



# Monetary Policy REPORT

DECEMBER 2022



NATIONAL BANK OF KAZAKHSTAN



## CONTENTS

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<b>PREAMBLE</b>	<b>4</b>
<b>I. PROSPECTS OF THE DEVELOPMENT OF THE MACROECONOMIC SITUATION</b>	<b>6</b>
1.1. Forecast Assumptions	6
1.2. Dynamics of Economic Development under the Baseline Scenario	9
1.3. Alternative Forecast Scenarios	12
1.4. Risks in the Medium Term	13
1.5. Forecast of the Current Account of the Balance of Payments	15
<b>II. MONETARY POLICY</b>	<b>18</b>
2.1. Decisions on the Base Rate	18
2.2. Money Supply	19
2.3. Money Market	19
2.4. Foreign Exchange Market	20
2.5. Stock Market	21
2.6. Deposit Market	26
2.7. Credit Market	28
<b>III. MACROECONOMIC CONDITIONS</b>	<b>34</b>
3.1. External Sector	34
3.2. Development of the Domestic Economy	35
3.3. Labor Market	43
3.4. Inflation	45
3.5. Fiscal Policy	52
<b>BOXES</b>	
Box 1. Overview of the Global and Kazakh Equity Market in 2020-2022	23
Box 2. Lending to Businesses: What is Actually Happening and is There Any Deceleration?	29
Box 3. Is There a Substitution for Imports from Russia?	39
Box 4. Overview of the Sunflower Oil Market in Kazakhstan	46
Box 5. Assessing the Effect of the Exchange Rate Pass-Through onto Inflation in Kazakhstan	50



**Monetary Policy Report** is a quarterly publication of the National Bank, which contains the analysis of key macroeconomic factors affecting inflation as well as the forecast of macroeconomic parameters in the short- and medium-term horizon.

The Report is published in an electronic form on the official Internet resource of the National Bank in the Kazakh, Russian and English languages.

The forecast and analysis of macroeconomic indicators was prepared on the basis of statistical information as at **December 1, 2022**.

## PREAMBLE

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The global economy continues to slow down in the context of ongoing geopolitical tensions, rising world energy prices and monetary tightening by major central banks. Meanwhile, inflation in most countries of the world continues to accelerate and reach multi-decade highs.

Projections regarding a further development of the global economy have been revised downward. According to the IMF forecasts<sup>1</sup>, in 2022-2023 the global economy's growth rates are expected to decelerate. The Chinese economy in 2022 will expand by 3.2% followed by a further acceleration to 5% in 2023 given an anticipated increase in the domestic consumption. The EU economy will slow down to 0.1% in 2023 under the pressure of energy crisis, high inflation and rising interest rates. In 2024, as inflation approaches its target, the economic growth rates will stabilize at 1.9%. In Russia, the economic contraction in 2023 will be less deep as previously expected, and in 2024 the Russian economy will step up to the growth phase.

Price pressure continues to be elevated. Inflation in the EU against the backdrop of the energy crisis will be somewhat higher than previously projected. Inflation forecasts for China have been also slightly increased as the economy is expected to reopen after the COVID-19 and the consumer activity picks up again. Meanwhile, in Russia, because of the pent-up demand and a strong ruble, the annual inflation decelerated. As the economy adapts to new conditions, inflation is expected to approach the target by mid-2024.

In the context of increased inflationary pressure, central banks of developed countries continue to tighten monetary conditions, which will generally limit the economic activity.

Despite high volatility, the FAO Food Price Index is decelerating, which, coupled with a slowdown of inflation in Russia, reduces external inflationary pressure on consumer prices in Kazakhstan over the forecast horizon.

Inflationary processes in Kazakhstan keep accelerating. In November 2022, the annual inflation accelerated to 19.6% due to the growing prices for all key inflation components. Food prices keep making the largest contribution to acceleration of the headline inflation.

Inflationary processes are being shaped under the impact of both demand-pull and supply factors. The pass-through of the costs of production and logistics onto consumer prices continues in the context of increasing prices of production means and interim products. The upward pressure on the growth of production costs is also exerted by the growth of nominal wages in the sectors of the economy and the rising electricity prices due to the increase in basic tariffs. There was a significant acceleration in import prices due to the weakening of the nominal exchange rate of the tenge in the third quarter of 2022. In turn, disinflationary pressure on consumer prices is exerted by the administrative regulation of prices for fuel and lubricants.

Despite some easing, demand drivers continue to exert pro-inflationary pressure on prices, especially as uncertainty grows. Thus, in October 2022, prices for rental housing went up dramatically due to increased demand on the part of people arriving from the Russian Federation. Prices for certain types of unregulated paid services, personal goods and household appliances also went up. In view of the slowdown in the growth rate of real income of the population, the domestic consumer demand is supported by growth in lending and high inflationary expectations of the population, which reached historical highs.

The seasonally adjusted core inflation indicators keep to be building at elevated levels, thus indicating the persistence of a protracted high inflation background in the economy. According to the updated forecasts of the National Bank, inflation will continue to accelerate until the first quarter of 2023; whereafter inflationary processes are expected to slow down. Under the baseline scenario, at end-2022 inflation will be about 20-21%, in 2023, the annual inflation will decelerate to 11-13%, in 2024 – to 7-9%, and in 2025 – 4-6%.

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<sup>1</sup> IMF, *World Economic Outlook, October 2022*.

Kazakhstan's economic growth during ten months of 2022 was below the National Bank's expectations due to a deeper decline in production in the mining industry amid scheduled repairs at the Karachaganak oil field in September 2022 and a protracted breakdown at the Kashagan field. This also led to a slowdown in the business activity in transport and trade. Agriculture, communication, construction, and manufacturing remain to be the drivers of economic growth. This year, the investment activity, compared to consumer demand, demonstrates more active growth, being driven by such sectors as construction and major overhaul. On an industry basis, positive investment activity is observed in almost all major sectors of the economy.

The forecasts of the National Bank regarding the dynamics of economic development at the end of 2022 and at the beginning of 2023 have undergone changes. The revision of forecasts is associated with a downward reassessment of oil production in the country by the end of 2022 and for 2023. According to the recent data, oil production at the Kashagan field is gradually recovering, but at a slower pace than previously expected. As a result, annual growth rates of Kazakhstan's economy are expected to decelerate to 2-3% in 2022. As oil production recovers during 2023, the GDP growth rates will be restoring and will make up 3-4% (YoY), and in 2024-2025, they will reach 3.5-4.5% (YoY).

The troubled geopolitical circumstances and the risks of recession continue to bring in high uncertainty into the forecast assumptions of macroeconomic indicators, thus leading to the persistence of risks of inflation deviating from its forecast values at a high level.

However, the likelihood of some risks materialization compared to the preceding forecasting round has slightly decreased. With the slowing inflation in Russia on the back of pent-up demand and a strong ruble, the risk of importing high external inflation in the short term has somewhat reduced. This risk is also mitigated by deceleration of world food prices in the context of positive harvest expectations worldwide.

The risk of a fall in oil prices has slightly increased due to a possible recession in the world and a significant drop in demand for oil, especially from China. The risk of capital outflow from emerging markets in favor of developed ones remains high in the light of more aggressive monetary tightening by central banks of developed countries.

Among internal factors, the risks of increased inflation expectations of the population as well as low fiscal discipline are still significant. In the medium term, the risks of a one-time increase in prices for fuel and lubricants and utility services remain high.

## I. PROSPECTS OF THE DEVELOPMENT OF THE MACROECONOMIC SITUATION

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### 1.1. Forecast Assumptions

In the environment of slowing economic development of the world's largest economies, accelerating inflationary processes and the corresponding tightening of monetary conditions, the prospects for the development of the global economy have become more pessimistic. The IMF kept its global economic growth forecast for 2022 at 3.2% (YoY), lowering the forecast for 2023 from 2.9% to 2.7% (YoY). Weaker growth in the US and China and a significant slowdown in economic growth in the Eurozone from 5.2% in 2021 to 0.5% by 2023 are expected under the pressure of spillovers from increased geopolitical tensions. Overall, the main negative impact from current headwinds is expected to materialize next year, with the largest contraction in the economic activity in the first half of the year. In future, if the geopolitical situation improves and as countries adapt to new conditions, the global economy will begin to gradually recover.

According to Consensus Ecs. forecasts, the economic growth of the EU countries in 2022 will be 3.1% (YoY) due to the strong performance of the first half of the year. In 2023, the energy crisis, high inflation and rising interest rates will significantly reduce the economic activity. The EU economy is expected to grow at no more than 0.1% (YoY) as a result of the decreased domestic consumption in the face of falling real income, more restrained investment activity due to high funding costs and increased uncertainty regarding geopolitical events in the world. Deceleration of the economic growth in the trading partner countries will be reflected in the decline in the indicators of foreign trade of the EU countries, industrial production will decrease by an average of 0.3% (YoY). The slowdown in economic activity will lead to some deterioration of the situation in the labor market, which, however, is expected to continue to be one of the key growth drivers. The economic growth in the EU is projected to stabilize at its potential level by 2025 (YoY) (Figure 1).

According to Consensus Ecs. forecasts, China's economic growth in 2022 will slow down to 3.2% (YoY) under the pressure of the pursued anti-COVID policy, weak domestic and external demand. In 2023, the country is expected to gradually quit the zero tolerance policy for COVID-19, which will lead to a significant growth in household consumption. At the same time, the greatest increase in activity is expected in the second half of the year, when people fully adapt to life without restrictions. Imports are expected to pick up as a result of the economic recovery. Exports, in turn, due to the anticipated downturn in the economies of many countries, will decline. Growth is expected to be more moderate also in the investment activity, which will continue to be constrained by the weak real estate market. The situation in the labor market due to the recovering economic upturn and increased demand for labor will improve significantly. The unemployment rate is expected to decrease. Therefore, at end-2023 the Chinese economy will accelerate to 4.5% (YoY). In the medium term, the economic growth will be 4.6-4.8% on average (YoY) (Figure 1).

In accordance with the forecasts of international organizations, in 2022 contraction of the Russian economy will account for 3.0% (YoY). The forecasts for Russia were improved as a result of faster-than-expected growth in the industry and agriculture as well as a more moderate decline in exports. According to forecasts, the main constraining effect on the economy will come from a drop in the consumer demand and low investment activity.

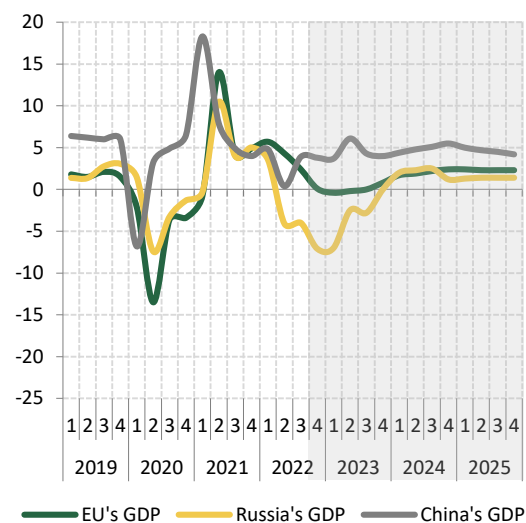
In 2023, after an expected imposition of the embargo on oil and petroleum products from Russia, the pressure on the industrial sector and foreign trade will intensify. It is expected that in 2023 the economic downturn in Russia would reach 3.1% (YoY). In 2024-2025, the economy will step up to the growth phase (Figure 1).

According to the updated IMF forecasts, in 2022 the global inflation will accelerate to 8.8%. In 2023, owing to the tighter monetary policy pursued and an anticipated global deceleration in many countries, inflation will gradually slow down but will still stay above the targets. In view of persisting uncertainty in geopolitical situation worldwide, future weather conditions in the food exporting countries, a possible hardening of the anti-COVID policy in China, the risks of inflationary processes acceleration remain heightened.

Over the forecast horizon, it is expected that inflation in the EU against the backdrop of the energy crisis will be somewhat higher. Inflation forecasts in China have also been raised slightly, due to the expected “opening” of the economy after COVID-19, and, accordingly, the resumption of consumer activity. The inflation outlook in Russia has been improved. As the economy adapts to new conditions, inflation is expected to approach the target by mid-2024 (Figure 2). Based on the updated inflation forecasts in the countries-Kazakhstan’s trading partners, external inflationary pressure on consumer prices in Kazakhstan in the medium term is expected to gradually weaken as long as inflation in the countries-Kazakhstan’s trading partners decreases.

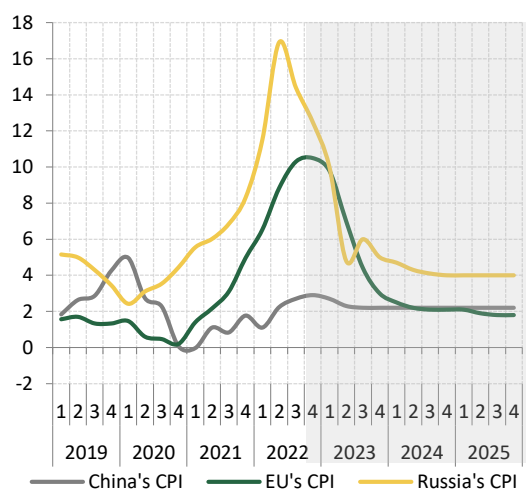
With a view to restrain inflationary processes, the US Fed and ECB intend to continue tightening their monetary policies in the nearest term. Meantime, in connection with a projected weaker economic growth in the USA, the US Fed is expected to move to the easing cycle of the monetary policy pursued by the end of the next year. The ECB, for its part, does not plan to opt for the policy easing in the nearest term in connection with the expected longer standing of inflation above the target.

Figure 1. GDP Growth Rates in China, the EU and Russia in real terms, YoY, %



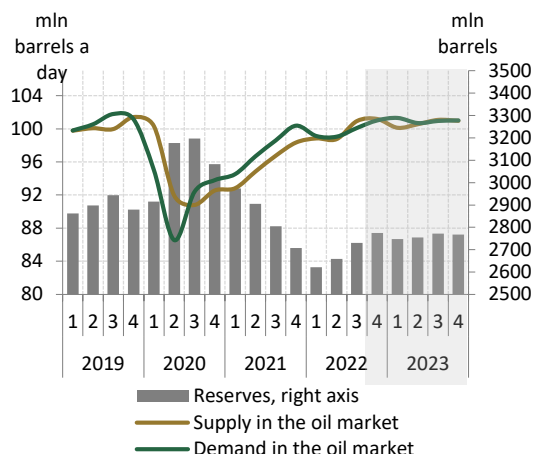
Source: Eurostat, National Bureau of Statistics of China, Rosstat, Consensus Ecs., CB RF, NBK's assessment

Figure 2. Inflation in China, EU, Russia, YoY, %



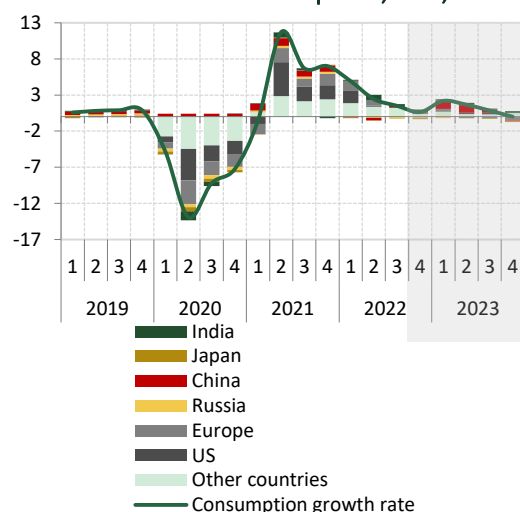
Source: Eurostat, National Bureau of Statistics of China, Rosstat, CB RF, Consensus Ecs., CB RF, NBK's assessment

Figure 3. Dynamics of the Global Oil Market, million barrels a day



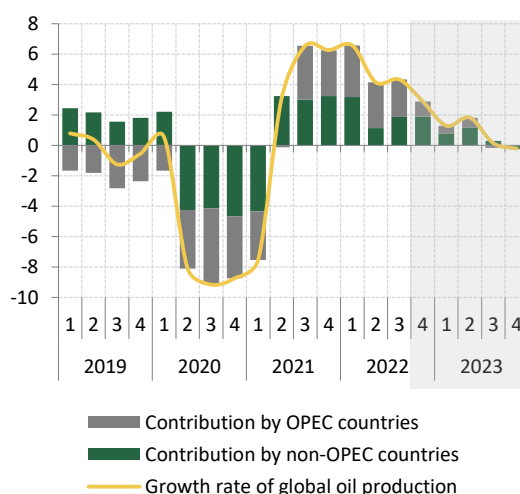
Source: EIA

Figure 4. Global Oil Consumption, YoY, %



Source: EIA

Figure 5. Global Oil Production, YoY, %



Source: EIA

According to EIA forecasts, before the end of 2022, Brent oil prices will be staying at present levels. Prices are expected to be supported by lower oil production in OPEC+ countries given the decision to reduce oil production, as well as lower oil production in Russia due to sanctions. In 2023, the expected downturn in the global economy will put pressure on the growth of energy prices. At the same time, because of low world oil reserves, anticipated disruptions in oil supplies and the policy pursued by OPEC plus, oil prices will be around 90 US dollars per barrel. The oil market is expected to be in balance by the end of the forecast period (Figure 3).

Forecasts regarding the demand for oil have been revised slightly downward in connection with expectations about a more sluggish development of the global economy. It is expected that in 2022 compared to 2021, oil consumption will go up by 2.3 million barrels a day to 99.8 million barrels a day. In 2023, the growth will be no more than 1.2 million barrels a day. Due to the imposed ban on supply of energy carries from Russia, starting from the second quarter of 2023, the contribution to the global consumption by the EU countries will decline. The main contribution to the growth will be secured by China, India and the USA (Figure 4).

Forecasts for global oil production have also been revised down slightly. By the end of this year, global oil supplies are expected to decline amid new OPEC+ restrictions and an embargo on Russian oil, whereafter Russia will cease to make a positive contribution to global oil production. In 2023, there will be a large deficit in the oil market. In non-OPEC countries, the growth rate of oil production will slow down to 0.7% (YoY) from 2.8% in 2022. In OPEC countries, oil production will remain approximately at the level of 2022 (Figure 4).

Drawing on projections of international organizations, in making forecasts under the baseline scenario, an assumption is made that in 2023 Brent oil price will be 89.9 US dollars per barrel on average, and by mid-2024, it is expected to decline to 85 US dollars per barrel.

Under the optimistic scenario, Brent oil price would make up 110 US dollars per barrel, and under the pessimistic scenario – 50 US dollars per barrel.



## 1.2. Dynamics of the Economic Development under the Baseline Scenario

**Compared to the previous forecast round, the NBK's expectations regarding the economic development rates by the end of this year have been revised slightly downward as a result of a reassessment of oil production volumes in Kazakhstan.**

This year, the mining industry, despite high prices in the global commodity markets, was adversely affected by other exogenous factors, in particular, interruptions in operation at the CPC and breakdowns at the large Kashagan field (17% of oil production in the country in 2021). Despite gradual recovery of operations at Kashagan, which can be seen from the most recent updated information, there was no full return to potential production levels expected during the preceding forecasting round; this led to a further slowdown in the dynamics of Kazakhstan's GDP.

According to updated forecasts, this year the output of oil and gas condensate is estimated to be below 2021. **As a result, at end-2022, the GDP growth rates will be 2-3% (Figure 6).**

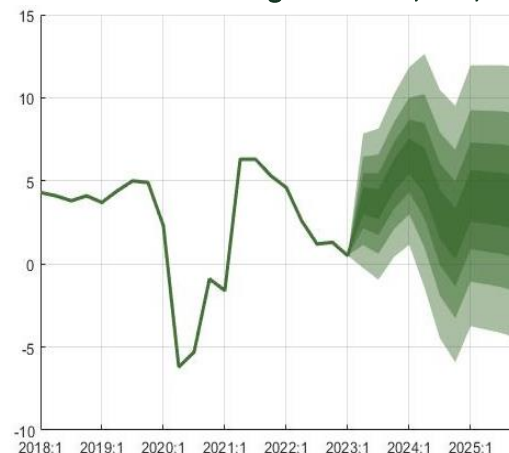
Based on the assumptions, in 2023 the output is expected to be larger than in 2022. It is believed that production at the Kashagan field will be restored to its potential rates from the second quarter of 2023.

In the first year-half, a negative contribution by exports is anticipated, with its growth recovering in the third quarter of 2023.

As for all other components, their positive contribution to the GDP growth is anticipated in the near term.

The consumer demand will be held up by fiscal stimuli aimed at supporting social income of the population as well as the raising of wages to certain categories of employees in the sectors of public administration and defense, education and healthcare.

Figure 6. GDP, YoY, %



Source: NBK's forecast, percentiles at the level of 80%, 60%, 40%, 20%.

Consumer lending is expected to be ongoing, which will also support the household consumption. However, given the significant expansion of the wage fund in the real sector in 2022 and gradual decline in the profitability of enterprises, the growth of wages in branches of the real sector in 2023 will be more moderate.

Taking into account, on the one hand, the continuing fiscal stimulation, and a moderate increase in wages in the real sector, on the other hand, more modest dynamics of household consumption is anticipated in 2023.

Raising wages in the public sector will secure a significant increase in consumption of the general government.

An active growth is anticipated on the part of gross formation owing to implementation of the scheduled infrastructure projects (LRT, Dostyk-Moiynty and other infrastructure projects) and completion of construction works under the plant construction project at the TCO. Imports will be demonstrating moderate dynamics given a positive pattern of the domestic demand. **As a result, in 2023 GDP growth rates will account for 3-4%.**

In 2024, in view of an increase in oil production at the Tengiz field, a further growth of exports is anticipated that will drive **acceleration of the GDP growth to 3.5-4.5%. In 2025**, the economic growth will keep staying near its equilibrium values and will also make up **3.5-4.5%.**

As for the output gap path defined as the percentage deviation of the actual GDP level from its potential level, it will be in the positive zone during the second half of 2023-end of 2025. This is due to the positive dynamics of domestic demand owing to fiscal stimulus, as well as exports due to the growth of oil production. However, the output gap is expected to remain negative in the short term, because of temporary problems with exports. Thus, the output gap after a slight decline in early 2023 will exert pro-inflationary pressure on the economy over the forecast horizon.

