



NATIONAL BANK OF KAZAKHSTAN



Monetary Policy REPORT

May 2023

CONTENTS

STATEMENT BY THE GOVERNOR OF THE NATIONAL BANK OF THE REPUBLIC OF KAZAKHSTAN	4
I. PROSPECTS OF THE DEVELOPMENT OF THE MACROECONOMIC SITUATION	7
1.1. Forecast Assumptions	7
1.2. Dynamics of the Economic Development under the Baseline Scenario	11
1.3. Alternative Forecast Scenarios	13
1.4. Risks in the Medium Term	15
1.5. Forecast of the Current Account of the Balance of Payments	17
II. MONETARY POLICY	20
2.1. Decisions on the Base Rate	20
2.2. Monetary Conditions	21
2.3. Money Supply	24
2.4. Money Market	24
2.5. Foreign Exchange Market	25
2.6. Stock Market	27
2.7. Deposit Market	32
2.8. Credit Market	35
III. MACROECONOMIC CONDITIONS	39
3.1. External Sector	39
3.2. Development of the Domestic Economy	42
3.3. Labor Market	49
3.4. Inflation	53
3.5. Fiscal Policy	59
BASIC TERMS AND DEFINITIONS	61
LIST OF KEY ABBREVIATIONS	63
BOXES	
Box 1. Quantitative Assessment of Efficiency of the Interest Rate Channel of the Monetary Policy Transmission Mechanism in Kazakhstan	21
Box 2. Can the Stock Market Act as the Channel of Influence on Inflation?	29
Box 3. Food Inflation in the EU	40
Box 4. Dynamics of Savings Behavior of the Population	47
Box 5. Review of the Labor Market in Kazakhstan after the Pandemic	51
Box 6. Analysis of Cyclicalities of Consumer Price Index Components	57



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 **May 15, 2023**

STATEMENT BY THE GOVERNOR OF THE NATIONAL BANK OF THE REPUBLIC OF KAZAKHSTAN



The Monetary Policy Committee of the National Bank decided to keep the base rate at 16.75% with a band of +/- 1 pp. The decision is based on the analysis of actual data and updated forecasts taking into account the influence of new factors.

Estimates point to a minor shift in the balance of risks towards disinflation. Pressure on prices from the external sector somewhat eased owing to lower world food prices and a marked slowdown in inflation in countries – Kazakhstan’s trading partner. The slower growth of external prices against a stable real exchange rate creates favorable

conditions for deceleration of inflation in the country. However, pro-inflationary effect of internal factors associated with the continuing fiscal stimulus, strong domestic demand, high inflation expectations as well as rising prices for fuel and lubricants and utility services is persisting.

This decision will help cool off inflationary processes in the country with the further goal of reducing and stabilizing the price growth in the medium term.

In April 2023, the annual inflation continued its downward trend that outlined in March and made up 16.8%. At the same time, various estimates of core inflation indicate a gradual slowdown in the stable components of price growth as a result of impact of monetary policy pursued. However, subsequently, their dynamics will be influenced by indirect effects of higher prices for fuel and lubricants and utility services. Inflationary processes are inertial in nature against a steady domestic demand. Price increases reflect the ongoing realignment of supply chains and production chains due to the changing geopolitical environment. The stimulative fiscal policy and high inflation expectations of the population also remain as significant pro-inflationary factors.

The growth rate of Kazakhstan’s real GDP in January-April of this year amounted to 5.0%, having built above the forecasts. Consumer demand of the population remains stable. This is proved by the data on retail trade, imports of consumer goods and cashless payments by the population for goods and services. There is an increase in nominal wages and income of the population is growing. At the same time, real income of the population is decreasing because of high inflation hindering a more active realization of consumer demand. High investment activity, which is stimulated by government economic support programs, is also one of the drivers of domestic demand.

Inflation forecasts based on existing external and internal factors as well as new assumptions have been revised upwards. Thus, according to updated forecasts, annual inflation will be in the range of 11-14% in 2023, 9-11% in 2024 and 5.5-7.5% in 2025. The change in forecasts for price growth is primarily driven by direct and indirect effects from the increase in the cost of fuel and lubricants and utilities. Due to inertia, they will lead to a slower decline in inflation towards the medium-term target. The fiscal impulse this year is estimated as pro-cyclical. However, based on the parameters that are laid down in the Forecast of Socio-economic Development, it will weaken given the planned comeback to compliance with the countercyclical fiscal rule in 2024-2025. Inflation will be constrained by restrictive monetary conditions and an improvement in the external economic environment, which will be expressed through a further decline in food prices and low inflation in trading partner countries.

Risks of inflation forecast may include increased fiscal stimulus, stronger spillovers from rising prices for fuel and lubricants and utilities, a prolonged impact from the realignment of supply chains and production chains on pricing, and the likelihood of inflation expectations anchoring at high levels.

Forecasts regarding the development of the Kazakh economy for 2023 have been improved. The GDP growth in 2023 will be in the range of 4.2-5.2%. The economic growth forecast for 2024-2025 remained unchanged at 3.5-4.5%. Estimates for the current year have been revised to reflect actual GDP performance, which is influenced by expansionary fiscal policy, robust domestic demand and expectations of higher external demand. At the same time, the positive dynamics of imports, the real interest rate, coupled with a stronger real exchange rate of the tenge, will balance economic activity, partly reducing pressure on inflation.

According to the National Bank estimates, given the positive dynamics of actual inflation, monetary conditions are approaching the level of containment. In this regard, in the second half of this year, the National Bank will consider the feasibility of a smooth and prudent reduction of the base rate. Our decisions will largely depend on whether the actual price growth is consistent with forecast estimates, on steady deceleration of core inflation against a moderate impact of indirect effects of higher prices for fuel and lubricants and utilities, on the dynamics of inflation expectations as well as compliance with the budget rule in drawing up the budget for 2024-2025. At the same time, the probability of the base rate being lowered already in the next decision is assessed as low.

Governor of the National Bank of the Republic of Kazakhstan
Galymzhan Pirmatov

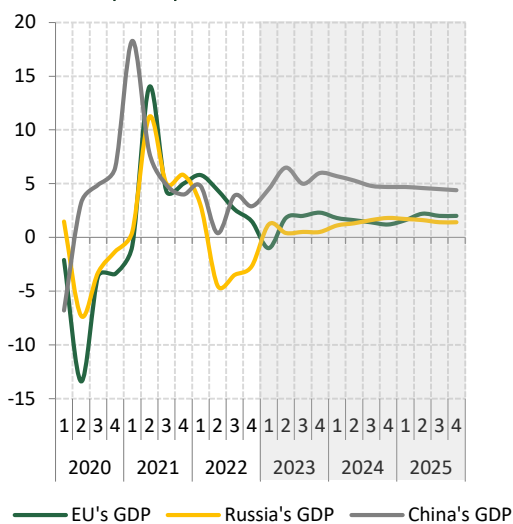


01

**PROSPECTS OF THE
DEVELOPMENT OF THE
MACROECONOMIC SITUATION**

I. PROSPECTS OF THE DEVELOPMENT OF THE MACROECONOMIC SITUATION

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 estimate

1.1. Forecast Assumptions

Compared to the “February 2023” forecasting round, assumptions regarding the development prospects of the global economy slightly changed. The IMF lowered its forecast for the global economic growth in 2023 from 2.9% to 2.8%, and for 2024 – from 3.1% to 3.0%. Developed economies are expected to slow down their upturn from 2.7% in 2022 to 1.3%-1.4% in 2023-2024 under the pressure of heightened inflationary background and high interest rates. Economic activity in developed countries in the same period will account for 4.0% on average, whereas the growth before the pandemic was at 4.4-5.0%.

On top of expectations about weaker global economic growth, the emerging problems in the banking sector in the US and Europe have intensified the fears of recession. Lingering risks of more steady inflation, further tightening of global financial conditions, a weak post-pandemic recovery in China, and a worsening global geopolitical environment also add to the uncertainty.

The updated forecasts for the EU suggest a more moderate slowdown in the economic growth in 2023 and a feebler growth during 2024-2025 (Figure 1). The improvement in estimates for 2023 came against a more positive-than-expected second half of 2022 and early 2023, which, on the one hand, was facilitated by lower energy prices, and, on the other hand, by a strong labor market. Over the medium term, estimates were lowered as a steady inflation in the EU is expected to lead to further tightening of monetary conditions, which will ultimately weigh on consumer demand, borrowing capacity and activity in the manufacturing sectors. In addition, it is not excluded that a dampening effect will also come from the projected weaker growth in the US, labor shortages and a possible spread of financial stress in the EU banking sector.

Compared to the preceding forecasting round, the forecast regarding the Chinese economy for 2023 was increased from 4.6% (YoY) to 5.5% (YoY) as a result of the exit from the pandemic (Figure 1).

Meanwhile, given the current data on the industry, investments, import and a near-zero growth of consumer prices, the recovery from the pandemic could take longer than anticipated.

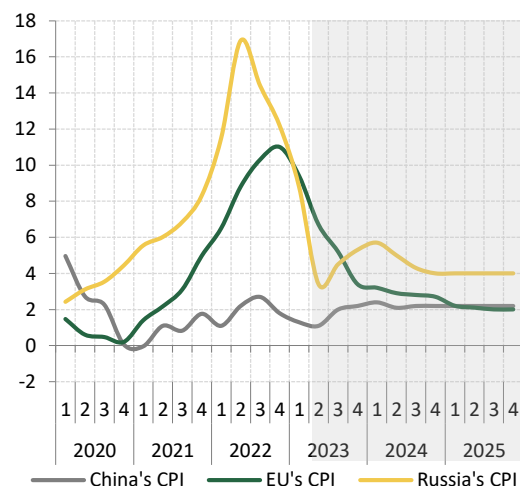
As a result, the rapid growth projected for this year may end up lower. Estimates for 2024-2025 have not changed significantly. As before, it is expected that by 2025 the Chinese economic growth will slow down to its potential levels.

Forecasts regarding the Russian economy have been also improved. While it was previously assumed that the Russian economy would resume its growth only by the end of 2023, now, due to a moderate decline in exports, improving economic sentiment, sustainable growth in the manufacturing industry, an expected increase in budget spending and stronger consumer demand, the recovery will take place at an earlier stage. The economic growth in 2023 is expected to be 1.3% (YoY), and will accelerate to 2.0% by the end of 2025 (YoY) (Figure 1). A narrow labor market and the strengthening of sanctions still represent risks of a feebler growth.

The IMF anticipates that in the nearest term the global inflation will remain to be steadier than it was expected earlier. In 2023, due to declining energy prices, the global inflation will decelerate from 8.7% in 2022 to 7.0% (the preceding forecast was 6.6%), and in 2024 to 4.9% (the preceding forecast was 4.3%). The core inflation, however, is expected to decelerate at a slower pace. The IMF expects that countries are unlikely to achieve their targets before 2025.

