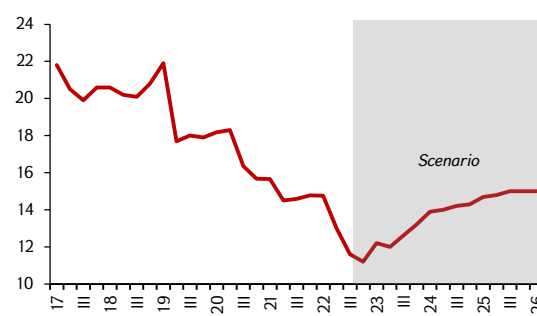
2.2.3. Comparison with previous scenario

The estimate of Armenia's economic growth has been revised upside relative to the previous scenario of the Central Bank.

The economic growth in 2023 is estimated at 5.8%, compared to the previous indicator of 4.6%, which will be mostly driven by expected strong growth in the services and construction sectors.

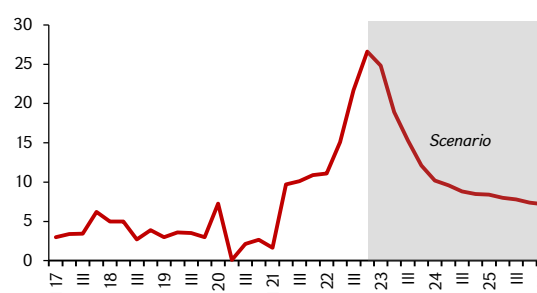
There is anticipation that the services sector will further see high growth during 2023, which will continue to be bolstered by both persisting positive external demand and high productivity growth. The sector's activity will continue to be driven by sustained high growth in the transport and IT service branches, as well as continued vibrancy in the accommodation and catering year-round amid sustained international visitor influxes.

Chart 19
Unemployment rate (%)



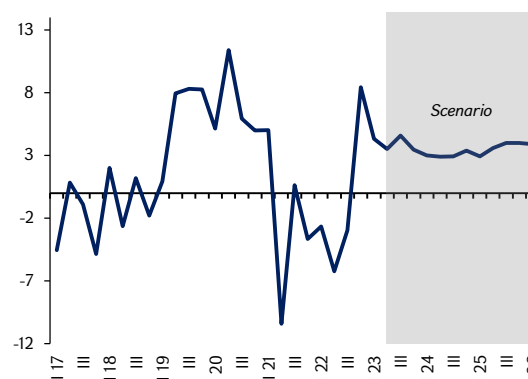
Source: Armenia Statistics Committee,
Central Bank of Armenia scenario

Chart 20
Private nominal wage growth y/y (%)



Source: Armenia Statistics Committee,
Central Bank of Armenia scenario

Chart 21
Unit labor costs growth y/y (%)



Source: Armenia Statistics Committee,
Central Bank of Armenia scenario

The economic growth in 2023 is estimated 5.8%, compared to the previous indicator of 4.6%, which will be mostly driven by expected strong growth in the services and construction sectors.

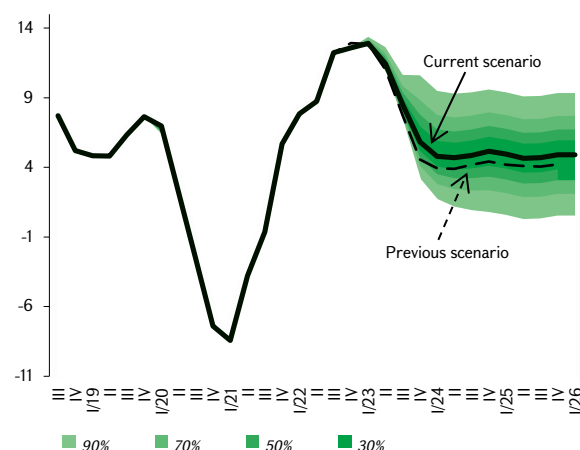
In the construction sector, the growth of housing construction funded by organizations will still be maintained at high levels. In addition, more construction will develop in 2023 in the field of mining thanks to the increase of construction works aimed at the operation of the Amulsar mine. The latter is estimated to contribute almost 4.0 percentage points to the sector's growth for the entire year.

In the agriculture sector, in line with the estimation by the previous program, the growth will be maintained low due to the reduction of the areas sown.

In 2023 the growth in the industry sector will be supported by positive developments in the manufacturing sub-industry. In the medium-term horizon, the growth in the industry sector will be higher compared to the previous program as there will be increased capacities and higher output growth in the industry sector owing to the operation of Amulsar mine.

Over the medium-term policy horizon, the positive GDP gap will close and economic growth will slow due to a gradual weakening of demand. However, the medium-term economic growth will incur the influence of the potential GDP growth factors related to a temporary rise in investment activity and productivity. As a result, with potential GDP growth maintained at a high level, the economic growth will still be around 5% at the end of the 3-year policy horizon and will approach a sustainable 4% level in the longer term.

Chart 22
Real GDP growth (cumulative) ¹¹ scenario probability distribution for the 3-year policy horizon



Source: Armenia Statistics Committee,
Central Bank of Armenia scenario

Table 2

Real GDP growth (cumulative) forecast probability distribution		
Period	30% probability distribution	90% probability distribution
January - December 2023 / January - December 2022	5.2 - 7.0	3.1 - 10.6
January - December 2024 / January - December 2023	4.1 - 6.2	0.7-- 9.6
January - December 2025 / January - December 2024	3.9 - 5.9	0.4 - 9.3
January - March 2026 / January - March 2025	3.9 - 5.9	0.4 - 9.3

¹¹ Each quarter's growth rate is calculated as the cumulative growth rate of the last four quarters.

In 2023, the current account deficit-to-GDP ratio will be at a lower level compared to the previous scenario, owing to the trade balance improved as a result of strong growth of external demand and even a lower level of the negative balance of investment income.

Compared to the previous scenario, the fiscal impulse will have around 0.2 percentage point stimulative effect: revenues are estimated to have a contractionary effect and expenditures, a stimulative effect in the event that the adjusted tax plan is fully performed and 98.5% (the Central Bank estimate) of the adjusted expenditure plan is performed.

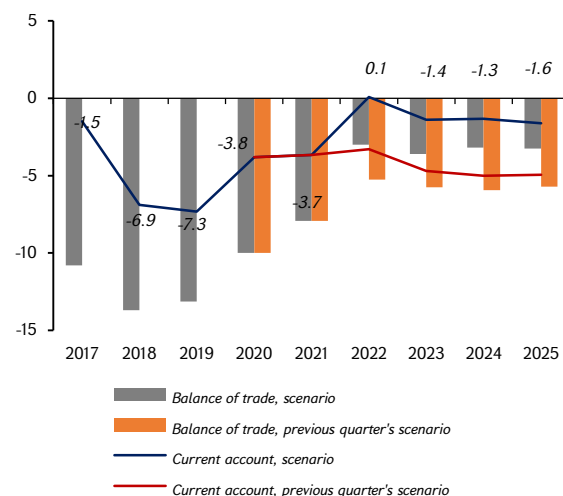
According to the scenario presented, the headline inflation in the short term will be lower than estimated by the previous program, primarily attributable to the lower core inflation and regulated service tariffs. Under the current scenario, as the effects of last year's high indicators phase out and the share of food products increases notably in the consumer basket, the headline inflation will continue to decrease rapidly in the course of the next quarters, floating at a level somewhat lower from the target, and will stabilize around the target starting from 2024 (see Chart 1).

2.2.4. Main judgements and risks

This section contains the main judgements underlying the monetary policy program for the first quarter of 2023 and the risks to implementation of the program, which derive from the external sector developments, the fiscal policy implementation, current trends and short-term estimations.

Chart 23

Current account/GDP medium-term scenario (%)

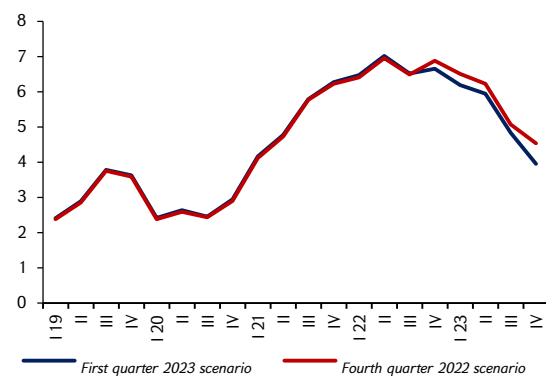


Source: Armenia Statistics Committee,
Central Bank of Armenia scenario

In the short-term perspective, the headline inflation will be at a lower level than estimated by the previous program, according to the scenario presented.

Chart 24

Short-term inflation expectation estimates (%)



Source: Central Bank of Armenia estimate

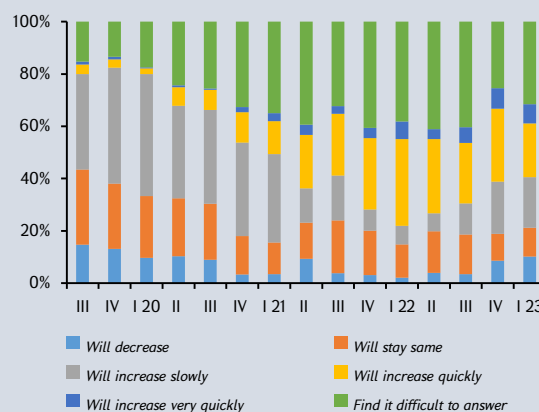
Box 2: The results of survey on the expectations by the households and the financial system

According to the results of the survey the Central Bank of Armenia regularly conducts among the households in connection with their expectations for a number of macroeconomic indicators in the first quarter of 2023, the inflation expectations have somewhat diminished, but they remain at high levels. In particular, the share of households expecting high inflation in the one-year horizon has decreased, whereas the share of those expecting low inflation has slightly increased in total respondents.

In the first quarter of 2023, as the results of the survey show, the uncertainty among respondents about expecting inflation has somewhat grown after a sharp decrease in the previous quarter, and remains at a high level. Thus, we can state that the contraction in the share of those expecting high inflation in the current quarter was largely reflected in the increase in uncertainties. It is noteworthy that although the inflation expectations of households have been declining recently, they still remain relatively high, emphasizing the logic of the above actions of monetary policy.

