

THE CENTRAL BANK OF
THE REPUBLIC OF ARMENIA

*Approved under the Central Bank Board
Resolution No. 105A, dated June 26, 2020*

Inflation Report

Monetary Policy Program, Q2, 2020



*Status Report on Implementation of the Monetary
Policy Program, Q1, 2020*

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

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

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

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

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

Projections in this report are based on the actual information available by June 16, 2020, 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.

Table of Contents

1. Executive summary	4
2. Forecast, forecast changes and risks	5
2.1. External environment developments	5
2.2. Forecasts	7
2.2.1. Inflation and monetary policy	7
2.2.2. Economic activity	9
2.2.3. Comparison with previous forecast	11
2.2.4. Main assumptions and risks	14
Box 1: The results of survey on the expectations by the households and the financial system	14
Box 2: The impact of increase of uncertainty on the economy (US example)	17
Box 3: An alternative program in case the second wave of pandemic develops	21
3. Actual developments in Q1, 2020	22
3.1. Inflation	22
3.1.1. Fulfilment of the inflation target	22
3.1.2. Prices	23
3.2. Economic developments	25
3.2.1. Economy position	25
3.2.2. The expenditures aspect of the economy	25
3.2.3. The production aspect of the economy	27
3.2.4. Labor market	27
3.3. Financial market developments	28
4. Summing-up	30
Annex	
Minutes	31
The CBA Board decision on interest rates	34
Press release	35
Main macroeconomic indicators	36
Charts	37
Tables	38

1. EXECUTIVE SUMMARY

During the second quarter of 2020 the rate of coronavirus spread worldwide, including in Armenia, accelerated significantly. Consequently, state of emergency was extended phase by phase in almost all countries of the world, while adhering to healthcare and economic restrictions. As a result, compared to the forecasts made in March under big uncertainty, the second quarter registered much deeper-than-expected declines in global economic activity and economic activity in Armenia, significant weakening of aggregate demand, deflationary patterns in key commodity markets, and uncertainty over the duration of the pandemic and economic growth outlook increased. In this situation, the world's major financial institutions and central banks have adjusted and revised their estimates of main macroeconomic indicators downside. Accordingly, the central banks continued to pursue a stimulative monetary policy during the quarter to ensure the recovery of demand and price stability.

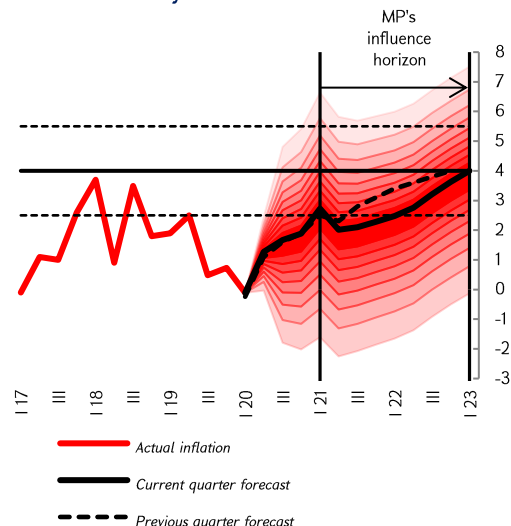
The Central Bank of Armenia also significantly revised its 2020 economic growth outlook from 0.7% projected in the previous quarter to -4.0%. This is determined by both an intensification of economic decline in the second quarter and anticipation of a slower recovery in the future, with economic growth in the medium term to reside below the long-term steady state. At the same time, in the face of low external demand and big uncertainty, private demand is expected to weaken. In order to neutralize this deflationary effect, the **Central Bank decided to cut the refinancing rate this time in a larger step**, assessing that under such circumstances the monetary conditions will need to remain expansionary in the medium run as well.

As a result, 12-month inflation will still be persisting low in the near future, as the effects of weak private demand in the short term will outweigh the expansionary impact of the fiscal policy. In the medium term, the inflation, driven by an expansionary monetary policy, will gradually recover, stabilizing around the target at the end of the forecast horizon.

The inflation and economic growth scenario risks in the forecast horizon are primarily downside due to possibly longer duration of the pandemic and deeper negative economic effects (see subsection “2.2.4. Main assumptions and risks”). If existing risks materialize, the Central Bank stands ready to adjust the monetary conditions accordingly while ensuring the price stability in the medium run.

Chart 1

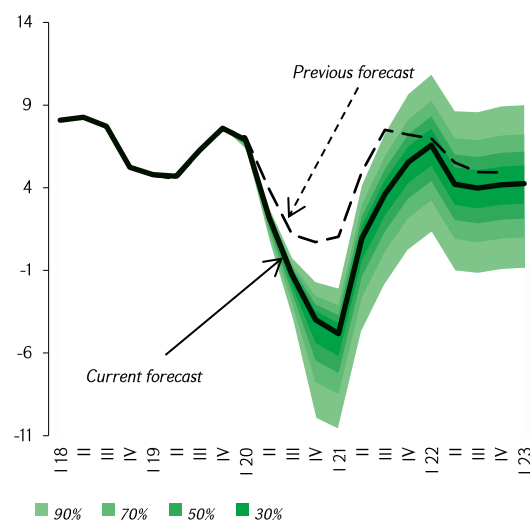
Inflation (12-month) forecast probability distribution for 3-year horizon



Source: RA Statistics Committee, CBA forecast

Chart 2

Real GDP (cumulative)¹ growth forecast probability distribution for 3-year horizon



Source: RA Statistics Committee, CBA forecast

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

2. FORECAST, FORECAST CHANGES AND RISKS

2.1. External environment developments

With the spread of the coronavirus pandemic in the world since the beginning of 2020, the pace at which the world economy advanced has changed significantly, which is reflected in actual developments and large decreases in the leading indicators of the countries during the second quarter. The global economic downturn is expected to continue up until the end of the first half of 2020, and in the course of the second half the rate of decline of the world economy will slow down under the assumption that at the end of the year the pandemic would subdue. Specifically, economic decline will be registered in the United States, Eurozone and Russia - main trade partners to Armenia - in the first half of 2020 and some recovery will be seen in the second. Amid a lasting uncertainty, the pace of recovery of the world economy and that of partner countries is anticipated to be slower also in the medium term.

Economic decline will be registered in the United States, Eurozone and Russia - main trade partners to Armenia - in the first half of 2020 whereas some recovery will be noticeable over the second half.

Economic developments in the United States: According to the U.S. Bureau of Economic Analysis estimate, economic growth in the USA in the first quarter of 2020 was a mere 0.25% y/y, determined mainly by the US government's actions to prevent the spread of the pandemic since March. In the first quarter of 2020 the unemployment rate rose slightly to 3.8% from 3.5% reported in the fourth quarter of last year, and in April, in the middle of full restrictions, the unemployment went up sharply to 14.4%. In 2020, with the global economy reducing, the US economy is predicted to slump by 6.2%; the risks are mostly downside due to high uncertainty at the moment.

In the USA in the first quarter of 2020, the quarterly personal consumption expenditure price index² amounted to 1.6% y/y, running below the US Fed's medium-term target, and in April it slowed to 0.5%, mainly due to lower energy prices. Given current growth developments and persisting uncertainties, the Fed cut the policy rate during the first quarter of 2020 first by 0.5 pp and then by another 1.0 pp, setting it in the range of 0.0-0.25%, and announced a USD 700.0 billion-worth quantitative easing program. The policy rate cut and the adoption of QE were steered to meet high demand for liquidity by financial markets amid increasing economic uncertainties due to the pandemic. It is expected that April's inflation, which was low because of fallen commodity prices and weak demand, will be persisting. Given such developments in the economy, the US Federal Reserve will continue pursuing a low interest rate policy.

² The personal consumption expenditure price index target is 2%, which on average is commensurate with headline inflation of 2.4%.

Economic developments in the Eurozone: The measures taken against the outbreak of coronavirus and its spread have had a considerable impact on the economic activity in the Eurozone. According to preliminary estimates by the Eurostat, economic growth in the Eurozone in the first quarter of 2020 amounted to -3.2% y/y. The first quarter's economic decline was due to sluggish domestic demand, while net foreign trade had a small positive effect. It is expected that the heaviest impact of pandemic on the Eurozone economy will be observed in the second quarter of 2020, and the 2020 economic decline will reach 7.4%. The unemployment rate in the Eurozone in the first quarter of 2020 remained at the previous quarter's level, 7.4%. Yet, taking into account the current uncertainty, the risks of a deeper slowdown in the individual economies of member states across Eurozone are persisting.

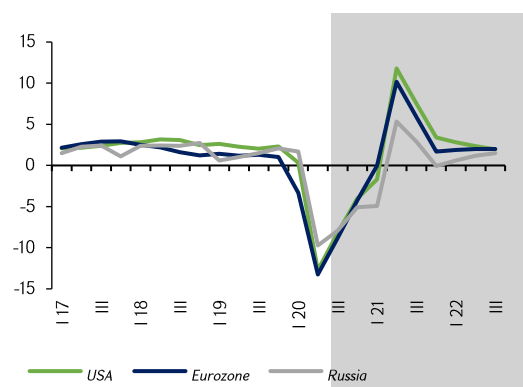
In the Eurozone in the first quarter of 2020, the average quarterly inflation reached 1.1% y/y, running below the European Central Bank's target, and the first quarter's core inflation averaged 1.25%. In April, the inflation notably decelerated to 0.4%, driven primarily by low energy prices and weak demand. In anticipation of low inflation and economic decline, the ECB will further pursue a low interest rate policy while announcing a program of EUR 20.0 billion-worth of assets purchases per month.

Economic developments in Russia: Economic growth in Russia in the first quarter of 2020 was 1.6% y/y, according to preliminary estimates by the State Statistics Service of Russia. The unemployment in Russia in the first quarter remained at the previous quarter's level of 4.6%. However, already in April, unemployment rose to 5.8%. Russia's economic slowdown in 2020 is projected at 5.3%, with downside risks prevailing.

In the first quarter of 2020 the average quarterly inflation in Russia slowed to 2.4% y/y from that of 3.4% reported in the previous quarter, residing below its target value of 4%. Note that inflation rates somewhat accelerated in April due to the ruble depreciation and growing demand for some goods, but this was temporary as already in May inflation rates subsided to 3.0% from those of 3.1% in April. With inflation decelerating, the Bank of Russia cut the policy rate in the first quarter of 2020 by 0.5 pp (another 0.5 pp was also lowered in April 2020) to 5.5%. Although the inflation expectations were somehow high early in the year, this is estimated as temporary, too. Given further inflation and economic developments, as well as the risks associated with the global economy, the Bank of Russia is expected to continue a rapid easing of monetary conditions.

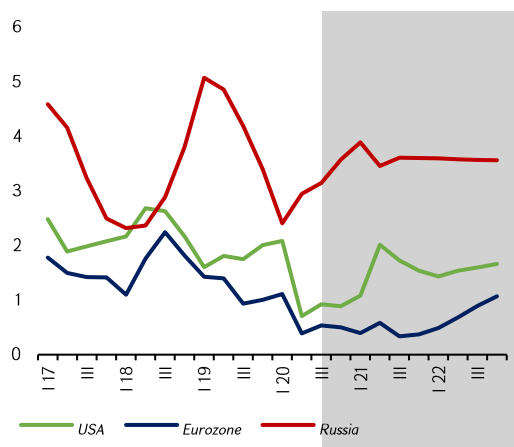
Developments in world commodity and food product markets: The coronavirus pandemic has adversely affected both demand and

Chart 3
Economic growth in trade partner countries, (%)



Source: Bureau of Economic Analysis, Eurostat, Rosstat, CBA forecasts

Chart 4
Inflation in trade partner countries, (%)



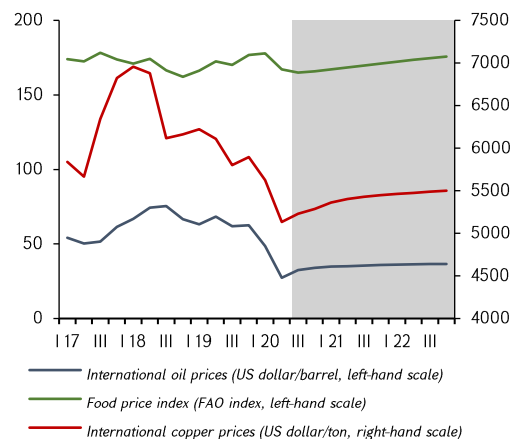
Source: Bureau of Labor Statistics, Eurostat, Rosstat, CBA forecasts

supply in commodity markets. The primary impact incurred by markets has been a result of country lockdowns and disrupted production chains, and the secondary impact was due to the slowdown in global economic growth. Prices in major commodity and food product groups in the first quarter of 2020 followed a downward path relative to the previous quarter. Price falling continued also in April 2020, but they tended to stabilize during May.

The first quarter of 2020 saw copper prices fallen by 4.6% q/q in the international market after the Chinese economy slackened amid a spread of the pandemic. The copper prices somehow rebounded in April as the Chinese economy showed signs of recovery. In the first quarter of 2020, relative to the previous quarter, international oil prices had plunged by 22.2% q/q after a sharp decline in demand for oil products due to cancelled flights between countries under the pandemic on the one hand, and following the disagreement over the reduction of supply in OPEC + member states during the first quarter, on the other. Albeit kept on dropping in April, oil prices restored to some extent during May as terms of agreement reached between OPEC + member states over reduction of supply were extended further. In 2020 international prices of raw materials, particularly copper and oil, will remain at their lows.

During the first quarter of 2020, a fall in prices since February was observable in the food product market. During the second quarter (April-May), these trends continued, and if the uncertainties in the world economy persist, they will carry on in the short term as well.

Chart 5
International commodity and food prices



Source: World Bank, FAO, CBA forecast

2.2. Forecasts

2.2.1. Inflation and monetary policy

Inflation remained at a relatively low level during this quarter. The Central Bank estimates that the second quarter will register one of the deepest economic declines ever in the external sector, which will cause deflationary pressures on the Armenian economy. At the same time, according to current estimates, the 2020 forecast for annual growth rate of the Armenian economy has been lowered considerably from 0.7% in the previous quarter to -4.0%, which is attributable not only to a deeper decline in economic activity in the second quarter but also expectations of a much slower recovery in future. Moreover, the Central Bank estimates that, in view of high uncertainty, private demand will incur additional negative pressures, so it decided to react to a greater extent by cutting the refinancing rate by 0.5 pp. As a result, the inflation, residing below the target in the upcoming months, will gradually stabilize around it in the medium run.