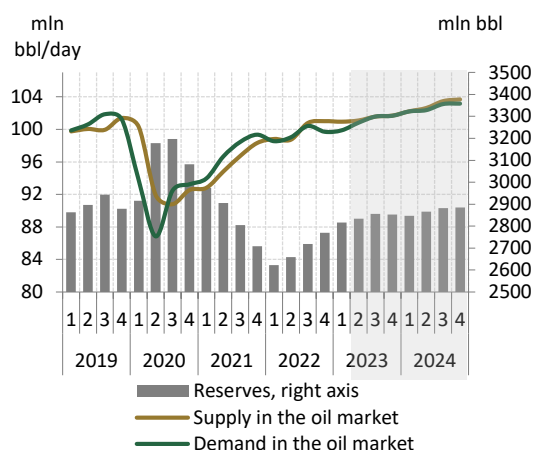
According to updated forecasts, inflation in China and Russia in the short term will be somewhat lower than previously projected. Further, due to the recovery of domestic demand and the expected weakening of the ruble against the US dollar, inflation in Russia will first accelerate and then will stabilize at the level of 4.0% by the end of the forecast period. In the EU, the target will be achieved only by the end of 2025. In China, inflation will accelerate slightly, but even despite this, it will be below the target level by the end of the forecast horizon (Figure 2) (Table 1).

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



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

Figure 3. Dynamics of the Global Oil Market



Source: EIA

Compared to the previous forecasting round, external monetary conditions have become a bit tighter in the short term due to steady inflation. Meanwhile, the emerging problems in the US and EU banking sectors strengthened the expectations about the end of the cycle of rate hikes in the world. Market participants expect that the US Fed rate hike in the summer will be temporarily suspended. At the same time, starting from this autumn, a gradual reduction in the rate is possible. The ECB’s monetary policy easing is not yet expected.

Just as in the “February 2023” forecasting round, the EIA expects that in 2023-2024 the supply of oil in the global oil market will be somewhat larger than its consumption. According to the EIA estimates, an overall oil surplus in 2023 may amount to 0.4 mln barrels a day, and in 2024 – 0.5 mln barrels a day (Figure 3).

Taking account of the existing factors and forecasts of international organizations, under the baseline scenario the Brent oil price by the end of 2023 will be 80 US dollars per barrel, which is somewhat lower than in the “February 2023” forecasting round. In 2024, the prices will stabilize at 80 US dollars per barrel, and by 2025, they will keep declining to 75 US dollars per barrel. Parameters under the pessimistic and optimistic scenarios are left unchanged. Under the optimistic scenario, the Brent price will be 110 US dollars per barrel, and under the pessimistic scenario – 50 US dollars per barrel (Figure 4) (Table 2).

Table 1. Forecast Assumptions under the Baseline Scenario

	2023	2024	2025
GDP, YoY, %			
China	5.5 (4,6)	5.1 (5,3)	4.6 (4,7)
EU	0.7 (0,2)	1.5 (1,6)	1.5 (2,0)
Russia	1.3 (-2,6)	1.5 (2,0)	2.0 (1,4)
Inflation, YoY, %			
China	2.2 (2,1)	2.2 (2,2)	2.2 (2,2)
EU	3.4 (3,5)	2.7 (2,3)	2.0 (1,7)
Russia	5.3 (5,0)	4.0 (4,0)	4.0 (4,0)

Source: forecasts by Consensus Ecs, NBK computations

* –the preceding forecast as part of the “February 2023” forecasting round is shown in the parenthesis

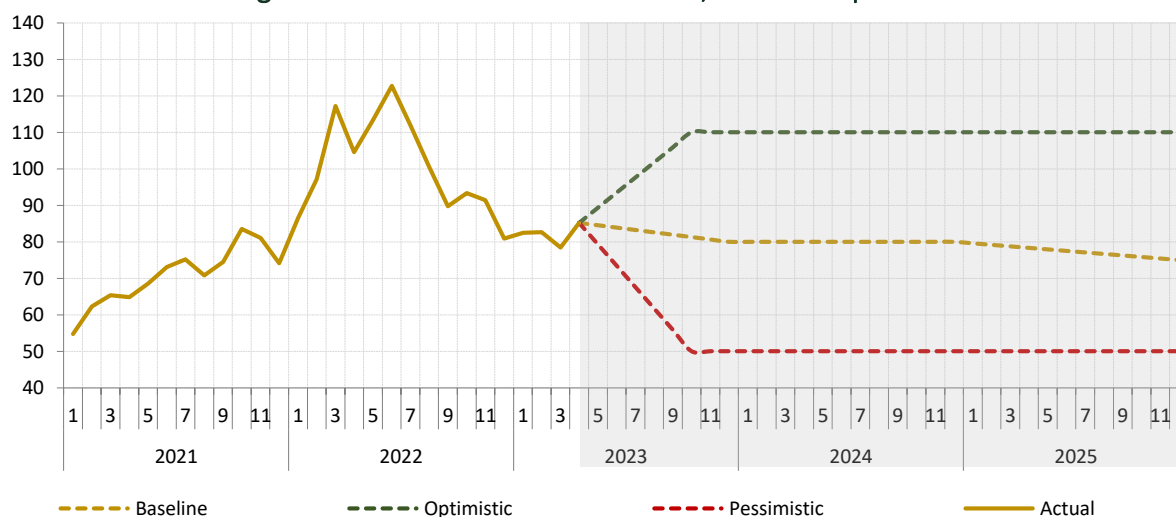
Table 2. Forecast Assumptions Regarding the Oil Price

	2023	2024	2025
Pessimistic scenario	68.1 (58,6)*	50.0 (50,0)	50.0 (50,0)
Baseline scenario	82.2 (87,7)	80.0 (85,0)	77.3 (77,3)
Optimistic scenario	95.6 (103,6)	110.0 (110,0)	110.0 (110,0)

Source: NBK computations

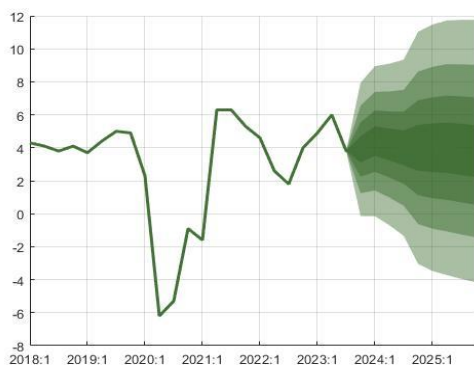
* –the preceding forecast as part of the “February 2023” forecasting round is shown in the parenthesis

Figure 4. Scenarios for Brent Oil Price, US Dollars per Barrel



Source: EIA, NBK computations

Figure 5. GDP, YoY, %



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

1.2. Dynamics of the Economic Development under the Baseline Scenario

Projections about the economic growth rates in Kazakhstan this year have been revised upwards due to higher actual growth rates of the economy, the expanding domestic demand in the environment of fiscal stimulus as well as increased exports.

From end-February 2023, business activity in the sectors of economy accelerated significantly and exceeded the National Bank's expectations. As of the end of January-April 2023, production of goods went up by 4.8% (YoY) and the volume of provided services – by 4.9%. Such dynamics reflect a steady realization of consumer demand, and expansion of investment demand supported by government economic development programs.

Under the baseline scenario, in the short term, the growth trend of domestic demand is expected to continue making the main contribution to the economic upturn. The household spending will hike because of the expected growth in real wages and household income due to slower inflation, as well as the effect of the last year's low base. Public sector demand will also remain strong given the continued social focus of government spending and fiscal stimulus. The expansion of investment activity will be supported by implementation of large infrastructure projects, which, in turn, led to an upward revision of the fiscal impulse in 2023. Completion of construction works on the plant project by the TCO will also positively contribute to the growth of investments. At the same time, high domestic demand will be accompanied by an increase in imports, which will stabilize the GDP growth. In addition to the demand, the growth in imports will be supported by a strong real exchange rate of the tenge. Exports will make a positive contribution to the economic growth due to an increase in oil output to 90.5 mln tons in 2023, as well as an improvement in external demand owing to higher growth rates in the economies of Kazakhstan's trading partners. **Therefore, as of end-2023, the real GDP growth is expected to be within 4.2-5.2% (Figure 5).**

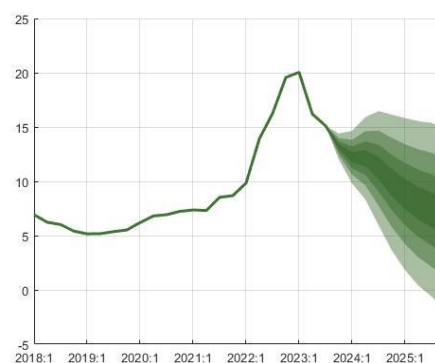
Forecasts regarding the GDP growth for the medium-term perspective have not undergone significant changes compared to the preceding forecasting round. In 2024-2025, given the increasing oil production including at the Tengiz oil field, growth rates of exports remain high. The domestic demand will be supported by continuing implementation of infrastructure projects. **The GDP growth in 2024-2025 is expected to be within 3.5-4.5%.**

The output gap defined as the percentage deviation of the actual GDP level from its potential will be in the positive zone throughout 2023-2025 with a gradual closure. This is related to the positive dynamics of domestic demand owing to the fiscal stimulus as well as growing exports due to the increasing oil production. Thus, the output gap will exert pro-inflationary pressure in the economy over the forecast horizon.

Inflation forecasts were revised upwards in the light of the planned increase of marginal prices on tariffs for regulated services, spillovers from appreciation of gasoline prices onto the overall price level and a higher fiscal impulse. Thus, in the baseline scenario, the annual inflation in 2023 will be in the range of 11-14% followed by deceleration to 9-11% in 2024 and 5.5-7.5% in 2025 (Figure 6).

The planned increase in prices for regulated utility services as well as direct and indirect effects from the rising prices for fuel and lubricants had been the main factors behind the revision of inflation forecasts. According to the National Bank estimates, the indirect contribution of the increase in prices for fuel and lubricants and utilities to the consumer price index will be from 1 to 2.5 percentage points. Given the inertia in inflationary processes, they will lead to a slower deceleration in annual inflation towards the medium-term target. Along with this, pro-inflationary pressure is expected from the procyclical fiscal impulse, which will support the domestic demand. At the same time, given the comeback to compliance with the countercyclical fiscal rule in 2024-2025, the fiscal impulse in the medium term will weaken.

Figure 6. Inflation, Quarterly Average, YoY, %



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

Inflation will be constrained by the restrictive nature of monetary conditions, an improvement in the external economic environment, which will be expressed through a further deceleration in food price growth and low inflation in the trading partner countries.