Chart 25

Surveys on households' inflation expectations



Source: Central Bank of Armenia

Table 3

Judgments of the scenario presented

Basic judgments and assumptions	Possible developments, if the assumption mentioned proves correct
The sanctions imposed on Russia will be maintained over the entire policy horizon. In the meanwhile, supply chain disruptions will continue easing.	✓ The economic growth in the USA and the Eurozone - principal trade partners to Armenia will continue pacing at low rates, and the economic decline in Russia will be smaller, mainly owing to a minor decline in the industry sector and growth in the construction sector.

In China, restrictions in connection with the pandemic have eased significantly and will further do so. In the US financial sector, bankruptcies of some banks reported recently are not systemic in nature and will not leave a significant impact on the financial and real sectors, including as a result of adequate policy measures. In the Eurozone, quite favorable weather conditions made it possible to significantly reduce gas consumption, which will allow to avoid forced restrictions on gas consumption this year. However, the problem of supplying natural gas in required quantities in the Eurozone for the next years is not completely tackled. The fiscal policy in Russia will be stimulative over the entire forecast horizon. As approved by OPEC+ member countries, the agreement to reduce oil production by 2 mln/b per day from November of 2022 will be effectively adhered to. The impact of the ban on the import of Russian oil to the EU and of the applied price ceiling policy on oil production volumes in Russia and, therefore, on the supply in the world oil market will be small.	✓ Downside price adjustments in the oil and food product markets will continue. ✓ The impact of rebounding demand in China will be particularly significant on copper prices, overriding the impact of tightening monetary conditions in advanced economies. ✓ Inflation in partner countries such as the US and the EU will continue to be influenced by falling commodity prices, which will come somewhat mitigated in domestic economies attributable to an estimated higher demand and its following a slower-than-expected contraction path. ✓ Inflation on goods with relatively rigid prices will still hover at high levels. The US Federal Reserve System and the European Central Bank will continue to tighten monetary conditions. In the USA and the Eurozone countries, inflation will return to its target only at the end of the forecast horizon.
The country risk-premium of the Republic of Armenia has somewhat decreased owing to the considerably reduced debt burden on the back of high economic growth (improvement of the outlook, too) and exchange rate appreciation in the country. Nevertheless, with currently high capital flows, it is estimated that the country risk-premium of Armenia stands slightly below the level determined by fundamental factors.	✓ There is expectation that, as current trends phase out, the country's risk-premium will gradually increase, stabilizing around a long-term sustainable level.
In 2023, the fiscal policy's impact is expected to be contractionary for revenues and somewhat stimulative for expenditures.	✓ In 2023, the fiscal policy is estimated to have about 0.2 percentage point stimulative impact (in the event the annual tax revenue plan and as much as 98.5% of the adjusted expenditure

	plan are executed) primarily driven by a sharp increase in capital expenditures. In the medium term, a minor stimulative effect of the fiscal policy is expected according to the estimate outlined in the Mid-Term Expenditures Framework 2024-2026.
Armenia's export opportunities continue to expand given the potential growth in the manufacturing and IT sector, as well as the persistently high external demand.	✓ Additional positive developments, including by way of some expanding of production capacity, will carry on in the manufacturing sector. ✓ Given a persisting influx of international visitors, positive trends in external demand will continue in the short term. ✓ High growth in Information and communication sector will be maintained in the short term, which will have on average a 1.5-2.0 percentage point positive impact on the GDP potential between 2022-2023.
In the medium-term perspective, the mining sector is expected to make a certain positive contribution to the growth of the GDP potential.	✓ The operation of the Amulsar mine will contribute positively to the Armenia's growth potential between 2023-2025. during. Specifically, the contribution of Amulsar to accelerating the growth potential will be reflected in strong growth in the construction sector and higher investment activity (about 1.0 percentage point in GDP) in 2023, and in the expanded output and export potential (some additional 2.0 percentage point contribution to the GDP) in 2024 and, to a certain extent, in 2025.
Changes in excise and customs duties in the EAEU framework, up until 2023, determined by the requirement to apply general rates.	✓ In 2021-2023, the impact of gradual change in the excise duty is estimated to be around 0.4 percentage points, and the impact of change in customs rates, up to 0.3 percentage points for each year. The estimation is that that these effects on inflation will continue to be expressed in the first half of 2023.

Scenario risks

Heightened geopolitical uncertainties in the region carry on, creating significant risks especially in terms of potential

growth outlook in the Russian Federation and the Eurozone, on the one hand, and the speed of demand recovery in Russia, on the other. Although negative consequences connected with limited quantities of natural gas in the Eurozone will be possible to avoid thanks to favorable weather conditions, the problem of ensuring long-term sustainable energy supplies remains, containing certain risks in the medium-term growth perspective.

The problems that have appeared in the financial system of the United States may contain a systemic context. This may be demonstrated by a sharp deterioration of economic growth outlooks both in the US and the world economy.

The significant easing of pandemic-related restrictions in China has a certain positive effect on the shaping of prices in commodity markets but, at the same time, it contributes to increased price volatility in these markets amid high uncertainties about the speed of demand recovery. However, problems in the real estate market in China persist, creating some risks to a quick recovery in demand.

The labor markets in the USA and the Eurozone are overheated. Unemployment is at historical lows, and the rates of new job creation remain high, especially in the services sector. Under these trends, the wage growth may accelerate, creating significant inflationary risks.

In general, the aforementioned factors further bring about risks and challenges in terms of stabilizing the global economy, making it possible for the international commodity, food product and financial markets as well as supply chains to function as usual and to rebound. With the inflation around the world drifting considerably above its target for quite a long time, the risks of deanchoring long-term inflation expectations keep going. In this circumstance, central banks of many countries pursue and are still planning to tighten monetary conditions. A substantial part of the risks is associated with uncertainties about the speed the US Fed will be tightening the monetary policy, which leads to increased volatility in global financial markets and a significant asset price adjustment.

The above-mentioned developments, as a matter of course, create high uncertainty and sizeable risks to the Armenian economy as well. In addition to risks from the outside world, there are also risks associated with large-scale military aggression by Azerbaijan. These factors carry on reflecting wider ranges of uncertainty around central value forecasts for inflation and other key macro indicators (see Charts 1 and 2). Accordingly,

as things with high uncertainties currently stand, only quantitatively most significant risks existing around the presented scenario are introduced below.

In the aggregate demand point of view, the risks are as follows:

- The problems reported in the US banking system may have a systemic context and leave a considerable impact on the contraction of demand globally.
- The fiscal policy in Russia may be more stimulative than expected, contributing to a faster recovery of demand in the economy and helping the inflation environment to expand.
- With current geopolitical developments unfolding in the region, factors such as how long and to what extent the international visitors and resultant financial inflow will influence the Armenian economy create primarily positive risks to demand.
- The possible slowdown of seasonal migration and remittances from the Republic of Armenia because of currently unfriendly economic environment in the Russian Federation and restrictions on the movement of capital creates risks in terms of slowing consumption, on the one hand, and increasing labor supply, on the other.
- In the fiscal policy point of view, the main risks are with regard to channeling the saved funds to current expenditures in case of underperformed capital expenditures that are projected at remarkably high targets and, therefore, facilitating the inflation environment to expand.
- In an environment of a sizeable positive demand, difficulties arise in attracting additional labor force and resources, in which case there are risks of non-linear effects on inflation.
- With inflation indicators staying notably above the target for a long period of time in the Republic of Armenia, risks related to deanchoring of long-term inflation expectations and emerging of the inflation and wage spiral persist.
- With a high amount of savings accumulated in the private sector, there are risks primarily associated with accelerating consumption and investment, i.e. more inflationary or deflationary risks, respectively.

In the supply point of view, the risks to inflation are as follows:

- The risks to commodity and food product price forecasts are attributable to the speed at which the demand slows in the global economy, the extent of monetary policy tightening by the US Federal Reserve, the speed at which demand recovers in China, as well as to possible disruptions in supply chains and ensuring fundamental supply volumes in international markets as a result of ongoing sanctions imposed on Russia.
- With geopolitical tensions persisting, there are risks to deglobalization and primarily inflationary risks deriving from it.
- With continued tension on the borders of the Republic of Armenia, high geopolitical and regional uncertainties, there are inflationary risks associated with overreaction of financial markets and the increase in the country risk-premium of the Republic of Armenia.

In the medium-term perspective, the risks to the inflation deviating from the projection path are estimated as balanced and, on the whole, rather big quantitatively (see Chart 1).

In addition to the above-mentioned inflation risks, there are more mid-term risks to economic growth potential that are both dual-sided and balanced. In particular, the risks are related to the following domestic and external factors:

- Uncertainties related to the operation of the Alaverdi copper smelter, which is an upside risk.
- Uncertainties related to the timing of the Amulsar mine operation, the nature and extent of investment, as well as output and export volumes following the operation of the mine, which is both an upside and downside risk.
- Difficulties in the activity of companies operating with Russian capital in the Armenian economy, which is a negative risk in terms of the domestic economic growth.
- Both positive and negative risks related to the nature, size, and duration of capital financial flows to the Armenian economy, and to possible transformation of the economy.
- Risks related to the size and effectiveness of capital expenditures (including the economy's ability to absorb

them) outlined in the medium-term budget expenditure plan.