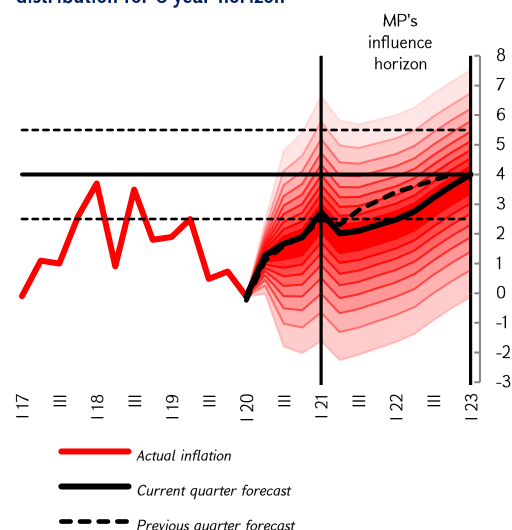
According to current estimates, the 2020 forecast for annual growth rate of the Armenian economy has been lowered considerably from 0.7% in the previous quarter to -4.0%.

According to current estimates of the Central Bank, in the second quarter of the year the decline in economic activity will deepen due to the influence of supply and demand factors. In the supply point of view, the decline is mostly conditioned by notable decreases in output volumes in construction and services sectors. In terms of demand, the decline will be reflected in reduction of total private expenditures and may be lengthier if uncertainties carry on longer. At the same time, the impact of fiscal policy will be stimulative in the second quarter of 2020 and throughout the year. As a result, the GDP gap is estimated considerably negative for the second quarter of 2020, and next year, under the influence of expansionary monetary and fiscal policies, it will gradually close, in which case deflationary pressures on inflation will gradually phase out. In view of the aforementioned monetary and fiscal policies, the inflation will begin recovering gradually in the upcoming quarters after having remained low. It is estimated that population's short-term inflation expectations have somewhat reduced amid increasing uncertainties at the moment and in anticipation that demand would restore at a weaker pace. However, inflation expectations are likely to stabilize in the medium term as inflation recovers, while high uncertainty over such expectations will gradually neutralize as the situation with the pandemic stabilizes. Taking into account the significant weakening of external and domestic demand and possible slowdown in recovery, as well as the negative effects of uncertainty caused by current developments with pandemic, the Board of the Central Bank decided to cut the refinancing rate in a big step. **At the same time, in view of expected macroeconomic developments, maintaining monetary conditions expansionary also in the medium term will still be needed in order to fulfil the inflation target.**

Given the significant weakening of external and domestic demand and possible slowdown in recovery, as well as the negative effects of uncertainty caused by current developments with pandemic, the Board of the Central Bank decided to cut the refinancing rate in a big step.

Chart 6

Inflation (12-month) forecast probability distribution for 3-year horizon



Source: RA Statistics Committee, CBA forecast

Table 1

Period	Inflation interval forecast probability distribution				
	<1.0%	1.0-2.5%	2.5-5.5%	5.5-7.0%	>7.0%
Q2, 2020	38.5%	57.5%	4.1%	0.0%	0.0%
Q3	39.3%	29.1%	29.4%	1.9%	0.3%
Q4	37.0%	26.0%	32.4%	3.6%	1.0%
Q1, 2021	26.8%	22.0%	39.4%	8.1%	3.6%
Q2	36.4%	23.9%	33.1%	4.7%	1.8%
Q3	35.5%	24.8%	34.0%	4.4%	1.4%
Q4	32.6%	24.6%	36.2%	5.0%	1.6%
Q1, 2022	29.9%	24.4%	38.4%	5.6%	1.7%
Q2	26.1%	23.5%	41.2%	7.0%	2.3%
Q3	20.4%	21.5%	45.0%	9.5%	3.5%
Q4	15.9%	19.3%	47.2%	12.2%	5.3%
Q1, 2023	12.5%	17.2%	48.1%	14.8%	7.4%

2.2.2. Economic activity³

Aggregate demand: The spread of the pandemic, anti-pandemic measures, economic restrictions, shrinking incomes, including reduced private remittances, as well as the suspending of decisions to consume and invest in the face of a sharp rise in uncertainty all are factors that will significantly weaken Armenia's economic activity. The assumption is that the impact of the above factors will gradually abolish only starting from the second half of 2020, with domestic economic growth lingering in a negative territory in 2020, amounting to -4.0%. The decline will primarily be a result of reduced private spending, whereas contribution of public expenditures to economic growth will be positive. According to the Central Bank estimates, the decrease in private consumption will reach 6.3%, and the decrease in gross accumulation of private fixed assets, 14.7%. Net export's contribution will be positive although the import and export volumes will reduce considerably. The length of the pandemic and negative developments associated with it remain largely uncertain and are the main risks to the slowing of economic growth in the forecast horizon.

In the forecast horizon, private spending will accelerate and be the key driver to economic growth. The export and import volumes will restore much slowly, in line with a slow recovery of international tourism, however net export's contribution to economic growth will remain in a positive territory. It is expected that contribution of public expenditures will come smaller as economic growth recovers.

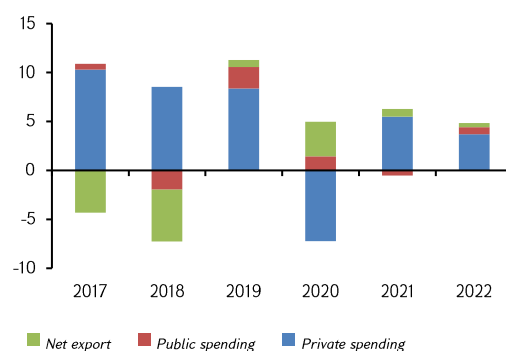
External demand: The 2020 forecasts were adjusted on a back of new predictions for a deep decline in global economy as well as domestic economic slowdown. Thus, the real export of goods and services is forecast to decrease in the range of 12.0-15.0%. This, amid a slackening global demand, will be attributable to the measures partner countries are taking to fight the pandemic. The volumes of international tourism are expected to shrink significantly. In line with new forecasts for domestic economy, the real import of goods and services will decrease between 15.0-17.0%.

Remittances of individuals are predicted to reduce substantially as a sharp decline in oil prices has notably contracted Russia's economic growth. Temporary migration restrictions Russia imposes at the moment will lead to considerable narrowing of remittances of individuals; the decrease in private remittances is anticipated in the

In 2020 Armenia's economic growth will be in a negative territory, amounting to -4.0%.

Chart 7

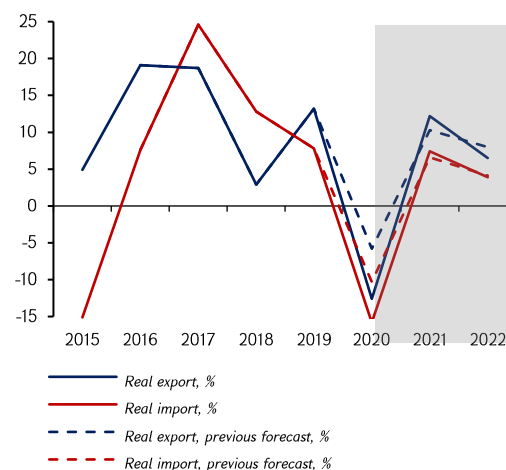
Demand components contributing to the growth, (percentage point)



Source: RA Statistics Committee, CBA forecast

Chart 8

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



Source: RA Statistics Committee, CBA forecast

³ For a detailed economic growth forecasts, see the "GDP Projection Probability Distribution", chart 18, table 2.

⁴ 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.

range of 22.0-25.0%, but it should be noted that, compared to previous years, the impact of this decrease on GDP has been way smaller.

On the back of such forecasts, the 2020 current account deficit-to-GDP ratio will improve against that of 2019, running within 6.0-7.0%.

In the medium run, as a result of surpassing export growth, the current account deficit-to-GDP ratio will gradually stabilize within an equilibrium level of 3.0-5.0%.

Fiscal policy: The fiscal policy's impact on aggregate demand for 2020 was estimated using the figures set out in RA Law on "State Budget 2020", the current changes to the law and the relevant Central Bank estimates.

A change to the 2020 state budget indicators has been made in order to neutralize and eliminate the economic consequences from the new coronavirus disease in Armenia.

According to the estimates by the Armenian Government, which are in line with the ones provided in the previous program, the tax revenue program has been trimmed down significantly as a result of the 2020 nominal GDP contraction. In the time of economic decline, it is estimated that in 2020 tax revenues will decrease by about AMD 169.1 billion relative to the scenario set forth in the RA Law on "State Budget 2020". Consequently, in the case of adjusted indicators, the taxes-to-GDP ratio⁵ will be 22.4%, remaining almost unchanged against 2019.

The figure of public expenditures, including the AMD 150.0 billion economic assistance packages, stayed unaltered relative to the indicator in RA Law on "State Budget 2020". The public expenditures-to-GDP ratio will reach 29.0%, up by 4.3 pp against the previous year.

Determined by reduction of taxes, the state budget deficit will increase to 5.0% of GDP, up by 4 pp compared to the previous year.

With the above tax and expenditure projections, exclusive of one-off streams not affecting aggregate demand but inclusive of economy net lending⁶, the 2020 fiscal policy's impact on aggregate demand is an estimated 5.5 pp expansionary⁷ against that of 2019. This will be attributable to expenditures (including net lending) impulse, which is primarily expansionary.

The 2020 fiscal policy's impact on aggregate demand is an estimated 5.5 pp expansionary relative to that of 2019.

The medium-term impact of fiscal policy is assumed to be neutral, according to the baseline scenario of preliminary version of the 2021-2023 Mid-Term Expenditures Framework.

⁵ The 2020 GDP indicator is the Central Bank forecast.

⁶ The calculation of the impact includes lending to the economy, which, although not affecting the deficit, has an impact on aggregate demand.

⁷ The estimate of the fiscal sector excludes the change to the method of advance payment of the profit tax under the RA Law "On Making Change to RA Tax Code" which the National Assembly adopted on 15.06.2020, so the entries on profit tax are expected to decrease against the 2020 projection.

Labor market⁸: In 2020 a notable slowing of the growth rate of private sector nominal wages is not anticipated; the growth will persist within 6.8% owing to both the increase in minimum wage and the change in the structure of average wage, as those employed in the most vulnerable segments are generally the ones who receive below-average wages in the time of persisting pandemic and economic constraints. Although the Statistics Committee estimates a 9.8% rise⁹ in average wage for April, the memo reminds that the calculation excludes some employees on forced leave; average wage growth will be slower if this effect is taken into account. Given the above, according to the Central Bank estimates, the growth of private sector wage in April has also slowed and will amount to 6.3% instead of the 12.8% published. Already in the medium term perspective the growth rate of nominal wages in the private sector will correspond to the economic growth and inflation developments, i.e. its fundamentals. In 2021 therefore, the rise is projected to be 6.4% and at the end of the forecast horizon it will stabilize around 7.1%.

The total number of hours worked will reduce amid the aforementioned economic downturn and current pandemic developments. Moreover, the overall impact of all these factors on unemployment is largely uncertain as the spread of pandemic could also affect the reduction of labor supply. The unemployment figures may come underestimated in the second quarter of 2020 too, as a result of non-inclusion of many workers on forced leave in the calculation. However, unemployment is expected to rise to 20.4% on average in 2020. In the medium run, as the economy slowly recovers, the unemployment rate will subside by about 0.3-0.5 pp per year, approaching the level of 19.6% at the end of the forecast horizon.

In 2020 the growth of firms' unit labor costs will speed up as the productivity growth rate slows down; at the end of the forecast horizon, as inflation recovers, the growth will stabilize around its fundamental value - the 4% inflation target.

2.2.3. Comparison with the previous forecast

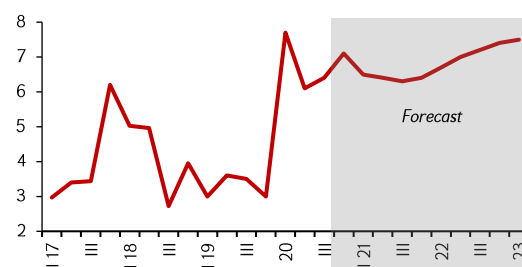
Under the more cautious reopening of the global economy because of the continued coronavirus pandemic and persisting high uncertainty, the main trading partner countries to Armenia will register deeper declines in the short term compared to the

⁸ The labor market data for 2020-2022 are the Central Bank projections based on the actual fourth quarter 2019 data. The growth indicators presented in this sub-section are relative to the same reference period last year, unless otherwise specified.

⁹ See: https://www.armstat.am/file/article/sv_04_20a_142.pdf

Chart 9

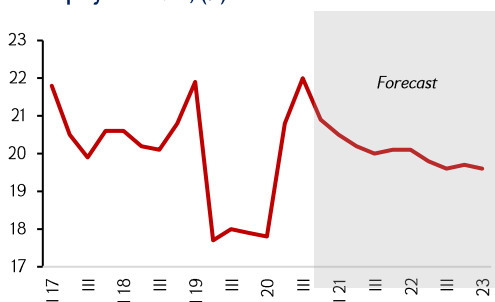
Nominal wage growth in private sector, y/y, (%)



Source: RA Statistics Committee, CBA forecast

Chart 10

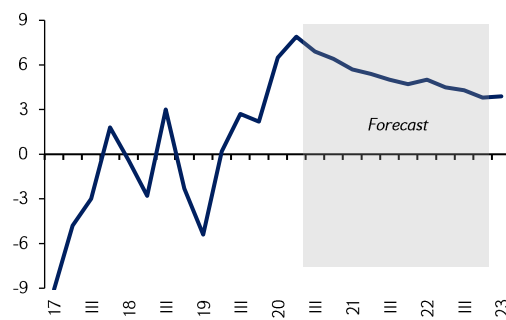
Unemployment rate, (%)



Source: RA Statistics Committee, CBA forecast

Chart 11

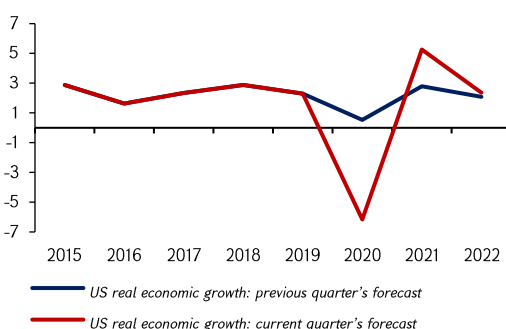
Unit labor costs growth, y/y, (%)



Source: RA Statistics Committee, CBA forecast

Chart 12

US economic growth forecasts, (%)



Source: Bureau of Economic Analysis, CBA forecast

previous forecast, with recovery trends, thereafter. This is evidenced by weaker-than-expected indicators of demand in the lead economies, high unemployment, poor indicators of business activity, etc.