In the forecast period, after stabilization in the second half of 2023, inflation expectations will gradually decline. This will make inflation to strive towards the medium-term goal over the forecast horizon.

Table 3. Forecasts under the Baseline Scenario

	2023	2024	2025
GDP, YoY, %	4.2-5.2 (3.5-4.5)	3.5-4.5 (3.5-4.5)	3.5-4.5 (3.5-4.5)
CPI, Dec. to Dec. of the preceding year, %	11-14 (9-12)	9-11 (6-8)	5.5-7.5 (4-6)
Brent oil, in US dollars per barrel, yearly average	82	80	77

Source: NBK computations

* –henceforth, the preceding forecast as part of the “February 2023” forecasting round is shown in the parenthesis

1.3. Alternative Forecast Scenarios

In view of the persisting uncertainty regarding the development of global economy amid unstable geopolitical situation, the National Bank, in addition to the baseline scenario, in making a decision on the base rate, also considered other alternative scenarios – pessimistic and optimistic.

If the **pessimistic** scenario is realized, oil prices will gradually decline to 50 US dollars per barrel and remain at this level until the end of 2025. Such dynamics of oil prices will be driven by the lowering global demand for oil due to the negative dynamics of the economies in importing countries (a prolonged global recession in the light of a tense geopolitical situation) with a concurrent gradual increase in oil output in the light of termination of the OPEC+ agreement on reducing oil production and growth in oil production in non-OPEC countries.

If the pace of development goes under the pessimistic scenario, the demand for Kazakhstani export commodities, primarily for oil, will be subdued. This factor, together with a lower oil price, will limit business activity in the extractive industries, which will also have a negative impact on the related sectors such as construction, transport, trade and other services, and on investments in the economy as a whole. A more sluggish activity in the economy will lead to lower household income and a corresponding weakening of consumption. Nonetheless, under a new countercyclical fiscal rule coming into effect from 2023, such domestic demand dynamics will be less subdued. As a result, **the GDP growth rates will account for 3.2-4.2% in 2023 and 3-4% in 2024-2025.**

Under the pessimistic scenario, inflation will decelerate at a slower pace than under the baseline scenario. Despite feebleness of economic activity, a weaker real effective exchange rate of the tenge and higher inflation expectations will cause increased inflationary pressure. **In 2023, inflation will be 13-15%, in 2024 – 11-13%, in 2025 – 7-9%.**

Should the global economy develop under the **optimistic scenario**, oil prices will gradually rise to 110 US dollars per barrel and stay at that level until the end of the forecast period. Higher oil and commodity prices in general will be supported by a faster growth of the global economy due to lower geopolitical tensions, the restoration of active trade relations and deceleration of inflation in developed and developing countries, while maintaining a moderate global oil production.

High world prices for minerals and strong external demand will have a more positive impact on the business activity in Kazakhstan than under the baseline scenario. **The economic growth in 2023 will make up 4.7-5.7%, in 2024 – 4.5-5.5%, in 2025 – 4-5%.**

In case of the optimistic scenario, inflation will be decelerating to its targets faster than under the baseline scenario. This will be ensured by the robust dynamics of the tenge exchange rate and lower external inflationary pressure. **In 2023, inflation will be building within 10.5-13.5%, in 2024 – 8-10%, in 2025 – 5-7%.**

Table 4 (a). Forecasts under the Pessimistic Scenario

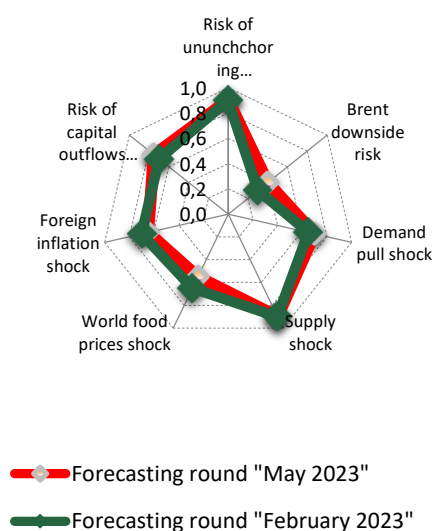
	2023	2024	2025
GDP, YoY, %	3.2-4.2 (2.5-3.5)	3-4 (3-4)	3-4 (3-4)
CPI, Dec. to Dec. of the preceding year, %	13-15 (11-14)	11-13 (7-9)	7-9 (5-7)
Brent oil, in US dollars per barrel, yearly average	68	50	50

Table 4 (б). Forecasts under the Optimistic Scenario

	2023	2024	2025
GDP, YoY, %	4.7-5.7 (4-5)	4.5-5.5 (4.5-5.5)	4-5 (4-5)
CPI, Dec. to Dec. of the preceding year, %	10.5-13.5 (8.5-10.5)	8-10 (5-7)	5-7 (3-5)
Brent oil, in US dollars per barrel, yearly average	96	110	110

Source: NBK computations

Figure 7. Risk Map based on the Expert Judgment



1.4. Risks in the Medium Term

Compared to the preceding forecasting round, the aggregate of risks of inflation acceleration slightly decreased, being largely related to external factors. However, risks on the part of internal factors remain high (Figure 7).

Such factors as the tense geopolitical situation in the world, a possible global recession due to the growing problems in the financial sector in a number of developed countries as well as the degree of influence of tariff-making for fuel and lubricants and regulated utility services on domestic prices are causing considerable uncertainty about the dynamics of forecasts of macroeconomic indicators of Kazakhstan. Thus, despite a slight reduction in risks from the external sector, the risks of inflation deviating from its forecasts remain high.

Compared to the preceding forecasting round, the risk of importing high global food inflation has somewhat decreased due to the persisting disinflationary dynamics of world prices for basic foodstuffs. However, a long-term underutilization of crop areas in Ukraine, adverse weather conditions due to the changing climate may cause a high increase in world food prices in the medium term. Moreover, the persistence of high food production costs in Kazakhstan may prevent low world prices from being passed on to domestic prices.

Compared to the preceding forecasting round, the risk of importing external inflation slightly decreased due to its deceleration worldwide. However, the stable part of inflation (core inflation) in the world is still high; in future, this may cause inflation to remain high for a long time. Moreover, in Russia as one of the main trading partners of Kazakhstan, despite low growth rates of both annual and monthly inflation, a stronger price rise is possible in the context of the observed depreciation of the ruble, the growing budget spending and an increase in the costs of the economy because of a change in supply sources.

At the same time, the risk of capital outflow from emerging markets in favor of advanced economies has somewhat increased. Thus, due to the persistent inflationary pressure in the world, the central banks of developed countries may continue to pursue a tight monetary policy, thereby increasing pressure on the exchange rates of emerging markets.

Another risk factor could be an increase in the number of defaults by financial organizations worldwide, which could lead to a global financial crisis and further depreciation of exchange rates of emerging markets. In addition, the impact of the EU-imposed embargo on export of Russian oil as well as possible problems with the Caspian Pipeline Consortium, may negatively affect the export of Kazakhstani oil and reduce foreign exchange proceeds, which may also be a negative factor for the tenge exchange rate.

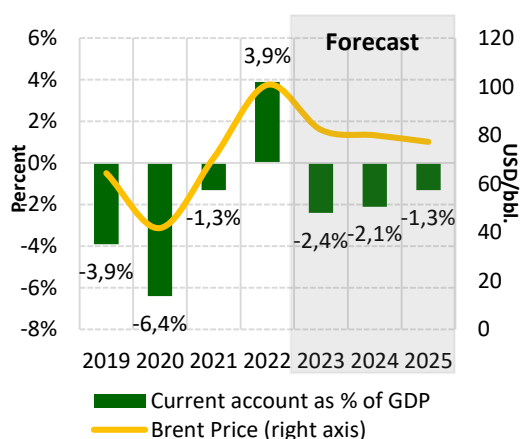
Problems in the financial sector may also become a significant factor in slowing down the growth of the global economy and cause a significant drop in prices for oil and other commodities. However, the continued upturn of the global economy, OPEC+ measures to prevent the accumulation of imbalances in the oil market to some extent limit the emergence of a serious oil surplus in the world; therefore, the risk of a significant fall in oil prices, although having increased, looks less pronounced than other risks.

Internal risk factors have not changed significantly but continue to be at high levels. Thus, an increase in prices of fuel and lubricants and regulated utility services, in addition to direct impact on inflation (through its presence in the consumer basket), can also have a multiplier effect on the prices of a wide range of goods and services. In addition, a long-term restructuring of logistical links with Russia may reduce the supply of goods or lead to an increase in their cost. The above risks are supply-side factors and can cause a surge in prices for final products.

In this regard, the risk of inflation expectations anchoring at high levels due to high current inflation and sensitivity to dynamics of prices for food and fuel and lubricants remains significant.

Finally, the risk of inflationary pressure from the domestic demand remains high in the context of increased fiscal stimulus this year. Given the low fiscal discipline and periodic upward revision of government spending in prior years, it is not excluded that the budget parameters in the years to follow can be further revised towards expanding the expenditure side, which can become an additional source of pro-inflationary pressure in the economy. Moreover, a risk of increased demand for consumer goods from Russian citizens in connection with sanctions and geopolitical escalation is persisting.

Figure 8. Current Account of the Balance of Payments



Source: NBK's forecast

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

Under the baseline scenario, the current account of the balance of payments will move from a surplus zone of 2022 to a deficit zone in the medium-term. The transition to a deficit zone in 2023-2025 will be driven by significant growth in import of goods and a decrease in projected oil and metal prices.

The expected transition of the current account from a surplus of (+)3.9% of GDP in 2022 to deficit values of (-)2.4% of GDP in 2023, (-)2.1% of GDP in 2024 and (-)1.3% of GDP in 2025 is expected to be the result of the following factors (Figure 8).

Import of goods according to the balance of payments methodology will continue to grow significantly over the forecast horizon, exceeding the all-time high of 2022 of 49.8 bln US dollars. This growth will be driven by insufficiency of domestic production to meet the growing needs of the population and businesses, implementation of fiscal stimulus via government programs supporting the economy and infrastructure projects, gradual resumption of transit trade due to the opening of the “Khorgos” International Center for Cross-Border Cooperation. In addition to personal and borrowed funds of the population and businesses, increasing fiscal expenditures will serve as a financing source of the high domestic demand for imported goods.

The export of goods according to the balance of payments methodology in the medium term will be formed under the influence of divergent factors. Pressure on exports will be exerted by the projected gradual decline in oil prices from the actual 100.8 US dollars per barrel in 2022 to 77.3 US dollars per barrel by the end of 2025, by the adjustment of the last year's high average contractual prices for metals, gas and cereals as well as by the redirection of gas to the domestic market due to increasing domestic consumption. According to the baseline scenario, export of goods will be supported by increase in oil production at three large oil fields, planned expansion in uranium production, and growth in the production of ferrous metals due to the completion of a ferroalloy plant construction.