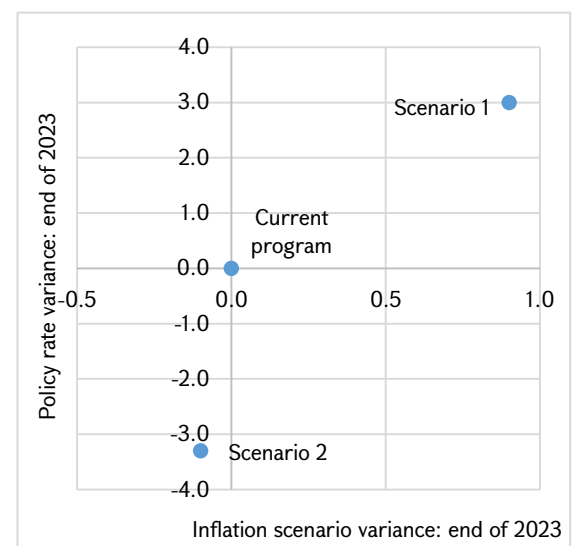
- Negative risks related to border tensions and geopolitical and regional uncertainties.
- Mainly positive risks related to acceleration of investment as a result of savings accumulated in the private sector.
- The programs with the EUR 2.6 billion support package intended to carry out within the framework of the EU Eastern Partnership, which is an upside risk (annual GDP growth of around 0.9-1.0%).

In general, there are serious uncertainties over the geopolitical situation, deglobalization, rearrangements in international supply chains and possible financial and economic developments, as well as over continuity of international travel and capital and labor inflows to Armenia, and this is why the Central Bank of Armenia attempts to reduce the possible risks arising from such uncertainties by building and discussing various scenarios about how the situations would unfold. Specifically, driven by the peculiarities of the current phase, in the context of lots of risks to be possibly materializing, two types of deflation and inflation scenarios of economic development were considered in depth, as follows:

- A long-lasting high inflation environment and persistently high inflation expectations, on the one hand, and strong demand and further heating of the labor market, especially in individual branches of the economy, on the other, may facilitate the acceleration of inflation by some elements (product groups standing out with rigid prices) of the headline inflation. Even with the headline inflation drifting around the target, this could lead to deanchoring of the inflation expectations and diminished reputation of the Central Bank, which would make fulfilment of the inflation target more costly. As a result, a higher level of the policy rate would be required for the Central Bank to stabilize the inflation (scenario 1).
- In the wake of the Russian-Ukrainian conflict, the inflow of capital and labor into the Republic of Armenia has had and

Chart 26

Possible economic development scenarios in the given situation



Source: Central Bank of Armenia scenario

will have a much more positive impact on the economy potential in the medium run than is estimated in the scenario the current monetary policy program presents. That is to say, both the growth of the Armenian economy and appreciated real exchange rate and reduced country risk-premiums mostly point to the factors of the economy's long-term productivity growth, increased investment attractiveness and potential, in contrast to mostly demand factors under the scenario considered in the program. In this circumstance, in view of a weaker inflation environment in the domestic economy and a lower neutral level of interest rates, the Central Bank of Armenia sets a lower path to policy rates in order to soften redundant extra pressures on the economy, neutralize possible deflationary risks and ensure price stability.

Possibilities of an appropriate policy response to them have been considered, which will allow to react in line with the situation at first substantial signs that these risks are materializing.

3. Actual developments in Q4, 2022

3.1. Inflation

3.1.1. Fulfilment of the inflation target

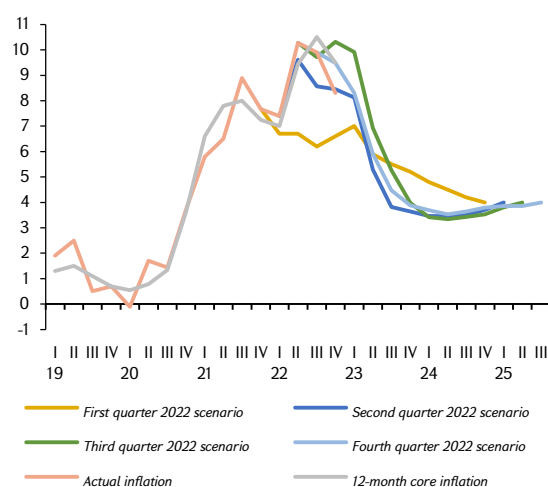
According to the main judgements in the scenario presented in the monetary policy program for the first quarter of 2022, the inflation environment would have to remain high in the course of the upcoming one year driven by the inflationary effects transmitted from external markets because of the escalation of the Russian-Ukrainian conflict, as well as the strong demand being created in the Armenian economy amid an estimated influx of international visitors and financial assets. It was predicted that in the medium term, in view of tighter monetary policy implementation and expected macroeconomic developments, the 12-month inflation would have to gradually decrease and stabilize around the 4% target.

It is noteworthy that in the beginning of the period under review, i.e. until March of 2022, the 12-month inflation was gradually decreasing; in February it was 6.5% thanks to a progressive monetary response by the Central Bank of Armenia in the previous period when the inflation patterns all over the world were trending up. Staring from end-February, however, as geopolitical developments unfolded, the inflation environment has expanded considerably, with the inflation having notably outgrown the expected level. This is why, in the next quarters the projected path of inflation has been revised upside in the short run.

Thus, the 2022 macroeconomic environment and, particularly, the inflationary developments in the Republic of Armenia have largely incurred the influence of the Russian-Ukrainian conflict, intensified since the end of February, and the various sanctions imposed on the Russian economy and exceptionally high uncertainties derived from them. They were reflected in the significant slowdown of economic growth rates in the main partner countries to Armenia, as well as high inflation recorded in international energy and food product markets as a consequence of supply chain disruptions. In the short term, such developments have transmitted their negative impact on the Armenian economy mainly through somewhat weakened economic activity, and on Armenia's commodity market, through high prices of individual imported goods. At the same time, driven by the Russian-Ukrainian conflict, a significant increase in the country's risk-premium and the volatility in the domestic financial market in the short term has been observable

Chart 27

At the beginning of the period under review, the 12-month inflation has reduced, in line with the projected path, while it has increased sharply since March 2022, so the short-term segment of the scenario for the subsequent quarters has been revised upside.



Source: Armenia Statistics Committee,
Central Bank of Armenia

too, contributing, in turn, to a certain rise in inflationary expectations and inflation risks. Starting from the second quarter of 2022, however, the growth rate of economic activity has speeded up owing to a large-scale influx of international visitors and tourists, as well as of financial transfers to Armenia. Consequently, the factors of external demand for domestic services have well contributed to high economic growth. Positive developments were also observed in the export sector, the IT and manufacturing industries in particular. Continuously growing demand has also contributed to the expansion of the general inflation environment and the maintenance of high inflation expectations. In the second half of the year, with energy and food prices reducing amid a contractionary monetary policy conducted by central banks in the main partner countries to Armenia, on the one hand, and the supply chain disruptions gradually phasing out, on the other, the inflationary impact from the external sector was reported to have somehow weakened, hence facilitating the overall inflationary environment of the Republic of Armenia to mitigate, yet sustained high demand in Armenia was further contributing notably to wage increases and growing prices of individual goods and services. In the course of 2022, determined by a strong demand from international visitors and influenced by a significant influx of financial transfers from abroad, Armenia's currency market has seen the domestic currency, the dram, appreciated markedly, helping the above-mentioned inflationary factors to somehow mitigate.

Under such circumstances, the Central Bank of Armenia continued to tighten monetary conditions during the first quarter of 2022 by raising the policy rate by 2.0 percentage points. Moreover, the monetary conditions were tightened, with a relatively large step of 1.25 percentage points, in March, responding to a high inflation environment estimated for mid-term perspective in the context of geopolitical developments. In the second quarter, the Central Bank refrained from changing the interest rate, taking into account the expectations of a gradual weakening of the inflationary effects under conditions of appreciation of the Armenian dram along with the increase in foreign demand. In the third and fourth quarters, however, despite some weakening of the inflationary effects on the Armenian economy from the external environment, the Central Bank tightened monetary conditions by raising the policy rate each time by 0.75 percentage points in view of persisting high demand and inflationary expectations in the domestic economy on the back of continued high influx of international visitors and tourists, and of financial assets.

To sum up, the 12-month inflation has increased significantly since March 2022, reaching 10.3% at the end of the second quarter; as a result of the implemented monetary policy, it gradually decreased to 8.3% at the end of the year. The 12-month core inflation behaved similarly in the course of the year, amounting to 9.5% at the yearend. It is estimated that the inflation rate will, starting from the second half of 2023, gradually weaken and stabilize around the 4% target owing to the impact of a consistent monetary policy implementation.

The 12-month inflation has increased notably since March of 2022, reaching 10.3% at the end of the second quarter; it then gradually decreased to 8.3% at the end of the year as a result of the implemented monetary policy.

Box 3: Alternative monetary policy (counterfactual analysis)

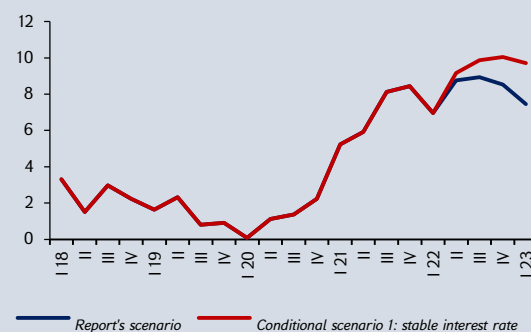
To ensure price stability as well as maintain/increase the margin of trust, it is important for central banks to react in a timely and sufficient manner to inflation and inflation expectations deviating from target values. This is crucial when these deviations linger some extended period of time in the same direction, for various reasons (even under the influence of exogenous factors) and create risks in terms of deanchoring of inflationary expectations and ensuring price stability.

The repercussions of the Russian-Ukrainian conflict in the Armenian economy were largely absorbed by the appreciation of the nominal exchange rate, as the economy encountered a significant external demand shock. Along with this, on the back of substantially strong demand, the response of the Central Bank of Armenia through raising policy rates has also been channeled to neutralizing the possible risks of inflation expectations. Under such conditions, a question may arise: how would the inflation behave in the Republic of Armenia if, for example, the Central Bank kept interest rates at the same level throughout 2022 in the current situation, on the premise that, determined by external demand factors, the inflationary pressures were to be completely absorbed by dram appreciation? To this end, policy response exercises were conducted to compare the behavior of inflation in that context.