The US and Eurozone economies will see a sharp economic slowdown this year, instead of previously anticipated small positive or zero growth, determined by more painful economic consequences under the influence of pandemic, resulting in even more precautionary economic expectations. Relatively high economic growth will be registered in these economies during the next year, and at the end of the forecast horizon the real output growths will slowly return to their long-term steady states. Under the above circumstances, the recovery of both the US and Eurozone economies will be at a slower pace, and the economies will bounce back to pre-crisis level of GDP not earlier than in the first half of 2022. **It should also be noted that the slower recovery of demand in these economies will result in a weaker inflation in the forecast horizon.**

Current Russia economic growth forecast for the entire forecast horizon is at a level much lower than the previous quarter's forecasts (in 2020, there will be a deep decline which will only be partially offset by small growth in 2021-22), attributable to the coronavirus consequences which proved to be more negative and to the international oil prices persisting at current levels.

Prices in international commodity and food markets will shape under the influence of weaker global demand. The impact of pandemic-driven restrictions is more noticeable on global oil prices that are directly affected by reduced mobility and transportation, which will be partially offset with the oil production cuts. Metal prices will begin recovering slowly starting this quarter, with the large economies' reopening, particularly China, while deep deflation now observable in the food markets will be restored only in the medium term.

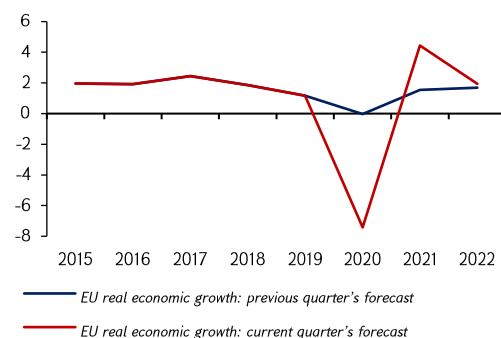
The price forecasts in the international food markets were revised considerably downside due to actual developments and weaker demand. Deflation is observable in almost all subgroups of food products during the last few months, and international food prices will return to pre-crisis levels at the end of the forecast horizon.

International oil price forecasts for the entire horizon will be lower from the previously forecasted levels due to weak global demand, despite the agreement between OPEC + member and partner countries to cut oil production in the medium term. In the course of forecast horizon, oil prices will be in the range of USD 30-40.

International copper prices will persist within the previous forecast, deviating upward only in the current quarters mainly supported with the positive signs of the recovery of the Chinese economy.

Chart 13

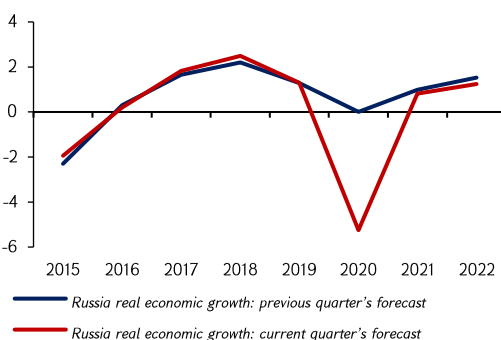
EU economic growth forecasts, (%)



Source: Eurostat, CBA forecast

Chart 14

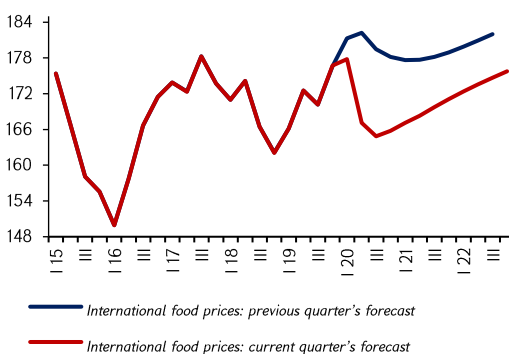
Russia economic growth forecasts, (%)



Source: Rosstat, CBA forecast

Chart 15

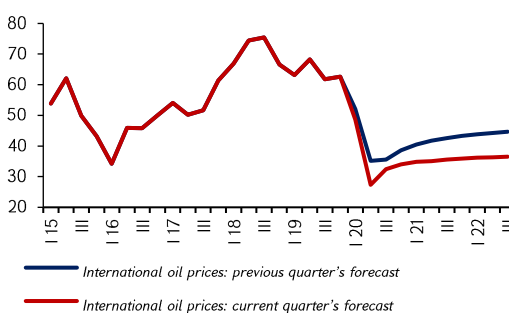
International food price forecasts



Source: FAO, CBA forecast

Chart 16

International oil price forecasts



Source: World Bank, CBA forecast

Armenia's economic growth projections were revised downside along the forecast horizon.

In 2020 economic activity was revised significantly downside and is currently estimated at -4.0%. The revision was prompted by the economic constraints of recent months hence low actual economic activity indicators reported in March-April, and the perception on how economic recovery will take place after the restrictions are lifted. In particular, there is assumption that lost (non-generated) revenues because of the pandemic will have some contractionary effect during the year, and if the pandemic lasts longer, the recovery of the service sector will be particularly slow on the back of increased consumer caution and notable reduction in international tourism. The output of services that require social interaction will remain the weakest. The construction sector was also revised significantly downside, reflecting the decisions to postpone investments amid a sharp rise in uncertainty. The recovery of the industry will be slower too, as it is quite vulnerable in terms of both the spread of the pandemic as industrial enterprises face concentration of large numbers of workers, and a declining domestic and external demand. The agricultural sector is considered to be relatively less vulnerable, and a considerable decline in the sector is not likely.

In 2021 economic growth will be higher than the growth rate of long-term potential owing to the recovery of demand, but in general, in the forecast horizon, economic growth will remain slightly below the long-term steady state. It is estimated that with the current debt burden of households, income losses in the short-term may cause certain change in the structure of consumption in the medium run, resulting in lower demand for non-primary consumer goods.

The GDP gap is estimated to be negative in the upcoming quarters, but as uncertainties decrease, as well as driven by the impact of current expansionary monetary policy and a gradual recovery of external demand, in the forecast horizon the gap will close and deflationary pressures will phase out.

Table 2

Real GDP growth (cumulative) forecast probability distribution		
Period	30% probability interval	90% probability interval
January-December 2020 / January-December 2019	(-5.4) - (-3.4)	(-10.0) - (-1.7)
January-December 2021 / January-December 2020	4.3 - 6.5	0.2 - 9.6
January-December 2022 / January-December 2021	3.0 - 5.3	(-1.0) - 8.9
January-March 2023 / January-March 2022	3.0 - 5.4	(-0.9) - 9.0

¹⁰ The personal consumption expenditure price index target is 2%, which on average is commensurate with headline inflation of 2.4%.

Chart 17

International copper price forecasts

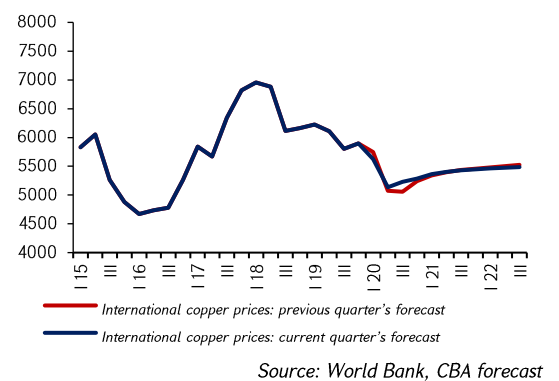


Chart 18

Real GDP (cumulative)⁰ growth forecast probability distribution for 3-year horizon

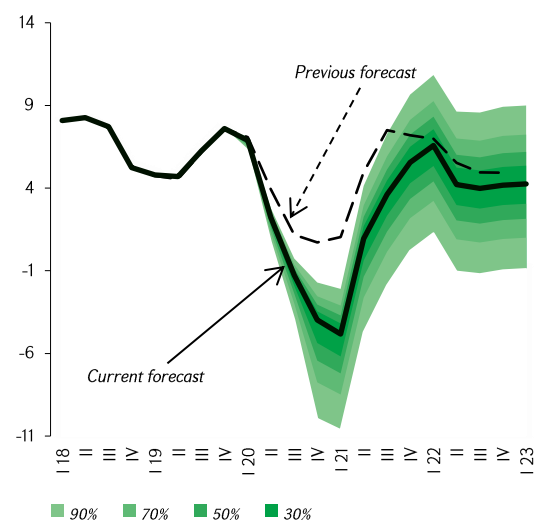
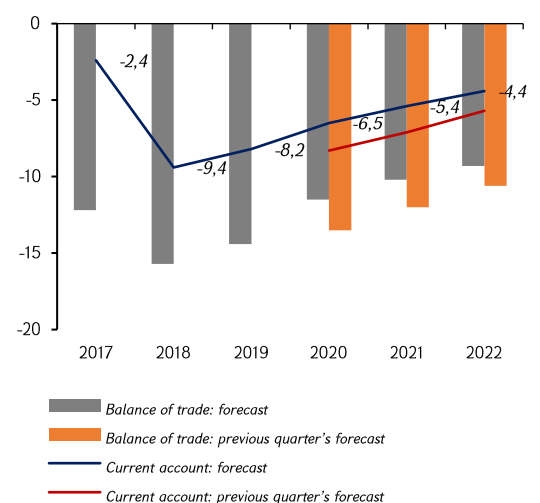


Chart 19

Mid-term current account-to-GDP ratio forecasts, (%)



In 2020 the current account deficit-to-GDP ratio will be lower compared to the previous forecast due to revisions of the negative trade balance.

Compared to the previous forecast, the fiscal impulse is estimated to increase to 5.5 pp expansionary (as expenditures and lending to the economy are expected to grow with the implementation of Government's anti-crisis measures, the taxes-to-GDP ratio is likely to remain at the 2019 level).

Current forecasts suggest that both headline and core inflation in the short run will follow a path consistent with previous projections. In the medium run, the recovery of inflation will be hampered by the influences of further deflationary pressures expected from the outside world, a slower restoring of domestic demand, and growing uncertainty. Accordingly, in order to fulfil the inflation target, cutting the refinancing rate in a big step will be needed. This would continue facilitating the recovery of aggregate demand while helping inflation stabilize around the target at the end of the forecast horizon ((see Chart 1: Inflation Forecast Probability Distribution).

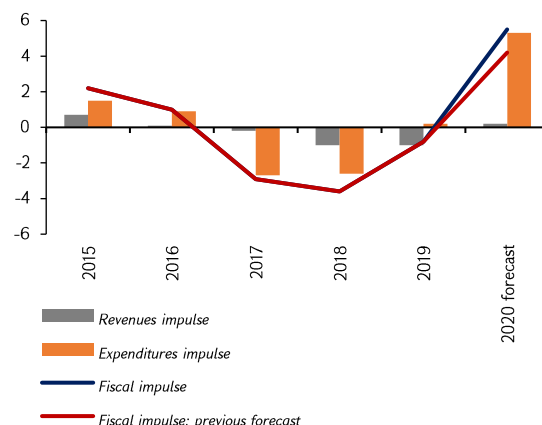
Short-term inflation expectations will linger at a level somewhat lower from previous projections, which is determined mainly by the prospect of a relatively slow recovery of core inflation.

2.2.4. Main assumptions and risks

This section presents the main assumptions underlying the Monetary Policy Program for the first quarter of 2020 and the risks to implementation of the program.

Chart 20

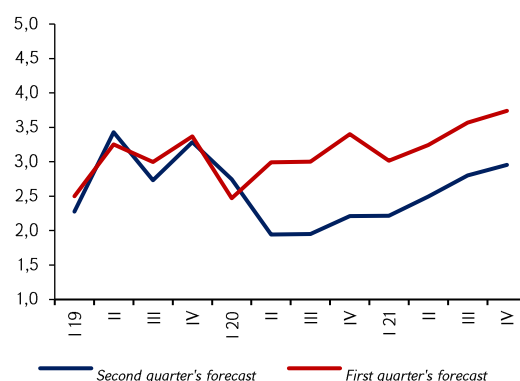
Fiscal impulse forecast, (percentage point)



Source: CBA estimate

Chart 21

Short-term inflation expectation estimates, (%)



Source: CBA estimate

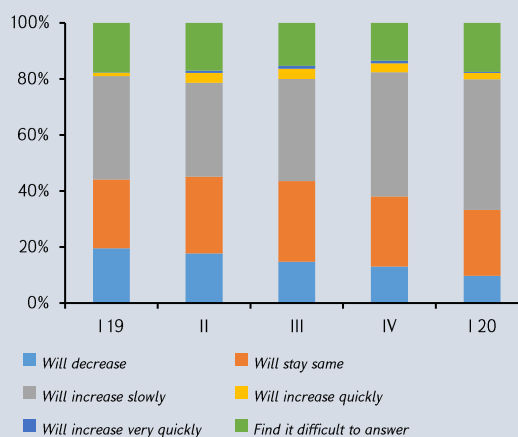
Box 1

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

The first quarter 2020 survey on selected macroeconomic indicators the Central Bank carried out through inquiries among households and financial sector organizations denote that inflation expectations prove steadfast and are much the same compared to the previous quarter. Specifically, the share of households expecting high and very high inflation rates for a one-year horizon continues to be small in total respondent base. The opinion of the respondents focused more on expecting a slow price rise contrary to a decreasing number of those expecting a very high price and low price inflation. In addition, the inquiries also reflect the objective reality that uncertainties have increased to some extent.