The **income balance** deficit will moderately widen and remain at sufficiently high levels. A moderate expansion of the deficit in the forecasting horizon will be a result of offsetting the projected decrease in oil and metal prices by increase in oil production. Accrued interest payments will reach the historical maximum in 2023 and will begin to decrease from 2024 due to the expected easing of monetary policy by central banks-issuers of reserve currencies.

The deficit of the **balance of services** over the forecast horizon will increase in the forecasting horizon due to the faster growth rate of service imports compared to exports. Exports of services will grow due to transportation services driven by a moderate increase in pipeline transit of the Central Asian gas to China and the growing volume of shipments by road and railway transport across the territory of Kazakhstan, as well as by an increase in travel due to a rise in the number of foreign visitors. On the other hand, service imports will rise due to freight, resulting from the expected growth in import volumes of goods, increasing travel, and moderate growth in the consumption of business services.



02

MONETARY POLICY

II. MONETARY POLICY

2.1. Decisions on the Base Rate

In the second quarter of 2023, two decisions about the base rate have been made.

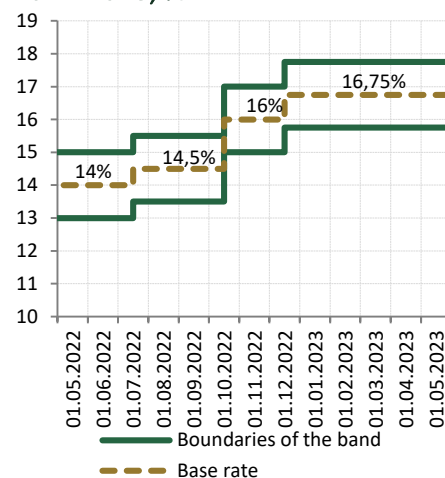
On April 7, 2023, the Monetary Policy Committee decided to keep the base rate at 16.75%. The decision was made in conditions when actual inflation was decelerating, while the pressure on prices from the external sector and the domestic economy was persisting.

The realization of internal factors in the form of unstable inflation expectations, an increase in government spending, and rise in prices for fuel and lubricants was observed. External factors were associated with the persistently high global inflation, despite its gradual slowdown. Therefore, the balance of factors necessitated maintaining the base rate at a constant level.

In March-April 2023, the annual inflation, after reaching its peak in February, started to go down gradually. As of end-April, it was 16.8%.

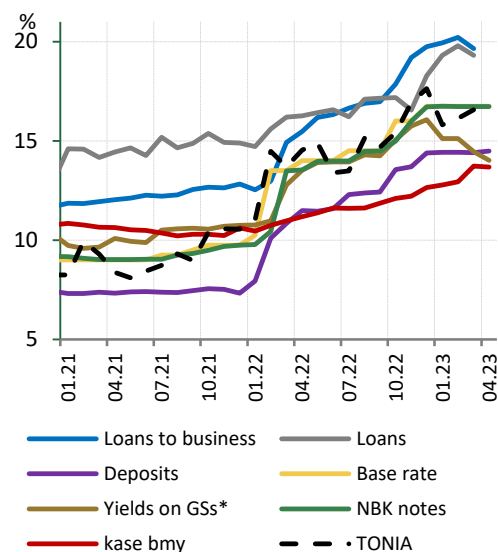
On May 26, 2023, the Monetary Policy Committee made the decision to retain the base rate at 16.75% per annum with the band of ± 1 pp (Figure 9). The balance of inflation risks shifted slightly towards disinflationary factors against the easing pressure from the external sector caused by slower growth of world food prices and inflation in the trading partner countries. At the same time, pro-inflationary pressure inside the economy remains. This is associated with a stimulative fiscal policy, steady domestic demand, high and unstable inflation expectations as well as rising prices for fuel and lubricants and utilities.

Figure 9. The Base Rate Bands in 2022-2023, %



Source: NBK

Figure 10. Dynamics of Changes in the Base Rate and Interest Rate in the Markets, %



Source: KASE, NBK

* Weighted average yield on placed government securities of the MF RK

2.2. Monetary Conditions

The National Bank's rhetoric about the end of the cycle of the base rate increase in December 2022 led to an increased demand for government securities; this had a downward effect on the interest rate setting in the government securities market. Thus, the weighted average yield on government securities in April 2023 declined by 1.1 bp compared to January and had set at 2.7 bp below the base rate (Figure 10). A high demand from the market participants was conducive to reduction in the yield on government securities.

Index of corporate bonds yields (KASE_BMY¹) in February-April 2023 was also building below the lower boundary of the base rate band, however, in April the index showed a 0.9 bp growth compared to January.

Since the beginning of the year, the weighted average rate on loans to businesses in the tenge remained at 19.7% in March 2023.

Given invariance of the base rate during 2023, general rates on corporate deposits in the tenge and retail deposits changed insignificantly. Meantime, the spread between TONIA rate and the general rate on the tenge deposits narrowed: from 3.04 pp in April 2022 to 2.43 pp in April 2023.

Box 1. Quantitative Assessment of Efficiency of the Interest Rate Channel of the Monetary Policy Transmission Mechanism in Kazakhstan

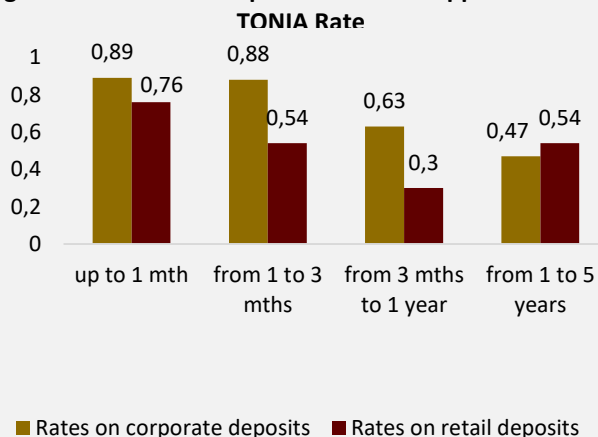
The interest rate channel is the main channel of the transmission mechanism within the framework of the inflation targeting regime. The interest rate channel reflects the impact of monetary policy decisions on market rates, whose changes influence the choice of borrowers and depositors between current and future consumption.

As part of analyzing the efficiency of interest rate channel in Kazakhstan, the assessment of the TONIA² rate transmission onto interest rates on corporate and retail loans and deposits by maturities was performed. The analysis was carried out by applying vector autoregression models using monthly data during the inflation-targeting period – from early 2016 to February 2023. Along with the TONIA rate and the analyzed interest rate, the change in the exchange rate of the tenge against the US dollar and a short-term economic indicator were additionally included as endogenous variables.

¹ The KASE_BMY list representative also includes bonds of the quasi-public sector where the yield can be lower than the market

² 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.

Figure 1. Reaction of Deposit Rates to a 1 pp Shock in the



is gradually weakening (Figure 1). Probably, this is related to the fact that banks factor in their pricing of deposit rates a higher uncertainty about the economic situation in Kazakhstan over a longer horizon.

Rates on retail deposits.

A pass-through of the TONIA rate onto rates on retail deposits is weaker compared to corporate deposits. Nonetheless, the effect of the TONIA rate on retail rates remains significant. The shock in the TONIA rate of 1 pp leads to the growth in interest rates on

retail deposits with maturity of up to one month by **0.76 pp (within one year after the shock)**; however, the reaction by interest rates on retail deposits with maturity of up to 3 months to the same shock is much weaker – a growth by **0.54 pp** (Figure 1). It is noteworthy that the graphical analysis of rates on all corporate deposits and deposits of the population also demonstrates correlation with the dynamics of the TONIA rate (Figures 2,3).

Rates on corporate deposits. Among interest rates of various maturities, rates on short-term corporate deposits are the most sensitive to the TONIA rate. The largest effect produced by the TONIA is on corporate deposits with maturities of up to 1 month and from one to three months. Thus, a one percent positive shock in the TONIA rate leads to a rise in rates on corporate deposits with maturities of up to one month and from one to three months by **0.89 pp** and **0.88 pp**, respectively, within one year after the shock. At the same time, once

the deposit maturity becomes longer, the response from interest rates on corporate deposits

Figure 2. Dynamics of Rates on Term Corporate Deposits in the Tenge, by Maturities

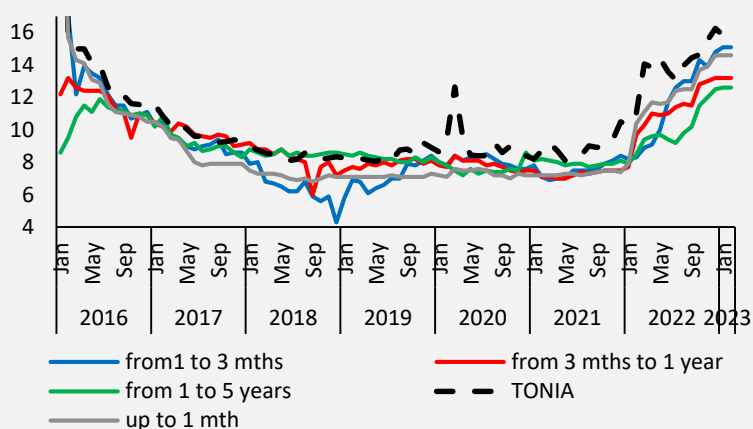
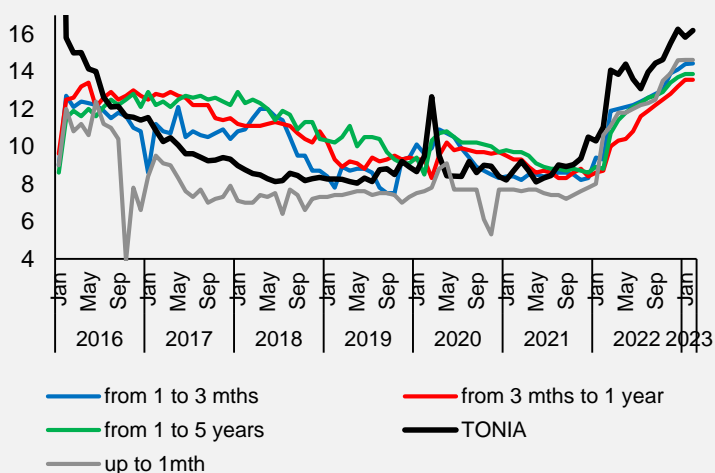


Figure 3. Dynamics of Rates on Term Retail Deposits in the Tenge, by Maturities



Based on the results obtained, one may note that the operational benchmark – TONIA rate – exerts a significant effect on the cost of bank funding. Further, money markets have a stronger influence on interest rates on corporate loans.