In particular, if the Central Bank left the policy rate unchanged after the first quarter of 2022, the inflation would increase, floating at double-digit levels throughout the year. It should be noted that in an environment of overall high inflation, the prices of basic goods too would be shaping at considerably higher levels, which means a notable increase in expenditures for more vulnerable families. Such a policy would reduce the public's confidence in the Central Bank of Armenia, somehow deanchoring the inflation expectations and making the fulfillment of price stability objective more costly in the future.

Chart 28

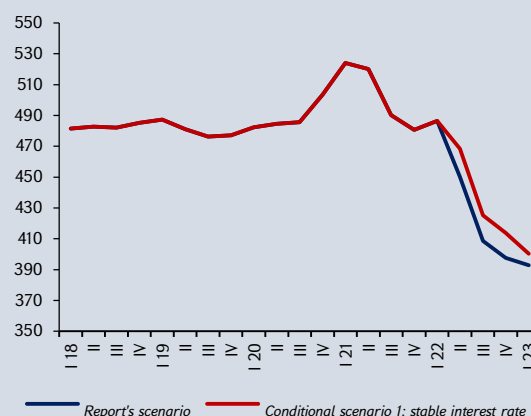
The 12-month inflation dynamics under the report's scenario and conditional scenario for a stable interest rate



Source: Central Bank of Armenia

Chart 29

The dram exchange rate behavior under the report's scenario and conditional scenario for a stable interest rate



Source: Central Bank of Armenia

As a result, to reduce high inflation and help it stabilize around the 4-percent target in the medium run, a more drastic policy response starting from 2023 would be needed by raising, for example, the policy rate to around 12 percent in early 2023.

It should also be noted that a weaker monetary policy would bring about somewhat a higher economic activity in the short term, which, however, would be “compensated” in the future driven by the need to implement a tighter monetary policy in a higher inflation environment.

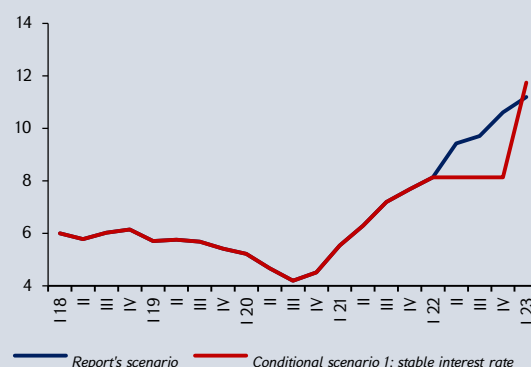
In the outcome, the timely and appropriate response enabled the Central Bank of Armenia, quite the reverse the conditional scenario, to let the inflation accelerate more controllably and stabilize around the target in the medium term with relatively fewer public expenditures.

As already mentioned, a considerably increased influx of international visitors and financial assets throughout 2022 has resulted in significant appreciation of the dram exchange rate in nominal and real terms. In particular, in the period from March to December 2022, the Armenian dram has appreciated against the US dollar by about 20 percent, markedly facilitating the mitigation of expanding of the inflation environment under the influence of external demand. In this context, the next question that may arise is what would be the impact of the above-mentioned phenomena on inflation and the Armenian economy, if the Central Bank abandoned the current monetary strategy to conditionally pursue a policy of fixing the nominal exchange rate of the dram at a stable level throughout 2022, directly intervening in the developments of the currency market (conditional scenario) ¹².

Thus, according to this conditional scenario, in the case of keeping the dram nominal exchange rate stable, starting from the first quarter of 2022 and throughout the year, the Central Bank would, in fact, intensify the external demand-prompted inflationary pressures, so raising the policy interest rate up to 25 percent would, therefore, be needed to achieve the goal of price stability in the medium term. But even with such a response, inflation would continue to accelerate, approaching around 15 percent by the end of the year.

Chart 30

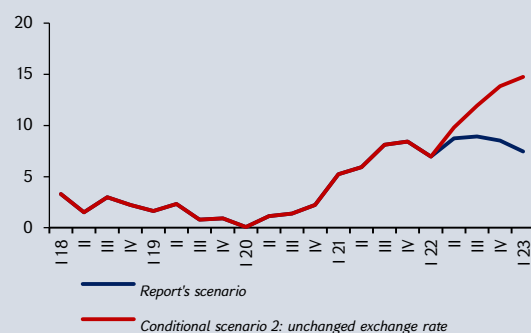
The Central Bank interest rate under the report's scenario and conditional scenario for a stable interest rate



Source: Central Bank of Armenia

Chart 31

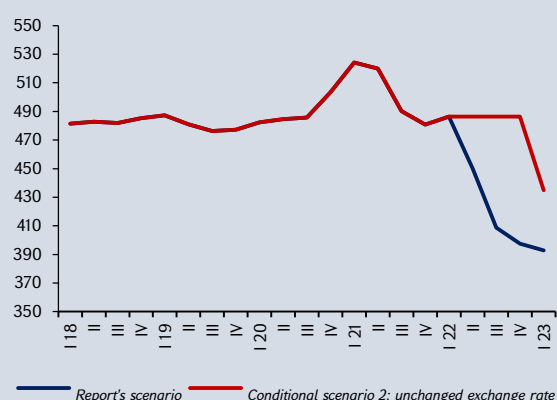
The 12-month inflation dynamics under the report's scenario and conditional scenario for a stable exchange rate



Source: Central Bank of Armenia

Chart 32

The dram exchange rate dynamics under the report's scenario and conditional scenario for a stable exchange rate



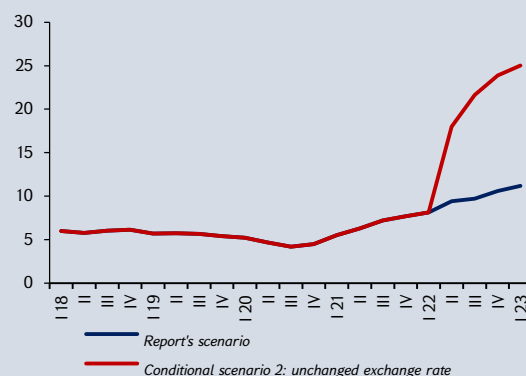
Source: Central Bank of Armenia

¹² It should be noted that the presented conditional scenario does not take into account the possible risks of the loss of credibility of the Central Bank and the consequent loosening of inflationary expectations, usually derived from a change in policy strategy.

Here, it is important to emphasize that expanding of the inflation environment in Armenia has largely been determined by the growth of external demand, so the increase in policy rates would, in fact, facilitate the stabilizing of inflation by curbing domestic demand while channeling the burden to the domestic economy. Note that even excluding the primary loss of reputation resulting from a sharp change in policy strategy, such a policy would have a negative impact on the people's trust in the Central Bank against the backdrop of accelerating inflation, and because of deanchored inflation expectations the inflation would persist at high levels in the future, making the fulfillment of price stability objective much more costly.

Chart 33

The Central Bank interest rate under the report's scenario and conditional scenario for a stable exchange rate



Source: Central Bank of Armenia

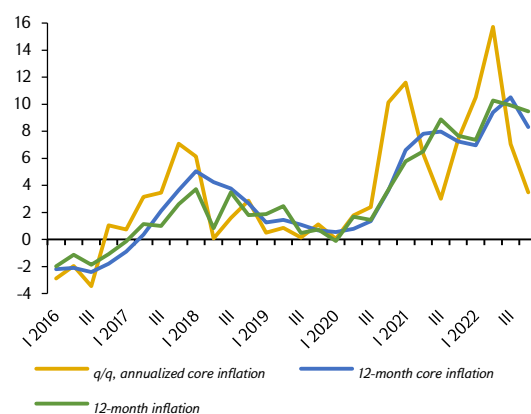
3.2.1. Prices

High inflation environment transmitted from the external sector and fueled by the growing demand in the domestic economy persisted throughout 2022, showing signs of some easing at the end of the year only.

Thus, a sharp increase in the prices of items “Bread and cereals”, “Meat”, “Dairy products”, “Oils and fats” has been observable in the domestic economy since the beginning of the year on account of the impacts transmitted from international food markets. The increase in international energy prices had its spillover effect on fuel prices. In the meantime, given the large influx of international visitors to the Republic of Armenia, high demand in the Armenian economy has added to inflationary pressures also in terms of locally manufactured goods and especially services, in which circumstance tariffs for a number of services with rigid prices (apartment rent, restaurants and hotels, hairdressing, financial, postal services) have gradually risen throughout the period under review. In the fourth quarter of 2022, in expectation of a sluggish demand from the world economy and tightening of financial conditions, a decrease in prices of some goods (fuel, sunflower oil, grain) has been observable in international commodity markets, which was also reflected in the prices of goods imported to the Armenian economy. It should also be noted that the Armenian dram appreciated along with mounting external demand has notably

Chart 34

The inflation environment, sharply expanded over the first half of 2022, has somewhat eased at the end of the year.



Source: Armenia Statistics Committee, Central Bank of Armenia

curbed, starting from the third quarter of 2022, the price increases of imported goods.

Meanwhile, the risen prices of items “Tobacco” and “Alcoholic beverage” out of the core inflation components has incurred, as was estimated, the inflationary impact of the change in excise duty rates early in the year.

In addition to the above-mentioned factors, the acceleration of inflation since the start of the period under review has been driven significantly by highly grown prices of seasonal food products. Reduced sown areas pushed vegetable prices up, particularly for certain products, while unfavorable weather conditions had their impact on fruit prices, especially in the second quarter. Starting from the third quarter of 2022, the impact of these factors on inflation has mitigated to some extent.

In the first half of 2022, the tariffs of regulated services rose sharply due to the increase in the tariffs of water supply services since January, those of electricity since March, and those of natural gas since April.