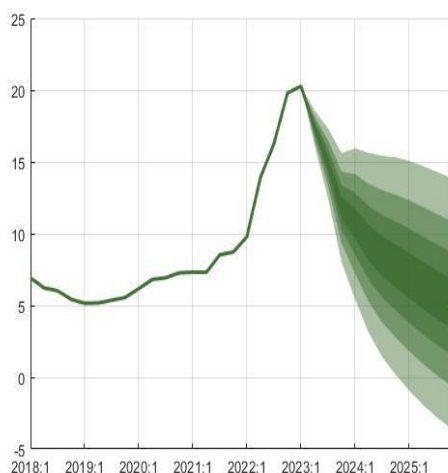
**According to the National Bank's forecasts, by the end of 2022 inflation will be within the range of 20-21%. Inflation will reach its peak in February 2023 (Figure 7).**

Previous inflation estimates are revised upward, which was associated with higher inflation expectations compared to those factored into the assumptions, and a higher rise in prices for a wide set of goods and services that occurred amid the migration shock.

The forecast dynamics of inflation is determined both by high inertia of existing inflationary processes and an increase in production costs because of disruptions of logistics chains, a high external inflation background in the short term, increased inflation expectations and a weak exchange rate of the tenge against the Russian ruble.

In the context of inflation components, the greatest increase is expected among food prices. A higher rise in food prices than previously expected, as well as an increase in world food prices caused by an exacerbation of the situation around the grain transaction in Ukraine led to acceleration of food inflation during 2022. Therefore, in the environment of elevated inflationary background as well as the persisting logistical costs

Figure 7. Inflation, Quarterly Average, YoY, %



Source: NBK's forecast, percentiles at the level of 80%, 60%, 40%, 20%.

under the pressure of sanctions, in 2022 the rise in food prices will exceed 25%.

The non-food component is expected to accelerate significantly in the coming months, driven by high global inflation, disruptions in supply chains, and continued strong demand on the back of rising wages and lending. By the end of 2022, price growth is expected to accelerate for all non-food products, with the exception of domestically produced goods, the prices of which are regulated administratively, for example, certain types of fuel and lubricants.

It is also predicted that inflation of paid services will accelerate by the end of 2022. To a greater extent, this will be due to a significant increase in inflation expectations in recent months. In addition, service inflation is expected to rise amid higher prices for regulated utilities within the limits of the contribution approved by the Government.

**In 2023, inflation is expected to slow down to 11-13% given the removal of the 2022 high base from the calculations as well as the impact of prior decisions regarding the monetary tightening. In future, the annual inflation will keep decelerating; however, it will be still building above the targets within 7-9% in 2024 and 4-6% in 2025.**

Medium-term inflation estimates were revised upwards. This is due to the fact that over the forecast horizon, inflation expectations will converge more slowly towards their target values, world grain prices will be gradually declining but will remain at elevated levels, and the output gap will be in the positive zone from the second half of 2023. Thus, deceleration of inflation will be slower than previously expected, which in turn will affect the speed of monetary easing (Table 1).

In 2023-2025, a number of divergent factors will be having an effect on the annual inflation dynamics.

On the one hand, a gradual exit of the 2022 high base, a rising real interest rate and decreasing inflation expectations, a progressive decline of world food prices, favorable grain crop this year, and mitigation of external inflationary background will be driving deceleration of inflation in Kazakhstan.

Table 1. Forecasts under the Baseline Scenario

	2022	2023	2024	2025
<b>GDP, YoY, %</b>	<b>2-3</b> (2.5-3.5)*	<b>3-4</b> (4-5)	<b>3.5-4.5</b> (4-5)	<b>3.5-4.5</b>
<b>CPI, December to December of the preceding year, %</b>	<b>20-21</b> (16-18)	<b>11-13</b> (7.5-9.5)	<b>7-9</b> (5.5-7.5)	<b>4-6</b>
<b>Brent oil, in US dollars per barrel, yearly average</b>	101.8	90	85	79

Source: NBK's computations

\* –henceforth, the preceding forecast as part of the “August-September 2022” forecasting round is shown in the parenthesis

On the other hand, a positive output gap resulting from the fiscal stimulus as well as inertia of inflationary processes will prevent inflation from deceleration.

### 1.3. Alternative Forecast Scenarios

**Given the presence of uncertainty related to the geopolitical situation in the world and the dynamics of the global economy's growth, in addition to the baseline scenario, the National Bank considered two alternative scenarios – a pessimistic and optimistic one.**

As a **pessimistic** scenario, the National Bank considered the scenario where oil prices would fall to 50 US dollars per barrel and would persist at this level until the end of the forecast horizon. The fall in oil prices will be caused by deterioration in the economic activity in the main oil importing countries (prolonged recession in the EU, sluggish economic activity in China in the face of a worsening situation with the COVID-19 and problems in the real estate market), a more active transition of developed countries to a green economy and reduction of toxic emissions, the cancellation of the OPEC + agreement on reduction of oil production and the concurrent increase in oil production in non-OPEC countries.

If the situation develops in line with the pessimistic scenario, the path of Kazakhstan's export growth will be more restrained due to the weak dynamics of external demand for raw materials from Kazakhstan. The negative dynamics of revenues of the mining sector enterprises in comparison with the baseline scenario will lead to curtailment in production and investments, which will negatively affect the construction, transport, trade and other services. Weaker dynamics of personal income and investments will somewhat limit the growth of consumer and investment demand. As part of the new counter-cyclical fiscal rule, from 2023, the dynamics of domestic demand will be less pent-up. As a result, **GDP growth rates will make up 1.5-2.5% in 2023 and 3-4% in 2024-2025.**

If such scenario were realized, inflation would be building at higher levels than under the baseline scenario. Despite a more pent-up domestic demand, a weaker real effective exchange rate of the tenge and the corresponding growth of inflation expectations would create strong inflationary pressure in the economy. **In 2023, inflation will be 14-16%, in 2024 – 10-12%, and in 2025 – 5-7%.**



If an **optimistic scenario** were realized, it is assumed that the oil price path would reach 110 US dollars per barrel over the forecast horizon. Such path of oil prices will be associated with a significant decrease in geopolitical tensions in the world, handling problems with supplies chains, faster economic growth of the global economy as well as stabilization of inflation in developed and developing countries and the corresponding normalization of the monetary policy.

High hydrocarbon prices and strong external demand from trading partner countries will result in higher growth rates for Kazakhstan's economy than in the baseline scenario. **The economic growth in 2023 will make up 3.5-4.5%, and in 2024-2025 – 4.5-5.5%.**

If events unfold according to the optimistic scenario, inflation will slow down at a faster pace compared to the baseline scenario. This will be facilitated by the strong dynamics of the tenge exchange rate and lower external inflationary pressure. **In 2023, inflation will be building within 10-12%, in 2024 – 6-8%, and in 2025 – 4-6%.**

Table 2 (a). Forecasts under the Pessimistic Scenario

	2022	2023	2024	2025
<b>GDP, YoY, %</b>	<b>2-3</b> (2.3-3.3)	<b>1.5-2.5</b> (2.3-3.3)	<b>3-4</b> (3.5-4.5)	<b>3-4</b>
<b>CPI, December to December of the preceding year, %</b>	<b>20-21</b> (17-19)	<b>14-16</b> (8.5-10.5)	<b>10-12</b> (6.5-8.5)	<b>5-7</b>
<b>Brent oil, in US dollars per barrel, yearly average</b>	100.1	54	50	50

Table 2 (6). Forecasts under the Optimistic Scenario

	2022	2023	2024	2025
<b>GDP, YoY, %</b>	<b>2-3</b> (2.6-3.6)	<b>3.5-4.5</b> (4.4-5.4)	<b>4.5-5.5</b> (4.4-5.4)	<b>4.5-5.5</b>
<b>CPI, December to December of the preceding year, %</b>	<b>20-21</b> (16-18)	<b>10-12</b> (6.5-8.5)	<b>6-8</b> (5-7)	<b>4-6</b>
<b>Brent oil, in US dollars per barrel, yearly average</b>	102.6	109	110	110

Source: NBK's computations

#### 1.4. Risks in the Medium Term

**Compared to the preceding forecasting round, the risks of inflation acceleration have not changed for the most part and remain high due to the persisting geopolitical tensions in the world (Figure 8).**

The persistence of geopolitical tensions and risks of recession in the world cause high uncertainty about the dynamics of forecasts of Kazakhstan's macroeconomic indicators such that the risks of inflation deviating from its forecasts remain at a high level.

Nonetheless, the probability of realization of some risks compared to the preceding forecasting round somewhat decreased. In view of the fact that during the recent months in Russia as the major supplier of import goods to Kazakhstan amid the pent-up demand and a strong ruble there is an extremely low growth of prices for a wide range of products in the consumer basket,

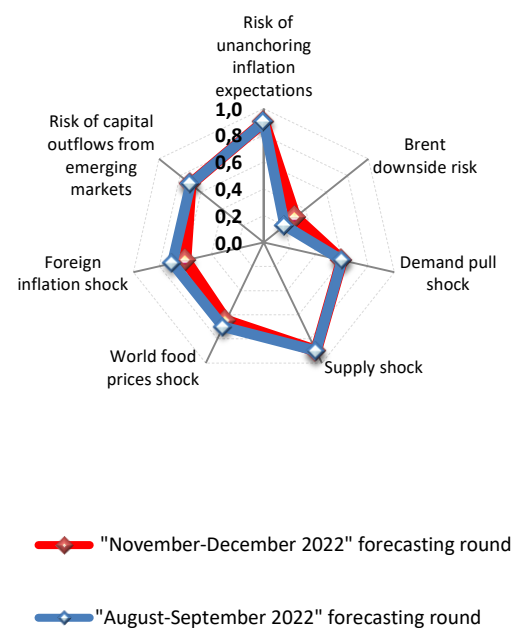
the risk of importing high external inflation somewhat decreased. At the same time, in the environment of anti-Russian sanctions and the corresponding rearrangement in the supplies of consumer goods, the risk of importing high inflation from Russia remains in the medium-term.

The risk of importing high global food price inflation has also slightly decreased. Despite some surge in grain prices in the face of a possible disruption of the implied grain deal between Ukraine and the Russian Federation, the situation with export supplies in the world is gradually normalizing. Alongside with positive expectations for the harvest worldwide, this will contribute to lower prices in the medium term. However, the risks of rising global food prices remain due to the tense geopolitical situation and historical price volatility.

At the same time, the risk of falling oil prices slightly increased. This factor is mainly associated with a possible recession in the world and a significant drop in demand for oil, especially from China. At the same time, low oil production by OPEC+ countries given the decision to reduce oil production and lower oil production in Russia because of sanctions will support world oil prices.

The risk of capital outflow from emerging markets in favor of developed countries also remains high. Amid the increased inflationary pressures worldwide, the central banks of developed countries may tighten monetary policy more aggressively, thereby increasing pressure on the exchange rates of emerging markets. In addition, due to the dependence of the tenge's perceived risk premium on the dynamics of the Russian ruble and high volatility of the Russian currency, the risks of the tenge depreciation are still high. Moreover, the impact of the embargo on exports of Russian oil on the part of the EU as well as problems with the Caspian Pipeline Consortium may negatively affect the export of Kazakh oil and reduce foreign exchange proceeds, which may also be a negative factor for the tenge exchange rate.

Figure 8. Risk Map Based on the Expert Judgment



Source: NBK's computations

Among internal factors, the risk of unanchoring inflation expectations due to high current inflation, the tense geopolitical situation in the world and inflation factors on the supply and demand side remains significant and has partly realized. In the short and medium term, the risks of accelerating inflation from supply factors remain high. Disruptions in supplies from the Russian Federation, restructuring of logistics networks can reduce the supply of goods or lead to an increase in their cost. In addition, in the medium term, the risks of a one-time increase in prices for fuel and lubricants and regulated utility services remain high due to the need to maintain the profitability of production and finance investments in major repairs, which can have a multiplier effect on the prices of a wide range of goods and services.

The risk of inflationary pressure from domestic demand remains pronounced due to the growth of minimum wage and salaries in the public sector, as well as the implementation of large infrastructure projects. At the same time, given a low fiscal discipline and periodic upward revision of government spending in previous years, it is not excluded that the budget parameters in subsequent years can be further revised towards expanding the expenditure side, which can become an additional source of pro-inflationary pressure in the economy.

### 1.5. Forecast of the Current Account of the Balance of Payments

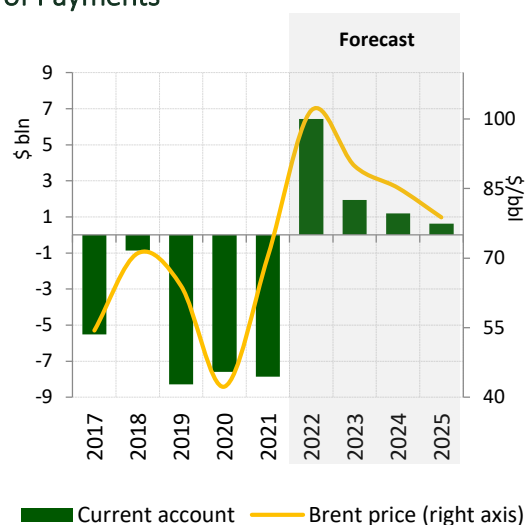
**In 2022, due to rising prices for raw materials, the current account of the balance of payments for the first time in 8 years will move into a surplus zone. Going forward, the downward forecast for the path of oil prices, combined with steadily growing imports, will help reduce the current account surplus. Volatility of the expected medium-term surplus will be a consequence of the dependence of the economy on world commodity prices.**

A low diversification of exports and their transportation channels will determine further dependence of the volume of supplies abroad on changes in the global economic environment. As a result, in 2022 high commodity prices will be driving the growth in export of goods by 39.9% to 84.4 bln US dollars.

In the medium term, multidirectional factors will influence the dynamics of exports. Pressure on exports will come from the projected reduction in oil prices and the redistribution of gas for domestic consumption. Growth will be supported by expected moderate rise in metal prices after 2023 (Consensus Economics forecast), the increasing cost and volume of uranium mining as well as the planned establishment of cargo traffic along the trans-Caspian transport route. As a result, in 2023 exports are projected to be at 84.9 bln US dollars, in 2024 – 86.5 bln US dollars, and in 2025 – 85.5 bln US dollars (Figure 9).

The insufficiency of local production in Kazakhstan to cover domestic needs will continue to support high levels of imports. Demand for imported products will be financed with the increasing fiscal spending, including government programs, as well as personal and borrowed funds of the population and businesses. It is expected that structural changes in global logistics supply chains and a reduction in supplies from Russia because of the ban on export of certain goods imposed by the Russian Federation, will lead to a reorientation of purchases towards the markets of East and Southeast Asia.

Figure 9. Current Account of the Balance of Payments



Source: NBK's forecast

Thus, the growth of imports of goods according to the balance of payments methodology will continue over the forecast horizon: according to projections, in 2022 imports will amount to 48.9 bln US dollars, in 2023 – 51.3 bln US dollars, in 2024 – 54.1 bln US dollars, reaching an all-time high of 54.6 bln US dollars in 2025 (Figure 9).

Returns payable to foreign direct investors, predominantly in the commodity sector, will continue to put pressure on the current account. The growth of export proceeds in the commodity sector as well as the tightening of monetary policy by major central banks will lead to an increase in returns of foreign investors in the form of net profit and interest on loans they issued. As consequence, the balance of revenues deficit will be sizeable and will amount to 27.7 bln US dollars in 2022, 30.2 bln US dollars in 2023-2024 and 29.5 bln US dollars in 2025.

**Therefore, according to the National Bank's forecasts, the current account surplus in 2022 will make up 6.4 bln US dollars, decreasing to 1.9 bln US dollars in 2023, 1.2 bln US dollars in 2024 and 0.6 bln US dollars in 2025.**

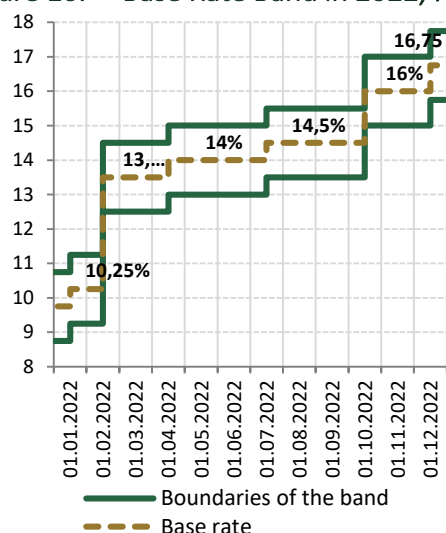
According to projections, the current account **surplus** in 2022 will be **2.9% of GDP**. In 2023-2025, under the optimistic scenario, a **surplus within the range of 1.8%-3.3% of GDP** is expected, and in case of the pessimistic scenario – the deficit of **2%-4.4% of GDP**.



## II. MONETARY POLICY



Figure 10. Base Rate Band in 2022, %



Source: NBK

## II. MONETARY POLICY

### 2.1. Decisions on the Base Rate

In October 2022, the National Bank made the decision to increase the base rate by 150 bp to 16% given a significant deviation of actual inflation from its projected path. Thus, in September of this year inflation accelerated and accounted for 17.7% against the National Bank's forecast of 16-18% by the end of the year (Figure 10).

Pressure on prices from high inflation expectations, robust demand, fiscal impulse, increasing production costs due to a shift to more sustainable supply chains, and continued external inflation pass-through required a corresponding restructuring of monetary conditions and an adjustment of the base rate path to maintain conditions conducive to deceleration of inflation in 2023.

In December, the Monetary Policy Committee made the last scheduled decision for 2022 about increasing the base rate by 75 bp to 16.75%. The decision was made taking into account the dynamics of actual inflation and the updated path of its forecast values. The external factors for an increase in the base rate included the uncertainty of further development and consequences of the geopolitical situation as well as high world food prices. Domestically, price pressures remain from historically high inflation expectations, supply/demand imbalances, trade restructuring amid accelerated import growth.

The National Bank has approached the end of the base rate increase cycle. The accumulated effect from tightening the monetary policy and maintaining the current base rate for a long time will help maintain conditions conducive to a gradual deceleration of inflation in the medium term. If inflation deviates from its forecast values, and new, previously unaccounted pro-inflationary risks arise, monetary conditions may be adjusted towards tightening. However, at present the probability of such scenario is assessed as low.

## 2.2. Money Supply

**The money supply growth accelerated. A significant contribution to expansion in the money supply during August-October 2022 keeps increasing claims on the economy (lending to the population and businesses). The money multiplier is exceeding the level of the last year.**

In October 2022, the money supply in the economy amounted to 33.3 trln tenge (Figure 11) and has been expanding since June. At end-October, the growth accounted for 14.8% YoY (in October 2021 – 17.3%).

The major positive contribution to the growth in money supply is made by loans to the population (11.9 pp) and the business to a lesser extent (2.6 pp).

The reserve money continued to expand, in October 2022 its growth accounted for 19.0% YoY (7.7% in October 2021). Within the reserve money, there was an increase in cash outside the NBK (a contribution of 3.4%) and deposits of STBs and other organizations with the NBK (a contribution of 15.5%).

The **money multiplier** (the ratio between money supply in the tenge and reserve money in the tenge), after its reduction in August 2022 to 1.70, in October grew to 1.78 (in October 2021 – 1.65) (Figure 12).

## 2.3. Money Market

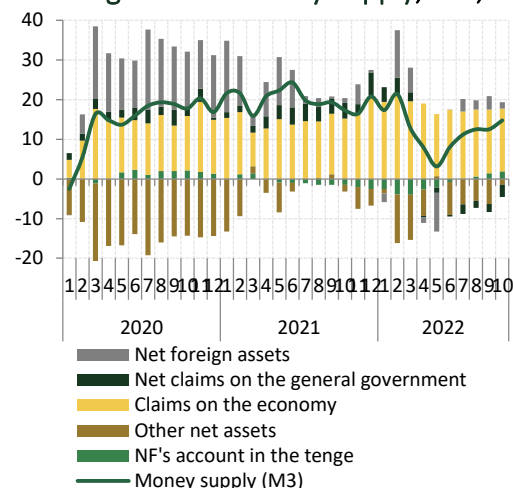
**At end-November 2022, there was an increase in the balance on the NBK operations (liquidity surplus) after reduction in October. In September-November, money market rates were setting mainly near the base rate.**

In November 2022, the balance of NBK operations went up by 20.8% compared to August and amounted to 3.2 trln tenge at the end of November.

The bulk of liquidity was withdrawn via notes (1.6 trln tenge), deposit auctions (0.9 trln tenge) and deposits (0.8 trln tenge) (Figure 13).