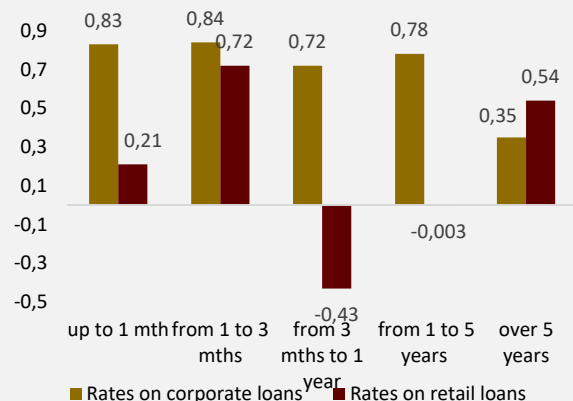
Corporate lending rates. A positive shock in the TONIA rate of one pp leads to a sizable increase in interest rates – by **0.83 pp** and **0.84 pp** on corporate loans with the maturity of up to 1 month and up to 3 months, respectively, during one year after the shock. Moreover, TONIA also demonstrates a fairly strong influence on the rates of up to one year and from one to five years (by **0.72 pp** and by **0.78 pp**, respectively). In terms of interest rates on

loans with the maturity over five years, the effect exerted by the TONIA is weaker (Figure 4). Such result is expected since the cost of long-term lending depends not only on monetary conditions but also on long-term

inflation expectations, potential rates of economic growth, and the degree of uncertainty about the economic situation in the long-term perspective, etc.

Retail lending rates. A positive interest rate shock in the TONIA leads to a rise in interest rates on loans with the maturity from 1 to 3 months by **0.72 pp**, loans with the maturity of up to one month – **by 0.21 pp** within a year after the shock (Figure 4).

Figure 4. Reaction of Loan Rates to the Shock in the TONIA Rate



As for retail rates on other maturities, the effect of TONIA with a correct sign is not observed. It is worth mentioning that **consumer loans** account for the main portion in loans to the population. According to received impulse responses, a general rate on consumer loans is less elastic to the change in the base rate and TONIA, which is probably caused by the following reasons:

- 1) an effective interest rate on such types of loans is way above the TONIA rate;
- 2) a cost of consumer loans is distorted by a significant portion of instalment purchases and marketing campaigns from many banks.

At the same time, since the 2022, following the growth of TONIA, interest rates on consumer loans at banks have been showing an upward trend. Therefore, influence by the base rate and the TONIA rate on the cost of consumer loans is not excluded.

In addition to consumer loans, mortgage loans are also included in the list of loans provided to individuals. According to estimates, the reaction of the mortgage rate is observed; however, it is limited because of concessional lending (The program “7-20-25”, Otbasz Bank, etc.) at rates below market levels. As a result of a high percentage of subsidized mortgage loans, a 1pp shock in the TONIA rate increases the mortgage rate by 0.24pp in the year following the shock.

However, following the increase in the money market rate from 2022, mortgage rates also went up, with the exception of Otbasz Bank rates; this indicates that the transmission of the TONIA rate onto non-concessional mortgage rates is in effect.

Given the above, the money market interest rate TONIA plays a significant role in the transmission of monetary policy and influences the cost of bank funding and lending rates. Transmission occurs more efficiently on the rates of short-term corporate and retail deposits as well as on the rates of short-term corporate loans. In addition, the TONIA rate also has an impact on consumer and mortgage loans but the impact is more moderate and is probably limited to concessional mortgage programs and instalments from STBs.

2.3. Money Supply

The growth rate of money supply, after its deceleration in February, accelerated in March-April 2023. The main contribution to the buildup of the money supply continued to be made by the credit channel owing to the increased lending to the population and businesses. The reserve money in April kept contracting in annual terms.

In April 2023, the money supply in the economy went up by 16.1% YoY (in April 2022 – 7.9%) and equaled 33.6 trln tenge (Figure 11).

Retail loans (12.3 pp) and loans to businesses to a lesser extent (2.5 pp) continued to make the main contribution to the annual growth in money supply. The contribution by net foreign assets was 5.6 pp as a result of increase in their foreign currency portion. The fiscal channel was also promoting the growth in money supply (3.6 pp) given the increasing issuance of government securities by the Government.

The money supply in the tenge, after the seasonal deceleration in February 2022, had sharply accelerated its growth rates to 25% in March because of the lower base of last year's March and accrual of compensation to retail deposit accounts in the tenge. In April, the volumes of money supply in the tenge have not changed versus March 2023, while the annual growth stood at 25% (Figure 12).

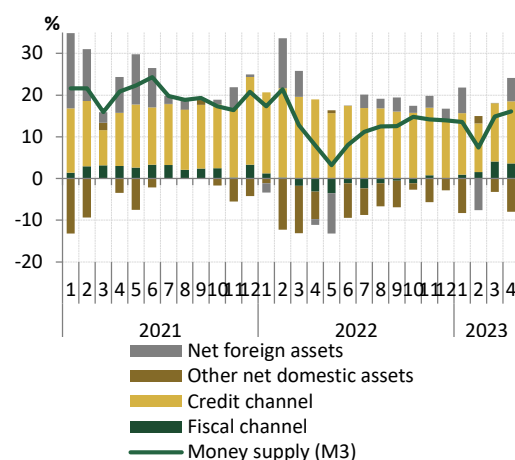
In April, the reserve money contracted by 1.1% over the year, and by 17% - since the beginning of the year.

2.4. Money Market

During February-March 2023, the balance of the NBK's operations was increasing (liquidity surplus) due to the growing budget deficit. In April, the balance went down to the January 2023 levels given the increase in Government's funds deposited at the NBK, including due to the growth in the issuance of government securities. Money market rates continued to set closer to the lower boundary of the band, except certain periods.

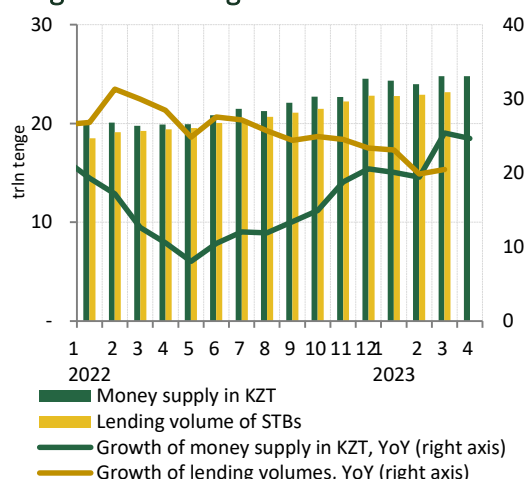
The largest growth in the balance on NBK's operations by 12.1% MoM (60.5% YoY) occurred in March 2023 as a result of the increasing liquidity against the growing budget deficit as well as payment of compensation on deposits as part of the Tenge Deposit Protection Program.

Figure 11. Money Supply, YoY, %



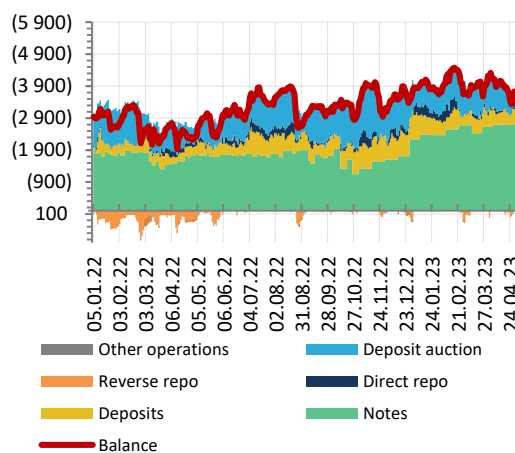
Source: NBK

Figure 12. Money Supply in the Tenge and Lending Volumes of STBs



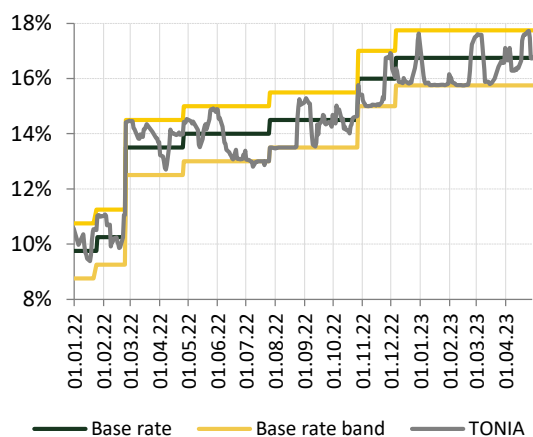
Source: NBK

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



Source: NBK

Figure 14. Interest Rate Band and TONIA



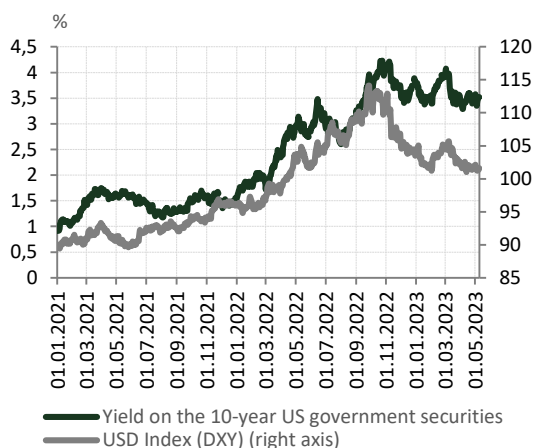
Source: NBK, KASE

The bulk of liquidity during February-April was generally withdrawn via notes amounting to 2.6 trln tenge, deposit auctions – 0.8 trln tenge and deposits – 0.4 trln tenge (Figure 13).

The money market rate TONIA during February-April was setting primarily near the lower boundary of the band, except during the periods of tax payments (end of February – beginning of March, and the second half of April). The average of TONIA rate in February-April was 16.6% (Figure 14). The spread between TONIA and the base rate on average during February-April 2023 was (-) 0.2 pp.

2.5. Foreign Exchange Market

Figure 15. Yield on the 10-Year US Treasuries, DXY



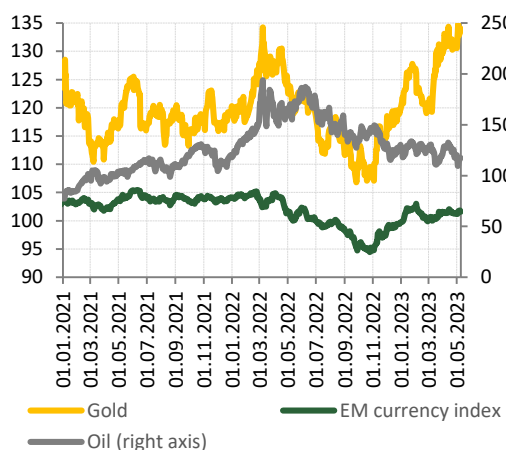
Source: Refinitiv

In February-April 2023, the exchange rate of the tenge appreciated by 1.6% from 460.5 to 453.2 tenge per the US dollar. This was nurtured by a capital inflow from foreign investors in the government securities market, a worldwide depreciation of the US dollar as well as a persistently high interest rate differential between deposits in the tenge and in foreign currency.