Table 4: Consumer price inflation by commodity items as key contributors

Commodity item	Weight	12-month inflation: December 2022	Contribution to inflation y/y
Core inflation	75.1	9.5	7.1
Bread and cereals	8.1	14.1	1.1
Meat	9	12.3	1.1
Oils and fats	2.6	4.8	0.1
Sugar	0.5	-2.1	0.0
Dairy products	4.2	16.6	0.7
Alcoholic beverage	2.4	9.1	0.2
Tobacco	1.4	8.6	0.1
Clothing	1.3	7.4	0.1
Footwear	0.8	6.7	0.1
Household appliances	0.6	8.8	0.1
Fuel	6.8	2.6	0.2
Air passenger transportation services	0.6	47.1	0.3
Outpatient care services	2.7	3.3	0.1
Actual rent paid by the tenant for additional accommodation	1	63.0	0.6
Restaurants and hotels	1	8.8	0.1
Fees for services of banks, post offices	0.6	18.6	0.1

Imported food products	14.8	11.1	1.6
Seasonal food products	9.4	4.1	0.4
Eggs	1.3	-6.2	-0.1
Fruits	3.2	10.9	0.3
Vegetables	4.9	2.1	0.1
Regulated services	15.5	5.2	0.8

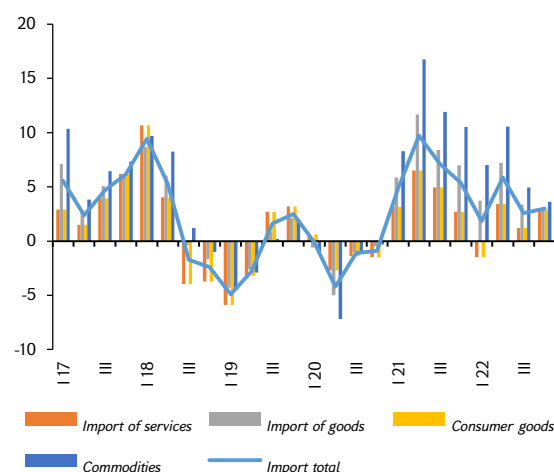
Import prices

A decrease in the prices of food products in the world was reported during the fourth quarter of 2022, which was expressed by a fall in the dollar prices of imports to Armenia. The latter was mainly determined by reduced prices of intermediate consumption goods, unlike consumer goods having posted even a small increase. Thus, over the fourth quarter, the dollar prices of imports dropped by 0.2% compared to the previous quarter; however that indicator is still 3.0% above the one recorded for the same period last year.

Relative to the same period last year, the growth was mainly determined by oil and wheat prices that persisted high in comparison with the previous year. In terms of consumer goods, the contribution of dollar prices has been positive - 1.0 percentage point.

Chart 35

In the fourth quarter of 2022 the increase in the dollar prices of import of goods and services has stabilized relative to the same quarter of the previous year, y/y, %.



'Source: Central Bank calculations

3.2. Economic developments

3.2.1. Economy position

In the period under review, the GDP gap persisted in a positive territory. In the fourth quarter of 2022, the economic growth was 12.8% (see section 3.2.3), which was slightly below the estimate of the previous Central Bank of Armenia program, but is still high. The growth was largely driven by strong external demand in the services sector. Furthermore, relative to the previous program, an increase in GDP potential was observable in the services and industry sectors. As a result, the GDP gap has been slightly revised downside compared to the previous estimate and continues to reflect the inflation environment persisting in the service sector, in particular.

In the period under review, the GDP gap remained in the positive territory.

3.2.2. Expenditures aspect of the economy

In terms of demand, primarily public expenditures and net exports contributed positively to the economic growth.

The growth of private spending in the reporting quarter was 3.9%, which is below the previous estimate of the Central Bank of Armenia. The deviation is due to lower private consumption and gross accumulation of private fixed assets. At the same time, with rather a strong economic growth (see section 3.2.3), remittances, as well as real wages (see section 3.2.2), the private sector disposable income has increased significantly, pointing to an increased level of savings. As observed by the Central Bank, the increase in savings has been progressive among businesses which are still not predisposed of making investment amid uncertainties about the main drivers of current economic growth (international visitors and financial inflows). Although large volumes of housing construction funded by organizations are sustained, the level of private investment remains low on the whole.

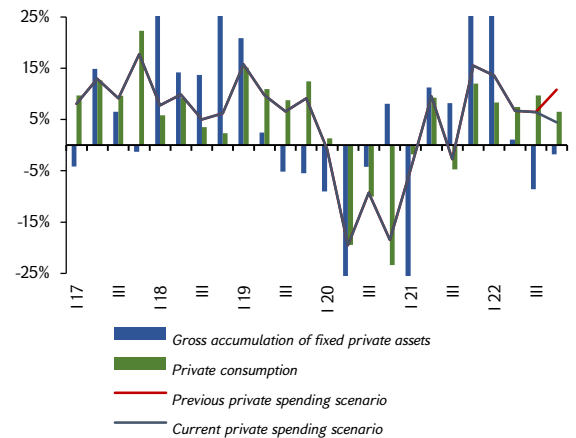
The real growth of export of goods and services was almost in line with expectations owing to persistently high external demand over the fourth quarter of 2022. The real growth of import of goods and services has been somewhat lower from the previous estimates. High revenues generated in the domestic economy are not yet reflecting the anticipated increase in the import of tourism. In terms of export, the high growth continued amid some weakening of previously competitive environment in the markets and opening of new positions. With sustained high growth of international visitors, the developments in export of tourism have somewhat exceeded the expectations. As a result, in the fourth quarter of 2022 the growth of real export of goods and services was 68.8% y/y, and the growth of real import of goods and services, 35.0% y/y.

To sum up, it should be noted that the contribution of net real exports to GDP in the fourth quarter has been more positive.

In the fourth quarter of 2022, the growth of net remittances of individuals (the seasonal workers income and personal transfers inclusive) in dollar terms was 36.1% y/y, according to estimates. This was attributable to high growth in nominal dollar incomes generated in the non-tradable sector of the Russian economy.

Chart 36

The structure of private spending, y/y growth



Source: Armenia Statistics Committee,
Central Bank of Armenia estimate

Chart 37

In the fourth quarter of 2022 the net export position further improved (net real export, y/y %, positive sign means improvement).



Source: Armenia Statistics Committee

Fiscal policy¹³

In the fourth quarter of 2022, both revenues and expenditures were overperformed against the budget thus posting deviation from the Central Bank of Armenia estimates. As a result, commensurate with previous expectations, the fiscal policy's impact on aggregate demand is an estimated 0.4 percentage points expansionary.

In the fourth quarter of 2022, the state budget revenues amounted to 103.5% of the adjusted plan, primarily owing to higher tax revenue collection. Also, other revenues were overperformed against the plan by about 1.8 times largely thanks to more interest fees payable for using temporarily free funds of the budget. The tax revenues of the Republic of Armenia state budget have outgrown the projected figure on account of high economic growth and inflation observable since the beginning of the year. As a result, in line with the previous estimate, the revenues impulse has been 0.4 percentage point expansionary.

In the fourth quarter of 2022, the state budget expenditures reached 102.1% of the Central Bank's expectations. As a result, the expenditures impulse came in less stimulative compared to the previous quarter - 0.3 percentage point expansionary instead of the previously estimated 0.7 percentage point. In the state budget's expenditures structure, expenditures on non-financial assets were overperformed, while current expenditures came in somewhat underperformed relative to the estimates of the Central Bank of Armenia.

In the outcome, with the revenues and expenditures dynamics mentioned above, the state budget posted a deficit of AMD 211.2 billion (budget funds intended as part of domestic sources of financing fell short of the needs) in the fourth quarter. In the meantime, the deficit of the consolidated budget has totaled nearly AMD 246.6 billion.

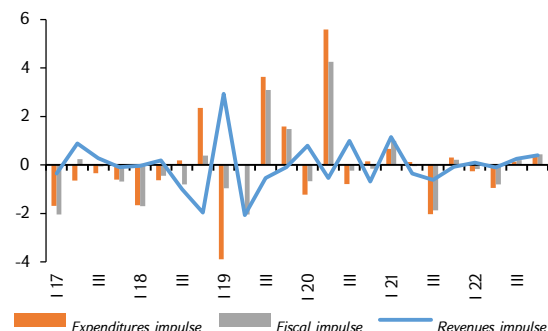
3.2.3. Production aspect of the economy

In the fourth quarter of 2022, the economic growth was 12.8%, close to the previous estimate of the Central Bank of Armenia. The services and construction sectors further contributed positively to the high economic growth, posting increases of 20.6% and 16.5%, respectively.

¹³ The review of the fiscal sector was done using the actual consolidated budget indicators of the first quarter.

Chart 38

In the fourth quarter of 2022 the fiscal policy had a weak stimulative effect relative to the previous quarter.

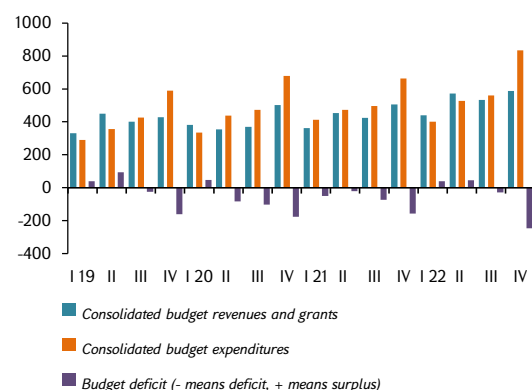


Source: Central Bank of Armenia estimate

The impact of fiscal policy on aggregate demand is estimated 0.4 percentage point expansionary, which is in line with previous expectations.

Chart 39

In the fourth quarter of 2022 the state budget generated a deficit (billion of dram).



Source: Armenia Statistics Committee

Residential house building funded by the organizations continued to be the main driver to the construction industry. In addition, the state budget-funded construction has increased to a certain extent.

High growth in services persisted in the financial and insurance activities, transport, accommodation and catering, and information and communication sub-industries driven by strong external demand.

Higher growth (4.9%) was recorded in the industry sector compared to the previous program estimate, mostly reflecting trends in increasing output and export potential in the manufacturing sector.

In the agriculture sector, a 0.4% decline was reported, in line with the Central Bank of Armenia estimate, following negative developments observable in both plant growing and animal breeding since the start of the year.