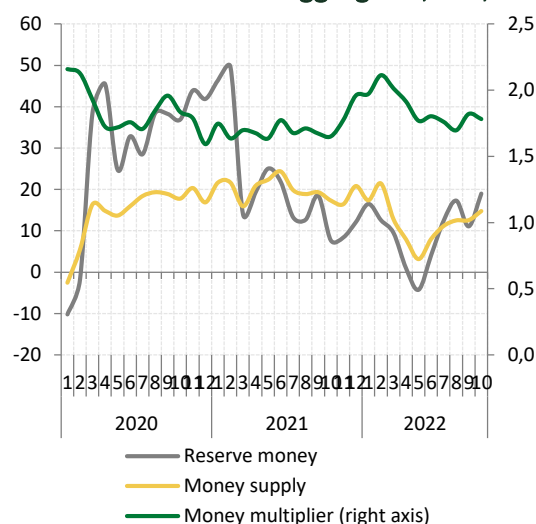
In September-November, the volumes of liquidity withdrawn by the NBK via deposit auctions and deposits increased; their daily average amounts equaled 1 112.7 bln tenge and 579.8 bln tenge, respectively

Figure 11. Money Supply, YoY, %



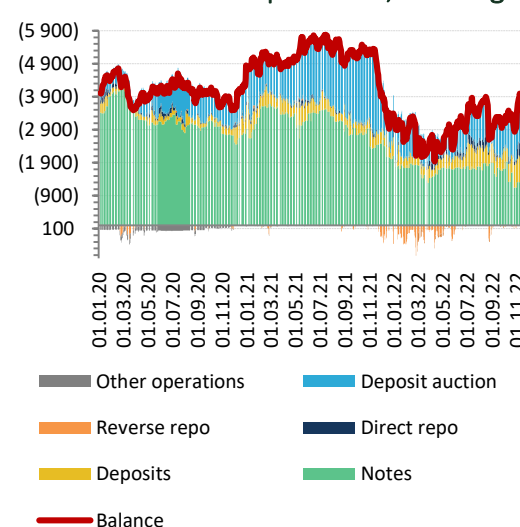
Source: NBK

Figure 12. Growth of Monetary Aggregates, YoY, %



Source: NBK

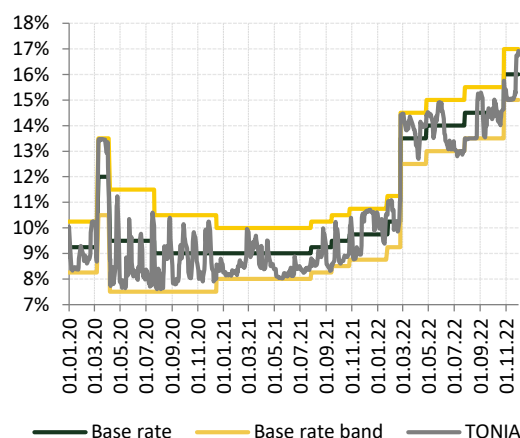
Figure 13. Exposure on the National Bank's Operations, bln tenge



Source: NBK

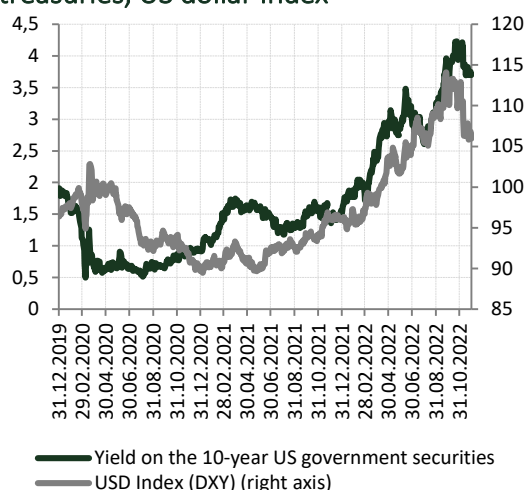


Figure 14. Interest Rate Band and TONIA



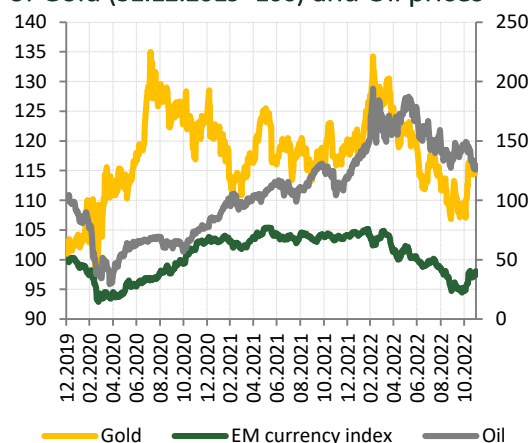
Source: NBK, KASE

Figure 15. Yield on the 10-year US treasuries, US dollar Index



Source: Refinitiv

Figure 16. Dynamics of the Emerging Market Currency Index, and of the Cost of Gold (31.12.2019=100) and Oil prices



Source: Refinitiv

(in June-August 2022 – 915.5 bln tenge and 497.0 bln tenge).

The raising of the base rate in October 2022 resulted in the corresponding growth of money market rates (Figure 14). At the same time, before the base rate had been increased, the target money market rate TONIA (an overnight repo rate) was staying mainly near the base rate. After the rate increase, TONIA was setting predominantly near the lower boundary. As a result, an average TONIA in September-November was 14.8%, and the spread between TONIA and the base rate on average in September-November 2022 had been negative at (-)0.25 pp.

## 2.4. Foreign Exchange Market

**Despite unfavorable external factors (global strengthening of the US dollar, the decreasing risk appetite of investors for emerging markets assets), the tenge exchange rate appreciated in the environment of high oil prices, the raising of the base rate as well as the supply of foreign currency from the quasi-public sector.**

In view of the persistence of significant pro-inflationary background, central banks of developed countries continue to tighten monetary conditions. This put pressure on the currencies of developing countries, including the tenge, in certain periods (Figure 15).

The US Fed twice increased its policy rate by 75 bp to 3.0-3.25% in September and to 3.75-4.0% in November. Therefore, yields on treasury bonds increased from 3.1% to 4.2% (Figure 16). The ECB had raised the policy rate two times by 75 bp to 1.25% in September, and to 2.0% in October, with an aim to bring inflation back to the medium-term target of 2%. The Bank of Canada has also increased its policy rate twice: by 75 bp to 3.25% and by 50 bp to 3.75%.

Along with the increase of interest rates by world central banks and the declining oil prices (in July-September the first quarterly reduction of oil quotes was observed in more than two years due to fears of a global recession, Brent oil price during September went down by 8.8% from 96.49 to 87.96 US dollars per barrel), in September the pressure on the exchange rate was exerted by the announcement of a partial mobilization in Russia



(a potential factor for depreciation of the exchange rate because of increasing geopolitical tensions). As a result, on September 22, the exchange rate of the tenge depreciated by 1.9% to 481.16 tenge per US dollar compared to the beginning of the month.

In October, the exchange rate was setting under the impact of external situation in the oil market. Thus, according to the decision of OPEC+ meeting, in November and December 2022 a maximum level of oil production by OPEC+ countries was cut by 2 million barrels a day compared to the permitted level in August 2022. As a result, oil quotes in October demonstrated a **7.8% growth from 87.96 to 94.83 US dollars per barrel**. This helped strengthen the exchange rate of the tenge in October from 476.53 to 468.35 tenge per US dollar.

During September-November 2022, the sale of foreign currency as part of the mandatory sale of proceeds of the quasi-government sector and transfers from the National Fund to the national budget contributed to additional supply in the foreign exchange market. In September-November, sales of foreign currency from the National Fund equaled 517.1 bln US dollars. The sale of foreign currency as part of realization of export proceeds of the quasi-government sector in September-November amounted to 1.6 bln US dollars.

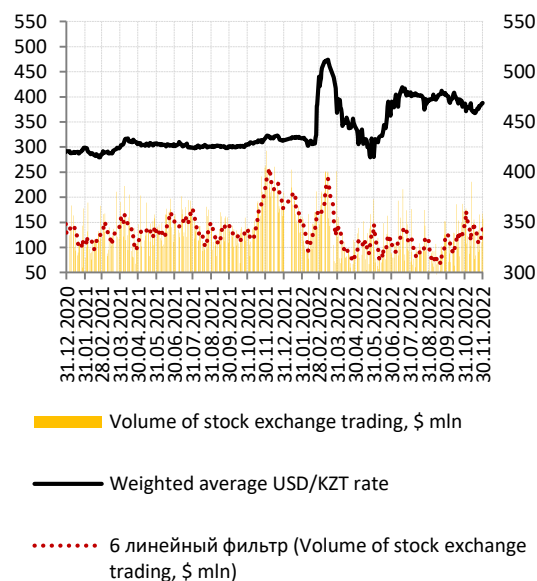
In September-November, the exchange rate was forming within the range of 458.62-481.16 tenge per US dollar (Figure 17). An average daily volume of stock exchange trading in September-November went down by 18.6% YoY and equaled 114.3 mln US dollars (in June-August – 102.9 mln US dollars, in September-November 2021 – 140.5 mln US dollars). The decline in volumes probably reflects the lack of significant demand for foreign exchange due to high oil prices and the increasing attractiveness of the tenge assets.

## 2.5. Stock Market

In August-October 2022, a risk-free yield curve was demonstrating an inverted (reverse) shape. However, in September it was hump-shaped.

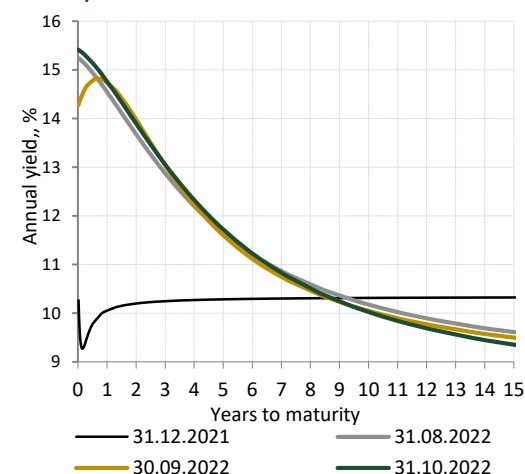
Overall, the yield curve dynamics on a short-term section of up to 1 year demonstrates growth due to the increase

Figure 17. Dynamics of the Exchange Rate of the Tenge and the Trading Volume



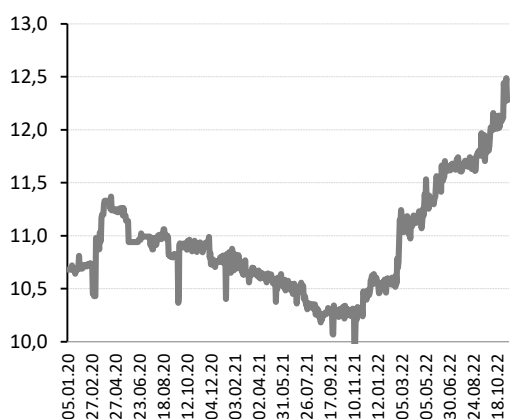
Source: KASE, NBK

Figure 18. Change in the Risk-Free Yield Curve, %



Source: KASE, NBK

Figure 19. Yield on Corporate Bonds, %



Source: KASE, NBK

**in the base rate, while there is a decline on the medium- and long-term sections.**

The volume of trading in government securities in August-October continues to grow on a QoQ and YoY basis owing to the budget deficit financing.

It is pointed out that the national budget deficit for 2022 is projected to be about 2 978 bln tenge. To finance the budget deficit, during 10 months Kazakhstan's Ministry of Finance attracted 3 112.2 bln tenge in the primary market (the government securities program of the MF RK – 2 818 bln tenge). From August, Kazakhstan's Ministry of Finance started to issue treasury obligations - METICAM – indexed to TONIA; during August-October, 15 placements totaling 401.5 bln tenge at 14.73%-15.45% were made.

The October decision of the National Bank to raise the base rate from 14.5% to 16.0% led to an upward shift of the yield curve on a short-term segment (Figure 18), while on a long-term segment, government securities produced lower yields.

Yields on placed government securities of the MF RK with different maturities following the increase of the base rate grew from 13.61-14.50% per annum in May-July 2022 to 13.85-15.70% per annum in August-October 2022.

Issuance of government securities in the primary market decreased from 1 312.6 bln tenge in May-July to 1 033.2 in August-October. Of which, borrowings of the MF RK equaling 1 012.4 bln tenge account for a significant portion. Maturities of placed government securities of the MF RK varied from 1 to 5 years. The remaining volume includes borrowings of local executive authorities that went down from 54.7 bln tenge in May-July to 32.7 bln tenge in August-October (at 0.35-4.25% with maturity from 1 to 2 years). Reduction in the volume of government securities issued in August-October was among other things, connected with the implementation of the MF RK's plan of issuing the MF RK's government securities.

The volume of placement in the corporate bond market went up from 267.1 bln tenge in May-July to 619.1 bln tenge in August-October.

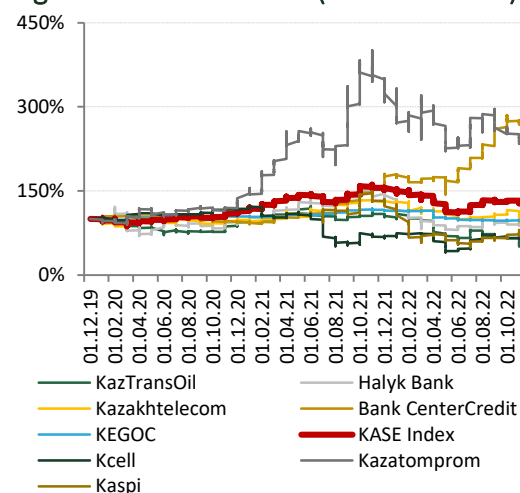
The weighted average yield on placed bonds in October<sup>2</sup> increased to 15.68% (14.76% in July<sup>3</sup> 2022). The KASE BMI at the end of October 2022 grew by 49.22 bp to 12.10 versus the end of July 2022. (Figure 20).

The KASE Index during September-November decreased by 2.7% (Figure 20). The main contribution to the index decline was made by the common stock of such joint-stock companies as KazTransOil – (-)25.5% and Kazatomprom – (-)16.3%.

At the same time, shares of stock of Kaspi.kz and “Bank CenterCredit” JSC appeared to be in the positive zone – 19.5% and 15.2%, respectively.

The global stock market is demonstrating a moderately positive stance. This was due to investors’ expectations about less aggressive pace of increase of the federal funds rate.

Figure 20. KASE Index (Dec.2019=100)



Source: KASE

### Box 1. Overview of the Global and Kazakh Equity Market in 2020-2022

The main indicator of the state of equity market in Kazakhstan is the KASE index computed by the Kazakhstan Stock Exchange. Despite the fact that the stock exchange was founded at the end of 1993, to date, the stock market of Kazakhstan still remains an underdeveloped sector of the country’s financial system due to the low investment culture, poor awareness of potential players about various types of transactions in the stock market, etc.

At present, the KASE Index representative list consists of only 8 companies and represents the primary sector (“KazTransOil” JSC), energy sector (“Kazatomprom” JSC, “KEGOC” JSC), telecommunication sector (“Kazakhtelecom” JSC, “KCell” JSC) and the banking industry (“Halyk Savings Bank of Kazakhstan” JSC, “Bank CenterCredit” JSC and “Kaspi.kz” JSC).

**For reference:** equity markets capitalization to GDP is as follows: KASE in 2019 – 27.4%, 2020 – 27.0%, 2021 – 34.3%; MOEX (Russia) in 2019 – 44.7%, in 2020 – 47.9%, in 2021 – 48.0%; S&P500 (USA) in 2019 – 125.2%, in 2020 – 151.5%, in 2021 – 175.5%.

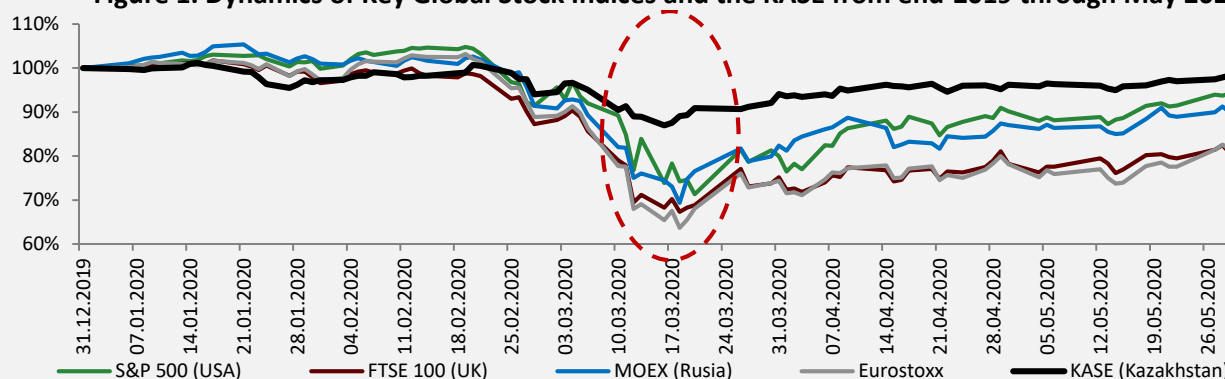
In general, the equity market as an integral part of the financial market is exposed to various shocks. Thus, the spread of COVID-19 and the restrictions associated with it have become a challenge for the global economy. If in previous crises, the financial sector acted as a trigger for economic shocks, in the context of the coronavirus pandemic, the economic downturn primarily associated with quarantine restrictions led to a synchronous shock in financial markets.

In the first quarter of 2020, the announcement by the World Health Organization of a pandemic in connection with the COVID-19, the failure of the OPEC + deal caused a panic in the global markets. The S&P500 index (USA) in March 2020 compared to December 2019 lost 20.0%, FTSE 100 (UK) – 24.8%, Euro Stoxx (Eurozone) – 25.6%, MOEX (Russia) – 17.6%. Thus, it has become one of the worst periods since the global financial crisis of 2008-2009. During the second week of March 2020, the indices of a number of global trading floors showed an intraday collapse. Even the measures of stock exchanges taken to automatically suspend trading intended to reduce increased volatility did not stop bargain counters.

<sup>2</sup> In October, placements were also made by “Online Kaz Finance Microfinance Organization” LLP – twice at 10%, Kazakhstan Residential Company – at 0.1%, and Bank RBK – at 0%

<sup>33</sup> In July, placements were also made by “Kazakhstan Temir Zholy” National Company – at 0%, “Online Kaz Finance Microfinance Organization” LLP – at 9.99%, “Arnur Credit” LLP – at 0%, and Kazakhstan Residential Company – at 0.1%

**Figure 1. Dynamics of Key Global Stock Indices and the KASE from end-2019 through May 2020**

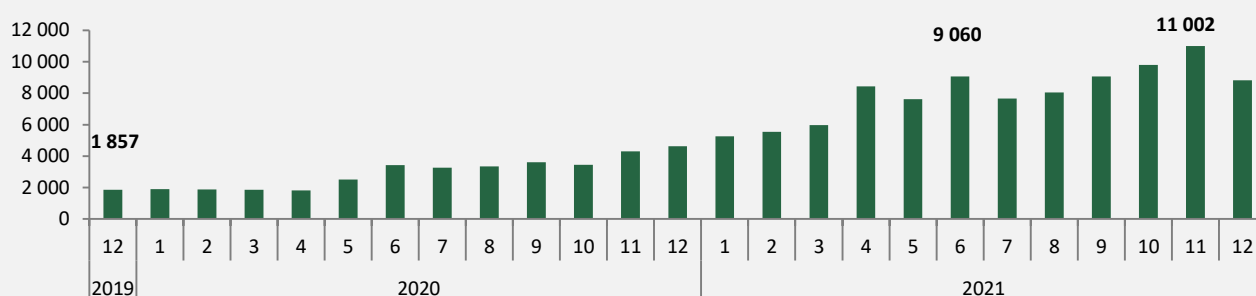


Source: KASE

The Kazakh market has not remained aloof from the global trend. In March 2020, compared to December 2019, the KASE index decreased. At the same time, the decline was insignificant by 5.9%. This is explained by the fact that Kazakh markets were closed at the time of the first wave of decline (March 9), while because of the low liquidity of the stock market at that time, there were no long-term and massive sales of equities included in the KASE index representative list.

On the other hand, interest in the market, just like in other countries, was associated with a low return on deposits relative to inflation (a traditional tool for accumulating and increasing funds), simplification of the investment process due to accelerated digitalization, as well as the opportunity to earn a higher return in a short period of time because of the stock price volatility. Thus, the number of active retail investors in the Kazakh equity market significantly increased at the end of 2020 compared to 2019 by 2.5 times, and at the end of 2021 it doubled.

**Figure 2. Dynamics of Active Retail Investors in the Equity Market from the End of 2019 through the End of 2021**



Source: KASE

However, from the end of April 2020, when macroeconomic indicators of largest countries started to hit new lows consistently, global financial markets set a trend for the opposite dynamics.

The divergence of these trends was explained by the unprecedented scale of the monetary stimulus measures for the economies by all major financial regulators. For example, the US Federal Reserve (Fed) lowered its policy rate target range to 0-0.25% and significantly increased its balance sheet through buying government and mortgage bonds as well as additional asset buyback programs.

The European Central Bank (ECB) launched the Pandemic Emergency Purchase Programme totaling 750 bln Euro that was later increased by additional 500 bln Euro. Further, requirements to credit ratings of instruments used as collateral in refinancing operations were eased.

Monetary easing also took place in other large economies. The G20 central banks lowered their policy rates by 30—250 basis points. The Bank of Russia has also reduced the key rate to 4.25%, and a broad range of programs to support the most vulnerable sectors and business entities was implemented.

A positive trend was also nurtured by the information about successful trials of highly effective vaccines against the coronavirus (Pfizer, BioNTech and others) at the end of 2020.

On the other hand, large-scale money injections by central banks, various support programs to the unemployed and enterprises that were in effect in different countries resulted in the appearance of new phenomenon in the market of investments – the so-called Robin Hoods.



**For reference:** Robin Hoods are mainly non-professional private investors that band together as associations, showing speculative activity in the stock market and not always operating within the rules/agreements. The actions of such players represent one of the indicators of an inflating bubble.

The inflow of new investors in equities, the large financial packages that various countries took to fight the crisis as well as the pent-up consumer demand and recovery of the economic activity in general allowed stock indices to refresh all-time highs in 2021.

Thus, since the beginning of 2021, global indices started to reach all-time highs and later refresh them on several occasions peaking in November: Euro Stoxx (Eurozone) – to 4401.49 points, MOEX (Russia) – to 3810.70 points; in December: S&P500 (USA) – to 4793.06 points, FTSE 100 (UK) – 7420.69 points.

**Table 1. Change in Key Global Stock Indices and the KASE Index**

<i>Global Indices</i>	at the end of 2019	at the end of 2020	at the end of 2021	Dynamics of 2020 versus 2019	Dynamics of 2021 versus 2020
<b>S&amp;P 500 (USA)</b>	3230.78	3732.04	4766.18	<b>15.5%</b>	<b>27.7%</b>
<b>FTSE 100 (UK)</b>	7542.44	6555.82	7384.54	<b>-13.1%</b>	<b>12.6%</b>
<b>MOEX (Russia)</b>	3045.87	3289.02	3787.26	<b>8.0%</b>	<b>15.1%</b>
<b>Eurostoxx Eurozone)</b>	3745.15	3571.59	4298.41	<b>-4.6%</b>	<b>20.4%</b>
<b>KASE (Kazakhstan)</b>	2363.79	2678.37	3675.28	<b>13.3%</b>	<b>37.2%</b>

Source: KASE, Thomson Reuters

In 2021, following the global markets, the KASE index also demonstrated a strong growth and hit all-time highs on several occasions (the peak was reached on November 18, 2021 – 3810.7 points). The main drivers in the structure of KASE index have been Kazatomprom, KAZ Minerals (delisting was accomplished on May 11, 2021) and the financial sector (Halyk Bank, Bank CenterCredit, Kaspi).