Chart 22

Household inflation expectation surveys



Source: CBA

Forecast assumptions

Table 3

Main judgments and assumptions	Possible developments, if this assumption proves correct
The impact of increasing spread of coronavirus pandemic will lead the world economy to a profound decline. The main blow on the global economy will come in the first half of the year, and in the second half a partial recovery of the world economy is probable.	✓ A more cautious reopening of the world economy and persisting high uncertainty about the future amid growing rates of spread of the coronavirus pandemic will determine the profound decline in economic activities in the USA and the Eurozone and the global economy on the whole. It will come along with reduced consumption as well as decreased and postponed investments under the accumulation of uncertainty. ✓ Low inflationary environment and economic slowdown amid a sluggish global economy will further lead to pursuing low interest rate policies in developed countries. ✓ In the time of a profoundly slackened global demand and in anticipation of slow recovery in future, a low inflationary environment in main commodity markets is expected. ✓ International oil prices sticking around the current levels and their slow recovery will determine the slower pace of Russia's economic recovery.
Armenia's country risk premium has been lower than expected.	✓ Armenia's country risk premium is currently estimated to be somewhat below the long-term steady state. It is expected to rebound to its long-term steady state gradually, over the forecast horizon. The current decrease also came along with a certain drop in the neutral interest rate.
Inflationary expectations diminish.	✓ It is estimated that the public short-term inflation expectations have decreased to some extent due to the current decline in demand and the prospect of a slow recovery in the future. In turn, this was reflected in the lower neutral nominal interest rate estimates for the forecast horizon.
A more stimulative fiscal policy for 2020.	✓ A significant 5.5 percentage point expansionary impact of fiscal policy¹¹ is projected for 2020 in the event of full implementation of anti-crisis programs proposed by the Government. The estimate of a stimulative impact is based on the following key assumptions: the taxes-to-GDP ratio¹² is predicted to remain at the previous year's level, government spending and net lending to the economy grows in GDP; in the medium term, based on the estimates of the baseline scenario of preliminary version of the MTEF 2021-2023, a gradual decrease in the deficit-to-GDP ratio and a neutral effect is admitted.

¹¹ The estimate of the fiscal sector excludes the change to the method of advance payment of the profit tax under the RA Law "On Making Change to RA Tax Code" which the National Assembly adopted on 15.06.2020, so the entries on profit tax are expected to decrease against the 2020 projection.

¹² The 2020 GDP indicator is a Central Bank forecast.

Both supply and demand reduce due to the pandemic.	✓ It is estimated that in the second quarter, due to the coronavirus pandemic, the economy will decline as both demand and supply reduce. In the future, even in the full lift of various economic restrictions, the recovery of demand may take longer, since its reduction, especially in the service sector, is largely precautionary. In this case, the GDP gap is estimated to be significantly negative and only under stimulative monetary and fiscal policies it will gradually close in the upcoming quarters.
The labor supply and demand reduce due to the pandemic.	✓ The labor supply will reduce during the pandemic as a result of infection, self-isolation, mortality, caring for the infected, or in fear of being infected; along with the economic downturn the labor demand will reduce too. As a result, the total number of hours worked in the economy will decrease, and wages will incur decrement pressures since reduction in labor demand over that of supply will be greater.
Measures to bolster potential GDP growth	✓ The activities of Amulsar mine and Alaverdi copper smelter are not factored in the monetary policy scenario. Their potential impact is considered in the framework of forecast risks.
A sharp increase in uncertainty as high rates of the spread of the pandemic persist.	✓ Although estimating the level of uncertainty in Armenia is difficult, it admittedly is rather high due to persisting high rates of spread of the pandemic, which can leave a considerable negative impact on economic activity in three main areas (see Box 2): 1. Reduction of household consumption and increase in precautionary savings. 2. Reduction of investment by firms. 3. Increase in risk premium in financial markets.

Box 2:

The impact of increase of uncertainty on the economy (US example)

Rising uncertainty can have a considerable impact on the economic activity, especially if it is combined with a financial and economic crisis. In high uncertainty, economic agents do not possess enough information about the future, consequently the increase of uncertainty also affects their decision-making. In this context, it is critical to understand which chains the impact of growing uncertainty on the economy is transmitted through. This is an important issue for policymakers too in their effort to make an optimal decision in this situation.

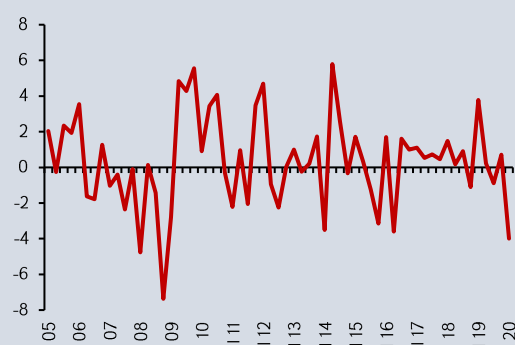
The uncertainty is demonstrated largely by having a vague idea of the future level of productivity, since future productivity is difficult to estimate. Note that the decline in productivity growth is most pronounced in times of crises¹³. This is due to the fact that in the case of high uncertainty, firms temporarily stop investing and downsize the demand for labor. The productivity growth also falls because of suspended (frozen) redistribution of resources¹⁴.

Despite the difficulties of measuring uncertainty, both empirical and theoretical analyses have been carried out to examine its impact on the economy, and various estimates are used as an approximation to the uncertainty; the VIX index, for instance, reflects economic uncertainty through the US stock market volatility. As we can observe in Chart 24, March 2020 saw an increase in uncertainty comparable to the global financial crisis of 2008-2009.

The uncertainty has a negative effect on the three main entities by the following scheme:

Chart 23

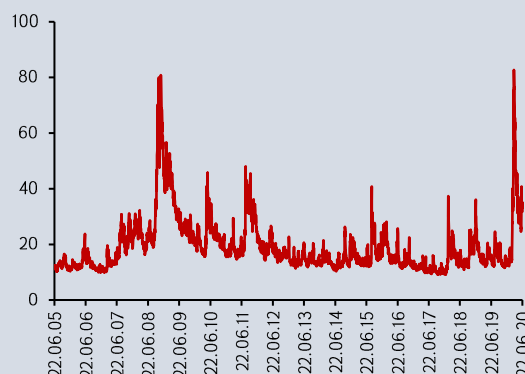
Business sector productivity



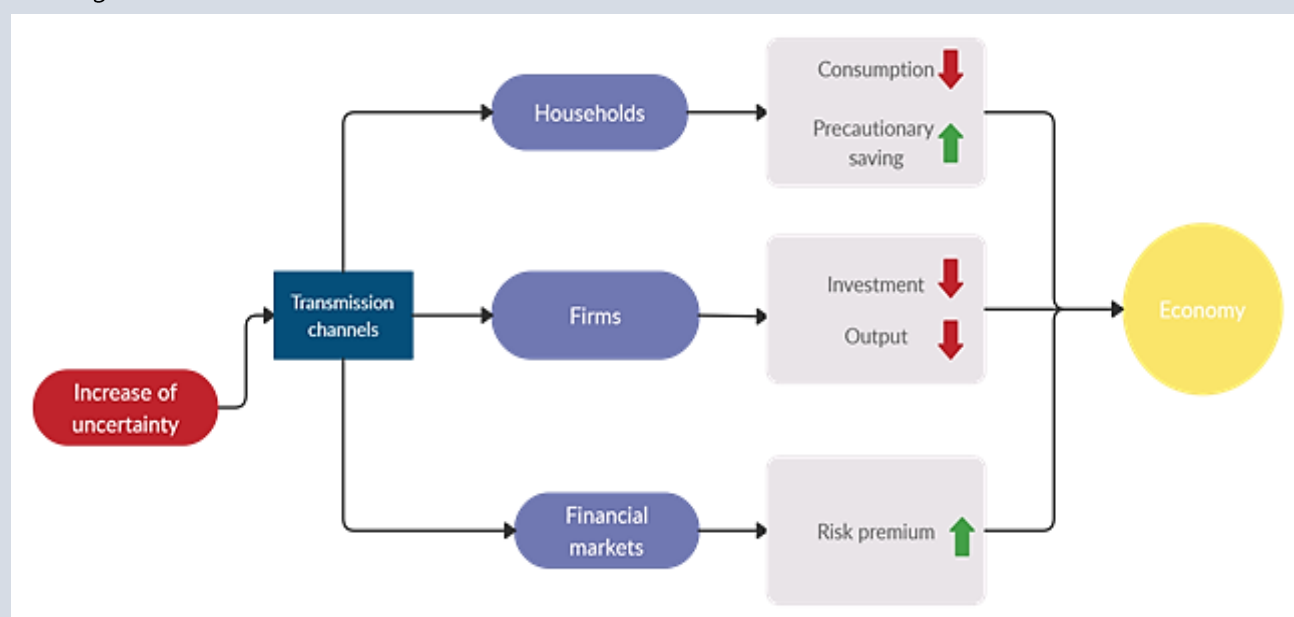
Source: Federal Reserve System of San Francisco

Chart 24

VIX index



Source: Federal Reserve System of St. Louis



¹³ Van Nieuwerburgh, Stijn, and Laura Veldkamp. "Learning asymmetries in real business cycles." *Journal of monetary Economics* 53.4 (2006): 753-772.

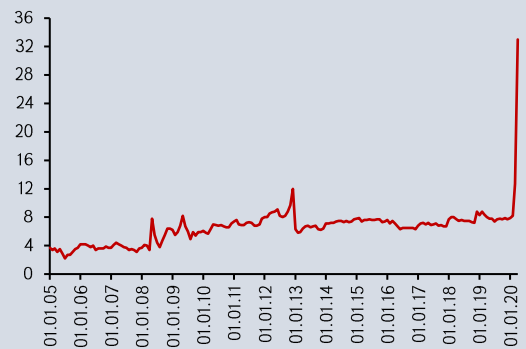
¹⁴ Bloom, Nicholas. "The impact of uncertainty shocks." *econometrica* 77.3 (2009): 623-685.

Households or consumers: Growth in uncertainty affects households through a chain of precautionary savings. When there is an intensifying uncertainty, households reduce consumption by increasing labor supply in an attempt to safeguard themselves against a possible drop in future income. As the expectations of economic agents about future incomes are uncertain, precautionary savings is what can motivate them. For example, the level of household savings in the United States has notably increased in the times of crises, and in 2020 it reached an unprecedented high level of 33%.

Firms: When it is not possible to cancel investments in whole or in part without incurring large losses, investors face the dilemma of whether to start an investment project and expect income therefrom or to wait for accessibility to additional information to see if embarking on new investment projects is possible. When an investor decides to delay an investment in the face of uncertainty, they act in a “wait and see” behavior¹⁵. In this circumstance, the increase in uncertainty reduces the volume of investments.

Financial markets and asset prices: To understand the impact of uncertainty, equally important is how the financial markets react, which, by reassessing economic risks, increase the risk premium needed to offset the rise in uncertainty. The latter takes place both at the level of firms and governments or countries. This is also reflected in the fall in the prices of financial assets.

Chart 25
US private savings



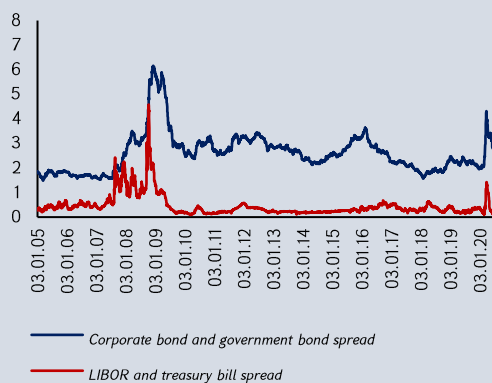
Source: Federal Reserve System of St. Louis

Chart 26
Company reliability index for the United States



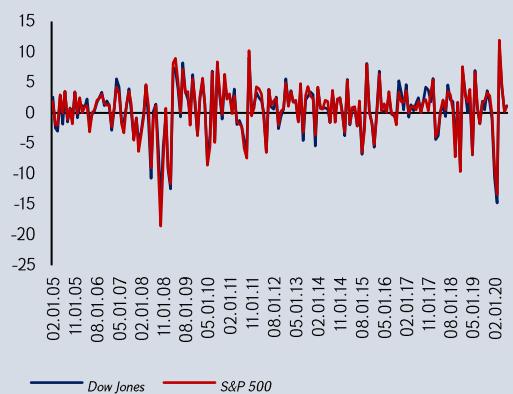
Source: Federal Reserve System of St. Louis

Chart 27
Risk premiums



Source: Federal Reserve System of St. Louis

Chart 28
Financial assets price change



Source: <https://finance.yahoo.com/>

¹⁵ Bloom, Nicholas. "The impact of uncertainty shocks." *Econometrica* 77.3 (2009): 623-685.

Forecast risks

Current developments denote that quite serious risks that the pandemic would take much longer and come even with deeper negative economic impact are persisting both in the world and Armenia. The extremely high level of uncertainty continues to be reflected in substantial widening of ranges of forecasting the central value of inflation and other key macro indicators (see inflation and economic growth forecast probability distribution charts (1 and 2)). The economic development risks and uncertainties around the baseline scenario of forecast stem from many factors, including the duration and intensity of the pandemic in Armenia, as well as the effectiveness of anti-pandemic measures taken all over the world, possible changes in their duration, short and long-term effects on the economy, changes in demand and supply structure, shifts in households' consumer behavior, etc. Quantitatively, the most significant risks are described below.

In terms of aggregate demand, the following risks stand out:

- External demand may post a much deeper decline and remain low for a long while due to further developments in the pandemic situation in the world and the anti-pandemic policy carried out.
- Household behavior is further adjusting from consumption to savings and the demand for secondary consumer goods is shifting to goods of basic necessities. If pandemic lasts longer, these structural changes may be of longer-term and permanent nature than projected in the baseline scenario, which can lead to relative price changes, on the one hand, and influence the steady state of neutral interest rate, on the other.
- Although curfew-imposed restrictions on a number of economic activities have been largely lifted, demand in some sectors is very low largely because of the wariness of people. Accordingly, households who used to earn a living in sectors most suffered (tourism, restaurant business, etc.) may still face liquidity problems in the coming months, which could lead to a further reduction in demand by these entities. Moreover, there is likelihood that the decline in demand for these services may take a longer-term nature, and the recovery will be rather sluggish. Of course, the extent of this risk largely depends on the developments in the pandemic situation in the country, as well as on the volume, effectiveness and continuity of the anti-crisis measures targeted by the Government at these groups. On the other hand, the deficient demand, if maintained longer, can start affecting the level of potential in these sectors through pushing it down, and can leave chain effects on other sectors of the economy.