Given deceleration of the overall price growth, central banks of developed countries in February-April 2023 constrained the pace of monetary tightening by increasing the policy rate at lower levels.

The bankruptcy of some of the US banks in mid-March, which appeared to be the largest bankruptcy case since 2008, intensified the risks of recession. This led to reduction in the yields on US Treasury bonds and a global depreciation of the US dollar. As of end-March 2023, the US dollar index declined by 2.3% from 104.9 to 102.5 points, and yield on the 10-year US treasuries decreased from 3.9% to 3.5% (Figure 15).

Figure 16. Dynamics of the EM Currency Index, and of the Price of Gold and Oil (31.12.2019=100)



Source: Refinitiv

Risks of financial stability in the banking sector of the US and Europe be worsening and the uncertainty regarding the prospects for global economy caused appreciation in the price of gold by 9.5% to 1983 US dollars in April 2023 (Figure 16).

Oil quotes in April went down compared to January by 5.9% to 79.5 US dollars per barrel.

Minor optimism in the oil market in February, owing to the demand for fuel in China, was replaced by risks of recession

in March, putting pressure on oil quotes.

The current weak data on the economic activity in China fueled the decline in oil quotes.

In early April, given the announcement of a voluntary reduction in oil production by the OPEC+ countries to maintain the stability of the oil market, quotes showed an increase. However, due to intensified fears of a recession after the release of weak macroeconomic data from the US market, oil began to cheapen.

The sale of foreign exchange proceeds by the quasi-public sector entities helps maintaining the supply in the foreign exchange market. Their average share of participation in the trades during February-April 2023 accounted for 9.6%.

Sales of foreign exchange from the National Fund as part of transfer to the budget ensured a more significant support to the supply in the foreign exchange market. Their average share of participation in February-April was 21.8% of the total trading volume – 1.9 bln US dollars in absolute terms.

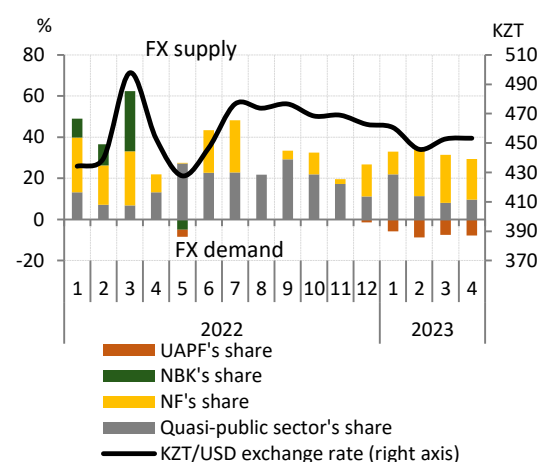
It is noteworthy that in order to maintain a foreign currency portion of the UAPF pension assets at 30%, the National Bank in February-April purchased foreign exchange for 698 mln US dollars.

Generally, the exchange rate of the tenge is forming under the influence of market factors.

The range of the exchange rate movements in February-April expanded to 431-466 tenge (25 tenge) per the US dollar, while in November 2022-January 2023 the range was 459-474 tenge (15 tenge) per the US dollar (Figure 17).

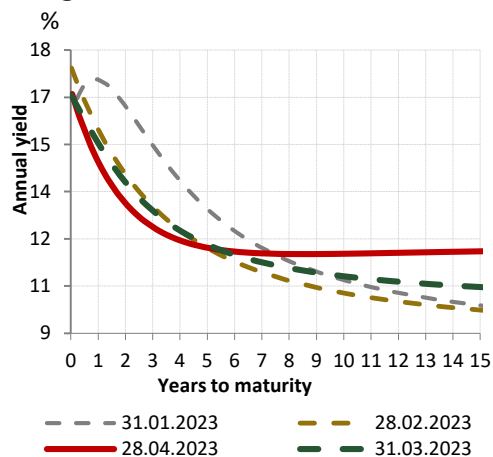
The average daily volume of stock exchange trading in February-April 2023 went up by 11.6% YoY and reached 148.4 mln US dollars (in November 2022-January 2023 – 125.7 mln US dollars, in February-April 2022 – 133.0 mln US dollars).

Figure 17. The Share of Certain Market Participants in the Currency Sales



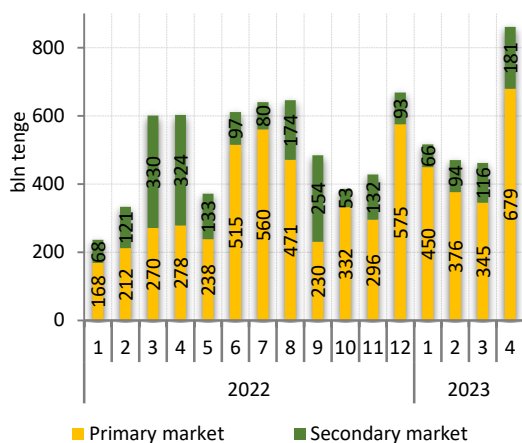
Source: KASE, NBK

Figure 18. Risk-Free Yield Curve, %



Source: KASE, NBK

Figure 19. Transaction Volume in the GS Market, Bln Tenge



Source: KASE, NBK

2.6. Stock Market

In February-April 2023, the trading volume in the government securities market increased significantly versus the same period of the last year. In April 2023, a record-high volume of trades in the primary government securities market was observed. The government debt traded on the Kazakhstan Stock Exchange keeps going up (a 5.6% increase on a year-to-date basis).

The risk-free yield curve, after its “hump” shape in February-April 2023, became “inverted” (reverse). Given the increased demand for government securities and the growing share of non-resident participants in the GS market, the yield on short- and medium-term sections of the yield curve was decreasing.

The corporate yield bond index (KASE_BMY) since the beginning of 2023 increased by 1.03 bp to 13.69 points. The trading volume in the corporate bond market in February-April 2023 decreased after high values in November 2022 - January 2023 due to large placements by the “Kazakhstan Sustainability Fund” JSC.

In April 2023, the KASE index went up by 7.5% to 3 542.8 points compared to January.

In the environment of expectations about the monetary policy easing and the expanding participation of non-residents, the demand in the primary market of GSs of the MF RK was increasing. As a result, the April yields on GSs in the segment from one to five years on the risk-free yield curve notably decreased (by 188.2 bp on average) versus January 2023 (Figure 18).

As of the end of April 2023, the volume of outstanding GSs in the national currency has increased by 1.6 trln tenge since the beginning of 2023 and amounted to 18.5 trln tenge; such growth is associated with the increased placement by the MF RK.

The trading volume of GSs of the MF RK in February-April 2023 continued to grow versus November 2022-January 2023 mainly owing to the primary market (Figure 19).

Issuance of government securities in the primary market in February-April 2023 increased by 6.05% versus November 2022-January 2023 and amounted to 1 400 bln tenge. Borrowings by the MF RK of 1393.4 bln tenge account for a significant portion in the issuance (a 6.6% growth compared to November 2022-January 2023) at 11.5-17.7%. The remaining volume fell on local executive authorities.

The bulk of trading in the primary GSs market in February-April fell on the short- and medium-term period from one to eight years amounting to 1 197 bln tenge with a yield of 11.6%-17.71%, and at longer-term sections from 9 to 16 years – 195.9 bln tenge at 11.5%-15.55% (Figure 20). In April, there was a record-large monthly volume of trades in the primary GSs market totaling 672.6 bln tenge (April 2022 – 256.7 bln tenge), 17 issues with maturity from one to 14 years were placed. It is worth mentioning that at the end of April, the MF RK issued 37.3% of the GSs issue³ planned for 2023 in the primary market.

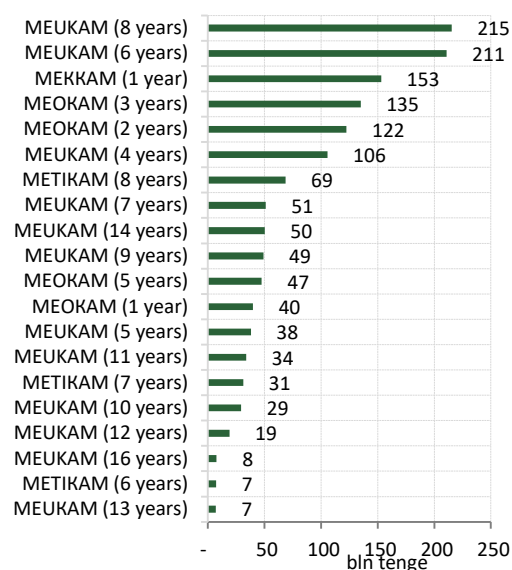
Non-residents’ participation increased to 2.7% in April from 2.2% in January (Figure 21). In general, the measures to increase liquidity of government securities initiated from 2020, including a wide differential of Kazakhstani government securities with bonds issued in other countries is a factor of attractiveness of Kazakhstani GSs for foreign investors.

The volume of trades in the corporate bond market, after high numbers in November 2022 - January 2023 (939.7 bln tenge) given large placements by the “Kazakhstan Sustainability Fund” JSC, went down to 502.9 bln tenge in February-April 2023. Volumes of placements in the primary market reduced in half and transaction volumes in the secondary market – by 37% (Figure 22). The corporate yield bond index KASE_BMY since the beginning of 2023 has grown by 1.06 bp to 13.69 points.

Capitalization of the KASE equities market at the end of April 2023 equaled 22.8 trln tenge, exceeding that of January by 5.1%.