The growth in equities of KAZ Minerals was supported by the upturn in copper futures to the levels close to eight-year highs amid supply shortages due to the pandemic. The growth of Kazatomprom was nurtured by reduction in the world supply of uranium, the suspension of operations at one of the largest uranium mines, Cigar Lake in Canada. At the same time, the prioritization by the USA, China, Russia and Europe of nuclear energy as part of the transition to a “green” economy has strengthened the prospects for this sector. The financial sector showed progress owing to positive reporting, confirmation of a stable forecast by international rating agencies for the long-term credit rating (“Halyk Savings Bank of Kazakhstan” JSC, “Bank CenterCredit” JSC).

However, in 2022 the Kazakh stock market was characterized by negative dynamics. The turmoil in the Kazakh stock market is associated with the January events of 2022, the Russian-Ukrainian conflict as well as increased uncertainty in the global and commodity markets in February 2022. The equities of “Halyk Savings Bank of Kazakhstan” JSC, NAC “Kazatomprom” JSC from the KASE representative list that are traded on the London Stock Exchange appeared to be under special pressure and continued to decline from autumn 2021. At the same time, since the beginning of July 2022, the domestic equity market has seen a recovery as a result of the dividend payment season, good quarterly reports from companies, and an increase in local demand.

Overall, volatility of the KASE index reflects the general turbulence in the world markets. However, it should be noted that, along with external conditions, it is influenced by factors such as USD/KZT exchange rate dynamics, dividend policies of index basket issuers, individual corporate histories as well as the dual listing factor, due to which higher liquidity of the London Exchange through arbitrage pricing affects the behavior of some stocks in Kazakhstan.

## 2.6. Deposit Market

Overall volume of deposits with depository organizations continued its growth in October 2022 after deceleration in May mainly owing to other (term<sup>4</sup>) deposits in the national currency and transferrable (non-term deposits) in foreign currency.

Overall dollarization in the banking system in October 2022 decreased compared to July due to an outstripping growth of the tenge deposits versus foreign currency deposits. Decline in the total number is related to the decreased dollarization of retail deposits, whereas dollarization of corporate deposits demonstrates growth.

Following the increase of the base rate, market interest rates on deposits at depository organizations went up.

The growth trend of the deposit portfolio was ongoing. In October 2022, such increase accounted for 15.3% YoY after a significant slowdown in May to 3.1% (Figure 21).

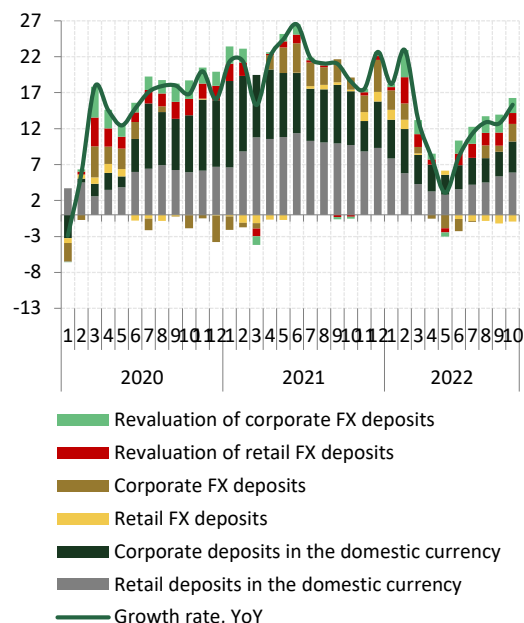
The deposit volume, after expanding five months in a row, reached its peak of 30.0 trln tenge at end-September. The increase in volumes was promoted by the growth in funds in the national and foreign currency. Within their structure, corporate entities have built up both deposits in the tenge and foreign currency deposits while deposits of individuals in the national currency were ramping up.

At the end of October, deposits in the national currency went up 15.8% YoY as a result of growth in corporate deposits by 13.2% and retail deposits – by 18.5%.

Deposits in foreign currency increased by 14.5% YoY given the adjustment of the tenge exchange rate and the growth of corporate deposits. However, deposits of individuals in foreign currency are decreasing, which, coupled with the growth of deposits in the tenge, possibly speaks for a partial overflow of resources from foreign currency deposits of the population to deposits in the tenge. A high interest rate differential between the tenge and foreign currency deposits had probably been conducive to the overflow.

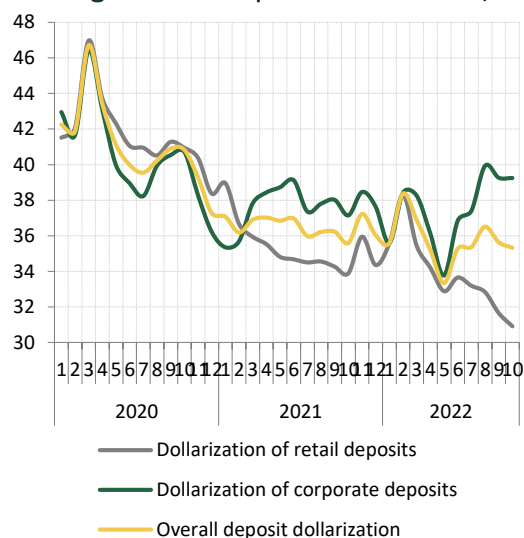
Overall dollarization level declined from 35.4% in July to 35.3% in October 2022 (Figure 22). Appreciation of the national currency and the outstripping growth

Figure 21. Contribution by Components to the Growth in Deposit Volume, YoY, %



Source: NBK

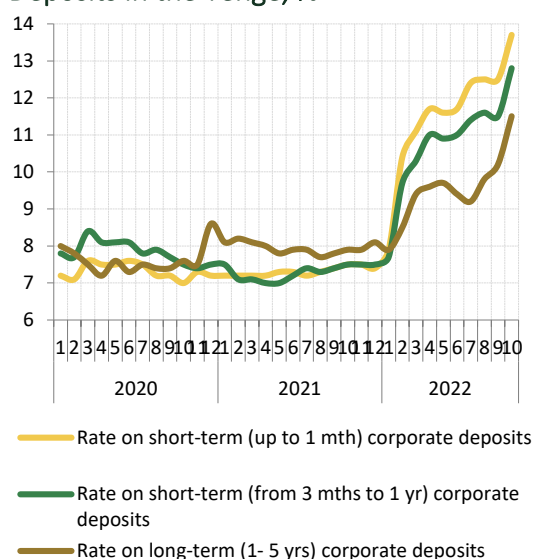
Figure 22. Deposit Dollarization, %



Source: NBK

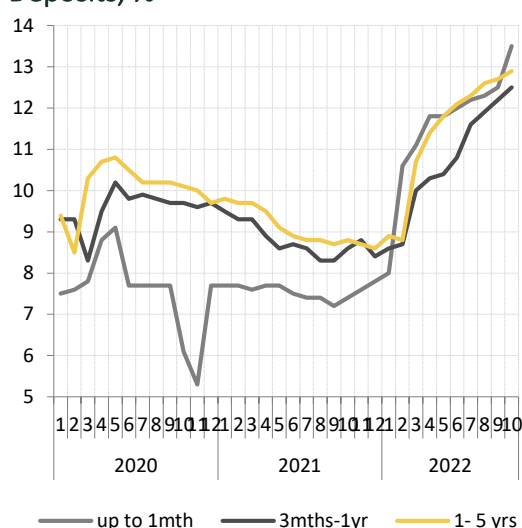
<sup>4</sup> According to the Monetary Statistics methodology

**Figure 23. Interest Rates on Corporate Deposits in the Tenge, %**



Source: NBK

**Figure 24. Interest Rates on Retail Deposits, %**



Source: NBK

of deposits in the tenge over foreign currency deposits nurtured such decline.

Along with that, the gap between dollarization of deposits of individuals and businesses increased. Dollarization of corporate deposits increased from 37.4% in July to 39.3% in October, and that of deposits of individuals decreased – from 33.2% to 30.9% (Figure 22).

Dollarization of retail deposits (including non-residents) has been declining across all segments in terms of amounts; nonetheless, large deposits are more sensitive to external factors and are more dollarized. In October 2022, the share of foreign currency deposits of individuals on accounts from 50 to 500 mln tenge made up 57.7%, whereas the share on accounts from 1 to 3 mln tenge was 12.6%. Dollarization of retail deposits without regard to depositors with the amount in excess of 50 mln tenge and deposits with Otbassy Bank in September accounted for 13.7%.

Following the increase of the base rate and the growth of KDIF cap rates, weighted average interest rates on deposits of corporate entities and individuals had risen significantly in October 2022.

Thus, interest rates on corporate deposits with maturity of up to 1 month that account for a major share in attracted deposits (84.1% of all corporate term deposits in the tenge), almost doubled to 13.7% compared to 7.4% in December 2021 (in July 2022 – 12.4%). Rates on deposits with maturity from three months to one year (the share – 9.2%) also increased from 7.5% to 12.8% (11.4%). Interest rates on long-term deposits with maturity from one to five years (the share – 0.6%) went up from 8.1% to 11.5% (9.2%) (Figure 23).

Interest rates on deposits of individuals also demonstrated an upward trend. Rates on short-term deposits with maturity of up to 1 month (the share – 17.6%) increased to 13.5% in October 2022 from 7.8% in December 2021 (in July – 12.2%). Rates on deposits from 3 months to 1 year (the share – 29.9%) grew to 12.5% from 8.4% (11.6%), on deposits with maturity from 1 to 5 years (the share – 48.2%) they increased to 12.9% from 8.6% (12.3%) (Figure 24).

## 2.7. Credit Market

The total loan portfolio of STBs in October 2022 increased to a greater extent due to loans to individuals, which continued to grow amid high inflation expectations. At the same time, deceleration of retail lending is observed because of the last year's high base and a slight slowdown in consumer lending growth. Mortgage lending maintains high growth rates due to high inflation expectations, a significant increase in housing rents in August-October and active disbursement of funds under the 7-20-25 program.

Corporate loans demonstrated a moderate growth amid the economic downturn and lower lending activity of Russian banks' subsidiaries.

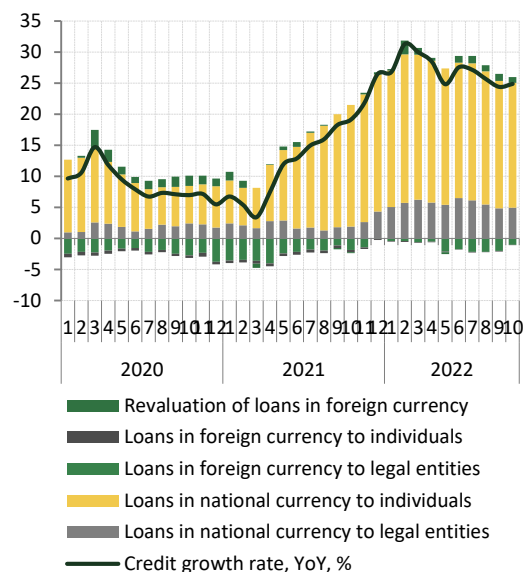
The STB loan portfolio in October 2022 grew by 24.9% YoY, amounting to 21.5 trln tenge.

The main contribution to the loan portfolio growth was made by loans to individuals in the national currency. Corporate lending in the tenge shows moderate growth rates on the back of the implemented monetary policy, a cutback of lending activity of Russian banks' subsidiaries and a slowdown in the economic growth (Figure 25).

Given a high base in 2021, the annual growth rate of the retail portfolio slowed from 39.7% in July to 34.7% in October. Within the structure of retail loan portfolio, consumer loans decreased from 32.5% in July to 25.2% in October, and mortgage loans – from 47.9% to 47.1% (Figure 26). Meantime, annualized growth rates of the consumer and mortgage loan portfolio during August-October on average accounted for 27.2% and 49.9%, respectively, which speaks for retention of yet high growth rates.

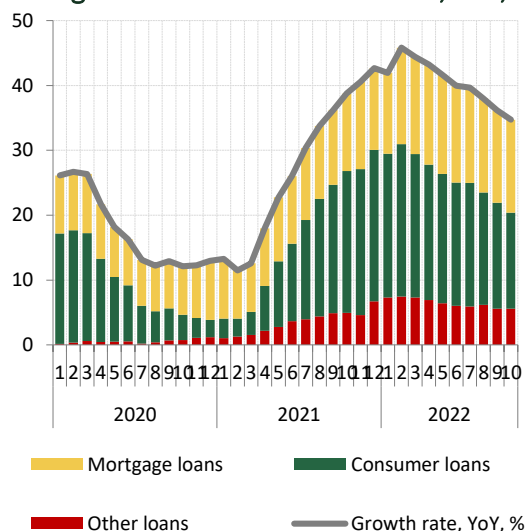
The continuation of marketing campaigns led to reduction in the cost of consumer loans in the tenge over the year by 1.2 pp to 18.0% at end-October (a 1.7 pp growth during August-October).

Figure 25. Credits to the Economy, YoY, %



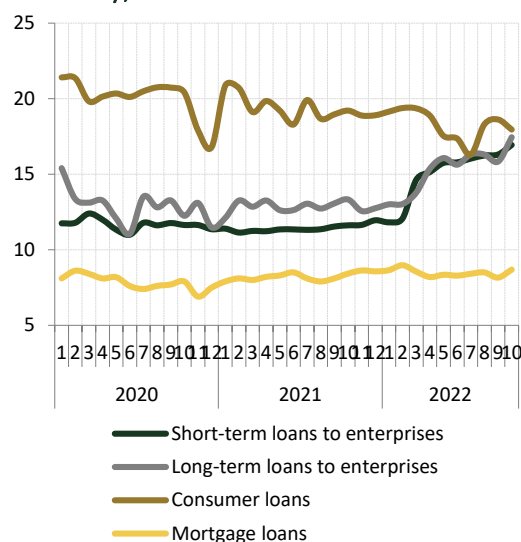
Source: NBK

Figure 26. Retail Sector Loans, YoY, %



Source: NBK

Figure 27. Rates on Loans in the National Currency, %



Source: NBK

Over the year, the weighted average interest rate on mortgage loans increased by 0.3 pp to 8.7% in October, also given the growing interest rates on interim loans from Otbassy Bank (Figure 27). The change in the base rate is largely affecting the rates on the market-based mortgage loans; however, in view of a high percentage of non-market concessional programs, the overall rate on mortgage loans is formed well below the base rate.

The annual growth of corporate loans in October has not virtually changed (an 11.4% growth YoY in October versus 11.6% in July). At the same time, lending to small businesses slowed from 40.8% to 31.4%.

Based on the monetary policy pursued, the weighted average interest rate on corporate loans in the tenge in the short-term segment grew from 11.6% in October 2021 to 16.9% in October 2022 (July 2022 – 16.0%). The cost of long-term loans has also increased from 13.3% to 17.4% (Figure 26). **Credits to the economy under the broad definition**<sup>5</sup> during January-June 2022 went up by 7.8% and as of July 1, 2022, amounted to 25.6 trln tenge. Loans to businesses (non-financial legal entities and individual entrepreneurs that obtained loans for business purposes) on a year-to-date basis grew by 4.0% to 12.9 trln tenge, and retail loans – by 11.9% to 12.7 trln tenge. As of July 1, the banking sector loans accounted for 86.3% of total loans.

## Box 2. Lending to Businesses: What is Actually Happening and is there any Deceleration?

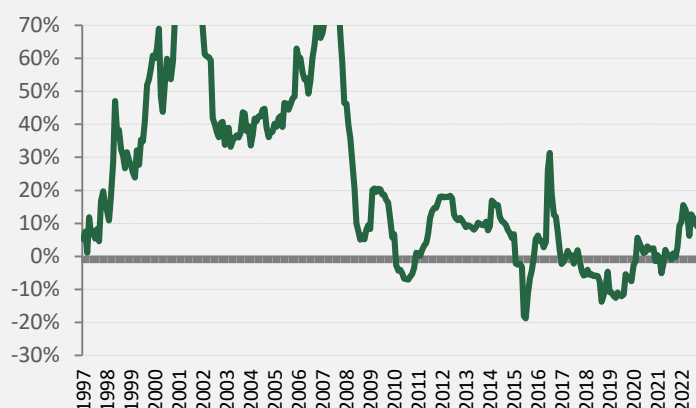
Recently, some members of the analytical community have been talking about deceleration/decrease in lending to corporate entities due to the raising of the base rate/stringent monetary policy. At the same time, as a rule, to prove these theses, the ratio of the STB loan portfolio volume to GDP is used. However, this indicator is an estimate and does not provide the most relevant and complete picture of what is happening in the dynamics of lending.

The dynamics of lending to corporate entities is influenced by a large number of factors and it is largely superficial to make an opinion based on the analysis of the dynamics of one indicator and in isolation from the impact on corporate lending by other important factors. In addition, it is also necessary to take into account the specifics of calculation of individual indicators. In this regard, we consider it appropriate to analyze the latest trends in corporate lending more comprehensively with additional consideration of the historical dynamics.

<sup>5</sup> Credits to the economy in a broad definition represent the data on the balances of effective debt on loans from the banking sector, mortgage organizations, other entities of the quasi-government sector, and organizations engaged in microfinance business



**Figure 1. Corporate Loan Portfolio, YoY %**



Source: NBK

In the 2000s, due to the access to external cheap financing, credits to the economy increased rapidly. Loans to GDP rose from 10.6% in 2000 to a peak of 56.5% in 2007, indicating a potential overheating in the economy. Thus, in the context of the global financial crisis in 2007-2008, the volume of foreign investments and access to foreign capital dropped sharply. After the global financial crisis, lending dynamics was largely affected by various developments in the economy and the financial sector of Kazakhstan, as well as external factors. Given the absence of cheap foreign currency funding, corporate lending, mainly in foreign currency,

which made a significant contribution to the growth of bank loans, significantly reduced its role in bank lending. As a result, foreign currency loans to the corporate sector as a percentage of GDP showed a nearly three-fold decline – from 16.8% in 2007 to 5.6% in 2017. Besides, the consequences of the global financial crisis led to accumulation of a significant amount of non-performing loans in the banking system, resulting in significant efforts that have been made since 2017, to improve the quality of STB assets; in particular, the Banking Sector Sustainability Enhancing Program has been implemented. As part of this program, non-performing bank loans were written off and, accordingly, bank balance sheets were cleaned up; however, from a statistical point of view, this led to a contraction in the loan portfolio. As a result, total loans to GDP over the past decade reached its lowest point in 2019, falling to 19.9% from 56.5% in 2007.

After a feeble expansion in the loan portfolio in 2019, in 2020, despite the pandemic, the total loan portfolio showed a moderate growth of 5.5%. At the same time, the corporate loan portfolio decreased by 1.5% due to the quarantine measures taken and the decline in business activity. However, already in 2021, the economic recovery, the lowering of the minimum sufficiency threshold for withdrawing funds from the UAPF, the implementation of anti-crisis programs, the growth in demand from business entities contributed to an increase in the loan portfolio by 26.5%, including corporate loan portfolio - by 9.3% (Figure 1).

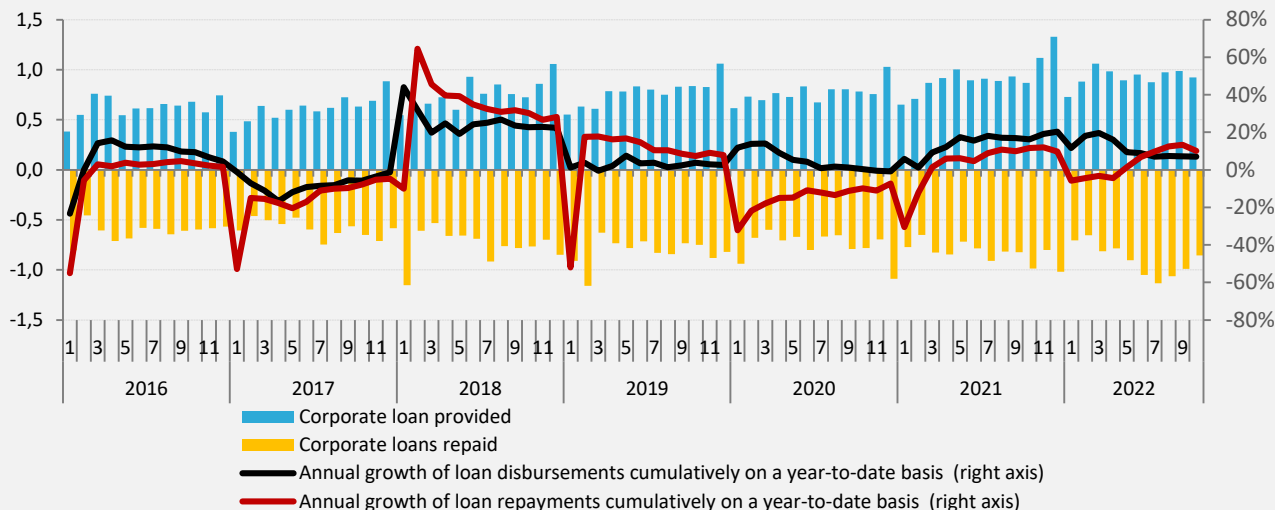
Aggravation of the geopolitical situation at the end of February 2022 in Russia was a trigger for a large-scale structural adjustment of the Kazakh economy: the situation with logistics worsened, business activity declined. The real GDP growth slowed down from 4.6% in January-March to 2.5% in January-October 2022. Due to external and internal inflation shocks, the National Bank increased the base rate several times in order to curb the accelerated price growth and increase the attractiveness of deposits in the national currency. Under these conditions, there was some slowdown in the growth of corporate loan portfolio from 15.6% YoY in February to 11.4% YoY in October 2022.

**For reference.** It is worth mentioning that the ratio of banks' loan portfolio to GDP is not the best indicator of lending activity for several reasons. Since Kazakhstan is an oil export-oriented country, with an increase in oil prices, especially in terms of the cost of a barrel of oil in the tenge (not in the US dollars), the nominal GDP can rise significantly. At the same time, operations of large oil companies are mainly financed by parent companies. On the other hand, there is a non-oil part of the Kazakh economy, which is credited within the country and mainly in the national currency.