- The extent of the policy's stimulative impact on aggregate demand largely depends on the course of state budget performance, and in the event expenditures are somehow underperformed or lending to the economy is less than planned, the public sector's impact will be less expansionary than outlined.

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

- In terms of supply in the short run, risks to the inflation are being assessed as balanced, since previous risks associated with possible disruption of the normal course of import of goods have generally been eliminated.
- Short-term risks to commodity prices are deflationary and are attributable to the global economy's downside risks.

In the medium-term perspective, risks that inflation would deviate from the projection path are mostly downside and quantitatively rather sizeable (see Chart 1: Inflation Forecast Probability Distribution).

In addition to the risks mentioned above, there are other mid-term risks (which unfold in either direction but downside risks prevail, however) to potential economic growth. These risks, in particular, are associated with the following domestic factors:

- The uncertainties over further operating of Amulsar mine and Alaverdi copper smelter.
- **Low level of confidence:** Uncertainties over the course of the pandemic and of the anti-pandemic measures may result in a low level of confidence in consumer and business environment, which, if persisted over a long period of time, would create additional risks to the mid-term GDP potential.
- **Change in consumption structure:** In the event of a long-lasting pandemic, changes in the structure of consumption may be inevitable – in particular, the share of services prone to social interaction may decrease, which poses additional risks in terms of redistribution of labor force in the medium term and may contribute to an increase of structural unemployment.
- **The pace of Government-led reforms and the extent and content of medium-term growth measures.**

In general, as there are major uncertainties about the healthcare situation, hence further developments in the economy, the Central Bank is trying to reduce the potential risks deriving from these uncertainties by developing and discussing various scenarios while viewing the possibilities of policy response, which would allow to react to the situation accordingly at the very first signs when these risks materialize.

Box 3

An alternative program in case the second wave of pandemic develops

Uncertainty over future economic developments has risen sharply around the world due to the coronavirus pandemic. The Central Bank considers that in such a circumstance identifying potential risks in time and appropriate response thereto is critical. Therefore, along with baseline scenario, alternative scenarios have been developed by changing some of the key judgments underlying the baseline scenario.

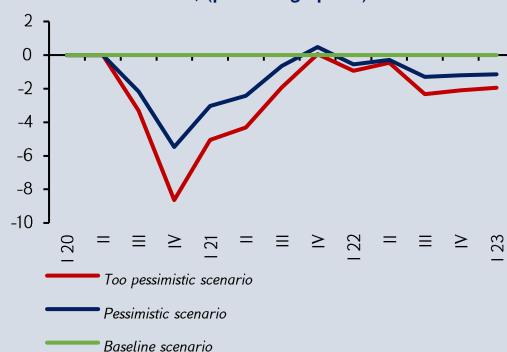
This box briefly outlines two scenarios of alternative developments (and how to react thereto) that will occur if a new major wave of coronavirus outbreaks in the second half of the year after some stabilization of the current pandemic situation. If the first alternative scenario (conventionally, too pessimistic scenario) unfolds, it was assumed that the so-called W-shaped developments are taking place both in the world and Armenia. The second scenario is based only on the assumption of the outbreak of the second wave in Armenia on the back of a relatively stable situation established worldwide (pessimistic scenario). It should be noted that in both cases the probability of the outbreak of the second wave in Armenia largely depends on the scope and quality by which the required anti-pandemic measures are taken and relevant healthcare rules followed.

In case of a too pessimistic scenario, the economy will be characterized by most adverse growth developments relative to the baseline scenario, due to further reduction of both external and domestic demand, which will exert additional deflationary pressures on the Armenian economy. As a result, all else being equal, the Central Bank will have to take further stimulative steps by reducing its refinancing rate to fulfil the inflation target in the medium run. Under a pessimistic scenario, no additional negative pressures will be observable from the outside world relative to the baseline scenario but, again, economic growth rates will decrease as the domestic economic activity slows and demand reduces. In this case too, the Central Bank will, all else being equal, take additional stimulative steps, but to a lesser extent than it will be needed in the event a highly pessimistic alternative scenario unfolds.

It is important to note that the predictions made under these alternative scenarios are based on the assumption of an unaltered response of the Government relative to the baseline scenario. On the other hand, it is obvious that in case of pessimistic developments the Government will most likely take extra stimulative socio-economic measures, in which event actual weakening of the economy will be milder than described above.

Chart 29

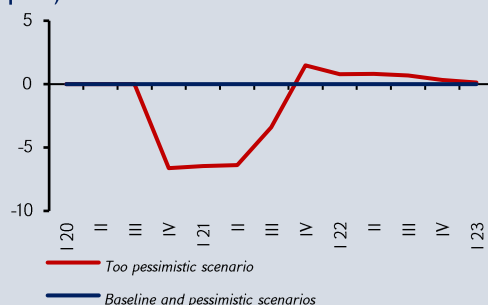
Armenia real GDP y/y growth rates difference relative to baseline scenario, (percentage point)



Source: CBA estimates

Chart 30

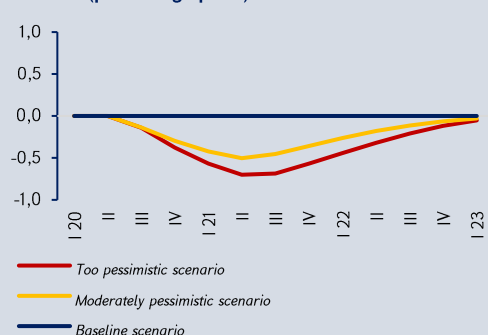
Main partner country real GDP y/y growth rates difference relative to baseline scenario, (percentage point)



Source: CBA estimates

Chart 31

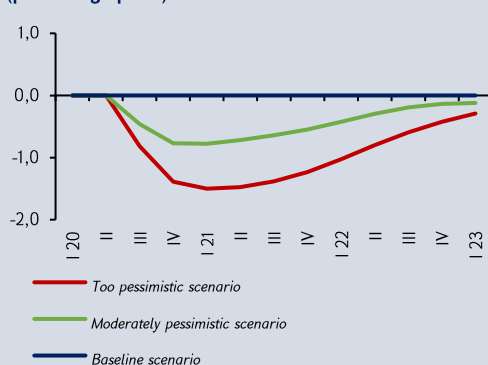
The 12-month inflation difference relative to baseline scenario (percentage point)



Source: CBA estimates

Chart 32

The policy rate difference relative to baseline scenario (percentage point)



Source: CBA estimates

3. ACTUAL DEVELOPMENTS IN Q1, 2020

3.1. Inflation

3.1.1. Fulfilment of the inflation target

According to the MP program for the second quarter of 2019, a low inflationary environment was predicted for the year preceding the second quarter of 2020, in view of the anticipated weak aggregate demand. The latter, in turn, had to incur the impact of the contractionary fiscal policy to be implemented and the impact of a low inflationary environment transmitting from the external sector. Under such conditions, the Central Bank would have to continue pursuing an expansionary monetary policy, opting for inflation to recover gradually, which, in view of macroeconomic developments outlined in the baseline scenario, would also be retained in the medium run. Under such a policy, the 12-month inflation would still be low in the short term and stabilize around the 4% target in the medium term.

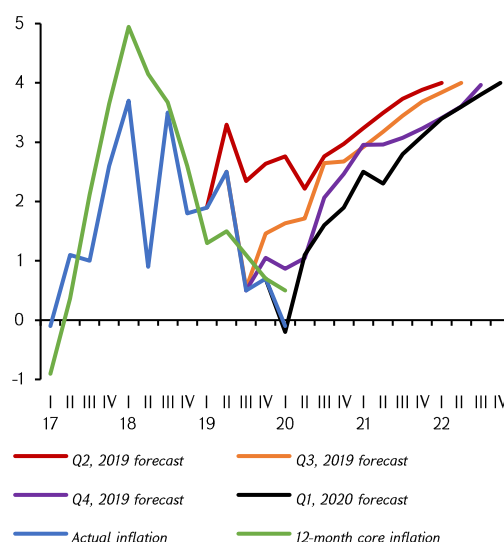
In the period under review, the 12-month inflation deviated from the projection path downside, mostly because the fiscal policy carried out at that time proved more contractionary than expected and the demand in the external environment came in weaker than predicted. Consequently, the Central Bank revised its inflation forecast and the path to recovery (see chart 33). In the meantime, some factors of supply having emerged to contain the inflation since the second half of 2019 included the impact of low prices in the external environment transmitted onto domestic prices, ever growing competition in commodity markets, which affects the firms' pricing behavior and reduces their markups, and adds to the effectiveness of the use of resources in the non-tradable sector of the economy.

With inflation environment persisting at low, in the period under review the Central Bank continued implementing an expansionary monetary policy and further favored the policy of letting the inflation approach its target gradually, since, as the Central Bank estimated, under current macroeconomic conditions the low inflation contributed to anchoring long-term inflation expectations. In consideration of the more-than-expected contractionary fiscal policy and weaker inflationary environment in international market of basic commodities, in the third quarter of 2019 the Central Bank slightly added to the monetary stimulus by cutting the refinancing rate by 0.25 pp.

The outburst of a new type of coronavirus (COVID-19) in a number of countries of the world in early 2020 that spread rapidly in many countries around the world, including Armenia, in the first half of March and was announced a pandemic was a serious challenge to the Central Bank in the monetary policy point of view. According to the

Chart 33

According to the Central Bank forecasts, the 12-month inflation will persist low in the medium run but stabilize around the target at the end of the forecast horizon



Source: RA Statistics Committee, CBA

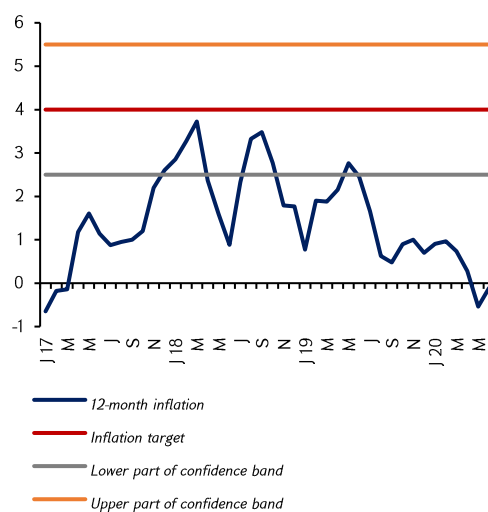
estimations of the Central Bank, the impact of the pandemic is reflected in the simultaneous reduction of aggregate supply and demand, without having a significant direct impact on headline inflation developments, in which event the role of monetary policy in responding to the pandemic is limited. In such a circumstance, the Board of the Central Bank, taking into account low inflationary environment at the time, expected developments and uncertainties in the global economy and the Armenian economy, cut on March 17th the refinancing rate by another 0.25 pp. In the meantime, the pandemic has increased uncertainty in Armenia's financial market, making demand for dram liquidity to grow substantially and pushing interest rates in the medium and long-term government securities market somewhat up. The Central Bank injected, through its main instrument, the required amount of dram liquidity into the system, helping short-term interest rates keep around the policy rate of the Central Bank. In the period under review, the Central Bank constantly signaled the financial market that in view of predicted macroeconomic developments, the expansionary stance of the monetary policy will continue as long as necessary to fulfil the inflation target in the medium run.

3.1.2. Prices

In the course of the year preceding the second quarter of 2020, the 12-month inflation remained low but behaved volatile amid a change in agricultural product prices primarily due to the shift in crop seasonality. Thus, in the second quarter of 2019 a notable rise in seasonal food prices contributed to a certain increase in inflation, which amounted to 2.5% in June; in the second half of the year and at the beginning of 2020, again mainly due to the fall in prices of seasonal goods, the inflation subdued gradually, reaching -0.1% y/y in March. However, the 12-month core inflation rate has also decreased, to 0.54%, whereas the y/y rise in regulated service tariffs and seasonal food product prices has been 1.41% and -6.53%, respectively. Price deflation of seasonal food products was driven by the fall in prices of items “Vegetables” (-19.4%, y/y), “Fruits” (-8.5%, y/y), and “Eggs” (-31.2%, y/y). The core inflation was mainly determined by prices of items “Alcoholic beverage”, “Tobacco”, “Bread and cereals”, “Footwear”, and “Fuel”, having increased by 11.0%, 7.2%, 1.4%, 3.6% and 2.7% y/y, and by tariffs of services “Outpatient care services”, “Hospital services” and “Education services”, having risen by 5.1%, 2.3% and 3.7% y/y, respectively. The rise in prices of “Tobacco” and “Alcoholic beverage” mostly incurs the inflationary impact of a change in excise duty rates at the beginning of the year. At the same time, the decline in food prices in international markets continued spilling over

Chart 34

A low inflation environment persisted over the last one-year horizon



Source: RA Statistics Committee

to the domestic market, where a certain weakening of price inflation on food products was observable as well. The sugar and meat product markets have seen a significant price deflation relative to the same period of the previous year (-10.6% and -4.5%, respectively, with a combined contribution to inflation amounting to -0.5%). It should be noted that the inflationary impact of a change in customs rates on some goods in the beginning of 2020, as was estimated, amounted to about 0.2 pp.

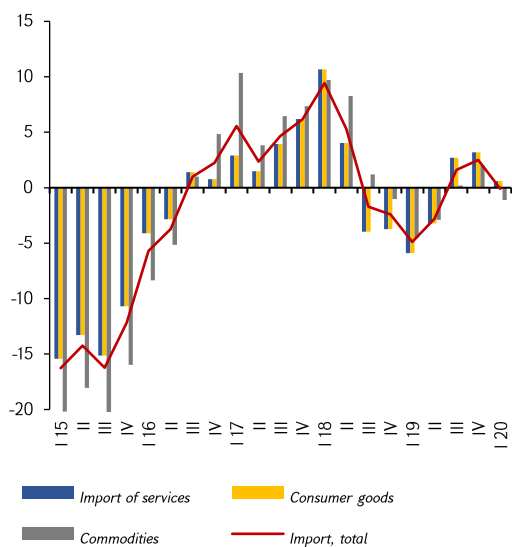
The coronavirus pandemic has prompted structural shifts and certain changes in demand for individual goods in consumer markets both in the world and the Republic of Armenia. However, these changes have not yet been substantially reflected in prices and service tariffs in the course of March. Nor has some dram exchange rate depreciation in March been significantly reflected in the domestic prices for March. As of March, prices of certain food products, especially those of buckwheat, bulgur, rice, flour of cereals, garlic, onion, lemon and pepper, rose due to the growing demand.