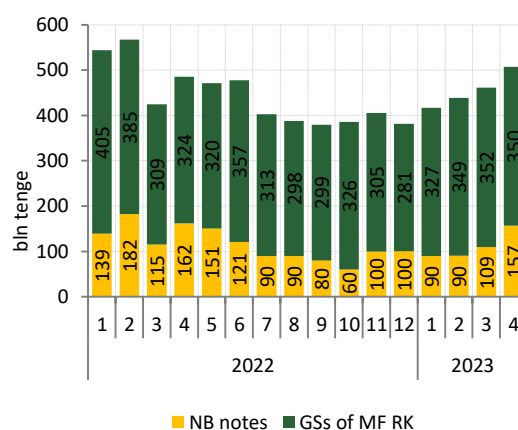
The trading volume in the equities market decreased to 86 bln tenge in February-April 2023 (where equities of KASE Global amount to 4.7 bln tenge) from 229.1 bln tenge in November 2022-January 2023. (Figure 23). However, given the public offering of shares of the “NC “KazMunaiGas” JSC

Figure 20. Placed GSs of the MF RK, by Maturities, Bln Tenge



Source: KASE

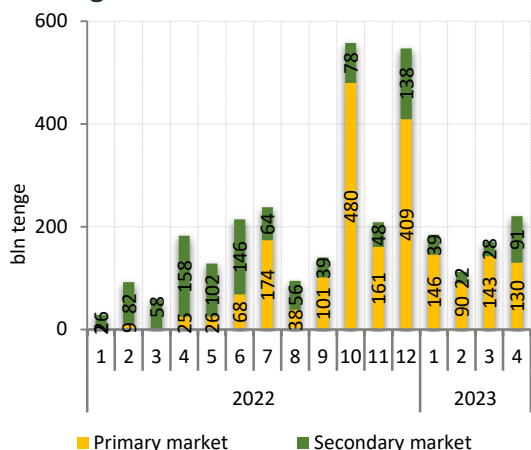
Figure 21. Volume of GSs Held by Non-Residents, Bln Tenge



Source: KASE

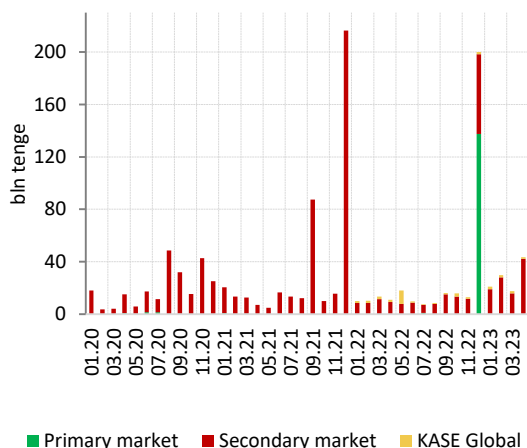
³ <https://www.gov.kz/memleket/entities/minfin/documents/details/391888?lang=ru>

Figure 22. Transaction Volume in the Corporate Bond Market, Bln Tenge



Source: KASE

Figure 23. Trading Volume in the Equities Market

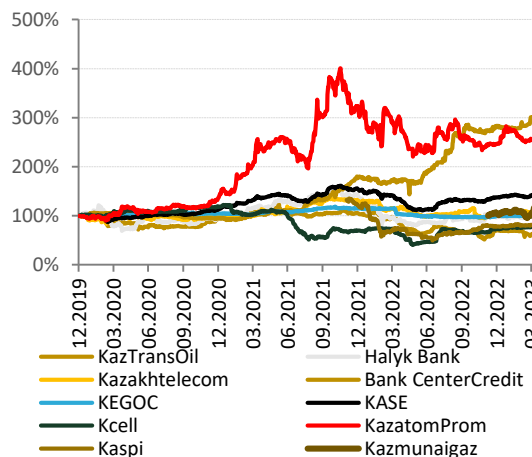


Source: KASE

and their active trading, the overall volume of trading in equities nearly tripled on a YoY basis. It is worth mentioning that the share of participation by non-residents in the equities market in the total turnover increased considerably from 13.8% in December 2022 to 35.7% in April 2023 (32.8% in January).

In April, the KASE index grew by 7.5% versus January to 3 542.9 points (Figure 24). The largest volume of trades was in the common stock of the “NC “KazMunaiGas” JSC exceeding 80% of the total volume of trading in index-linked stock.

Figure 24. KASE Index and Components (Dec.2019=100)



Source: KASE, Thomson Reuters

Box 2. Can the Stock Market Act as the Channel of Influence on Inflation?

Over the past two decades, in order to develop the stock market of Kazakhstan, a number of considerable measures have been implemented: the Almaty Regional Financial Center was established in 2005, the Astana International Financial Center (AIFC) was founded in 2018, a series of the so-called “People’s IPO” (Initial Public Offering) of large national companies, which is underway, has been conducted, and digitalization is being actively introduced.

In the past few years, the list of stock market instruments has been expanded (restrictions have been lifted for issuing shares of investment funds by the stock exchange, creating an infrastructure for “green” bonds issuance, etc.)⁴. In addition, the trading in foreign equities was launched in a new sector – KASE Global, where equities of 41 companies are traded including securities of Amazon, Boeing, Netflix and others that were not available before on Kazakhstani platforms.

⁴ If at the beginning of 2020, only 7 securities of investment funds were offered on the KASE floor, as of June 1, 2021, their list has been extended to 17 items, due to the inclusion of Mutual Investment Funds managed by the “Halyk Finance” JSC, BCC Invest JSC”, “First Heartland Jysan Invest” JSC, “East-West” LLC, as well as two ETFs.

Despite this, the securities market of Kazakhstan remains largely underdeveloped. Thus, the total share of securities market (including transactions in government securities and corporate bonds) in the total trading volume at the KASE in 2018-2022 averaged 4.3%. Moreover, the share of equities in the total volume of securities is insignificant. In particular, at the end of 2022, the trading volume of government securities amounted to 6.0 trln tenge, corporate bonds - 2.5 trln tenge, whereas the equities market – only 0.3 trln tenge.

An insufficient development of the securities market deprives many market participants of good opportunities: producers of goods and services could have financing alternative to bank loans, investors – an additional investment instrument. Besides, the development of the stock market would enable to expand the volume of infrastructure financing, as well as the growth in volumes of the entire financial market. In terms of production, a direct consequence of the appearance of an additional source of funding would be the growing output, increased employment, and more tax revenues. Thus, the slowdown in development of the stock market leads to the loss of these opportunities.

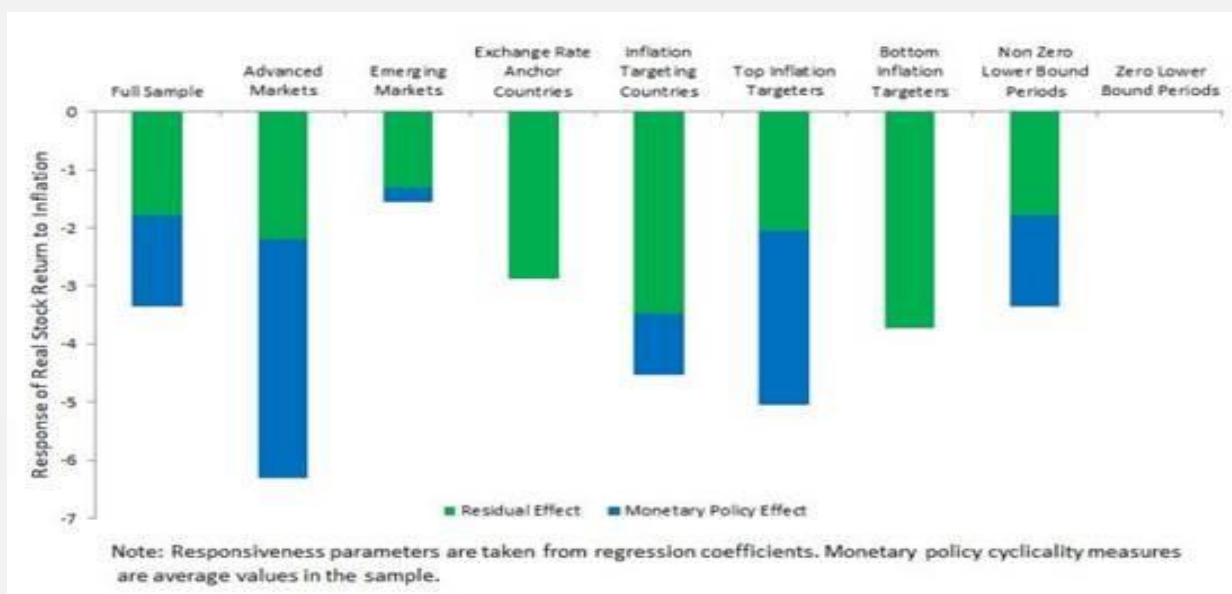
In the context of an effective monetary policy implementation, the stock market, along with other channels, could also act as an efficient channel of the transmission mechanism. Thus, if the operating target for the central bank in the inflation targeting regime is the money market rate on an overnight repo, then the stock market analogue is the return on shares (in real terms). The monetary policy (the “MP”) influences the stock market as part of the “return-inflation” chain. This chain assumes that the rising inflation turns into a kind of “inflation tax” for shareholders who “require” that the issuers of securities (i.e., firms that produce goods and services) should increase the real return on their shares. To meet the requirements of shareholders, management companies have to increase efficiency, change the combination of factors involved in production, whereby the total output in the economy, employment, and, finally, inflation is changing⁵.

The paper by Zhongxia Zhang “Stock Returns and Inflation Redux: an Explanation from Monetary Policy in Advanced and Emerging markets” (2021) presents the results of modeling, where, depending on the cyclicity of the monetary policy (countercyclical, procyclical, acyclical) pursued, the response of the real stock return to inflation, and that is, on the effectiveness of policy, varies from country to country. If the central bank pursues an active countercyclical monetary policy, the stock return-inflation relationship becomes more negative. This is because the market provides for the expected effectiveness of monetary policy under different regimes: a fixed exchange rate, inflation targeting, and a zero lower boundary of interest rates. According to the results of the study, it is best to use the stock return during the impact of inflation in developed countries, while inflation targeting is the most optimal mode of monetary policy for this. Therefore, for these countries, interest rate hikes have a stronger downward effect on the stock return.

In addition, with regard to the flexibility of monetary policy, based on the results of observations, it was concluded that if the range of interest rate changes is limited to the zero lower boundary, i.e. is not flexible enough, markets ignore inflation and monetary policy cyclicity. In other words, the limited flexibility of monetary policy changes the response of stock return to inflation (Figure 1).

⁵ For more detail, look at “The stock market channel of monetary policy”, Ralph Chami, Thomas F. Cosimano, Connel Fullencamp, IMF working paper, february 1999

Figure 1. Response of Real Stock Returns to Inflation in Advanced and Emerging Markets (2021)



Source: Zhongxia Zhang “Stock Returns and Inflation Redux: an Explanation from Monetary Policy in Advanced and Emerging Markets” (2021)

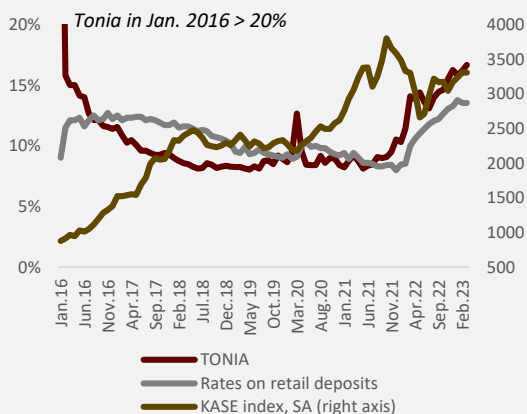
In 2008, Paul De Grauwe published the “Stock Prices and Monetary Policy” paper, where he looked into the strategy of practical influence on inflation through the stock return of companies. He concluded that central banks could well influence stock prices by following the “moving against the wind” strategy in the stock market, which consists in conducting, in some cases and in the short term, a tighter monetary policy in order to ensure financial stability, taking into account not only the level of inflation but a wider range of indicators and factors. The study concludes that pursuing the “moving against the wind” strategy by central banks can improve the balance between output and inflation reducing their volatility.