Therefore, it is more appropriate to take into account the dynamics of non-oil and gas GDP. However, this indicator also has a number of deficiencies. Thus, non-oil and gas GDP is published on an annual basis and with a large lag, which makes it impossible to quickly analyze the proposed indicator. There are also industries/sectors of the economy that are not formally included in the oil and gas GDP but serve the oil and gas sector. In this regard, the dynamics of lending should be considered comprehensively, incorporating various qualitative and quantitative indicators and not directly comparing indicators with developed countries, whose economic agents have completely different behavioral characteristics and a different level of development of the financial system.

Also, the disadvantage of the “loan portfolio” indicator is that it is affected by a possible write-off of distressed and non-performing loans, the rescue of banks as part of financial sector support programs, etc. In addition, the loan repayment rate, which depends on the macroeconomic situation and may further constrain the growth of the loan portfolio in certain periods is factored in the loan portfolio. Thus, given high uncertainty in the market, the volume of repaid corporate loans during 10 months of 2022 increased by 10.1% YoY (more than the volume of loans issued). Therefore, the dynamics of new loan disbursements is a more appropriate indicator that describes the situation in the credit market.

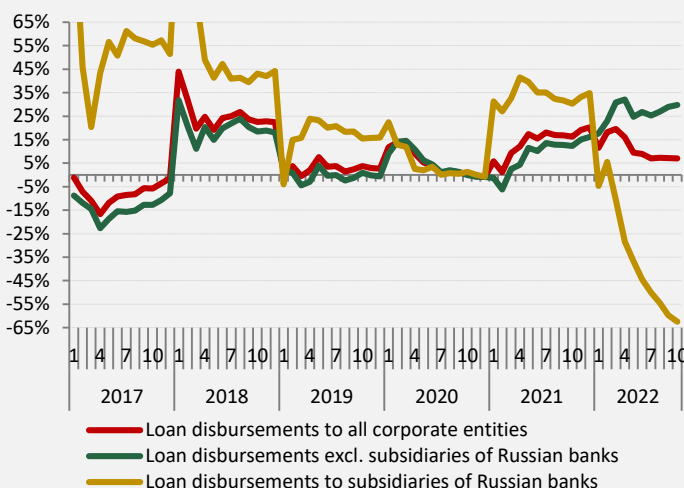
**Figure 2. Dynamics of Corporate Loan Disbursements and Repayments, trln tenge**



Source: NBK

Taking into account the deficiencies in the indicator of the loan portfolio mentioned above (write-off of non-performing loans, the presence of certain periods of introduction of a temporary deferral for loan repayments, etc.), it is worth to mention the dynamics of the issuance of loans. In 2021, a high base for this indicator had formed – the volume of new corporate loans increased by 20.3% YoY in 2021 (Figure 2). Despite the high base, in 2022 the issuance of corporate loans showed positive numbers, during January-October 2022 they increased by 7.0% YoY. The growth rate of corporate loans in January-October 2022 is higher compared to the corresponding periods of 2017, 2019 and 2020.

**Figure 3. Dynamics of Corporate Loan Disbursements, YoY, cumulatively, on a year-to-date basis**



Source: NBK

current 7.0% (Figure 3). At the same time, the total amount of loans provided to subsidiaries of Russian banks is a quarter of the total loan portfolio disbursed.

Given the above, the growth of corporate lending, despite the significantly increased uncertainty, turbulence in the external sector and other negative factors, continues to be in the positive zone. The

Given the high base in 2021 and more moderate growth rates in prior years, in 2022 the dynamics of lending, along with other factors, do not indicate a significant slowdown but a possible return to its potential growth rates, taking into account the structure of the economy and the financial system of Kazakhstan. Also, the reason for the slowdown in issuance/return to potential growth rates is the imposition of sanctions against subsidiaries of Russian banks. Subsidiaries of those banks in Kazakhstan played an important role in lending to corporate entities. Thus, in 2021, the activity of Russian subsidiary banks in lending to corporate entities was significantly higher compared to other banks. Without taking into account the data of banks, provision of loans during January-October 2022 increased by 29.8% YoY instead of the

following significant factors that led to a return to potential growth rates/slowdown in lending to corporate entities in 2022 should be pointed out:

- 1) sanctions imposed on subsidiaries of Russian banks;
- 2) a historically high base of 2021;
- 3) general deterioration in the macroeconomic situation;
- 4) existing structural problems in the economy of Kazakhstan;
- 5) an active growth of loan repayment by corporate entities;
- 6) the January events.

At the same time, structural factors, including those limiting an active long-term increase in the demand for credit resources, are well-known problems and specifics of the Kazakh economy: a high share of the informal cost in industries due to sluggish technological development and low labor productivity, a low level of diversification of the economy in Kazakhstan, etc.



### III. MACROECONOMIC CONDITIONS



### III. MACROECONOMIC CONDITIONS

#### 3.1. External Sector

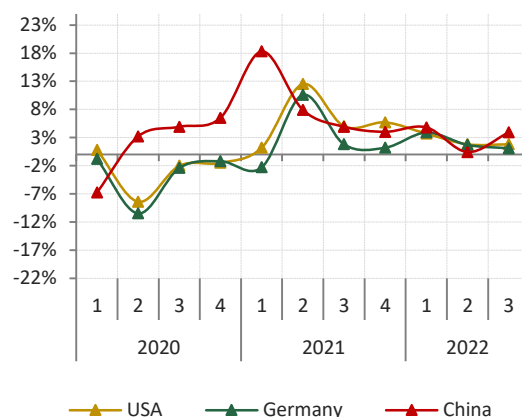
Most countries of the world have returned to pre-pandemic levels of economic development as early as in 2021. However, accelerating inflationary processes and increasing uncertainty due to the growing geopolitical tensions keep holding back the economic growth in many countries of the world. The economies of the USA, China and Germany, which account for almost 40% of the global GDP, continued to slow down or show rather feeble growth in the third quarter of 2022 (Figure 28). Updated information on business activity in the industry and services prove that this trend is ongoing. The Global Composite PMI has been declining for the third month in a row, making up 49 points at the end of October 2022. A drop in business activity is observed in the industry and services.

Inflation in most countries of the world continues to accelerate. Among the G7 countries, the highest inflation was registered in Italy, Germany and the UK (Figure 29). In European countries, in addition to high energy prices, the rising prices for almost all types of food are contributing to acceleration of inflationary processes. Inflation continues to decelerate in some developing countries but is still way above the targets (Figure 30).

In conditions of increased inflationary pressure, the US Federal Reserve, following the results of the November meeting, raised the rate to 3.75-4.0% per annum for the sixth time in a year. The ECB also increased the rate by 75 bp to the range of 1.25-2.0% in October 2022 against the backdrop of accelerating inflation.

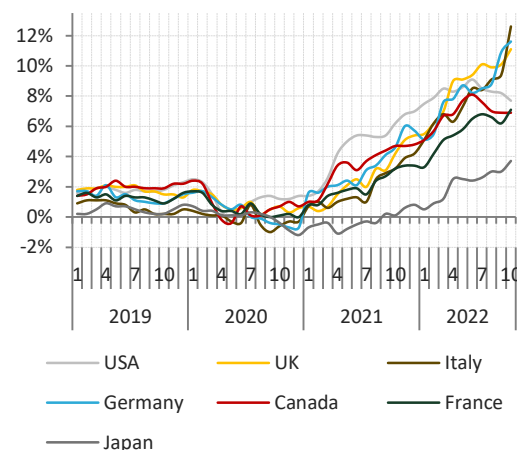
In the second half of November 2022, Brent crude oil prices slightly decreased amid the worsening epidemiological situation in China, the strengthening of the US dollar against other world currencies and growing fears of further monetary tightening by the US Fed. The main growth drivers for world oil prices still include the approaching date for the imposition of a ban on the export of Russian oil, sluggish oil production in the USA and reduction in oil production by OPEC + countries as part of the agreement.

Figure 28. Economic Activity in a Number of Countries, YoY



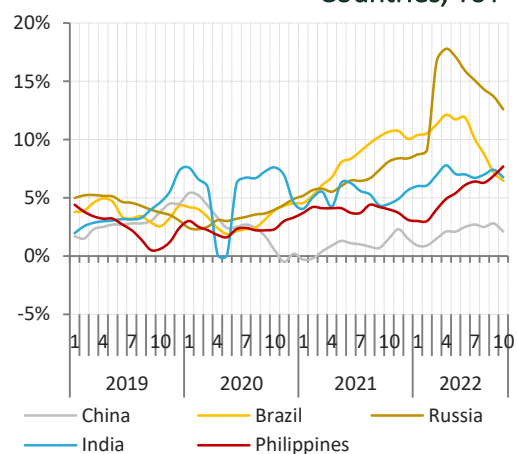
Source: National statistical offices

Figure 29. Inflation in the G7 Countries, YoY



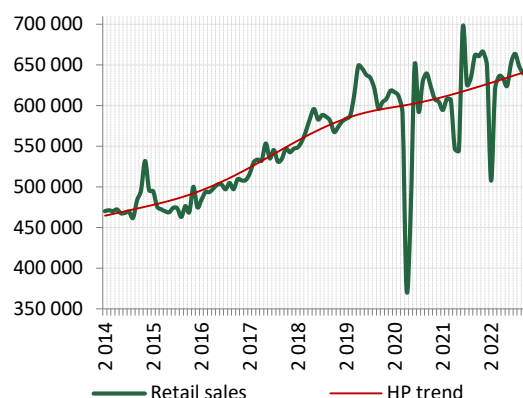
Source: National statistical offices

Figure 30. Inflation in Developing Countries, YoY



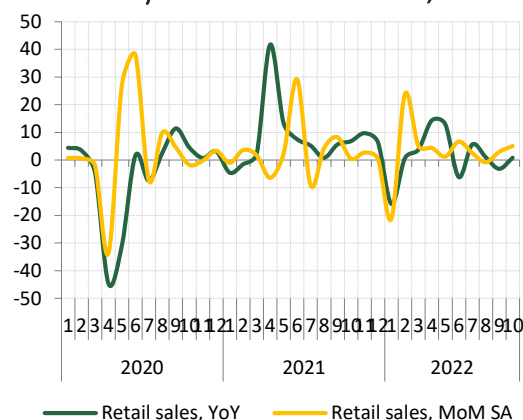
Source: National statistical offices

Figure 31. Dynamics of Retail Sales, SA in Constant Prices, mln tenge



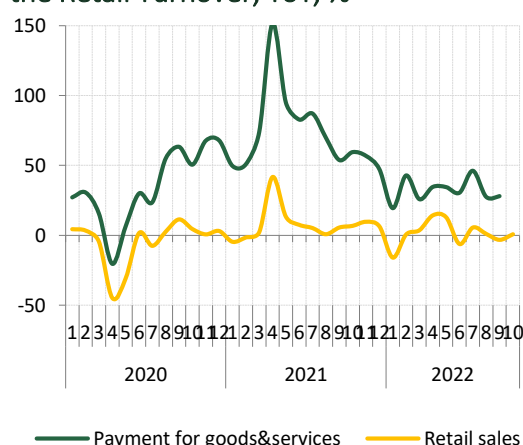
Source: ASPR BNS, NBK's computations

Figure 32. Dynamics of Retail Sales, %



Source: ASPR BNS, NBK's computations

Figure 33. Cash Flows on Bank Cards of the Population in the 2016 Prices and the Retail Turnover, YoY, %



Source: ASPR BNS, NBK's computations

### 3.2. Development of the Domestic Economy

After a robust recovery in 2021, again the dynamics of household demand showed increased uncertainty due to the growing geopolitical tensions. Demand-pull factors in the form of inflationary processes, income of the population, and consumer lending, budget expenditures on transfers demonstrate multidirectional dynamics. At the same time, according to the behavior of proxy indicators, the demand after the January decline does not show a downward trend.

Before the COVID-19 pandemic, retail turnover grew at its potential, and in some periods exceeded it. However, since 2020, the dynamics of retail trade turnover has been characterized by high volatility and, in the face of recurrent various shocks, has not managed to stabilize at its potential level (Figure 31).

Based on the growth rate of retail trade turnover, one can judge about the persistence of positive dynamics of the demand with separate periods of reduction. Seasonally adjusted monthly retail turnover indicates stronger demand during the year. At the same time, demand in 2022 is more modest than in 2021, when the deferred demand had materialized. A steady realization of current consumption is restrained by the accelerating inflation, disruption of supply chains and growing uncertainty (Figure 32).

The persistence of consumer demand can be judged by the dynamics of yet another proxy indicator – household payments for goods and services via electronic cards, which keep a positive trend. At the same time, growth rates are lower than last year, thus also indicating a more moderate pattern of household demand this year (Figure 33).

Consumption is supported by the positive dynamics of income of the population, where employment income makes the main contribution to the growth, income from hired work in particular.

This year, there has been a significant expansion of the payroll fund in the economy, also resulting from an increase in the minimum wage (MW) by 42% in January 2022 (a contribution by 9 pp), a growth in the actual numbers of employees at enterprises (a contribution just below 1 pp) as well as possible wage indexation. Similar dynamics were observed in 2019, when the minimum wage was raised by more than 50% from 28 thousand tenge to 42.5 thousand tenge, which largely led to the expansion of the payroll fund (Figure 34).

According to ASPR BNS, nominal wage growth during 2022 exceeds 20% in annual terms. At the same time, high inflation limits the growth of real wages and their dynamics are slowing down compared to the beginning of the year, while the quarterly dynamics of real wages in the third quarter of this year show a slight decline (Figure 35).

Therefore, high inflation, despite the increasing nominal income, is limiting a sustainable growth in the demand.

**After the coronavirus pandemic, the growth potential of real investments in fixed assets slightly decreased in Kazakhstan, and volatility of its dynamics increased. There is a decline in potential in the non-oil sectors (Figure 36). Non-mining investments show a significant drawdown that began even before the pandemic. Thus, despite the decline in the share of the mining industry in fixed asset investments during the pandemic (from 45% in 2019 to 33.6% in 2020), the role of the industry as the main driver of investments in the economy has not changed.**

Unlike consumer activity, the investment activity has been demonstrating continuous growth since the second quarter of 2021. If in 2021, the main contribution to growth rates was made by the manufacturing industry, construction, trade and transport, this year the main source of investments in fixed assets is the mining industry.

Figure 34. Dynamics of the Payroll Fund, YoY, %

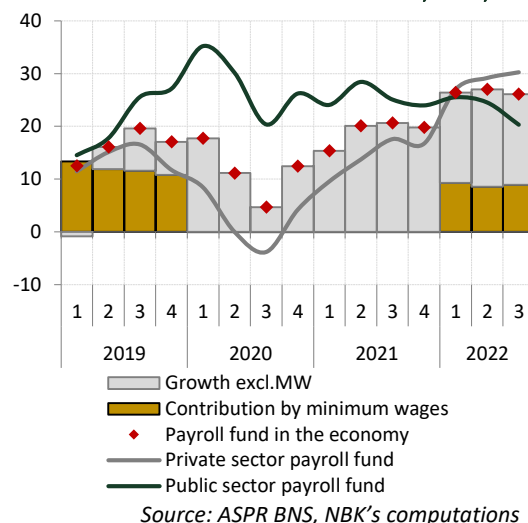


Figure 35. Dynamics of Wages in the Economy, YoY, %

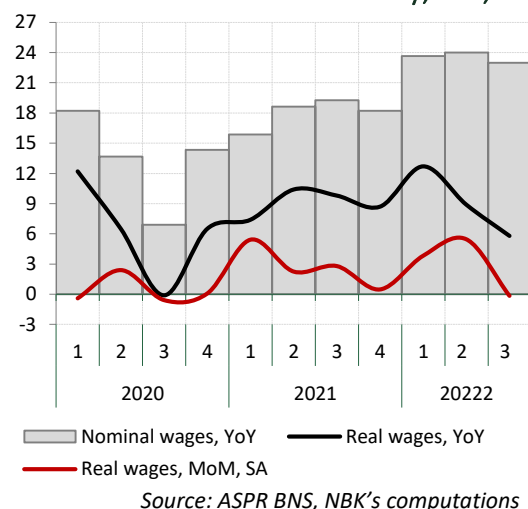


Figure 36. Fixed Capital Investments in the 2010 Prices, SA, mln tenge

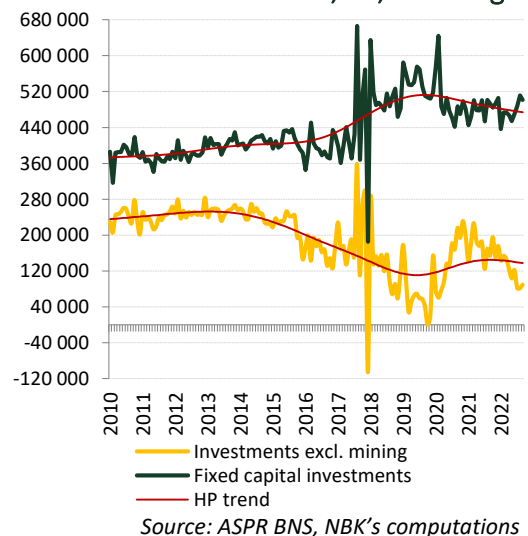
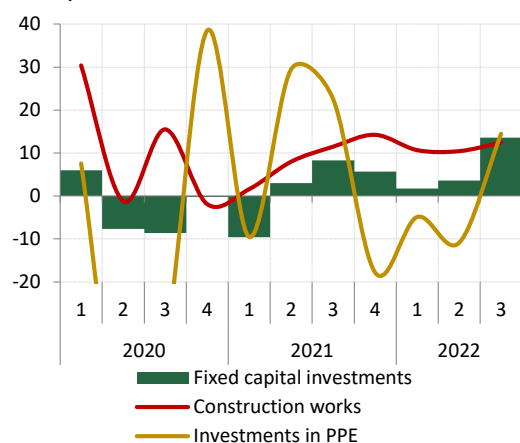
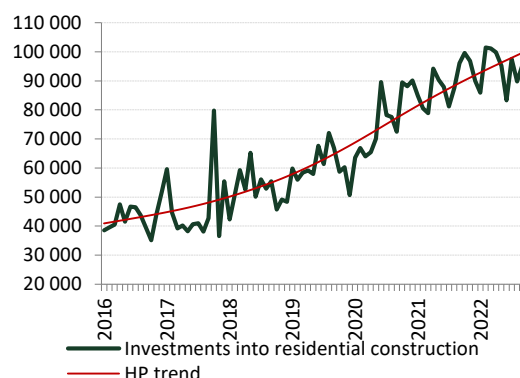


Figure 37. Fixed Capital Investments and Components, YoY



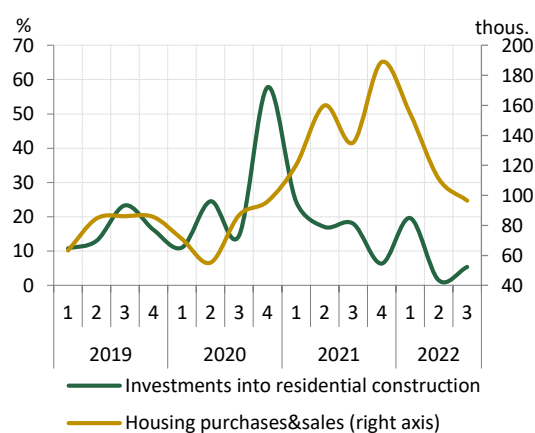
Source: ASPR BNS, NBK's computations

Figure 38. Investments into Residential Construction in the 2010 Prices, SA, mln tenge



Source: ASPR BNS, NBK's computations

Figure 39. Investments into Residential Construction in Real Prices and Activity in the Real Estate Market



Source: ASPR BNS, NBK's computations

In terms of types of technological costs, the growth of construction and overhaul works continues to act as a source of investment (Figure 37). In the third quarter of 2022, investments in fixed asset renewal entered the growth zone, leading to acceleration in the growth rate of investments in fixed assets to double digits. Nevertheless, the negative dynamics of investment activity persist in the electricity supply and arts, entertainment and recreation sectors. In these industries, according to the recent data, negative profitability of enterprises was observed.

**Compared to enterprise investments, investments of the population have an upward trend and, except for some periods, are growing above its potential (Figure 38).**

At the same time, the real growth rate of investments in residential construction is slowing down slightly compared to preceding periods. There is a slight decline in activity in the real estate market this year, expressed in a gradual reduction in housing purchase and sale transactions compared to the previous year (Figure 39). Nonetheless, the number of purchase and sale transactions is still higher than in 2019-2020, which is an evidence of persisting demand in this segment. According to public polls<sup>6</sup>, lately the percentage of population preferring to hold assets in real estate is increasing.

**Foreign trade turnover of Kazakhstan during three quarters of 2022 increased by 34.9% in annual terms as a result of high oil prices, the growing demand for some commodities and a high inflationary background worldwide.**

During 9 months of 2022, exports went up by 47.5% (YoY) owing to a significant rise in world prices of oil (Figure 40). Crude oil exports grew by 63.4% (YoY) in value terms. Meantime, the growth of export in kind accounted for 1.6% (YoY) only because of curtailment in production due to overhaul at the Kashagan field and the CPC.

<sup>6</sup> Public polls conducted by Fusion LAB



On a country-by-country basis, there is a growth in supplies to Italy by 12.3% in annual terms, China – by 71.4%, Republic of Korea – by 92.5%, while supplies to the Netherlands decreased by 28%, to France – by 36.7% and to India – by 46% (Figure 41).

Given the imposed sanctions against Russia, the demand for black coal on the part of Switzerland, Poland and Cyprus increased significantly. Decline in production alongside with re-orientation towards the domestic market resulted in reduction of natural gas exports by 16.4% (YoY).

In the structure of metals, there is a decrease in iron ore exports in the face of decline in production and problems with supplies to Russia. The downturn in industrial production in China was reflected in the reduction in the supply of ferroalloys to this country.

In the environment of production growth, copper exports went up, including to China, thus increasing investments in the production of chips. There is also an increase in copper exports to Georgia. Along with this, the supply of lead increased by 9.7%, while exports of aluminum and zinc decreased.

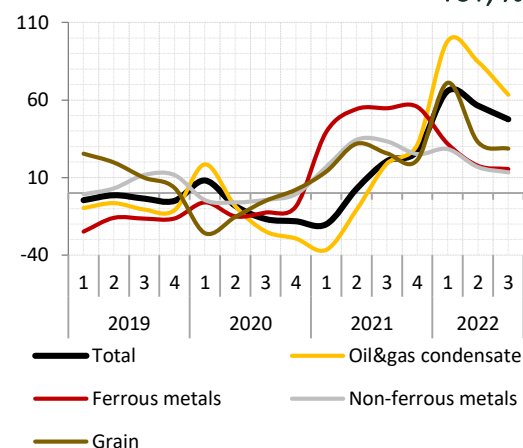
Among food products, exports of vegetable oils and fats to Uzbekistan and China, flour to Afghanistan went up. Among beverages, shipments to Kyrgyzstan increased. As for agricultural products, the demand for barley from Iran has significantly decreased.