Table 4

Consumer price inflation by commodity items as key contributors			
<i>Designation</i>	<i>Weights</i>	<i>12-month inflation</i>	<i>Contribution</i>
Core inflation	72.7	0.54	0.39
Bread and cereals	8.99	1.44	0.13
Meat	9.87	-4.48	-0.44
Oils and fats	2.77	-3.46	-0.10
Sugar	0.6	-10.62	-0.06
Alcoholic beverage	2.77	10.99	0.30
Tobacco	1.77	7.20	0.13
Clothing	2.58	0.47	0.01
Footwear	1.52	3.57	0.05
Medicines and health products	4.83	0.78	0.04
Fuel	5.29	2.73	0.14
Air passenger transportation services	0.55	-9.02	-0.05
Education	1.48	3.71	0.05
Hospital services	2.57	2.27	0.06
Outpatient care services	2.44	5.14	0.13
Seasonal food products	10.5	-6.53	-1.85
Eggs	1.44	-31.19	-0.45
Fruits	3.35	-8.52	-0.29
Vegetables	5.74	-19.4	-1.11
Regulated services	16.7	1.41	0.24

Chart 35

In the first quarter of 2020 the dollar prices of import of goods and services slightly dropped against the same quarter of the previous year, %



Source: CBA calculations

Import prices: In the first quarter of 2020 the dollar prices of import of goods and services to Armenia posted a 1.3% decrease relative to the previous quarter, with y/y growth rates having slowed down by 0.1%. This was primarily driven by depreciation of nominal exchange rates in main partner countries relative to the same reference period of the previous year. The contribution of intermediate consumption goods to total import prices is negative, compared to the same reference period last year, mainly due to lower oil and aluminum prices.

3.2. Economic developments

3.2.1. Economy position

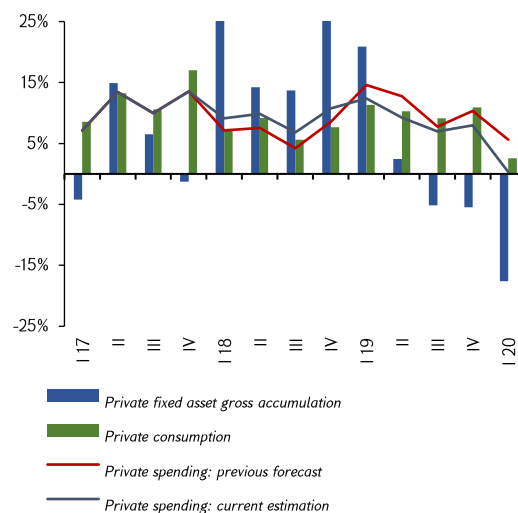
In the reporting quarter the GDP gap lingered in a negative territory. Economic growth in the first quarter of 2020 (see section 3.2.3) notably slowed down to 3.8%, as the supply contained and demand slackened on the back of continued pandemic, anti-pandemic measures and a sharp increase in uncertainty (see section 3.2.2). As a result, the GDP gap remained close to the previous quarter's negative value. In the reporting quarter the impact on the GDP potential is estimated to be temporary but, in the medium term, the risks to the potential growth trend downward (see section 2.2.4) and are primarily determined by how the pandemic will develop further. The negative GDP gap is largely a result of slowed down private and external demand and is reflected in a weak inflationary environment (see section 2.2.1). The contribution of public expenditures has been positive.

In the first quarter of 2020 economic growth slowed down considerably to 3.8%, as the supply contained and demand slackened on the back of continued pandemic, anti-pandemic measures and a sharp increase in uncertainty.

3.2.2. The expenditures aspect of the economy

In the first quarter of 2020, with a 3.8% economic growth, private expenditures decreased substantially due to decelerated private consumption and reduced private investment. The increase of private consumption amounted to 2.6%, whereas gross accumulation of private fixed assets reduced by 17.6%, in which case private expenditures posted a moderate growth of 0.3% - considerably below the previous Central Bank estimate. The slowing of private demand at such rates is explained by a sharp increase in uncertainty and, consequently, more precautionary savings, the spreading of pandemic and the pace of anti-pandemic measures, which has especially affected the consumption of

Chart 36
Structure of private spending, (y/y growth)¹⁶



Source: RA Statistics Committee, CBA estimate

In the first quarter of 2020, with a 3.8% economic growth, private expenditures decreased markedly due to decelerated private consumption and reduced private investment.

¹⁶ The 2018-2019 spending series has been revised by the RA Statistics Committee.

services requiring social interaction. Private expenditures were also affected by reduced remittances from abroad.

According to the Central Bank estimate, the impact of private consumption is generally deflationary but the end of the quarter saw a change in the consumption structure, shifting from durable goods to non-durable goods, and inflationary patterns were observable in certain commodity groups, as a result.

In the first quarter of 2020 the export and import in real terms reduced. The real import has contracted noticeably faster than the real export, and net real export's contribution to the GDP has been positive, as a result. Thus, the real contraction of export of goods and services and of import of goods and services amounted to 1.6% y/y and 7.9% y/y, respectively. The decrease in export was caused by slackened global demand as well as the preventive measures taken domestically. The reduction in import owed to the contracted domestic demand

In the first quarter of 2020 net remittances of individuals (seasonal workers' income and personal transfers inclusive) in US dollars reduced by an estimated 7.3% y/y; this was determined by economic developments in Russia, the ruble's steep exchange rate depreciation since the start of March as well as restrictions in migration flows.

In the first quarter of 2020, relative to the same reference period last year, the current account deficit-to-GDP ratio decreased by about 3.0 pp, according to the Central Bank estimates.

Fiscal policy¹⁷: In the first quarter of 2020 the actual budget revenues and expenditures deviated from the Central Bank's projections¹⁸, with revenues slightly overperformed and expenditures underperformed. The fiscal policy's impact on aggregate demand for the quarter was estimated 1.8 pp expansionary, instead of the expansionary forecast of 3.0 pp, which was attributable to both deviated revenues and expenditures and revised actual economic growth rate and potential GDP estimates.

In the first quarter of 2020 actual budget revenues surpassed the projection by 2.9% primarily thanks to overperformed tax revenues. As a result, the revenue impulse amounted to 1.4 pp contractionary, instead of the contractionary forecast of 0.8 pp.

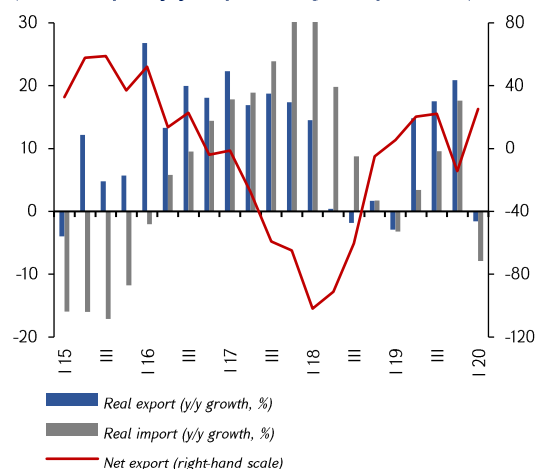
In the first quarter budget expenditures made up 96.0% of the Central Bank projection, so the expenditures impulse had a smaller - 3.2 pp expansionary - effect, instead of the predicted expansionary 3.9 pp. **Government consumption** reached 94.2% of the projected indicator and actual expenditures **on non-financial assets** amounted to 97.3% of the projection, which is primarily attributable to shortfalls of funds intended for capital expenditures under foreign aid.

¹⁷ The review of the fiscal sector used actual consolidated budget indicators of the first quarter of 2020.

¹⁸ The revenue projection was based on the adjusted 2020 plan of the Government.

Chart 37

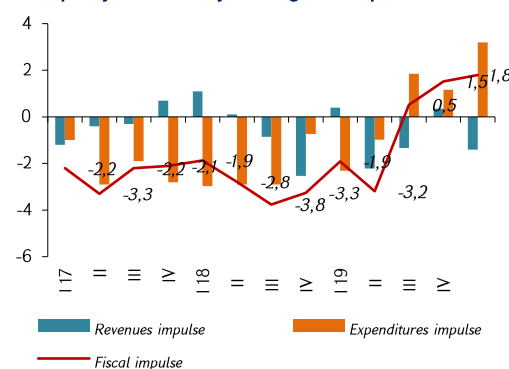
In the first quarter of 2020 net export position improved as import reduced faster than export did (net real export, y/y, %, positive sign = improvement)



Source: RA Statistics

Chart 38

In the first quarter of 2020 the expansionary effect of fiscal policy owed mainly to the grown expenditures

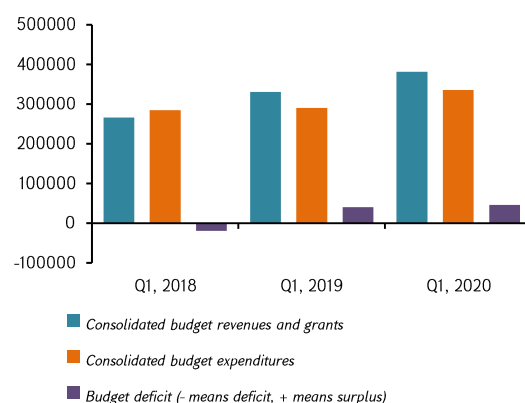


Source: CBA estimate

The fiscal policy's impact on aggregate demand was an estimated 1.8 pp expansionary for the quarter, instead of the forecast 3.0 pp expansionary.

Chart 39

Main indicators of the consolidated budget (billion Armenian dram)



Source: RA Statistics

With revenues and expenditures performance described above, the state budget generated a surplus of AMD 38.0 billion in the first quarter of 2020, which is roughly three times the Central Bank's projection of the surplus figure. Local budgets have reported surpluses too, so the consolidated budget surplus totaled AMD 46.3 billion.

3.2.3. The production aspect of the economy

In the first quarter of 2020 the GDP grew by 3.8%, which is slightly below the projection outlined in the previous program. The deviation came after a more-than-expected decline in construction (-12.1%). It should be noted that the impact of the pandemic and economic restrictions has been factored in the previous forecast. The construction activity was suspended starting from March 27th, so the decline in the first quarter was a result of uncertainty rather than actual restrictions. Already in March, the decline was observable in all sectors of the economy, except agriculture which suffered the least from the spread of the pandemic and taking of anti-pandemic measures. However, the first quarter's economic growth remained in a positive territory owing to the January-February strong growth, with agriculture reporting 4.4% growth and services and industry reporting 5.1% and 2.1% growths, respectively, for the first quarter.

In April, relative to the same reference period last year, the decline in economic activity in the face of the pandemic and strict anti-pandemic measures reached 17.2%, induced by slumps in construction (50.1%), trade (33.1%), services (15.9%), industry (8.6%), and agriculture (2.3%).

3.2.4. Labor market

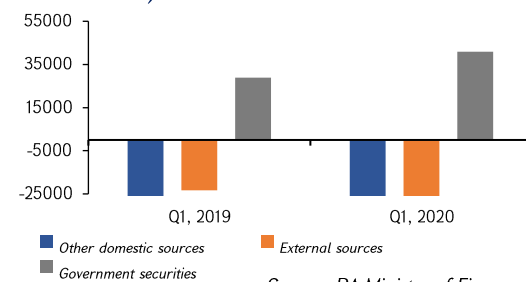
In the first quarter of 2020, economic growth was concomitant with the labor productivity growth of 1.2%. This positively affected the private sector nominal wage growth rate which resides within 7.7% - slightly above the previous forecast by the Central Bank. Note that acceleration of the growth of private sector wage was bolstered also by the minimum salary rise effective from January 2020. As a result, the low inflation has facilitated the real private sector wage growth as well.

With economic growth and productivity developments described above, the unemployment rate in the first quarter of 2020 is an estimated 17.8%, which is in line with previous forecasts.

In the period under review the firms' unit labor costs grew by 6.5%, with private wage growth rate pacing faster than the output growth per unit of private labor. As a result, weak inflationary pressures from the labor market are observable.

Chart 40

In the first quarter of 2020 state budget generated a surplus, and net inflows from government securities held a bigger share in the sources of financing (million Armenian dram)



In the first quarter of 2020 the GDP grew by 3.8%, which is slightly below the projection outlined in the previous program. The deviation owed largely to a more-than-expected decline in construction (-12.1%).