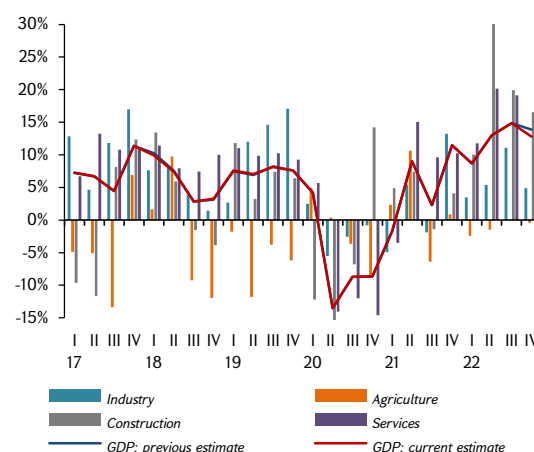
3.2.4. Labor market

In the fourth quarter of 2022, the unemployment rate is estimated around 11.2%, which is below the previous estimate of the Central Bank of Armenia. The decline in the unemployment rate was mainly attributable to the employment following a growth path amid high economic activity. At the same time, in the labor market demand posted a surpassing growth over supply, as a result of which the nominal wage growth in the private sector has been much higher than the Central Bank's expectations, amounting to 24.8% in the fourth quarter of 2022. Wages have grown mostly in the services sector (IT and financial services, in particular), with strong output growth reported there. It is noteworthy that in the inflation environment at the time, the growth of real wages in the private sector was around 10%.

Thus, the high growth of private wages and the decline in the unemployment rate were largely influenced by the positive GDP gap and demand factors in the period under review.

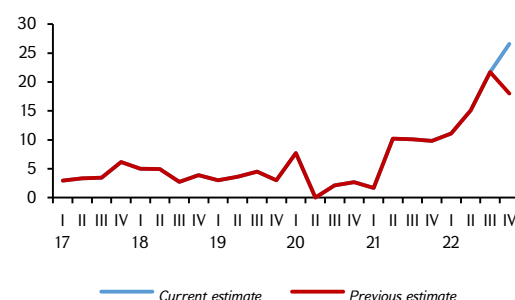
It should also be noted that a significant increase in labor costs was observed during the fourth quarter as the growth of private wages surpassed the output growth per employee. Although partially incurring the impact of the above-mentioned demand factors, this also points to a certain increase in inflationary pressures from the labor market.

Chart 40
The GDP structure by sector, y/y growth, %



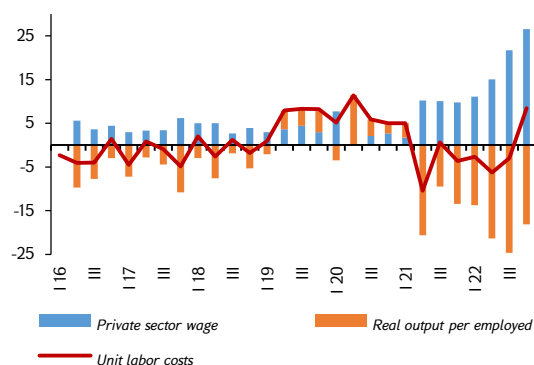
Source: Armenia Statistics Committee,
Central Bank of Armenia estimate

Chart 41
Private nominal wage, y/y growth, %



Source: Armenia Statistics Committee,
Central Bank of Armenia estimate

Chart 42
Unit labor costs, y/y growth, %¹⁴



Source: Armenia Statistics Committee,
Central Bank of Armenia estimate

¹⁴ In unit labor costs, the productivity is represented by a negative contribution.

3.3. Financial market developments

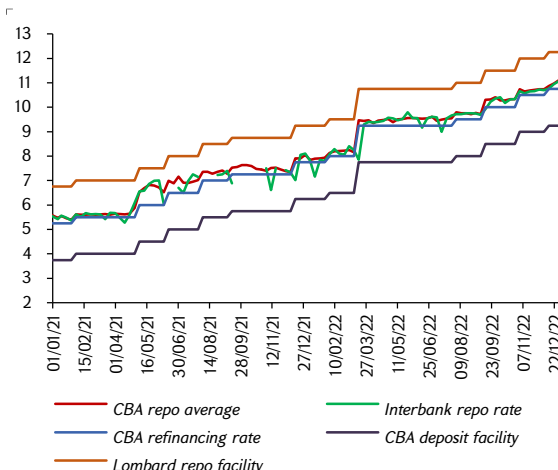
In the fourth quarter of 2022, the Board of the Central Bank of Armenia raised the refinancing rate by 0.75 percentage points to 10.75%.

In the fourth quarter of 2022, the Central Bank Board raised the refinancing rate by 0.75 percentage points, setting it at 10.75%.

Despite somewhat weakened inflationary effects from the external sector and that the appreciated dram made a deflationary contribution, the accelerating inflation environment and high inflation expectations in the wake of large-scale inflow of international visitors prompted the Board of the Central Bank of Armenia to make a decision to tighten monetary conditions through raising the refinancing rate by 0.5 percentage points in November. In December too, insisting on the priority to managing monetary risks, the Board of the Central Bank found it appropriate to further tighten the monetary policy, but with a smaller step of 0.25 percentage points. The Board reckoned that a relatively tight monetary policy and the dram's appreciation would gradually help contain demand and reduce inflation expectations. Moreover, the Board had announced its commitment to taking all required measures to make sure the inflation is stabilized and the risks of deanchoring of inflation expectations are neutralized.

Chart 43

During the quarter the short-term interest rates continued shaping around the Central Bank's policy rate.



Source: Central Bank of Armenia

Table 5: Average interest rates in Armenia's financial market

	02.02.22-15.03.22	16.03.22-03.05.22	04.05.22-14.06.22	15.06.22-02.08.22	03.08.22-13.09.22	14.09.22-01.11.22	02.11.22-13.12.22	14.12.22-31.01.23
Central Bank refinancing rate	8.00	9.25	9.25	9.25	9.5	10.0	10.5	10.75
Central Bank repo rate	8.20	9.46	9.51	9.53	9.75	10.32	10.7	11.11
Interbank repo rate (up to 7-day)	8.14	9.39	9.65	9.55	9.67	10.32	10.66	11.11
Yield of government securities on a yield curve (average indicator)								
Short-term treasury bill (1-year)	9.08	10.13	10.25	10.41	10.46	10.86	11.50	11.67
Medium-term notes (5-year)	9.93	10.97	10.87	10.98	11.02	11.43	11.83	11.94
Long-term bonds (30-year)	10.25	11.20	11.26	11.59	11.69	12.04	12.11	12.02

Trends observable in the financial market continued over the fourth quarter of 2022: the financial system demonstrated higher liquidity and capital levels, while the Armenian dram appreciated in the currency market, primarily incurring the effects of a large influx of international visitors and financial transfers. In the quarter under review, a certain decrease in the

demand for liquidity provided by the Central Bank was recorded, with short-term interest rates in the dram market shaping around the policy rate.

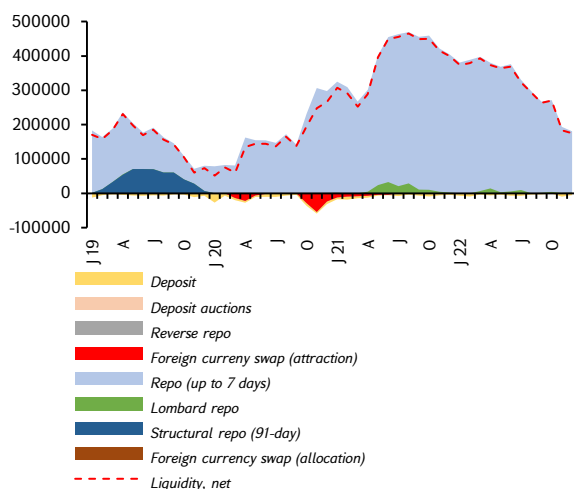
In the fourth quarter of 2022, the market of government securities saw a pronounced increase in yields in the medium-term segment against the backdrop of raised policy rate of the Central Bank of Armenia. At the end of the fourth quarter, the long-term interest rates demonstrating a downward reaction, concurrent with the action of the Central Bank, is noteworthy. Moreover, the high level of liquidity in the financial market, on the one hand, and the Government's internal debt management policy, on the other, came to suppress the yield increases. However, the average increase in government security yields across the curve was 0.5 percentage points.

In the fourth quarter of 2022, the funds attracted and provided by commercial banks kept on growing. In the meantime, there has been an increase in interest rates, bearing the effect of the policy rate rise by the Central Bank of Armenia. In the face of uncertainty over real sector income growth and growth outlook there, the demand for lending hence the growth of actual volumes of loans were relatively contained. According to the Central Bank surveys on the terms of lending,¹⁵ the economic activity was concomitant with other commercial services actively offered by banks and a less demanding behavior in the lending sector. However, according to the same surveys, both supply and demand for business lending are expected to expand in the upcoming quarters. Some rebounding in consumer and mortgage lending is anticipated, as well. Despite the tightened terms of mortgage lending, a fairly high growth in this sector was seen during the fourth quarter of 2022 too. Overall, in the course of 2022 the lending¹⁶ has grown by 4.5% and by 13.5% if the effect of the exchange rate is netted off.

The dram further followed an appreciation trend in the currency market over the fourth quarter of 2022 market driven by the high demand of international visitors for domestic services and the inflow of financial assets from abroad. The average quarterly exchange rate of Armenian dram/US dollar

Chart 44

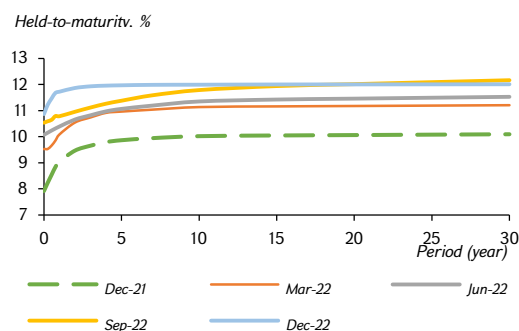
Liquidity injected and absorbed through Central Bank transactions (average monthly inventory, million of dram)



Source: Central Bank of Armenia

Chart 45

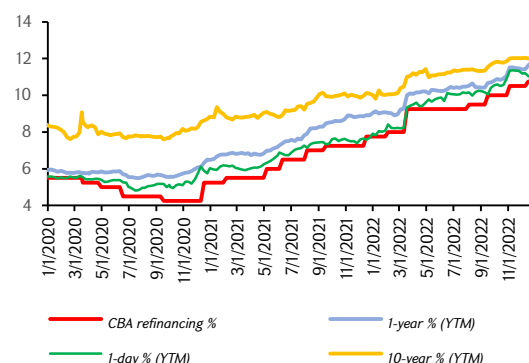
In the fourth quarter of 2022 the government security yields grew in short- and medium-term segments.