At the end of January-September, imports had risen by 16.5% (YoY) owing to the growing import of interim products. On a country-by-country basis, imports from the EU and China are ramping up (by 17%, YoY and 25.2%, YoY, respectively).

It is worth mentioning that after the escalation of the conflict between Russia and Ukraine at the beginning of this year, imports from Russia have been steadily declining, in particular, imports of consumer, interim and investment goods from Russia decreased in physical terms in the third quarter of 2022 (Figure 42).

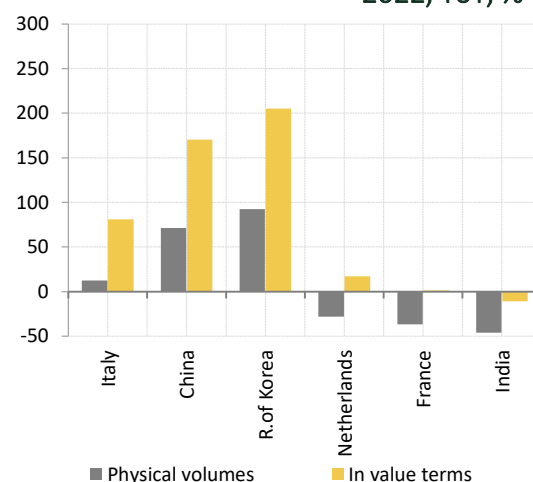
Among food products, imports of sugar and crude sugar from Brazil and India went up. At the same time, imports of refined sugar from Russia decreased given a ban on exports imposed from March to August 2022, as well as a weakening of the tenge exchange rate against the Russian ruble. There is a significant increase in imports of alcoholic and non-alcoholic beverages.

Figure 40. Exports by Major Commodity Groups, Cumulative, YoY, %



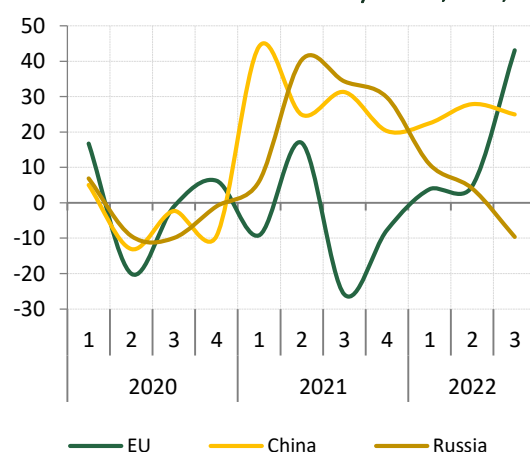
Source: NBK

Figure 41. Oil Exports on a Country-by-Country Basis during 9 Months of 2022, YoY, %



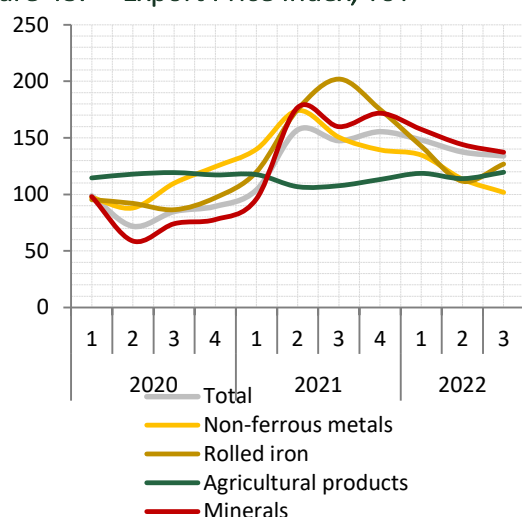
Source: ASPR BNS

Figure 42. Imports on a Country-by-Country Basis, YoY, %



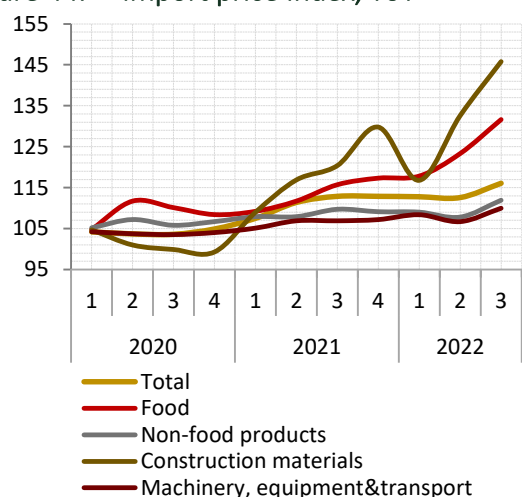
Source: NBK

Figure 43. Export Price Index, YoY



Source: ASPR BNS

Figure 44. Import price Index, YoY



Source: ASPR BNS

Among non-food products, supplies of clothing from China and Turkiye increased. Imports of telephone sets, medicines, tires and covers, monitors and projectors have gone up. On the other hand, the demand for imported cars decreased, and because of the withdrawal of large manufacturers from the Russian market, the supply of detergents, hygiene and cosmetics curtailed.

In the structure of investment and interim goods, supplies of spare parts for cars, machines and devices for haulage, motor vehicles for the transportation of goods, medical equipment and fertilizers increased.

Despite the exchange rate depreciation in July 2022, the growth of export prices in the tenge slowed down in the third quarter (YoY) because of a high base in 2021, deceleration of prices for oil and non-ferrous metals (Figure 43). Prices for non-ferrous metals decelerated due to a reduction in industrial production in the EU against the backdrop of high energy prices and in China due to the ongoing anti-COVID policy, as well as the increase of the US Fed rate.

Given the depreciation of the nominal exchange rate of the tenge in July 2022, import price inflation in the third quarter accelerated to 16.1%, while acceleration in the price growth affected a wide range of goods (Figure 44). It is worth mentioning a significant rise in prices for construction materials and food products.

### Box 3. Is there a Substitution for Imports from Russia?

In the context of aggravating geopolitical situation and the subsequent withdrawal of international manufacturers from the market in Russia, industrial production decreased, the existing logistics and supply chains have been disrupted, and there is a shortage of certain goods and raw materials. This situation has caused a reduction in imports of certain goods from Russia and a decline in the share of Russian products in Kazakhstan's foreign trade. According to the results of 9 months of 2022, the share of imports from Russia went down because of reduction in imports of consumer and intermediate goods (Table 1).

**Despite a significant drop, the smallest change in the structure of imports has affected the means of production, about 20% of which Kazakhstan imports from Russia.** The largest share in this category falls on machinery and equipment (68% of imports of capital goods), where imports from Russia decreased by 9% in the first 9 months of 2022. At the same time, imports of this category of goods from other countries increased by only 1%, which indicates the absence of significant substitution of Russian imports (Table 2).

**Table 1. Structure of Imports according to the Broad Economic Classification (BEC)<sup>7</sup>, share of total imports**

Commodity Group under BEC	Russia		Other Countries	
	9 mths of 2021	9 mths of 2022	9 mths of 2021	9 mths of 2022
Consumer goods	36.6%	29.7%	63.4%	70.3%
Food products	50.7%	48.2%	49.3%	51.8%
Non-food products	31.1%	22.9%	68.9%	77.1%
Interim goods	54.2%	46.8%	45.8%	53.2%
Investment goods	20.6%	17.6%	79.4%	82.4%
Total imports	41.6%	36.0%	58.4%	64.0%

particular (Table 2). The substitution of Russian imports by Chinese imports is also true for measuring devices and counters. However, a significant shift in imports towards other countries for the most part of production means has not yet been observed.

**Table 2. Import of Investment Goods (bln US dollars)**

HS Codes	Commodity	9 mths of 2021		9 mths of 2022		Change, %	
		Russia	Others	Russia	Others	Russia	Others
	Total	1 314.3	5 064.0	1 132.4	5 291.5	-14%	4.5%
84-85	Machinery&equipment	774.4	3 681.2	702.6	3 708.9	-9%	1%
86-89	Motor vehicles excl.cars	284.0	792.7	221.4	996.4	-22%	26%
	Others	134.4	3 884.1	47.4	4 111.7	-135%	5.9%
90	Optical, measuring, control devices	121.3	378.3	83.9	442.8	-31%	17%

**A major portion of Russian imports in Kazakhstan is represented by interim goods, where the most active re-orientation towards other countries is observed.**

Significant import substitution of interim goods was recorded for such groups as auto spare parts, plastics and plastic products, latex and rubber, as well as boilers, equipment and mechanical devices. The reduction in physical volumes of imports of these categories of goods from Russia is offset by an increase in imports from other partner countries, including the orientation towards new markets – imports of truck beds from the Czech Republic, internal combustion engines from Uzbekistan (Table 3).

**Table 3. Imports of Interim Goods (bln US dollars)**

HS Codes		9 mths of 2021		9 mths of 2022		Change, %	
		Russia	Others	Russia	Others	Russia	Others
	Total	7 752	6 562	8 074	9 169	4%	40%
71-83	Precious/base metals and their products	2 269	853	2 367	1 300	4%	52%
	Others	1499	2143	1 479	2 706	-1%	26%
25-27	Lime, cement, ores and slag, fuel	1 316	559	1 512	831	15%	49%
39	Plastics and plastic goods	574	486	624	736	9%	52%
84	Boilers, equipment and mechanical devices	432	975	349	1 226	-19%	26%
87	Auto spare parts	330	443	258	1 056	-22%	2,4 p.
44	Timber and its products	326	67	260	60	-20%	-10%
68-70	Products made of stone, cement, ceramics	232	243	242	258	4%	6%
40	Latex, resin and their products	222	225	187	381	-16%	69%
10-14	Plant products	173	61	403	80	132%	32%
31	Fertilizers	114	32	149	38	31%	18%
32	Paints, varnishes	89	76	89	120	0%	59%
94	Industrial furniture	77	125	49	99	-36%	-21%
51-59	Textiles other than clothing	66	220	72	213	9%	-3%
01-05	Live animals and their products	34	55	33	64	-2%	16%

The import of timber and its products from Russia is decreasing. However, given the scale of this production in Russia, which is among the top ten countries in the export of forest products<sup>8</sup>, substitution in this category has not yet been observed. A similar reduction in total imports of interim goods and lack of substitution is observed among industrial furniture, where the decline occurs in almost all types of goods in this category.

<sup>7</sup> Import value data of the ASPR BNS for the EAEU countries and data from SRC providing information on other countries are divided into groups according to the UN classification by broad economic categories according to 6 HS digits.

<sup>8</sup> According to the FAO.

The value of imports of Russian textiles and their products is growing along with a reduction in imports of similar goods from other countries. At the same time, there is a substitution of some types of Russian goods. Thus, there is a re-orientation of imports of cotton wool, yarn, non-woven materials from Türkiye, Iran, Germany, cotton fabrics – from China, chemical fibers – from Uzbekistan, China.

In addition, despite the growth in value imports, against high inflation in Russia and the depreciation of the tenge against the ruble, physical volumes of imports of Russian building materials went down. This decline is offset by a significant acceleration of imports across a wide range of countries, in particular, Uzbekistan and China.

In the structure of interim goods, imports of plant products and fertilizers from Russia keep growing. With a relatively stable dynamics of the value of imports of paints and varnishes from Russia, the physical volumes of these categories of goods have reduced significantly (*by more than 20% on average*), with the exception of artistic paints. The decline in Russian imports is offset by an increase in the purchase of these goods from Italy, Iran and Poland (Table 3).

Thus, in the structure of interim goods, imports from Russia went down significantly and purchases from other countries increased. At the same time, for some categories of goods, where imports from Russia get smaller, substitution does not occur. This is due both to the lack of alternative suppliers and to additional costs of establishing new supply chains.

**The decline in the share of consumer imports from Russia was largely stemming from scale-down in imports of non-food products. At the same time, imports of food products, half of which are imported from Russia, are not decreasing (Table 4).**

**Table 4. Imports of Consumer Goods (bln US dollars)**

HS Codes		9 mths of 2021		9 mths of 2022		Change, %	
		Russia	Other countries	Russia	Other countries	Russia	Other countries
	<b>Total</b>	<b>3 286</b>	<b>5 685</b>	<b>3 240</b>	<b>7 651</b>	<b>-1%</b>	<b>35%</b>
<b>16-21</b>	Food products	664	203	687	351	3%	73%
<b>84-85</b>	Electric equipment, household appliances	446	990	330	1 586	-26%	60%
<b>87</b>	Transport vehicles	436	636	127	1 002	-71%	57%
	Detergents, scouring products, cosmetics, care products	232	188	288	207	24%	10%
<b>22</b>	Alcohol/Soft beverages	167	108	208	211	25%	95%
<b>02-04</b>	Meat, meat products and sea food	157	295	193	321	23%	9%
<b>61-63</b>	Clothing	135	618	161	1 081	19%	75%
<b>94</b>	Furniture	106	113	86	105	-19%	-7%
<b>64-67</b>	Footwear, small ware	64	379	84	248	31%	-35%
<b>30</b>	Medications	63	708	74	892	16%	26%
<b>48-49</b>	Paper and paper products	41	25	52	23	28%	-10%
<b>07-08</b>	Vegetables, fruits	38	418	34	466	-11%	12%
<b>09</b>	Coffee, tea and spices	22	76	25	64	16%	-15%

During 9 months of 2022, Kazakhstan ramped up its imports of Russian meat and dairy products, whereby Russia's share in imports of this category increased. Meanwhile, egg imports from Russia, which accounted for more than two thirds of the physical volumes of imported eggs in 2021, are being replaced by imports from Uzbekistan (Table 5). A significant acceleration in imports of food products from other countries is associated with an increase in imports of refined sugar from India because of a ban on sugar exports by Russia imposed from March to August 2022. The reduction also affected the canned vegetables market, where the share of Russian goods was more than 60%. These products are now more imported from Uzbekistan, Poland and China.

Among Russian non-food products, the import of cars has significantly reduced. In the structure of car imports, along with reduction of imports from Russia, there is a significant decline in supplies from Uzbekistan. At the same time, the decline in Russian imports of cars to Kazakhstan is offset by the growing imports from China, South Korea, as well as an increase in domestic production, which is indirectly confirmed by larger imports of interim goods.

Russian imports are substituted with supplies from other countries in such categories as detergents and scouring products, medications. At the same time, despite a noticeable decline in the physical volumes of imports of detergents and scouring products (by 42.5%), the share in value imports from Russia remains high due to the rise in prices in Russia, thus creating inflationary pressure in Kazakhstan as well. Imports of household chemicals from Russia are reoriented to Türkiye, China and Iran. The decreased imports of

medications from Russia were offset by an increase in supplies from Germany, China and Turkiye. Import of medications from Uzbekistan also slightly declined.

In the structure of household appliances, shipments of washing machines, refrigeration equipment and other machinery from Russia went down. Partly, imports of household appliances from Russia are compensated by supplies from China, so far there were no substitution for some commodity items.

The decline in imports of non-food products from the Russian Federation, which has not yet been substituted by other imports, is observed among furniture. In addition, a significant decrease in imports without substitution is observed for hygiene products, most of which were purchased in Russia. The lack of substitution of this category of goods with limited domestic production causes both a slump in supply in the domestic market and a significant acceleration in consumer prices.

**Thus, to a greater extent, the reduction in imports of non-food products from Russia resulted from decreased import of cars, household appliances as well as hygiene products and detergents, some of which have not yet been substituted by imports from other countries.**

**Table 5. Change in the Direction of Imports of Some Goods (Jan.-Sep.2022 to Jan.-Sep.2021)**

Group of Commodities under the BEC	Commodity (4-digit HS code)	Share of Imports from Russia (2021)	Share of Imports from Russia (2022)	Change in Physical Volumes of Imports from Russia	Growth of Physical Volumes of Imports from Other Countries*
Investment Goods	Tractors (8701)	26.0%	16%	-39.0%	Germany (22%), China (93%), (41%) and others.
	Motor vehicles for the transport of goods (8704)	20.0%	5%	-43.0%	China (33.7%), Sweden (31%), Thailand (41%), (by 3.5 times), Korea (62.3%)
	Trailers, semi-trailers (8716)	40.1%	24.2%	-61.2%	China (89%), Poland (45%), France (41.3%)
Interim Goods	Truck beds (8707)	38.3%	12.6%	-49.7%	R.of Korea (by 3.4 times), Uzbekistan (by 3 times), China (23.4%), Czech Republic (new direction)
	Polyethylene (3901)	69.1%	63%	-8.6%	Iran (7.7 times), China (3.5 times), R. of Korea (2.1 times)
	Cotton fabrics (5208)	28.1%	16.4%	-17.0%	China (by 23.6 times), Turkiye (80%)
	Paints&varnishes (3208)	64.6%	50.1%	-19.0%	Italy (49.6%), Iran (8%), Poland (96%)
	Internal combustion engines (8407)	41.9%	13.4%	-44.9%	R. of Korea (by 2.1 times), Uzbekistan (new direction), the UAE (87%), Japan (72.7%)
	Tires&covers (4011)	56.6%	34.2%	-34.7%	China (70.8%), R.of Korea (by 2.9 times), Thailand (2 times), Turkiye (by 2.5 times)
Consumer Goods	Eggs, in shell, fresh (0407)	40.5%	31.5%	-36.2%	Uzbekistan (by 5.9 times)
	Other solid sugar (170199)	92.3%	33.5%	-63.1%	India (+55 thous.tons, new direction)
	Processing products of vegetables, fruits, nuts or other parts of plants (20)	68.8%	61.4%	-23.4%	China (21%), Poland (by 2.2 times), Uzbekistan (by 2 times)
	Medications (3004)	8.1%	7.5%	-19.6%	China (by 2.1 times), Germany (39.9%), (by 2.5 times)
	Hygiene products (3306-3307)	51.4%	47.7%	-29.6%	-
	Detergents&scouring products (34)	77.2%	78%	-42.5%	Turkiye (81.3%), Iran (59.1%), China (by 2.9 times)
	Refrigeration equipment (8418)	51.2%	42.1%	-62.9%	China (62.6%), Uzbekistan (by 3.1 times), Germany (by 15.4 times)
	Washing machines (8450)	81.8%	62.4%	-23.3%	China (by 2.8 times)
	Monitors&projectors (8528)	93.7%	63.3%	-20.1%	Indonesia (+1503 tons)
	Minivans (8703)	41.7%	11.1%	-73.8%	Japan (by 2.2 times), USA (by 1.8 times), Korea (by 2.3 times), China (by 34 times), Thailand (by 21 times)

*\*arranged in the descending order of their shares*

Source: NBK, SRC MF, ASPR BNS



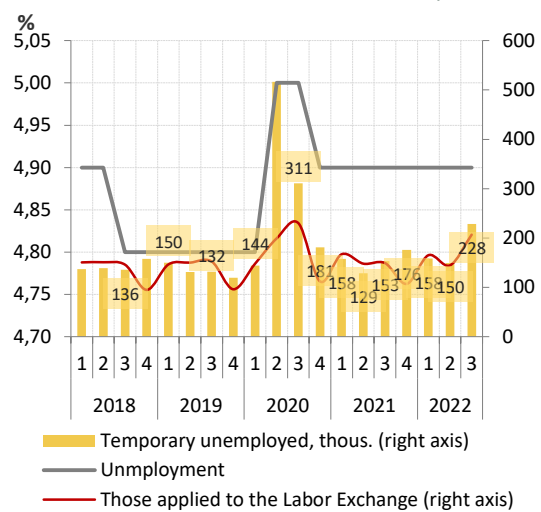
### 3.3 Labor Market

In the third quarter of 2022, the labor market maintained the trends of the first two quarters of this year, when the numbers of labor force slightly increased, and the numbers of unemployed population slightly reduced. The unemployment rate remained at 4.9%.

Despite the dynamics of macro indicators for the labor market, the numbers of temporarily unemployed population went down and the number of applications from the population to employment agencies increased (Figure 45). The surge in the temporarily unemployed population may be due to some slowdown in the economic activity, decreased profitability of small enterprises and, in general, the growing uncertainty because of increased geopolitical tensions.

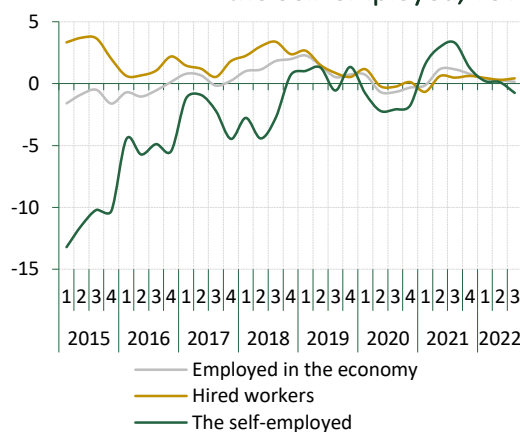
In recent years, the growth rate of employees in the economy has been decelerating. In 2015-2017, an increase in the numbers of employees was observed in the context of reduction in the numbers of labor force in the economy as well as the transition of the self-employed population to the category of employees in light of the improving economic situation. Over the past four years, the growth rate of employees has been slowing down significantly and has practically repeated the dynamics of changes in the labor force. Thus, the current changes in the category of employees are to a greater extent stemming from the ongoing demographic processes in the country (Figure 46).