Chart 41

GDP structure by sector, (y/y growth, %)

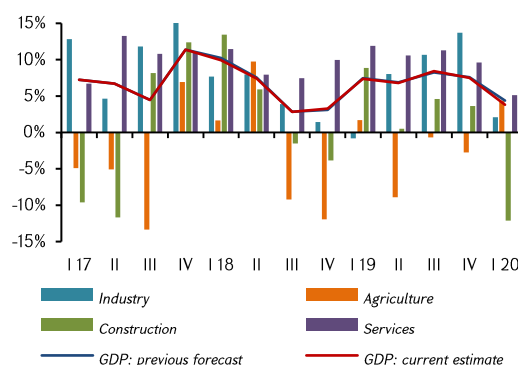


Chart 42

Private sector nominal wage, (y/y growth, %)

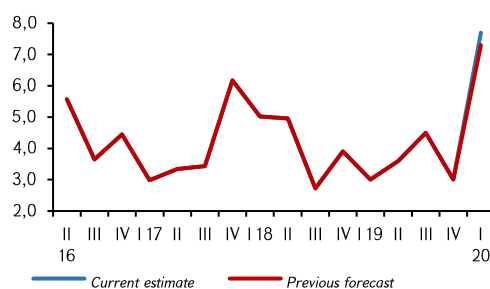
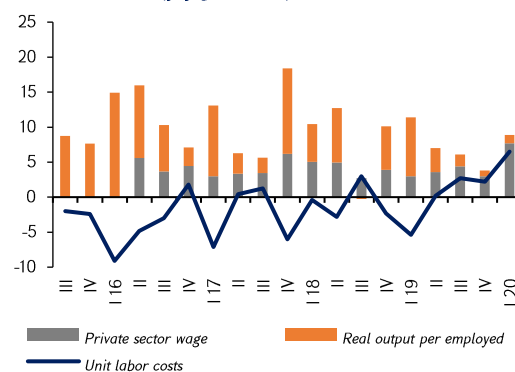


Chart 43

Unit labor costs, (y/y growth, %)



Source: RA Statistics Committee, CBA estimate

3.3. Financial market developments

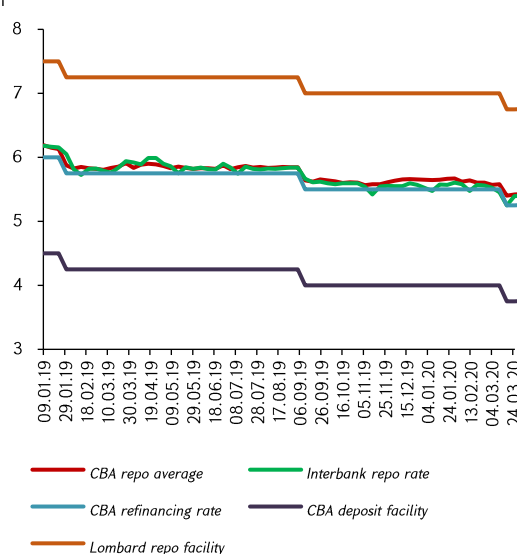
In the first quarter of 2020 the uncertainty caused by the spread of COVID-19 led to a sharp increase in demand for liquidity in global financial markets, depreciation of national currencies in many countries, and Armenia was no exception. At the end of the quarter, amid the pandemic-driven uncertainties, the domestic financial market saw an increasing demand for dram and foreign currency liquidity, and the dram exchange rate depreciation was observable in the meantime.

Unlike the developed countries that have announced quite stimulative monetary and fiscal policies to meet liquidity demand, in developing countries, central banks faced a policy dilemma of whether to stimulate aggregate demand or tighten monetary policy. One of the reasons for this dilemma is that inflation expectations in such countries usually are not anchored sufficiently, which is reflected also in the high dollarization of assets. However, in recent years, some developing countries, including Armenia, have made some progress in ensuring low, stable inflation in the domestic economy, by anchoring inflation expectations and enhancing confidence in the monetary policy. This, perhaps, allowed the Board of the Central Bank of Armenia (unlike some of partner countries in this region) deciding to add monetary policy stimulus under the coronavirus-induced uncertainty. Considering the estimated impact of the coronavirus, its prevention and remediation measures on macroeconomic and financial markets both in the outside world and Armenia, as well as in view of a low inflationary environment and expected deflationary effects of the global economy, on March 17th the Board cut the refinancing by 0.25 pp setting it at 5.25%.

At the same time, highlighting the importance of conducting transparent and predictable monetary policy, aimed at price stability amid uncertainties, the Board had signaled the financial market participants that the Central Bank stands ready to respond appropriately to any developments and emergence of risks.

Chart 44

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



Considering the estimated impact of the coronavirus, its prevention and remediation measures on macroeconomic and financial markets both in the outside world and Armenia, as well as in view of a low inflationary environment and expected deflationary effects of the global economy, on March 17th the Board cut the refinancing by 0.25 pp setting it at 5.25%.

Chart 45

USD/AMD exchange rate dynamics in the first quarter of 2020

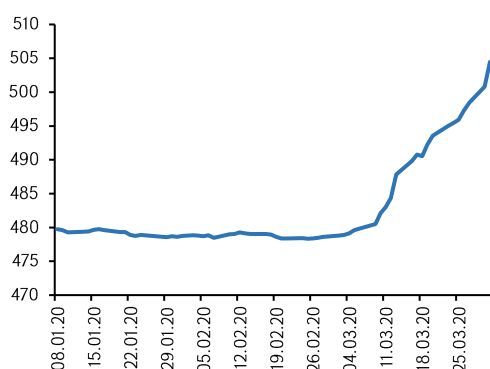


Table 5

Average quarterly interest rates in Armenia's financial market					
Indicators	Q1 19	Q2 19	Q3 19	Q4 19	Q1 20
Central Bank refinancing rate (end of quarter)	5.75	5.75	5.50	5.50	5.25
Central Bank repo rate	5.94	5.86	5.80	5.63	5.57
Interbank repo rate (up to 7-day)	5.94	5.86	5.78	5.54	5.52
Yield of government securities on a yield curve (as of end-quarter)					
Short-term treasury bill (1-year)	6.57	6.36	6.26	6.01	5.83
Medium-term notes (5-year)	8.65	8.39	7.99	7.44	6.90
Long-term bonds (30-year)	11.05	11.13	10.99	10.46	9.93

As it was mentioned, the uncertainties amid the spread of COVID-19 had caused a certain increase in demand for dram and foreign currency liquidity in the domestic financial market. Meanwhile, the Central Bank continued injecting the required amount of dram liquidity into the system through its main instrument by letting short-term interest rates stabilize around the policy rate.

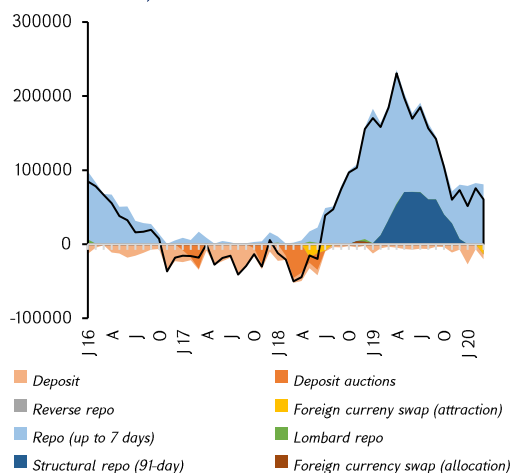
Demand for foreign currency liquidity has in the meantime been concurrent with the dram exchange rate depreciation pressures, similar to many developing countries. However, considering the temporary nature of the demand for foreign currency liquidity, in mid-March the Central Bank provided the required amount of funds to banks through a foreign exchange swap instrument, totaling USD 53.0 million. To make sure the foreign exchange market operates uninterruptedly, in the last week of March the Central Bank sold USD 70.0 million, with net sales by the Central Bank amounting to USD 12.2 million during the quarter, together with January-February purchases of foreign currency.

The end of quarter announcements and tools used by the Central Bank were mainly aimed at mitigating the negative effects of the pandemic on the financial market and ensuring financial stability. During this period, despite the stable level of short-term interest rates, existing uncertainties were reflected in mid-term and long-term government bond yields. The gradual decline in bond yields in January-February was followed by a sharp rise in mid-March, raising both the yield curve and the slope. However, the refinancing rate cut by the Central Bank and the fully satisfied demand for dram liquidity somehow eased the concerns in the financial market, making yields in the medium and long-term segments of the curve to squeeze and come closer to the previous quarter's level.

As to the lending and interest rates of loans in the first quarter of 2020, the negative effects of the coronavirus pandemic did not show up yet during this time: lending growth remained strong but was, at the same time, accompanied by a slight increase in interest rates. The 12-month growth of total loan portfolio as of March 2020 has been 19.7%, with consumer and mortgage loans still holding the biggest share in total lending both in the previous and this quarter. The pressures in the financial market did not affect the growth rates of lending; in the first quarter they were -0.24%, 1.91% and 2.87%, respectively.

Chart 46

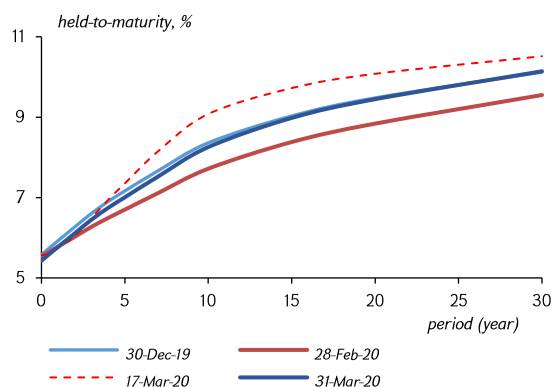
Liquidity injected and absorbed through CBA transactions, average monthly inventory, (million Armenian dram)



Source: CBA

Chart 47

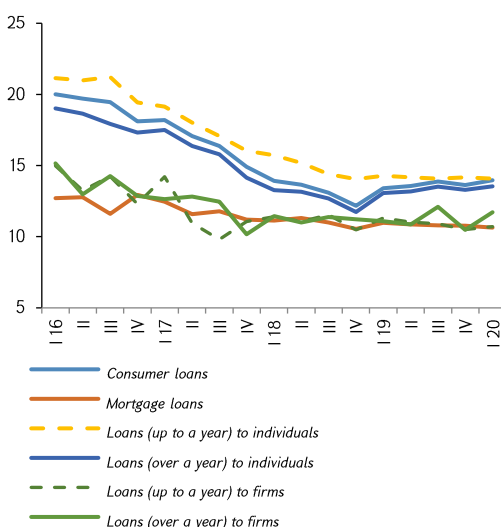
In the first quarter of 2020 government bond yields fluctuated in the mid-term to long-term segments of the curve



Source: CBA

Chart 48

Interest rates of dram loans



Source: CBA

4. SUMMING-UP

The inflation environment will remain low in the upcoming period of time, according to Q2 2020 monetary policy program, driven by a consideration that, despite an expansionary impact of the fiscal policy compared to the previous year, persisting minor impact of private demand on domestic prices will prevail. At the same time, uncertainties over the extent of spread of the pandemic and the prospects for economic development are still high, therefore the Central Bank will continue pursuing a stimulative monetary policy in the short term and, if need be, will carry on with that policy in the medium run.

In the forecast horizon, risks that inflation would deviate from the projection path are generally downside. The Central Bank is monitoring these risks and stands ready to react once they emerge, while maintaining price stability in the Republic of Armenia.

BOARD MEETING OF THE CBA

MINUTES (16.06.2020)

On the Refinancing Rate

The CBA Board Meeting of June 16, 2020 attended by Governor Martin Galstyan, Deputy Governors Nerses Yeritsyan and Vakhtang Abrahamyan, and Board Members Hasmik Ghahramanyan, Arthur Stepanyan, Armenak Darbinyan and Oleg Aghasyan

The Board meeting opened with a report of the situation as of June 16, 2020. It addressed the developments on inflation, external environment and real, fiscal and monetary sectors of the economy in the context of assessing the impact and consequence of the coronavirus pandemic.

There was 0.1% deflation in May 2020, compared to 0.4% deflation registered in the same month last year, **with the 12-month inflation expanded to 1.2%**. The month's negative inflation figure was mainly due to 0.2% drop in prices of item "Food and non-alcoholic beverage" (contribution to inflation: 0.09 pp), and prices of items "Clothing and footwear", "Transport" and "Recreation and culture" decreased by 2.3%, 0.6% and 0.6%, respectively (combined contribution to inflation: 0.15 pp). Following some recovery in April, the **12-month core inflation rate** declined to a certain extent to **0.9%** in May.

The Board touched upon possible statistical and substantive issues of estimating the inflation. Particularly noteworthy was the fact that, in face of a sharp change in the consumer basket structure in recent months, the inflation rate calculated using the previous year's weights may not reflect the change in the current standard of living accurately.

The negative impact of the coronavirus pandemic on the external sector has already reflected in considerable reduction of economic growth in the world economy, including partner countries to Armenia. Moreover, it is expected that in the second quarter the global economy will see one of its biggest downturns ever. According to new forecasts, the recovery of the world economy is delayed; in particular, the US GDP will reach its pre-crisis level by the end of 2021, and the Eurozone economy, even by the end of 2022. At the same time, major uncertainties are persisting over how the pandemic will evolve further in the short run and what structural shifts will be seen in the global economy resulting from the pandemic in the long run. Because these developments will have a significant impact on deepening poverty and inequality, both developed and some developing countries are taking unprecedented fiscal and monetary stimulus-driven measures.

It should be noted that in the international commodity markets, along with reopening of the Chinese economy, prices are recovering to a certain extent. Thus, following a more than 70% slump to USD 20 a barrel in April, international oil prices recovered to USD 40 a barrel at the end of May. Also, copper prices rose from USD 4,800 per ton at the end of March to approximately USD 5,350 per ton at the end of May.

While discussing the current state of the Armenian economy, it was noted that the spread of coronavirus in Armenia and around the world, as well as anti-pandemic measures against it will, as expected, sharply slacken the economic activity in Armenia over 2020. The slackening is determined by supply factors - reduction in labor supply, productivity, disruption in supply chain, as well as demand factors - less propensity to consume and invest, more propensity to save. As expected, the negative effects will be observable mainly during the second quarter. Thus, already in April of 2020 a substantial slowing of economic activity was registered due to the decline in almost all sectors of the economy, the construction and services sectors in particular. At the same time, private investment and external demand decreased considerably, with private consumption growth weakened notably. Despite the measures taken by the Government to neutralize the above negative effects of the coronavirus on the Armenian economy, there is expectation that aggregate demand will remain sluggish in the near future and will recover slowly due to the pandemic-driven uncertainties and weak external demand.

As for the developments in financial markets, it was stated that the volatility observed in financial markets in March-April had diminished, markets stabilized. After a reported rise in the mid to long-term segment of the government bond yield curve in March-April, interest rates fell notably amid uncertainty over the pandemic. At present, a certain increase in interest rates in the long run, naturally, took place mainly against the background of that notable fall.

Following a discussion of the situation report and external and domestic macroeconomic developments, the Board proceeded to addressing the monetary policy directions and making decision on the policy rate. With major uncertainties persisting, when precautionary savings grow and demand slackens, global interest rates (neutral interest rate) have been falling, as international experience shows. On the other hand, inflation expectations, better-anchored compared to previous crises, which owes to more effective monetary policy developing countries are implementing, allow responding with stimulative policies to aggregate demand weakened by economic shocks. In the case of Armenia too, thanks to a low inflation policy pursued in recent years, inflation expectations are estimated to be rather anchored. In the context of the above, in view of a weak demand

to be persisting in the near future, a currently low inflation environment and high uncertainty, the Board of the Central Bank decided to **cut the refinancing rate in a bigger step - by 0.5 pp** - in order to maintain the policy's stimulative stance in the near future. As a result, according to the main scenario, inflation will remain relatively low in the upcoming months, gradually approaching the target in the future.