Source: Central Bank of Armenia

Chart 46

The Central Bank refinancing rate and government securities yield dynamics



Source: Central Bank of Armenia

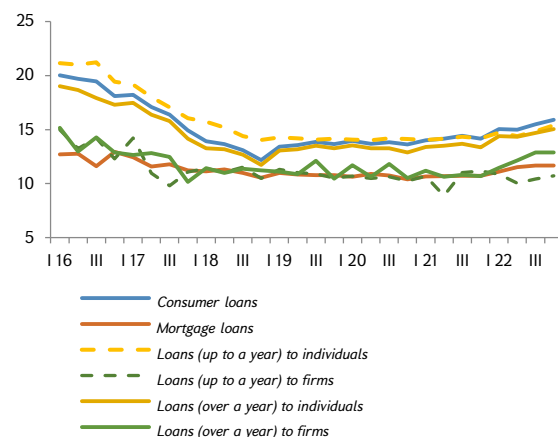
¹⁵ The survey on terms of lending is carried out once in every quarter, with commercial banks and credit organizations involved as survey participants. The fourth quarter 2022 survey was conducted in February of 2023.

¹⁶ The calculation includes the volume of loans provided to residents by banks and credit organizations.

appreciated by 2.79%, and the exchange rate of Armenian dram/Russian ruble, by 8.5%.

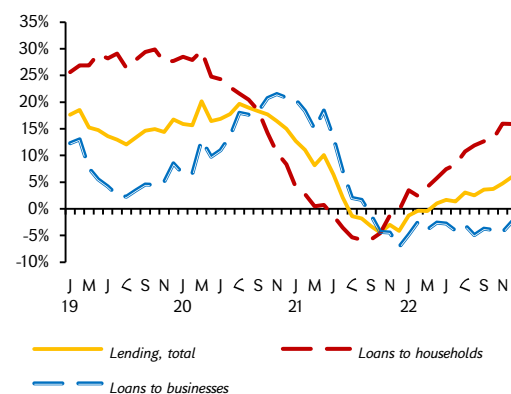
The large-scale foreign currency inflow has outstripped, in certain episodes, the domestic currency market's ability to absorb, bringing about risks of market disruption, to which the Central Bank of Armenia responded by situationally intervening in the currency market and purchasing foreign currency thus contributing to the financial markets to function as usual. The net purchase of US dollars by the Central Bank of Armenia in the fourth quarter amounted to USD 252.0 million.

Chart 47
In the fourth quarter of 2022 the interest rates of loans continued increasing.



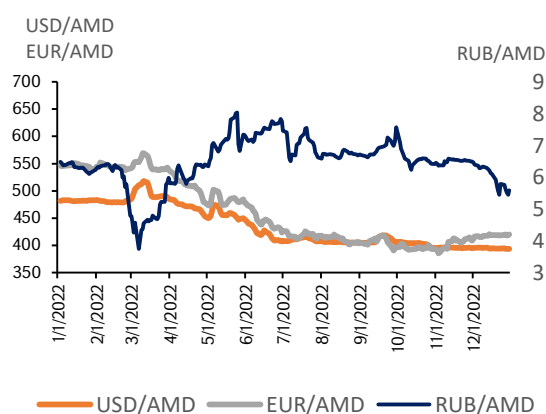
Source: Central Bank of Armenia

Chart 48
The behavior of the 12-month growth of loans provided by banks



Source: Central Bank of Armenia

Chart 49
The behavior of currency exchange rates against the Armenian dram in 2022



Source: Central Bank of Armenia

4. Summing-up

According to the the first quarter 2023 monetary policy program of the Central Bank of Armenia, the headline inflation will decrease in the near future, but the prices of some goods and services (especially tariffs of unregulated services) will further remain at high levels, incurring the effects of the shaped high demand and inflation expectations. Considering the aforementioned, the Central Bank found it reasonable to keep monetary conditions relatively tight at this stage, stressing the importance of regulating prices of products that stand out with rigid prices in fulfillment of the price stability objective. At the same time, the Central Bank will be consistent in taking required action in order to stabilize the inflation and neutralize any risk of deanchoring of inflation expectations. In view of the monetary policy the Central Bank of Armenia implements and expected macroeconomic developments, the 12-month inflation will decrease during the year and **stabilize a while later around the target value of 4%.**

For the 3-year policy horizon the risks of inflation deviating from the projection path are mostly balanced, and in the event any such risks materialize, the Central Bank will stand ready to react accordingly to ensure the price stability objective in the medium run.

MINUTES

THE CENTRAL BANK OF ARMENIA BOARD MEETING (14.03.2023)

On the refinancing rate

The Central Bank Board Meeting of March 14, 2023 attended by Governor M. Galstyan, Deputy Governors A. Nurbekyan and H. Khachatryan, and Board Members H. Ghahramanyan, D. Nahapetyan, A. Manukyan, L. Sahakyan, and N. Ghazaryan

The Board meeting opened with reporting on the situation as of March 14, 2023. It addressed the developments on inflation, external environment, and real, fiscal, financial, and monetary sectors of the economy.

Current developments in the external sector were presented. It was reported that in the first quarter of 2023, the trends of economic activity slowing down in the world economy and the partner countries to Armenia continued, although a certain revival of the economy in the short-term perspective is expected amid easing of pandemic restrictions in China. In the face of continued tightening of financial conditions, the international commodity markets report price decreases, for food products and oil in particular, which also contributes to the decelerating of inflation around the globe. However, the overall inflationary environment remains elevated because of persisting high demand and pressures deriving from the labor market. Under these conditions, central banks of developed countries will further tighten monetary conditions in the near future. As a result of such actions, the global demand will gradually slow down and prices in international commodity markets will decrease, facilitating the global inflationary environment to mitigate and helping the inflationary effects, transmitted from the external sector to the Armenian economy, to weaken.

The Board of the Central Bank referred to the latest developments taking place in the US financial market, discussing in detail their effects on and risks to the US economy, as well as the channels and scenarios of possible spillovers to the Armenian economy.

The developments in the Armenian financial market were addressed; in the banking system, it was noted, the demand for providing liquidity through the main instrument of the Central Bank of Armenia kept on contracting in the course of the first quarter of 2023. However, short-term interest rates in the market were largely shaped around the policy rate. It should be noted that the country risk-premium of the Republic of Armenia remains at a low level owing to the improved Armenia rating and the effect of some economy-specific factors.

Inflation developments were also presented to the Board; it was stated that 0.1% inflation was registered in February of 2023 driven by 0.3% increase in food products prices and 0.2% rise in service tariffs, whereas the prices of non-food products decreased by 0.6% during the month. **As a result, the 12-month inflation continued to decline to 8.1% at the end of the month. The 12-month core inflation reduced too, reaching 8.4%.** Furthermore, the Board admitted that the overall inflationary environment in Armenia continued mitigating as a result of the contractionary monetary policy implemented by the Central Bank, the dram appreciation and weakening inflationary pressures from the external sector, while also stating that the strong demand and inflation expectations were still facilitating the growth of wages and prices of individual goods and services.

Following the discussion of the Situation Report and the macroeconomic developments in external and domestic sectors, the Board proceeded to addressing the macroeconomic scenarios and monetary policy directions and making decision on the policy interest rate. The Forecasting Team, in view of the aforementioned macroeconomic situation, provided the Board with scenarios describing the monetary risks that would possibly derive from upcoming economic development outlooks. Specifically, considering the possible scenarios of the developments unfolding in the US financial market, the majority of the Board members reckoned that they would not be systemic in nature, while the macroeconomic effects transmitting to the world economy would be weak and minor. The Board members were of the opinion that, on the one hand, the inflationary effects spilling over to the Armenian economy from the external sector continued weakening thanks to the consistent monetary policy of central banks in the main partner countries to Armenia and, on the

other hand, strong demand and high inflation expectations were persisting in the Armenian economy. In such a situation, the Board members stated, although the 12-month inflation was expected to subdue notably in the near future, the prices of items in the consumer basket, important in the monetary policy point of view (product groups with rigid prices), were still going up, in which case the Board emphasized the need to be consistent in taking action to handle future inflationary risks. As a result, the **Board of the Central Bank of Armenia made a decision in consensus to leave the refinancing rate unchanged**. The Board also endorsed its commitment in taking adequate measures to stabilize inflation and neutralize any risk of deanchoring of inflation expectations. According to the presented monetary policy scenario, the 12-month inflation will gradually decrease and, starting from the second half of 2023, stabilize around the 4% target.

The Board of the Central Bank estimated that the risks of inflation deviating from the projection path are mostly balanced. In the case of risks materializing in any direction, the Board will adequately react and ensure the price stability objective.

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

THE CENTRAL BANK OF THE REPUBLIC OF ARMENIA

BOARD DECISION

ON THE SETTING OF INTEREST RATES OF MONETARY POLICY INSTRUMENTS OF THE CENTRAL BANK OF THE REPUBLIC OF ARMENIA AND THE PRESS RELEASE ON THE REFINANCING RATE

By virtue of Article 2 (3), Article 20 “c” and “e” of the Republic of Armenia Law on the Central Bank, and clauses of the Republic of Armenia Law on Normative Regulations, the Board of the Central Bank of the Republic of Armenia ***enacts:***

1. Set the Refinancing rate of the Central Bank of the Republic of Armenia to be 10.75%.
2. Set the Lombard facility rate offered by the Central Bank of the Republic of Armenia to be 12.25%.
3. Set the Deposit facility rate offered by the Central Bank of the Republic of Armenia to be 9.25%:
4. Approve the Press Release on the Refinancing Rate of the Central Bank of the Republic of Armenia (attached).
5. This decision to take effect on the day following its publishing on Internet homepage of the Central Bank of the Republic of Armenia.