Figure 45. Unemployment Rate and the Temporary Unemployed Population



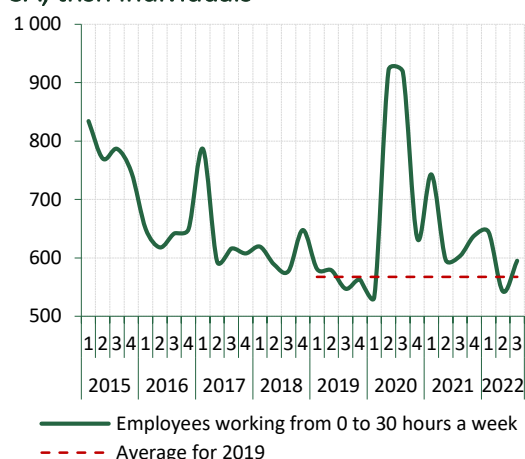
Source: ASPR BNS

Figure 46. Labor Force, Employees and the Self-employed, YoY



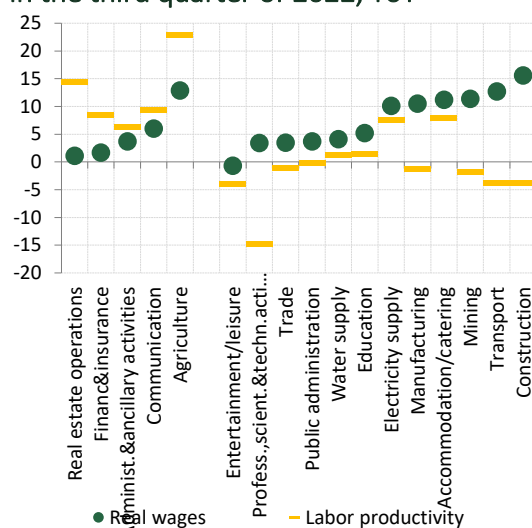
Source: ASPR BNS

**Figure 47. The Number of Employees Working from 0 to 30 Hours a Week, SA, thsn individuals**



Source: ASPR BNS, NBK's computations

**Figure 48. Labor Productivity and Real Wages by Types of Economic Activities in the third quarter of 2022, YoY**



Source: ASPR BNS, NBK's computations

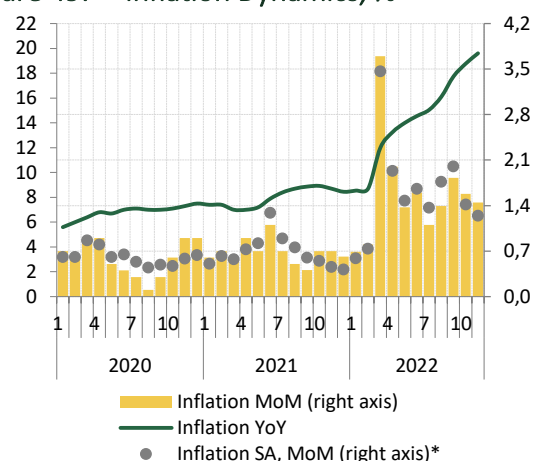
The decline in the numbers of the self-employed population was observed until 2019. In 2020, due to deterioration in the economic activity and imposition of restrictions, the number of self-employed people decreased again. In the third quarter of 2022, given a high statistical base of 2021, the number of self-employed individuals went down, especially in agriculture. Along with this, there is a steady increase in the self-employed population in other sectors of the economy, in particular in the field of sports, recreation and entertainment, the activities of public organizations and provision of other personal services. In other sectors of the economy, the dynamics of change in the self-employed population is multidirectional. Despite an increase in the total number of employees in the economy, many sectors saw a reduction in their number in the third quarter of 2022.

Such dynamics, together with the growing temporary unemployed population, indicate that the situation in the labor market has not stabilized completely because of the slowing economic activity.

The dynamics of changes in the numbers of part-time employees since 2015 has shown a downward trend with the periods of short-term growth. This figure reached an all-time low in 2019. During the pandemic, the number of employees with less than 30 hours of work increased significantly, followed by its gradual reduction and returning to the levels of 2019 by the second quarter of 2022 (Figure 47). However, in the third quarter of this year, the number of part-time employees increased again, which may be a consequence of the economic slowdown in some sectors of the economy.

Given the decelerating business activity, labor productivity in sectors of the economy also demonstrates some deceleration. At the same time, despite restrained business activity, the payroll fund and real wages continue to grow faster than labor productivity in most sectors of the economy, leading to an increase in the cost of enterprises (Figure 48). This trend indicates the presence of pro-inflationary pressure from the supply side.

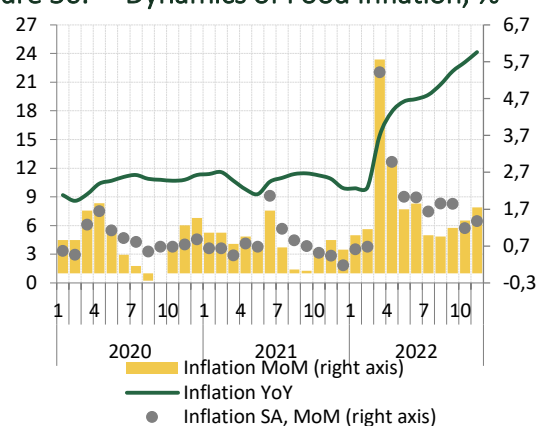
Figure 49. Inflation Dynamics, %



Source: ASPR BNS, NBK's computations

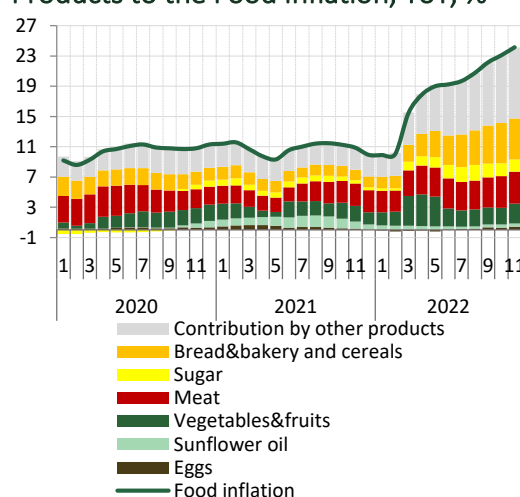
\*- Seasonal adjustment was performed by using X-12-ARIMA method from 2011 until present

Figure 50. Dynamics of Food Inflation, %



Source: ASPR BNS, NBK's computations

Figure 51. Contribution of Particular Products to the Food Inflation, YoY, %



Source: ASPR BNS, NBK's computations

### 3.4 Inflation

As of November 2022, the annual inflation accelerated to 19.6% amid the growing prices for all inflation components (Figure 49). The largest contribution to acceleration of the headline inflation is continued to be made by food prices, whose annual growth made up 24.1% in November of this year. Prices in the non-food market accelerated significantly, accounting for 18.6% in annual terms. The rise in prices for paid services accelerated to 14.1%.

Inflation of **food products** in November of this year accelerated to 24.1% (Figure 50). Within the structure of food component of inflation, prices for bread and bakery and cereals as well as dairy products, fruit and vegetable production, and eggs accelerated their growth (Figure 51).

The rise in prices for bread and bakery and cereals in November 2022 in annual terms accounted for 32.8%. The increase in prices for flour, which made up 43.7%, as well as rice whose price growth accelerated to 33.5% is worth mentioning. However, in October producer prices of the flour and cereals industry showed deceleration and even a monthly decline.

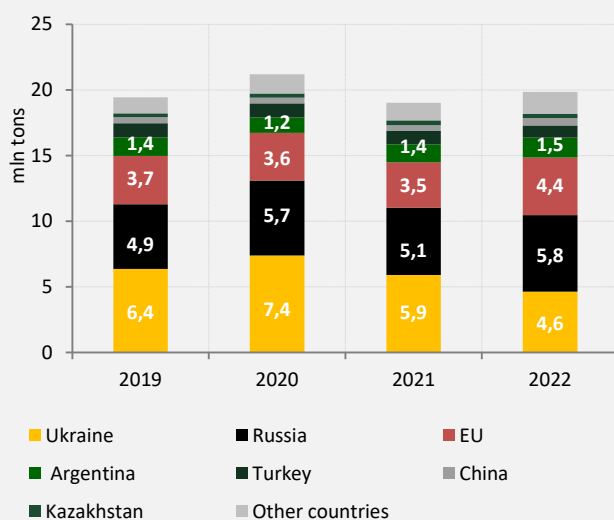
A similar situation is observed in the markets of dairy products and meat, where a significant deceleration of prices of forage producers (from 24.2% in March to 6% in October 2022, YoY) and a minor slowdown in prices of unpasteurized milk producers (from 21.4% in July to 20.4% in October 2022, YoY) was observed. At the same time, consumer prices are demonstrating the opposite dynamics. Thus, the annual rise in meat prices in November accelerated to 16.1%, and dairy prices – to 30%. Such divergent dynamics the growing costs of commodity prices and consumer prices may be driven by the growing costs amid rising prices for production means (19.7% in October 2022, YoY) and interim consumption products (18.2%) given the disruption in logistics chains and the increasing inflation in supplying countries.

#### Box 4. Overview of the Sunflower Oil Market in Kazakhstan

Sunflower oil is one of the most demanded products in the food market. The leading positions in the world production of sunflower oil are taken up by Russia (its share in the global production according to the results of the 2021/2022 agricultural year is 29%) and Ukraine (23%), since the bulk of the sown area and gross harvest of sunflower seeds falls on their territory (Figure 1).

Major global producers also include the EU countries (22%), Argentina (8%) and Turkey (5%). Share of Kazakhstan in the global sunflower oil production is 2%, and in the output of EAEU countries – in the order of 6%.

Figure 1. Global Sunflower Oil Production <sup>9</sup>



In Source: United States Department of Agriculture.

The volumes of sunflower oil production in Kazakhstan have increased significantly since 2019 (Table 1). During 9 months of 2022, production exceeded the annual values of preceding years, amounting to 352 thousand tons. At the same time, according to the data of the National Oilseed Processors Association, production capacities are loaded for 35%<sup>10</sup>, among other things, because of the shortage of raw material. Mainly large suppliers operate at full capacity with partial or 100% export orientation of their commodity.

In recent years, sunflower oil production has exceeded domestic consumption, which allows increasing export volumes. In 2021, exports decreased only due to the imposition of restrictions on the export of oilseeds and sunflower oil by the government for food safety purposes. The main target markets for Kazakhstan are Uzbekistan, China, Afghanistan, Tajikistan and, starting from 2022, Turkey. Primary processing oils

are supplied to the countries of Central Asia for further refining.

There is a number of problems in the domestic production of sunflower oil. One of the main issues is the insufficiency of the raw material base. Final consumption of sunflower seeds makes up 3 mln tons<sup>11</sup>. Local raw material covers the needs of producers only by one third.

Table 1. Balance of Resources and the Use of Sunflower Oil in Kazakhstan (thous. tons)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	9M2022
<b>Resources</b>												
Production	225	226	199	235	217	246	260	264	323	323	331	352
Imports	157	49	35	68	104	95	88	93	115	101	92	75
<b>Use</b>												
Exports	21	13	4	16	18	21	46	62	83	111	85	173
Domestic consumption	360	262	230	286	303	320	302	296	354	313	338	255
<b>The ratio of production and domestic consumption</b>	<b>63%</b>	<b>86%</b>	<b>87%</b>	<b>82%</b>	<b>72%</b>	<b>77%</b>	<b>86%</b>	<b>89%</b>	<b>91%</b>	<b>103%</b>	<b>98%</b>	<b>138%</b>

Source: ASPR BNS

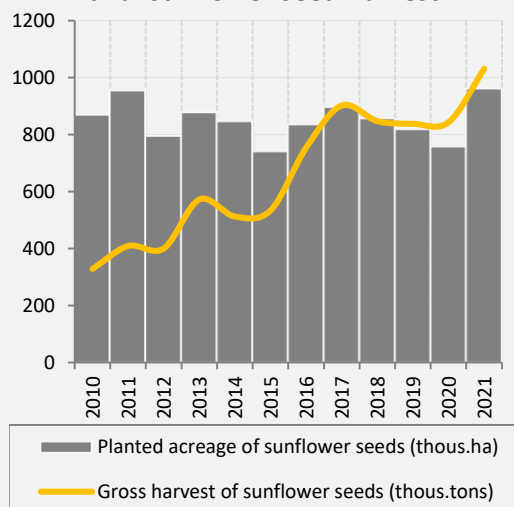
<sup>9</sup> Here, "a year" implies an agricultural year. For example, the year of 2022 means the 2021/2022 agricultural year.

<sup>10</sup> According to the National Oilseed Processors Association: <https://eldala.kz/novosti/maslichnye/12293-poshlinu-na-eksport-podsolnechnika-predlagayut-vvesti-v-kazahstane>.

<sup>11</sup> According to the National Oilseed Processors Association: <https://agroqogam.kz/в-казахстане-урожай-подсолнечника-мо/>.

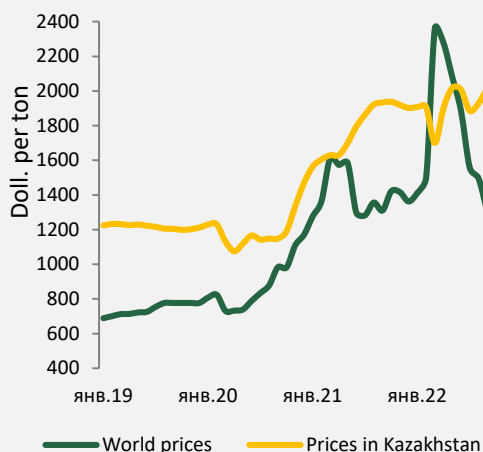
In 2021, oilseeds as a whole occupied 13.5% or 3.1 mln. hectares of the total planted acreage in the country. Of these, 31% or 961 thousand hectares were sown with sunflower. The gross harvest of sunflower from sown lands for this period amounted to 1 mln. tons (Figure 2).

**Figure 2. Dynamics of Planted Acreage and Sunflower Seed Harvest**



Source: ASPR BNS

**Figure 3. Dynamics of Prices for Sunflower Oil**



Source: World Bank, ASPR BNS

Productivity over the past 10 years has more than doubled: in 2011, 954 thousand hectares were sown with a yield of 409 thousand tons. Yield growth trend is explained, among other things, by the import of seeds<sup>12</sup> and the use of mineral and organic fertilizers.

The main regions of sunflower cultivation are concentrated in East Kazakhstan, Pavlodar, Kostanay, West Kazakhstan, Akmola and Aktope regions. Half of the total harvest of oilseeds comes from the East Kazakhstan region, where there are large oil extraction enterprises.

As at the beginning of November, 237 operating vegetable oil producing enterprises<sup>13</sup> were registered in Kazakhstan. As regards sunflower oil, mainly non-refined product is produced. The share of refined sunflower oil in the domestic production is 36%.

Kazakhstani enterprises engaged in the production of sunflower oil are partially loaded not only because of the shortage of raw materials but also because of the lack of equipment for processing, storage and transportation. The small number of high-tech oil extraction plants in the country, combined with the deficient raw materials and equipment, leads the market to depend on import prices for raw materials and production means. This results in the growth of producer costs and the cost of the final product.

In the context of increased demand, cost of production resources and disruption of supply chains, prices for sunflower oil have been growing significantly since 2020.

The acceleration of price growth in 2022 is intensified due to the high cost of energy resources and the conflict between Russia and Ukraine.

The trend in prices for sunflower oil in Kazakhstan, in general, coincides with the global one. However, the domestic price level is significantly higher than the external one (Figure 3).

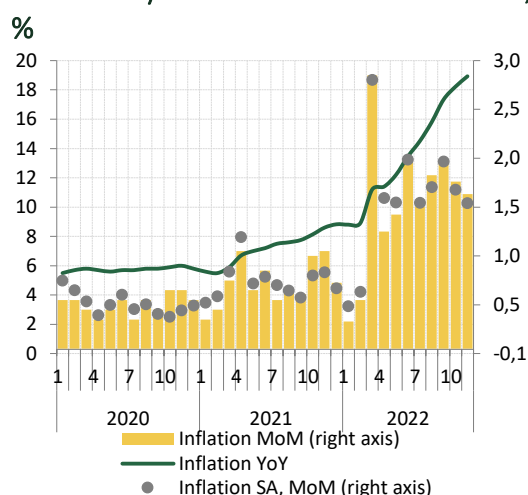
The creation of a competitive oil and fat industry, including for stabilizing prices in the domestic market, requires the implementation of a set of effective measures to develop the industry.

<sup>12</sup> <https://www.oilworld.ru/analytics/worldmarket/322391>

<sup>13</sup> Legal entities and individual entrepreneurs.

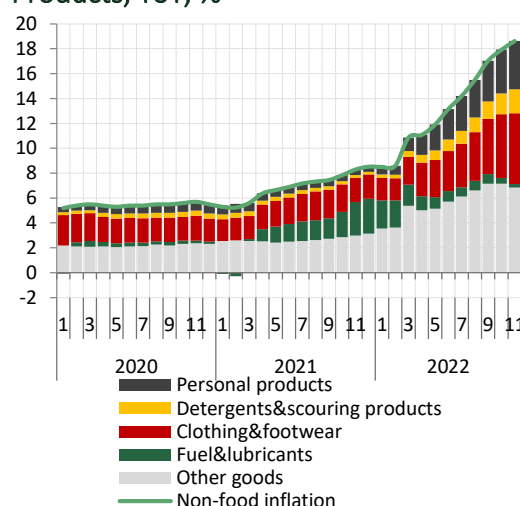


Figure 52. Dynamics of Non-Food Inflation, %



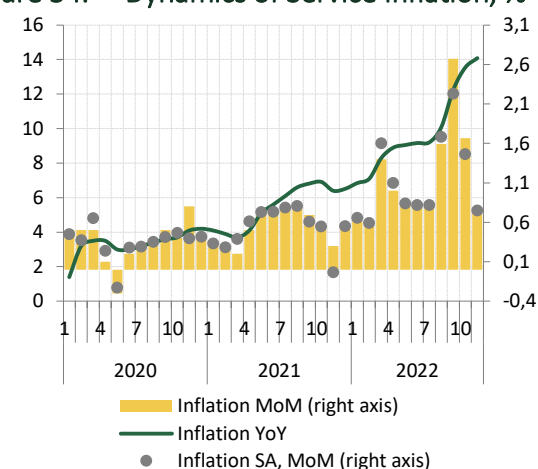
Source: ASPR BNS, NBK's computations

Figure 53. Contribution by Non-Food Products, YoY, %



Source: ASPR BNS, NBK's computations

Figure 54. Dynamics of Service Inflation, %



Source: ASPR BNS, NBK's computations

In the context of **non-food inflation**, due to the failure of logistics supply chains and depreciation of the tenge exchange rate, prices of imported goods continue to accelerate (Figure 52). Specifically, there was acceleration in prices for personal products (36.5%, YoY), clothing and footwear (17.1%), detergents and scouring products (43.3%) (Figure 53). On the other hand, administrative regulation of prices for some types of fuel and lubricants (2.8%, YoY) continues to put disinflationary pressure on the non-food component.

A significant contribution to the **paid services** inflation is made by the growing house rents, which, despite a monthly deflation in November (-1.4%), in annual terms accounted for 42.3% (Figure 54).

Meantime, since the announcement of partial mobilization in Russia, in the autumn months, the rental payment have risen by 17.2%. In addition, in November of this year, prices for some of the non-regulated services increased (education – 14.3%, YoY, and hairdresser services – 17.3%, YoY). Among regulated services, prices of electricity have been rising (8.1%, YoY) because of the increase in basic tariffs and the growing prices of production, transmission and distribution of electricity by its producers (a 3% growth from July to October 2022) (Figure 55).

**Inflation expectations of the population in September-October 2022 continued to increase and reached the all-time highs.**

The median estimate of expected inflation over a one-year horizon increased from 16.5% in July to 18.3% in October 2022. The results of the public poll show an increase in the level of discussion of inflation among the population. Respondents who expect prices to rise over a one-year horizon continue to attribute it more to the rise in food prices and less to external events and changes in the exchange rate (the poll in September 2022). The share of respondents linking future price growth with changes in prices for gasoline and diesel fuel increased.

The median estimate of perceived inflation (for the past 12 months) increased from 21.5% in July to 22% in October 2022 (Figure 56).

Overall, both expected and perceived inflation rates have remained high in recent months, reaching their all-time high in October 2022 (since 2016).

Among the respondents who noted the rise in prices over the past month, the share of those who noticed the increase in prices of paid services went up. In terms of food products, the respondents noticed most the growth in prices for dairy and meat products as well as for vegetable oil and bread and bakery. These groups of goods account for a significant share in the consumer basket.

In October 2022, deterioration in the consumer sentiment was observed that to a greater extent is associated with a decline in estimates of both the current and future financial situation.

Estimates of the change in personal status for the year ahead have deteriorated significantly, approaching the minimum at the beginning of 2016.

**At the same time, inflation expectations of enterprises based on the survey results at the beginning of the fourth quarter of this year somewhat slowed down (Figure 57).**

The share of enterprises anticipating a more rapid price growth over a one-year horizon was 26% (30% a quarter before).

The balance of responses from enterprises regarding inflation expectations shows deceleration of price growth. Enterprises in the information and communication sector were the most optimistic in their assessment while the agriculture sector branches appeared to be the most pessimistic. Meantime, expectations in the construction sector remained as before.

The enterprise survey showed that in the third quarter of 2022 the growth rate of prices for final products (goods, works, and services) had slowed down. In the fourth quarter of 2022, enterprises expect that this trend will continue.