After looking at the main policy scenario, some Board members raised other concerns and observations for discussion. One such observation questioned if increasing the monetary stimulus wouldn't involve risk in the financial stability point of view. It was stated that, at the moment, easing the monetary conditions in a bigger step actually contributes to the strengthening of financial stability by supporting the recovery of aggregate demand.

Potential risks of capital outflow because of lower interest rates and, therefore, possible problems in attracting investment was another concern for discussion. It was noted that, in fact, the policy response would need to be developed using the assumptions in the baseline scenario, and should there emerge risks, to respond to such developments while ensuring price stability in the Republic of Armenia.

The Board sounded concerns that the amount of fiscal policy stimulus may be smaller than expected. The fiscal policy, they talked, would need to respond in a greater extent to the cyclical decline in demand, given that the decline in demand is sectoral by nature, whereas the monetary policy stimulus cannot have a sectoral impact but facilitates the recovery of aggregate demand. As a result, they admitted that there should be even closer cooperation between the Ministry of Finance and the Central Bank through an efficient exchange of information and, when the Central Bank proceeds to the stages of quarterly forecasting, through regular discussions with the Ministry of Finance representatives on external demand, budget and current domestic economy.

The Board also looked to the possibility of a second wave of the pandemic in the world and Armenia, and how it will influence the economy. Under this scenario, deflationary developments will intensify markedly, and a coordinated monetary, fiscal and social policy response thereto will be required, as well.

In the end, it was noted, for an enhanced scenario analysis, the Board of the Central Bank will work more closely with the Forecasting Team on the issues related to current developments in the external sector and the Armenian economy.

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

The Central Bank of the Republic of Armenia

Board Decision

Interest Rates of Instruments of Monetary Policy of the Central Bank of the Republic of Armenia

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

1. Cut the refinancing rate of the Central Bank of the Republic of Armenia by 0.5 pp to 4.5%.
2. To the Financial Markets Operations Department of the Financial Markets Directorate of the Central Bank to perform the Central Bank transactions in the financial market at the following interest rates:
 - 2.1. Lombard facility rate offered by the Central Bank of the Republic of Armenia to be 6.0%.
 - 2.2. Deposit facility rate offered by the Central Bank of the Republic of Armenia to be 3.0%.
3. This decision takes effect through a procedure required by law.

Martin Galstyan,
Governor of the Central Bank

June 16, 2020

c. Yerevan

PRESS RELEASE

16.06.2020

At its June 16, 2020 meeting, the Board of the Central bank of Armenia decided to cut the refinancing rate by 0.5 percentage points to 4.5%.

There was 0.1% deflation in May 2020, compared to 0.4% deflation recorded in the same month of the previous year, in which case the 12-month inflation has increased, amounting to 1.2%.

Due to the coronavirus pandemic, the world economy is expected to register one of its biggest historic downturns. Moreover, the recovery of the world economy is estimated to be slower than expected, and uncertainty over the further course of the pandemic persists. At the same time, commodity prices show signs of stabilization and recovery, owing to the cautiously optimistic expectations for Chinese economy. It is predicted that the external sector will continue having a deflationary effect on the Armenian economy.

According to the Central Bank estimates, the decline in economic activity in Armenia in the second quarter will deepen driven by both supply and demand factors. On the supply side, the slowdown is mostly caused by the decline in construction and services, and the decrease in demand will be reflected mainly in the reduction of private expenditures in terms of both consumption and investment. Despite the stimulative impact of the fiscal policy compared to the previous year, the impact of declining private demand will prevail, which is largely determined by persisting uncertainties related to the pandemic.

Given the slowdown of the recovery of external and domestic demand, the current low inflationary environment and the adverse impact of increased uncertainty, the Board of the Central Bank deems it appropriate to reduce the refinancing rate by a wider step. The Board estimates that, in the current situation, maintaining the expansionary monetary policy stance in the medium run will be needed, under which the inflation will remain low in the short term, approaching the target only at the end of the forecast horizon. The Board also reckons that, in the current situation, implementing a more expansionary fiscal policy along with a stimulative monetary policy is key to restoring aggregate demand.

The Board estimates that the risks of inflation deviating from the projection are still on the downside due to the possible slow recovery of demand and the likely persistence of uncertainty. Should the risks materialize, the Central Bank will stand ready to adjust the policy as needed, ensuring price stability in the medium run.

Press Service of the Central Bank of Armenia

MAIN MACROECONOMIC INDICATORS OF ARMENIA

Items	2012	2013	2014	2015	2016	2017	2018	2019***	2020	2021	2022
	actual	actual	actual	actual	actual	actual	actual	actual	program	program	program
Prices											
Inflation (y/y, end of period, %)	3,2	5,6	4,6	-0,1	-1,1	2,6	1,8	0,7	1,9	2,3	3,6
Consumer price index (y/y, average, %)	2,6	5,8	3,0	3,7	-1,4	1,0	2,5	1,5	1,2	2,3	3,1
Core inflation (y/y, average, %)	5,3	5,8	1,9	5,1	-2,0	0,8	4,0	1,2	1,0	2,3	3,0
Gross product											
GDP (billion Armenian dram)	4266,5	4555,6	4828,6	5043,6	5067,3	5568,9	6005,1	6569,0	6370,7	6855,6	7357,8
GDP (% real growth)	7,2	3,3	3,6	3,2	0,2	7,5	5,2	7,6	-4,0	5,5	4,2
Supply											
Industry (% real growth)	6,4	6,3	-0,9	6,2	7,7	11,7	4,9	8,3	-2,2	6,1	4,7
Agriculture (% real growth)	9,5	7,6	6,1	13,2	-5,0	-5,1	-6,9	-2,6	-0,4	4,2	3,9
Construction (% real growth)	4,5	-7,4	-4,5	-3,1	-14,1	2,8	0,6	3,7	-11,2	9,3	3,2
Services (% real growth)	6,3	3,1	6,7	1,6	3,2	10,6	9,1	10,7	-4,3	5,0	4,1
Taxes, net (% real growth)	9,9	3,6	1,8	-5,1	-4,7	9,7	8,0	7,1	-5,4	5,9	4,4
Demand											
Consumption (% real growth)	7,7	1,9	0,7	-6,2	-1,2	10,5	6,0	10,6	-5,0	3,7	3,8
Public consumption (% real growth)	-1,4	8,7	3,4	4,7	-2,4	-2,1	-3,0	12,5	3,6	-5,8	3,3
Private consumption (% real growth)	9,1	0,9	1,0	-7,7	-1,0	12,7	7,4	10,3	-6,3	5,3	3,9
Gross accumulation of fixed assets* (% real growth)	-1,9	-8,3	-2,2	2,5	-11,4	9,7	4,8	4,4	-4,9	8,7	4,3
Public investment** (% real growth)	-22,4	-13,8	10,0	13,6	5,0	31,7	-37,4	31,1	35,4	7,4	6,3
Gross accumulation of private fixed assets (% real growth)	0,9	-7,8	-3,4	1,2	-13,9	6,2	19,6	-0,5	-14,7	9,3	3,7
Export of goods and services (% real growth)	12,0	8,9	6,4	4,9	19,1	18,7	2,9	13,2	-12,6	12,2	6,5
Import of goods and services (% real growth)	4,7	5,5	-1,0	-15,1	7,6	24,6	12,8	7,8	-15,8	7,4	3,9
External sector											
Balance of trade (million US dollar)	-2111,9	-2196,2	-2055,4	-1186,4	-944,4	-1376,1	-1789,1	-2051,2	-1615,3	-1582,7	-1587,7
Balance of services (million US dollar)	-101,6	-124,3	-113,0	-94,5	-71,4	-35,6	-157,8	79,9	124,0	153,5	203,1
Remittances (million US dollar)	1539,8	1755,1	1616,1	1082,4	989,6	1179,3	1136,2	1157,3	885,4	938,5	994,8
Current account (million US dollar)	-1057,9	-812,9	-883,1	-279,1	-238,1	-344,4	-1165,3	-1118,4	-850,3	-755,0	-654,1
Balance of trade (share in GDP, %)	-19,9	-19,7	-17,8	-11,3	-8,9	-12,2	-15,7	-14,4	-11,5	-10,2	-9,3
Balance of services (share in GDP, %)	-1,0	-1,1	-1,0	-0,9	-0,7	-0,3	-1,3	0,6	1,0	1,1	1,4
Remittances (share in GDP, %)	14,6	15,8	14,0	10,3	9,3	10,2	9,1	8,5	6,8	6,7	6,7
Current account (share in GDP, %)	-10,0	-7,3	-7,6	-2,7	-2,2	-3,0	-9,4	-8,2	-6,5	-5,4	-4,4
Public sector											
Revenues and grants (billion Armenian dram)	946,2	1071,4	1144,8	1167,7	1171,1	1237,2	1341,7	1559,1	1525,9	-	-
Tax revenues (billion Armenian dram)	878,4	1000,9	1064,1	1067,9	1079,7	1158,1	1258,1	1464,3	1433,2	-	-
Expenditures (billion Armenian dram)	1006,1	1142,9	1235,1	1409,0	1449,1	1503,9	1447,1	1623,0	1850,2	-	-
Deficit (billion Armenian dram)	-59,9	-71,5	-90,3	-241,3	-278,0	-266,7	-105,4	-63,9	-324,3	-	-
Revenues and grants (share in GDP, %)	22,2	23,5	23,7	23,2	23,1	22,2	22,3	23,7	24,0	-	-
Tax revenues (share in GDP, %)	20,6	22,0	22,0	21,2	21,3	20,8	21,0	22,3	22,5	-	-
Expenditures (share in GDP, %)	23,6	25,1	25,6	28,0	28,6	27,0	24,1	24,7	29,0	-	-
Deficit (share in GDP, %)	-1,4	-1,6	-1,9	-4,8	-5,5	-4,8	-1,8	-1,0	-5,1	-	-
Monetary sector											
Broad money (y/y, end of period, %)	19,5	14,8	8,3	10,8	17,5	18,5	7,4	11,2	-	-	-
Dram broad money (y/y, end of period, %)	11,9	14,9	-3,5	5,2	24,8	28,9	13,2	21,5	-	-	-
Loans to economy (y/y, end of period, %)	27,6	12,9	20,8	-3,3	6,0	16,5	17,2	18,5	-	-	-
USD / AMD (Armenian dram for one US dollar)	401,8	409,6	415,9	477,9	480,5	482,7	483,0	480,4	-	-	-

* 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 considered 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 forecasts are based on the Mid-Term Expenditures Framework, 2021-2023.

*** The 2020 budget indicators are the indicators of the revised law.

CHARTS

Chart 1	Inflation (12-month) forecast probability distribution for 3-year horizon	4
Chart 2	Real GDP growth (cumulative) forecast probability distribution for 3-year horizon	4
Chart 3	Economic growth in trade partner countries	6
Chart 4	Inflation in trade partner countries	6
Chart 5	International commodity and food prices	7
Chart 6	Inflation (12-month) forecast probability distribution for 3-year horizon	8
Chart 7	Demand components contributing to the growth	9
Chart 8	Change in real export and import of goods and services in the medium term	9
Chart 9	Nominal wage growth in private sector	11
Chart 10	Unemployment rate	11
Chart 11	Unit labor costs growth	11
Chart 12	US economic growth forecasts	11
Chart 13	EU economic growth forecasts	12
Chart 14	Russia economic growth forecasts	12
Chart 15	International food price forecasts	12
Chart 16	International oil price forecasts	12
Chart 17	International copper price forecasts	13
Chart 18	Real GDP growth (cumulative) forecast probability distribution for 3-year horizon	13
Chart 19	Mid-term current account-to-GDP ratio forecasts	13
Chart 20	Fiscal impulse forecast	14
Chart 21	Short-term inflation expectation estimates	14
Chart 22	Household inflation expectation surveys	14
Chart 23	Business sector productivity	17
Chart 24	VIX index	17
Chart 25	US private savings	18
Chart 26	Company reliability index for the United States	18
Chart 27	Risk premiums	18
Chart 28	Financial assets price change	18
Chart 29	Armenia real GDP y/y growth rates difference relative to baseline scenario	21
Chart 30	Main partner country real GDP y/y growth rates difference relative to baseline scenario	21
Chart 31	The 12-month inflation difference relative to baseline scenario	21
Chart 32	The policy rate difference relative to baseline scenario	21
Chart 33	According to the Central Bank forecasts, the 12-month inflation will persist low in the short run but will expand in the medium run and stabilize around the target at the end of the forecast horizon	22
Chart 34	A low inflation environment persisted over the last one-year horizon	23
Chart 35	In the first quarter of 2020 the dollar prices of import of goods and services slightly dropped against the same quarter of the previous year	24
Chart 36	Structure of private spending	25

Chart 37	In the first quarter of 2020 net export position improved as import reduced faster than export did	26
Chart 38	In the first quarter of 2020 the expansionary effect of fiscal policy owed mainly to the grown expenditures	26
Chart 39	Main indicators of the consolidated budget	26
Chart 40	In the first quarter of 2020 state budget generated a surplus, and net inflows from government securities held a bigger share in the sources of financing	27
Chart 41	GDP structure by sector	27
Chart 42	Private sector nominal wage	27
Chart 43	Unit labor costs	27
Chart 44	During the quarter short-term interest rates continued shaping around the Central Bank's policy rate	28
Chart 45	USD/AMD exchange rate dynamics in the first quarter of 2020	28
Chart 46	Liquidity injected and absorbed through Central Bank transactions (average monthly inventory)	29
Chart 47	In the first quarter of 2020 government bond yields fluctuated in the mid-term to long-term segments of the curve	29
Chart 48	Interest rates of dram loans	29

TABLES

Table 1	Inflation interval forecast probability distribution	8
Table 2	Real GDP growth (cumulative) forecast probability distribution	13
Table 3	Forecast judgments	15
Table 4	Consumer price inflation by commodity items as key contributors	24
Table 5	Average quarterly interest rates in Armenia's financial market	28