Martin Galstyan

Governor of the Central Bank

March 14, 2023

PRESS RELEASE
14.03.2023

At the March 14, 2023 meeting, the Board of the Central Bank of Armenia decided to leave the refinancing rate unchanged, at 10.75%.

In February of 2023, the 12-month inflation continued to decrease to 8.1% at the end of the month. The 12-month core inflation reduced as well, reaching 8.4%.

In the first quarter of 2023, the economic growth and the 12-month inflation in the world and main partner countries to Armenia are slowing down. However, the overall inflationary environment continues to remain elevated driven by still high demand and pressures coming from the labor market. Therefore, central banks of developed countries will continue to tighten monetary conditions in the near future. This will lead to a weakening of global demand and contribute to a certain drop in prices in international commodity markets. As a result, the inflationary effects of the global economy on the Armenian economy continue to weaken.

High activity in the domestic economy of Armenia in early 2023 is persisting, which continues to be driven by strong growth recorded in services and construction sectors. High activity is accompanied by increased export and GDP potential observable in industry and service sectors. As a result of the implemented contractionary monetary policy, appreciation of the dram and weakened inflationary effects from the external sector, the overall inflationary environment in Armenia continues to mitigate. However, high demand and inflation expectations are still driving up wages and prices of certain goods and services.

The Board of the Central Bank finds it reasonable to leave the policy rate unchanged. The Board will be consistent in taking appropriate actions to ensure stabilization of inflation and neutralize any risk of deanchoring of inflation expectations. According to the outlined monetary policy scenario, the 12-month inflation will gradually decrease and, from the second half of 2023, will stabilize around the 4% target.

The Board of the Central Bank estimates that the risks of inflation deviation from the projected path are mostly balanced; in the event these risks materialize in any direction, the Board stands ready to respond accordingly in fulfilment of the price stability objective.

Armenia's main macroeconomic indicators according to the Scenario

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Indicators	actual	actual	actual	actual	actual	actual	actual	actual	program	program	program
External sector											
USA economic growth (% real growth)	2.7	1.7	2.3	2.9	2.3	-2.7	6.1	2.1	1.6	2.3	2.4
EU economic growth (% real growth)	1.9	1.8	2.7	1.9	1.6	-6.3	5.5	3.5	1.0	-0.7	0.5
Russia economic growth (% real growth)	-1.9	0.2	1.8	2.8	2.0	-2.9	4.8	-2.2	-0.2	1.8	1.3
USA inflation (average, %)	0.1	1.3	2.1	2.4	1.8	1.2	4.7	8.0	5.8	4.0	2.7
EU inflation (average, %)	0.0	0.2	1.5	1.7	1.2	0.3	2.6	8.4	7.4	4.5	2.5
Russia inflation (average, %)	14.4	6.8	3.6	2.8	4.5	3.4	6.7	13.7	9.2	5.7	4.3
Oil price (dollar/barrel)	53.5	45.0	54.6	71.4	64.1	42.5	71.0	98.7	88.0	94.5	96.7
Copper price (dollar/barrel)	5497.4	4867.6	6201.5	6544.7	6024.1	6191.2	9288.1	8956.0	9094.7	9353.9	9578.9
FAO index	93.0	91.9	98.0	95.9	95.1	98.1	125.7	143.6	133.4	141.5	144.8
Domestic economy											
Prices											
Inflation (y/y, end period, %)	-0.1	-1.1	2.6	1.8	0.7	3.7	7.7	8.3	2.8	4.0	4.0
Consumer price index (y/y, average, %)	3.7	-1.4	1.0	2.5	1.5	1.2	7.2	8.6	4.4	3.8	4.0
Core inflation (y/y, average, %)	5.1	-2.0	0.8	4.0	1.2	1.3	7.2	8.9	4.8	4.0	4.0
Gross product											
GDP (billion of Armenian dram)	5043.6	5067.3	5568.9	6017.0	6543.3	6181.7	6983.0	8496.8	9352.3	10230.3	11160.9
GDO (% real growth)	3.2	0.2	7.5	5.2	7.6	-7.4	5.7	12.6	5.8	5.2	4.9
Supply											
Industry (% real growth)	6.2	7.7	11.7	4.9	12.0	-1.7	3.5	6.3	5.2	7.4	6.3
Agriculture (% real growth)	13.2	-5.0	-5.1	-6.9	-5.8	-4.1	-0.6	-0.7	1.2	2.4	2.8
Construction (% real growth)	-3.1	-14.1	2.8	0.6	6.5	-6.7	3.1	19.1	13.2	8.4	5.9
Services (% real growth)	1.6	3.2	10.6	9.1	10.0	-9.7	7.9	18.1	6.3	4.4	4.6
Tax, net (% real growth)	-5.1	-3.7	9.7	8.0	7.1	-10.0	7.4	8.2	4.7	5.6	5.4
Demand											
Consumption (% real growth)	-6.0	-2.1	11.6	3.8	11.7	-10.9	4.2	7.7	4.6	4.1	4.6
Public consumption (% real growth)	4.7	-2.4	-2.1	-3.0	12.9	9.2	8.4	6.5	7.6	2.1	3.5
Private consumption (% real growth)	-7.5	-2.1	14.0	4.8	11.5	-14.0	3.4	8.0	3.9	4.5	4.8
Gross accumulation of fixed assets* (% real growth)	2.5	-11.4	9.7	4.8	4.4	-1.5	6.3	9.5	23.3	5.5	8.4
Public investment** (% real growth)	13.6	5.0	31.7	-37.4	31.1	16.2	-9.9	41.1	60.7	3.5	15.9
Gross accumulation of private fixed assets (% real growth)	1.2	-13.9	6.2	19.6	-0.5	-5.7	11.2	1.9	12.1	6.4	4.8
Export of goods and services (% real growth)	4.9	21.3	19.3	5.0	16.0	-33.4	17.1	54.4	14.3	3.4	4.5
Import of goods and services (% real growth)	-15.3	6.3	24.6	13.3	11.6	-31.4	12.5	33.8	14.6	1.7	4.6
Current account											
Balance of trade (million of US dollar)	-1186.4	-976.9	-1400.9	-1724.4	-1727.9	-1382.2	1504.8	-2016.1	2091.8	-1972.3	-2031.3
Balance of services (million of US dollar)	-96.4	70.4	159.4	24.7	-66.9	118.0	396.9	1429.4	1251.9	1243.3	1228.2
Money transfers (million of US dollar)	1098.3	1009.4	1179.3	1136.2	1143.8	1046.2	1243.1	1630.5	1297.8	1222.3	1157.6
Current account (million of US dollar)	-284.7	-107.9	-173.9	-875.9	-1002.3	-477.8	-515.1	14.8	-322.9	-301.6	-400.3
Balance of trade (share in GDP, %)	-12.2	-8.6	-10.8	-13.7	-13.1	-10.0	-7.9	-3.0	-3.6	-3.2	-3.3
Balance of services (share in GDP, %)	-0.9	0.7	1.4	0.2	-0.5	0.9	2.8	7.3	5.4	5.5	5.0
Money transfers (share in GDP, %)	10.4	9.5	10.2	9.1	8.4	8.3	8.9	8.3	5.6	5.4	4.7
Current account (share in GDP, %)	-2.7	-1.0	-1.5	-7.0	-7.3	-3.8	-3.7	0.1	-1.4	-1.3	-1.6

Indicators	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	actual	actual	actual	actual	actual	actual	actual	actual	program	program	program
Public sector***											
Revenues and grants (billion of Armenian dram)	1167.7	1171.1	1237.8	1342	1559.1	1560.4	1683.8	2046	2366.4	2630	2969
Tax revenue (billion of Armenian dram)	1067.9	1079.7	1158	1258	1464.3	1385.2	1586.9	1926	2248	2553	2898
Expenditures (billion of Armenian dram)	1409	1449.1	1504.8	1447	1623	1894.3	2004.3	2243.5	2541	2846	3190
Deficit (billion of Armenian dram)	-241.3	-278	-267	-105.4	-63.9	-333.9	-320.5	-197.5	-174.6	-215.6	-221.4
Revenues and grants (share in GDP, %)	23.2	23.1	22.2	22.3	23.8	25.2	24.1	24.1	25.3	25.7	26.6
Tax revenue (share in GDP, %)	21.2	21.3	20.8	20.9	22.4	22.4	22.7	22.7	24	25	26
Expenditures (share in GDP, %)	28	28.6	27	24.1	24.8	30.6	28.7	26.4	27.2	27.8	28.6
Deficit (share in GDP, %)	-4.8	-5.5	-4.8	-1.8	-1	-5.4	-4.6	-2.3	-1.9	-2.1	-2
Monetary sector											
Broad money (y/y, end period, %)	10.8	17.5	18.5	7.5	11.2	9	13.1	16.1	0	0	0
Dram broad money (y/y, end period, %)	5.2	24.8	28.9	13.2	21.5	14.8	12.8	13.4	0	0	0
Loans to economy (y/y, end period, %)	-3.3	6	16.5	17.2	18.5	14.3	-3.9	4.5	0	0	0
USD/AMD (Armenian dram for one US dollar)	477.9	480.5	482.7	483	480.4	489	503.8	435.7	0	0	0
* From now on the Central Bank will only present the indicator of gross fixed asset accumulation instead of gross accumulation, since the change in tangible working capital inventories is calculated by Armenia's Statistics Committee as a balancing item and it does not show the true level of gross accumulation. See https://www.armstat.am/file/article/sv_04_19a_112.pdf .											
** Actual indicators of public investment are the capital expenditures of the consolidated budget, and the estimates are based on a revised macro-framework, 2023-2025, available at the time.											
*** The 2023 budget indicators are the Central Bank of Armenia estimate. The 2024-2025 indicators are presented from the state Mid-Term Expenditures Framework.											

Yerevan, 2023