Figure 55. Contributions to the Paid Services Inflation, YoY, %

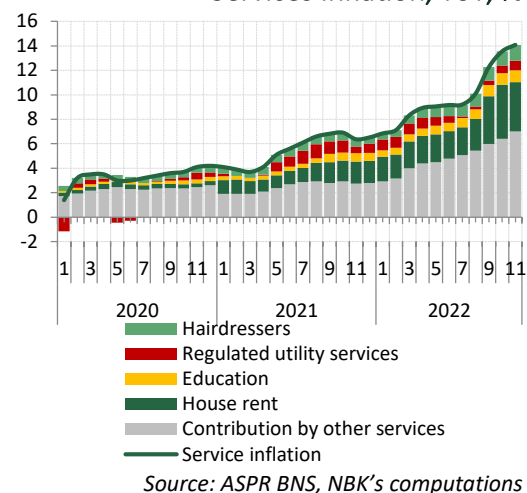


Figure 56. Median Estimates of Expected and Perceived Inflation, YoY, %

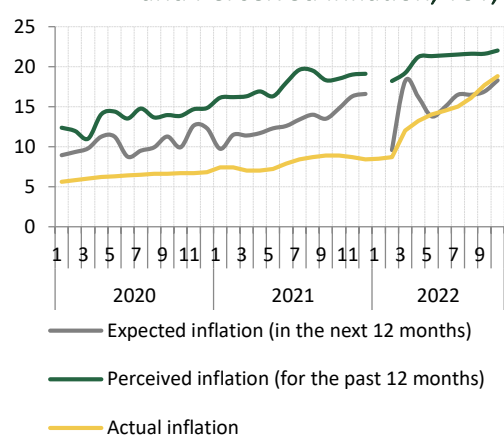
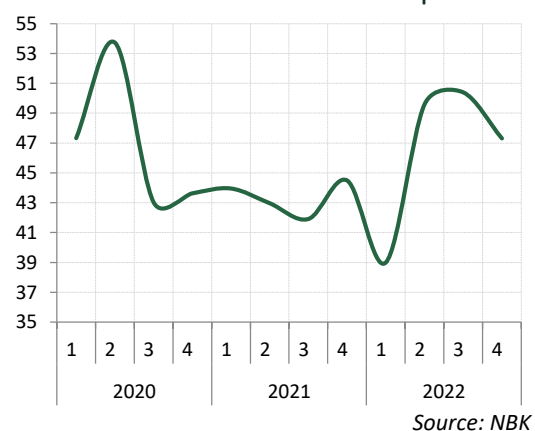


Figure 57. Inflation Expectations of Enterprises for a Year Ahead, the Balance of Responses<sup>14</sup>



<sup>14</sup>The balance of responses is the difference between the shares of respondents anticipating the increase and decline. It may vary from -100 (all responses: "will decline") to +100 (all responses: "will be growing faster than now")

### Box 5. Assessing the Effect of the Exchange Rate Pass-Through onto Inflation in Kazakhstan

Inflationary processes are building up under the impact of various factors, including the exchange rate of the national currency. In the economic literature, such impact has acquired the name of the effect of exchange rate pass-through onto prices and shows the price elasticity of a commodity to the movement in the exchange rate.

Following the transition to a free-floating exchange rate regime (FFER) of the tenge in August 2015, volatility of the tenge exchange rate increased significantly, leading to the increased impact of the exchange rate dynamics on prices. To obtain empirical results, an assessment was made of the pass-through effect of the nominal tenge exchange rate to the Russian ruble and the US dollar, as well as of the nominal effective exchange rate<sup>15</sup> on inflation in Kazakhstan in different periods.

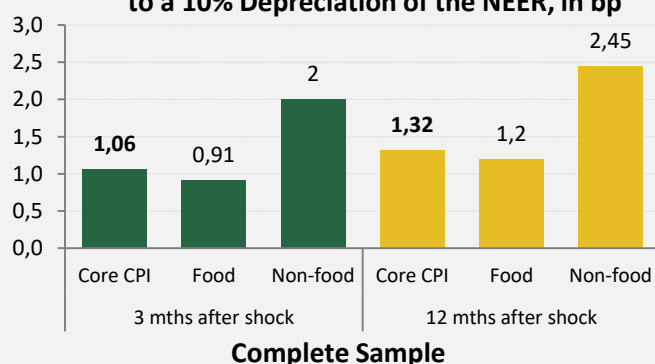
Along with that, the asymmetry of the exchange rate pass-through effect on prices in the short term was considered, in particular, its larger value when the tenge weakens and an insignificant number when the tenge strengthens.

**For reference:** To obtain estimates of the pass-through effect, a vector autoregression (VAR) model was used, followed by obtaining estimates of the impulse response function of the consumer price index to an exchange rate shock. Structural identification of the VAR model was performed using recursive short-term identification according to Cholesky. Estimates are obtained for both the overall CPI and its components for different time periods.

The analysis used the core consumer price index and its components in annual terms, excluding fruits and vegetables, utilities (regulated), railway transport, communication services, petrol, diesel fuel and coal. These positions are excluded from the indices due to their high monthly volatility or distorted dynamics because of administrative regulation of their prices. Thus, the dynamics of the excluded categories often reflect not the real relationship between consumer income and prices but short-term imbalances in supply and demand. Data from January 2011 to September 2022 was used to evaluate the model.

The results of analysis showed that in the interval of up to 3 months (a short-term period) the greatest impact of exchange rate movements on prices is observed, since prices, especially in the event of a sharp depreciation of the exchange rate, react instantly. At the same time, the pass-through of the exchange rate shock to prices is almost completely over in the interval up to 12 months (a medium-term horizon).

**Figure 1. The Pass-Through Effect in Response to a 10% Depreciation of the NEER, in bp**



The results obtained indicate that from January 2011 to September 2022 **over a short-term horizon the pass-through of a 10% change in the NEER of the tenge to the core inflation made up 1.06 pp, to the food component of the core inflation – 0.91 pp, and to the non-food component – 2.0 pp** (Figure 1). A significant change in prices for non-food products in response to the exchange rate shock is due to a larger share of imports in their consumption compared to food products. The dependence on the dynamics of the exchange rate for imported goods is much higher. When

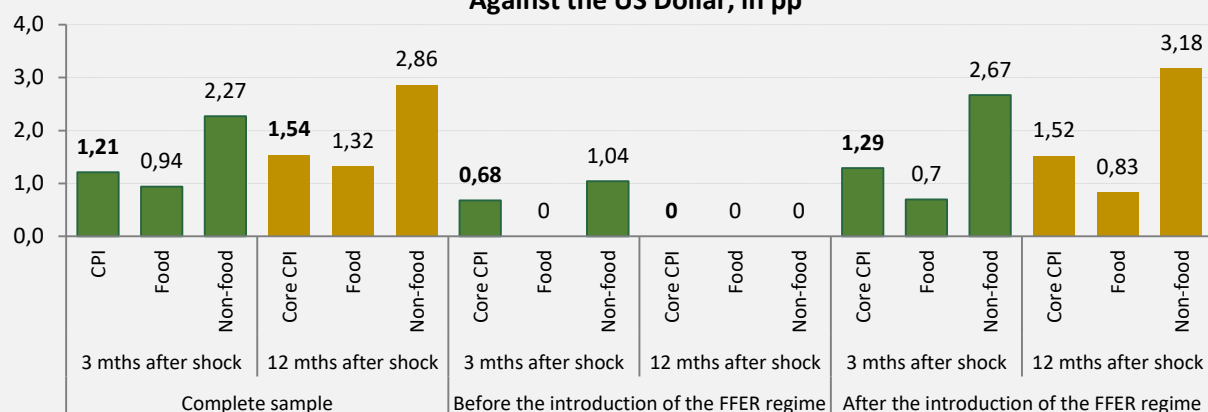
the exchange rate depreciates sharply, retailers raise prices in order to avoid losses and in anticipation of product purchases at “new” prices. The rise in imports of interim goods due to depreciation of the exchange rate leads to an increase in producer prices in the manufacturing industry, which then pass the costs on to consumers. The demand-side effect of a sharp depreciation of the exchange rate is realized through the channel of increasing inflation expectations of the population. Thus, consumers, expecting a rise in prices for goods in the future, especially for durable goods, make purchases at a time at the “old” prices, which, in turn, provokes a rise in prices.

As economic agents adapt to the “shock,” the pass-through effect on prices gradually weakens. Thus, the cumulative effect of the pass-through of this shock **after 12 months** was **1.32 pp** for the core CPI, and for the food and non-food components of the core CPI – **1.2 pp** and **2.45 pp**, respectively. It should be noted that the assessment of the pass-through of NEER shock onto the prices of paid services in the structure of

<sup>15</sup> Nominal effective exchange rate against currencies of trading partner countries, whose share in the total turnover accounts for at least 0.5% (source: nationalbank.kz).

core inflation **does not have statistical significance** over any horizon, which confirms the thesis that the prices of non-tradable goods and services are insensitive to exchange rate dynamics.

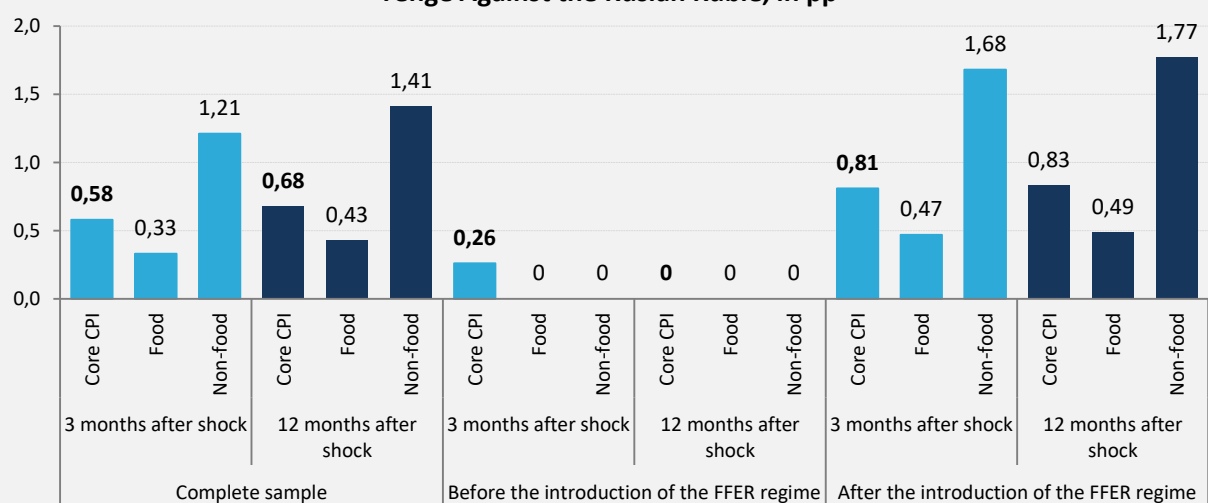
**Figure 2. Pass-Through Effect in Response to a 10% Depreciation of the Tenge Against the US Dollar, in pp\***



\*- statistically insignificant coefficients of elasticity are shown as zero

Along with the NEER of the tenge, empirical estimates of the pass-through effect were obtained for the nominal exchange rate of the tenge against the US dollar and the Russian ruble. In terms of currencies, the results of the analysis showed that **the pass-through effect of the US dollar exchange rate is higher** than the pass-through effect of the ruble exchange rate for all periods and horizons (Figure 2). This may be due to the predominance of this currency in settlements on foreign trade operations, as well as a high demand for it from the population.

**Figure 3. The Pass-Through Effect in Response to a 10% Depreciation of the Tenge Against the Russian Ruble, in pp\***



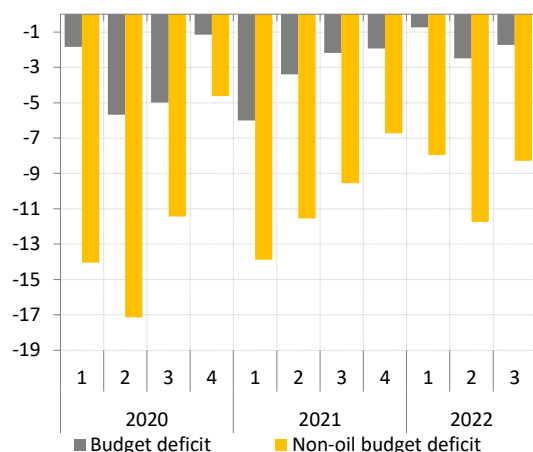
\* statistically insignificant coefficients of elasticity are shown as zero

It should be noted that during the period before the introduction of the free-floating exchange rate regime of the tenge (FFER) in August 2015, estimates of the ruble pass-through did not show statistical significance (Figure 3). At the same time, after the introduction of the FFER regime, there has been a significant increase in the estimates themselves and their significance both for the short term and for the medium term. This may be due to both the new exchange rate regime itself, which allows exchange rate fluctuations, and the growth of trade and imports from Russia after the establishment of the EAEU in 2015 (the share of the Russian Federation in the total trade turnover of Kazakhstan from 2011 to 2015 averaged 18.0%, from 2016 to 2021 – 21.3%, while imports from the Russian Federation increased from 35.3% to 37.9% on average during the same periods).

Additionally, the study found evidence of an asymmetric price response to the growth and fall of the tenge exchange rate in the short term: depreciation of the tenge leads to a statistically significant increase in prices, while appreciation does not affect inflation.

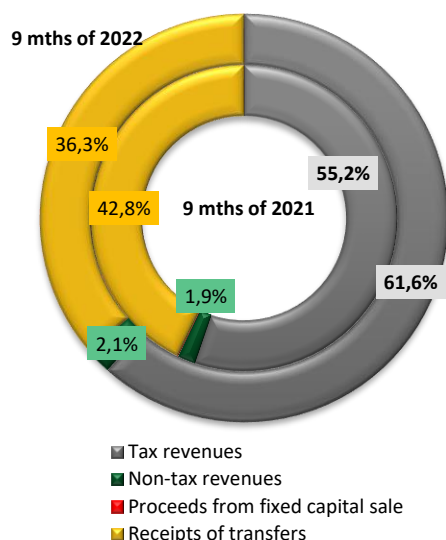
Thus, on the horizon of up to 3 months, the exchange rate pass-through effect on prices is present in both cases. However, the empirical estimate of the pass-through effect and its statistical significance are much higher when the tenge exchange rate weakens than during the periods of its appreciation. Over the medium term (up to 12 months), only the depreciation of the exchange rate has a statistically significant impact on price dynamics.

Figure 58. Overall and Non-Oil Deficit of the National Budget, as % of GDP



Source: MF RK

Figure 59. Structure of National Budget Revenues



Source: MF RK

### 3.5. Fiscal Policy

**As at the end of nine months of 2022, the budget deficit was at a low level owing to the increased transfers from the National Fund and growing tax revenues.**

In January-October 2022, the national budget deficit amounted to 1.5 trln tenge, decreasing by 34.1% compared to the corresponding period of 2021 (during 9 months of 2022 – 1.7% of GDP). Reduction in the budget deficit was secured, in the first instance, by the outstripping growth of revenues over spending (the growth by 31.3% and 18.7%, respectively).

During January-October 2022, official transfers equaling 4 643.2 bln tenge were received to the revenue side of the budget, where the guaranteed transfer from the NF RK amounted to 3 590.0 bln tenge, and the earmarked transfer – to 386.6 bln tenge; transfers from subordinate government authorities totaled 666.6 bln tenge.

During January-September 2022, the non-oil budget deficit (budget deficit excluding transfers from the National Fund and export customs duties for crude oil), according to the National Bank's estimate, amounted to 5 994.6 bln tenge (9.3% of GDP), which is by 1.5 pp less compared to the corresponding period of 2021 (Figure 58).

In January-October 2022, the national budget revenues increased compared to the corresponding period of 2021 by 31.3% and totaled 13.0 trln tenge. The main reason for the growth of revenues is a 46.3% increase in tax revenues (their share in budget revenues accounted for 61.1%) given the easing of quarantine restrictions, recovery of the economic activity and a rise in prices for major export commodities.



The highest growth in taxes in a sector-based breakdown is observed in the mining, manufacturing industry and in trade.

The tax revenues structure shows the increased receipts from corporate income tax (a 60.5%, YoY) due to additional tax liabilities paid by large mining and smelting companies as well as from the value-added tax (by 43.1%, YoY) as a result of the growing turnovers on realization of goods, works and services.

At the same time, during ten months of 2022, receipts of official transfers went up by 8.2% (the share in the budget revenues accounted for 35.6%) owing to an increase in the guaranteed transfer (by 48.1%, YoY) and transfers from subordinate government authorities (by 4.7%, YoY).

Non-tax revenues increased by 1.3 times compared to the same period of the last year; the major growth in their structure occurred among revenues from public assets (receipts of rental payment for the use of Baikonur space complex) and other non-tax revenues. Reduction of proceeds from fixed capital sale is related to the fact that there were no sales of tangible assets from the state stockpiles (Figure 59).

During January-October 2022, national budget expenditures amounted to 14.0 trln tenge, having increased by 18.7% compared to the corresponding period of 2021. The main contribution to the growth of the national budget expenditures was made by the following sectors: education – a 46.3% increase (the share – 10.9%), spending on debt service went up by 29.4% (the share – 8.4%) and on defense – by 43.7% (the share – 5.4%). Along with that, spending on social welfare and social security increased by 11.2% (the share – 25.7%).

**Core inflation** means the inflation, which excludes transitory erratic price changes subject to certain factors of administrative, event-related and seasonal nature. The base rate is the National Bank's key monetary policy instrument that enables to regulate nominal interbank interest rates in the money market. By setting the base rate level, the National Bank determines a target value of the targeted interbank short-term money market rate in order to achieve the goal of ensuring the price stability in the medium term.

**Gross Fixed Capital Formation** is the growth in non-financial assets, which have been used in the process of production for a long time. Gross fixed capital formation includes the following components: a) acquisition, less retirement, of new and existing fixed assets; b) costs for major improvements of tangible produced assets; c) costs for improvement of non-produced tangible assets; d) expenses in connection with the transfer of title for non-incurred costs.

**Gross Domestic Product (GDP)** is an indicator that reflects the market value of all final goods and services produced during a year in all sectors of the economy within the territory of the country for consumption, exports and saving, irrespective of the national identity of the used production factors.

**Money Supply (M3)** is determined on the basis of consolidation of balance sheet accounts of the National Bank and banks. It consists of cash in circulation and transferable and other deposits of non-bank corporate entities – residents and the population in the domestic and foreign currency.

**Dollarization of the Economy** means the situation where a foreign currency (largely – the US dollar) starts to be used for transactions within a country or in certain sectors of its economy, pushing out the domestic currency from the domestic money turnover, and acting as the means of saving, measure of value and the legal tender.

**Inflation** is an increase in the overall price level of goods and services. In Kazakhstan, inflation is measured by the consumer price index.

**Consumer Price Index** is the change in the overall price level of goods and services purchased by the population for consumption. The consumer basket of Kazakhstan used for calculation of inflation reflects the structure of household spending and contains goods and services, which represent the largest portion in the consumption of population. The CPI is calculated as the ratio of the cost of a fixed set of goods and services in current prices and its cost in the prices of the previous (base) period. The index is calculated by the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan.

**Inflation Targeting** is a monetary policy regime, which is oriented at achieving a target inflation rate.

**Reverse REPO** is the purchase of a security with the commitment to sell it after a specific period of time and at a specific price. The National Bank conducts reverse repo operations with a view to provide the tenge liquidity to banks against the pledge of securities in accordance with the National Bank's list of collateral. Open Market Operations are regular operations of the National Bank in the form of auctions for liquidity provision or withdrawal in the money market with a view to set interest rates around the base rate.

**Standing Facilities** refer to monetary policy instruments for adjustment of volumes of liquidity, which resulted from the open market operations. Standing facilities are provided as part of bilateral arrangements where the National Bank is one party to the transaction. Such operations are conducted at the initiative of banks.

**Transferrable Deposits** refer to all deposits, which: 1) can be converted into cash at face value at any moment in time without any penalties and restrictions; 2) are freely transferable through a check, draft or endorsement orders; and 3) are widely used for making payments. Transferrable deposits represent a part of the narrow money. Other deposits primarily include savings and time deposits that only can be withdrawn on expiration of a certain period of time, or can have different restrictions which make them less convenient for use in the ordinary commercial transactions and, mainly, meet the requirements established for saving vehicles. In addition, other deposits also include non-transferable deposits and deposits denominated in foreign currency.

**Potential Output.** Reflects the level of output in the economy that can be reached subject to full utilization of inputs and full employment. It reflects the volume of production, which can be manufactured and realized without creating prerequisites for the change in the price growth rates.

**Consumer Basket** means a sample of goods and services, which characterizes the standard level and the structure of monthly (annual) consumption of an individual or a family. Such sample is used to calculate the minimum subsistence level, based on the cost of the consumer basket in current prices. The consumer basket also serves as a comparative basis for estimated and real consumption levels and also as the basis to determine the purchasing capacity of currencies.

**Interest Rate Channel of the Monetary Policy Transmission Mechanism** is the transmission mechanism channel, which describes the impact of the central bank on the economy through the interest rate regulation.

**Direct Repo** is the sale of a security with the commitment to repurchase it after a specific period of time and at a specific price. The National Bank conducts direct repos with a view to withdraw excess liquidity in the tenge.

**Free Floating Exchange Rate.** According to the IMF's current classification, under the floating exchange rate framework a central bank does not establish any pegs including operating ones for the level or the change in the exchange rate, allowing the exchange rate to be determined by the market factors. In doing so, the central bank reserves the opportunity to periodically influence the domestic foreign exchange market in order to smooth out the volatility of the domestic currency exchange rate or to prevent its dramatic movements as well as to ensure the financial system stability.

**Output Gap** is the deviation in GDP expressed as a percentage of a potential output. Expresses the difference between an actual GDP and potential GDP for a certain time interval. Serves as an indicator, which reflects the effectiveness of resources utilized in the country. If an actual output exceeds the potential one (a positive gap), other things remaining equal, the trend of acceleration in the price growth rates would be anticipated because of the overheating of the economy.

**TONIA Rate** represents a weighted average interest rate on one-day repo opening transactions made on the stock exchange with government securities in the automatic repo sector.

**Monetary Policy Transmission Mechanism** is the process, by which monetary policy instruments influence final macroeconomic indicators such as the economic growth, inflation. Narrow Reserve Money is the reserve money excluding other deposits of banks at the National Bank.

## LIST OF KEY ABBREVIATIONS

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**bp** – basis point

**ASPR BNS** – Bureau of National Statistics of the Agency for Strategic Planning and Reforms

**GDP** – gross domestic product

**NOB** – nature of business

**F&L** – fuel and lubricants

**GSs** – government securities

**EIA** – Energy Information Administration

**EM** – emerging markets

**EU** – European Union

**ECB** – European Central Bank

**CPI** – consumer price index

**KASE** – Kazakhstan Stock Exchange

**KSF** – “Kazakhstan Sustainability Fund” JSC

**NBK** – National Bank of the Republic of Kazakhstan

**NF RK** – National Fund of the Republic of Kazakhstan

**OPEC** – Organization of Petroleum Exporting Countries

**pp** – percentage point

**Rosstat** – Federal State Statistics Service of the Russian Federation

**IMF** – International Monetary Fund

**bln.** – billion

**mln.** – million

**MNE** – Ministry of National Economy of the Republic of Kazakhstan

**MF RK** – Ministry of Finance of the Republic of Kazakhstan

**MED** – Ministry of Economic Development of the Russian Federation

**trln.** – trillion

**thous.** – thousand

**TCO** – Tengizchevroil

**CB RF** – Central Bank of the Russian Federation

**FAO** – Food and Agriculture Organization of the United Nations

**Fed** – US Federal Reserve System