In general, based on the study of international experience on how, under what conditions, and which central banks manage to use such channel of the transmission mechanism as the stock market, one can conclude that a prerequisite for the effective operation of this channel is the market’s confidence in the regulator, in its anti-inflationary policy pursued, and the ability to achieve the announced inflation targets.

Taking into account the results obtained as part of the study of international experience, an attempt was made to identify the relationship between the monetary policy and the stock market in Kazakhstan in terms of comparing the dynamics of the KASE index, the return on deposits of individuals and the risk-free TONIA rate⁶. According to the graphical analysis, there is a rather high unidirectionality between deposit rates and the TONIA rate, which may indicate noticeable sensitivity of the price terms of banking products to changes in monetary conditions (Figure 2). At the same time, as regards the KASE and TONIA index, it can be said that in certain periods (the beginning of 2016 - mid-2017, the end of 2021 - mid-2022), there was a negative correlation, which may indicate some correct influence of prices on assets within the channel in terms of the monetary policy transmission. However, it is difficult to assert unequivocally about the presence of a quantitative impact of changes in monetary conditions on stock market indicators, since the dynamics of the KASE index in the specified periods could depend on changes in the situation in the global commodity markets and the geopolitical situation. Thus, in 2017, the growth of oil prices recovered, and from February 2022 on, the geopolitical situation aggravated dramatically.

⁶ Weighted average yield on one-day repo transactions with securities of the GSs basket with a cut-off of 5% of transactions with the lowest and highest yield. //www.kase.kz

Figure 2. KASE Index (Seasonally Adjusted), TONIA, and Interest Rates on Retail Deposits in the Period from January 2016 to March 2023



Source: NBK and KASE

In view of the above, it is impossible to fully assert that the dynamics of the domestic stock market is largely influenced by monetary conditions. Nevertheless, the development prospects for the stock market given the strengthening of the monetary policy transmission mechanism are quite achievable as the market grows and develops. Thus, in 2023, the KASE intends to scale technical solutions and create a subsidiary to perform the functions of a central counterparty that guarantees payment for transactions with securities, which should increase the robustness of the stock market, facilitate the inflow of investors and expand the range of services provided. Thus, it can be expected that the simplification of access for participation of a wide range of investors in the stock market operations, the increased transparency and guarantees in transactions, and improvement of the infrastructure will remove the existing barriers to the development of the securities market and create a foundation for its intensive growth. Then it will be possible to strengthen the monetary policy transmission

mechanism and, accordingly, the impact of monetary policy through the stock market on the output and inflation.

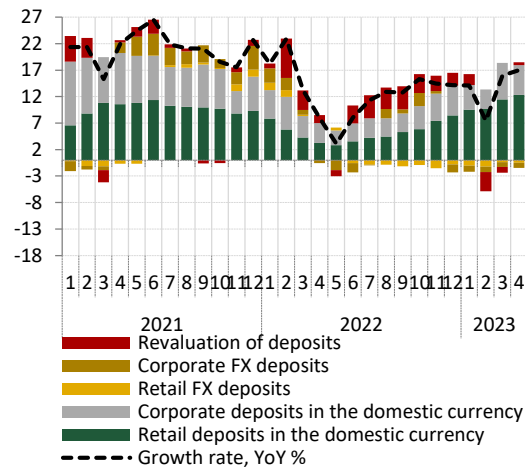
2.7. Deposit Market

In April 2023, overall volume of deposits at depository organizations continued its annual growth.

Overall dollarization in the banking system decreased in April 2023 to the 15-year minimum due to a persistently outstripping growth of the tenge deposits compared to foreign currency deposits. Decline in the total indicator is related to the decreased dollarization of deposits, both retail and corporate ones. Owing to the retention of the base rate level, general market interest rates on deposits changed insignificantly.

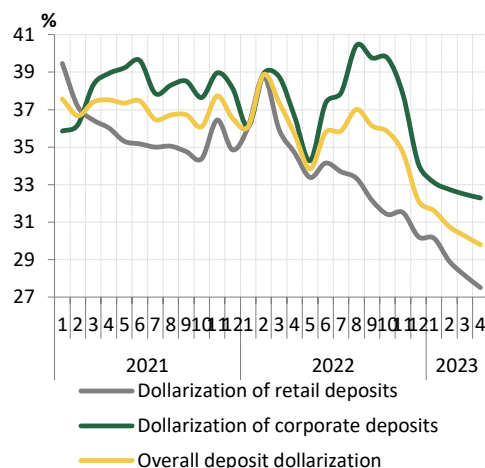
Deposit Portfolio. Given a high base of the February 2022, the upward trend of the deposit portfolio continued, the increase in April 2023 accounted for 17.0% YoY (in April 2022 – 8.0%) (Figure 25).

Figure 25. Deposits of Residents at Depository Organizations, YoY, %



Source: NBK

Figure 26. Deposit Dollarization, %



Source: NBK

As of end-April 2023, the deposit volume reached 30.3 trln tenge. Within the structure of deposits, the tenge deposits demonstrated growth, while foreign currency deposits decreased.

In annual terms, in April 2023, deposits in the national currency went up by 27.7% as a result of a 17.1% growth in corporate deposits, and 38.3% increase in retail deposits. The buildup of retail deposits in the tenge was partially nurtured by the accrual of reimbursement in March 2023 as part of the Tenge Deposit Protection Program.

Foreign currency deposits decreased by 2.6% YoY. Over the year, corporate foreign currency deposits went down by 3.5%, and retail deposits – by 1.6% (in foreign currency equivalent, the overall reduction in foreign currency deposits amounted to 4.1%). The outflow of foreign currency deposits along with the growth in the tenge deposits may be the evidence of a partial overflow of resources from foreign currency deposits to deposits in the tenge given a high differential of interest rates between them.

Within the structure of retail deposits (including non-residents), a significant portion of the tenge deposit base as of end-April 2023 was in non-term deposits⁷ – 55.2% (in April 2022 – 47.1%), and the percentage of savings deposits was 9.6% (in April 2022 – 11.7%). The growth of non-term deposits in the tenge on a YoY basis accounted for 64.0% or 2.5 trln tenge, while the growth on savings deposits made up 15.5% (or 151.3 bln tenge).

Deposit Dollarization. In 2023, the trend for deposit dedollarization was ongoing and dollarization decreased to 29.3% as of end-April; in April 2022, it was 35.2% (Figure 26).

Over the year, dollarization of corporate deposits has decreased from 36.1% in April 2022 to 31.8% in April 2023, and that of retail deposits – from 34.2% to 27.0% (Figure 26). Dedollarization took place amid high interest rates on deposits in the tenge and low interest rates on foreign currency deposits. It is worth mentioning that the downward pressure on deposit dedollarization was largely exerted by both a net inflow of new deposits in the tenge and a net outflow of foreign currency deposits (Figure 27).

⁷ According to the KDIF methodology for calculating and setting maximum rates on retail deposits

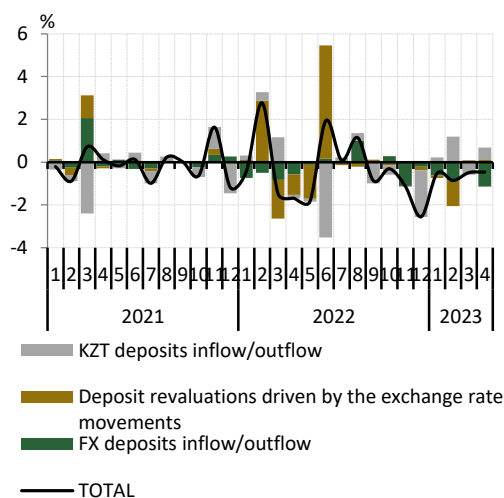
Dollarization of retail deposits (including non-residents) declined virtually in all segments classified by amounts. Nonetheless, dollarization of large accounts remains high. Thus, the share of foreign currency deposits held on accounts of individuals in the amount from 50 to 500 million tenge totaled 54.0% in April 2023, whereas it has made only 11.7% on accounts from 1 million to 3 million tenge.

Deposit Rates. Given the retention of the base rate in 2023 at the same level, short-term interest rates on corporate deposits almost did not change, except for long-term deposits; market rates on retail deposits has demonstrated growth.

Thus, interest rates on corporate deposits with maturity up to one month that account for a major portion of attracted deposits (85.0% of all corporate term deposits in the tenge), have remained nearly unchanged on a year-to-date basis and made up 14.6% in April 2023 (in April 2022 – 11.7%). Interest rates on deposits with the term from 3 months to 1 year (the share – 10.8%) increased from 11.0% in April 2022 to 13.8% in April 2023. Rates on long-term deposits from 1 to 5 years (the share – 0.5%) have gone up from 9.6% to 11.8% over the year (Figure 28).

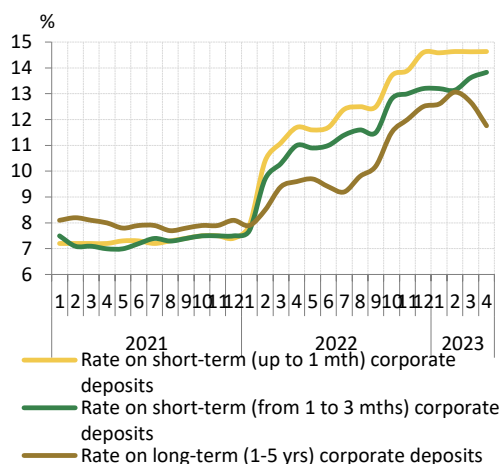
Interest rates on term deposits of individuals also demonstrated an upward path compared to the corresponding period of 2022: rates on short-term deposits of up to 1 month (the share – 15.5% of all retail term deposits in the tenge) went up to 14.7% in April 2023 from 11.8% in April 2022. Interest rates on deposits with maturity from 3 months to one year (the share – 32.2%) grew to 13.9% from 10.3%, on deposits from 1 to 5 years (the share – 47.4%) increased to 14.0% from 11.4% (Figure 29).

Figure 27. Factors Causing the Change in Dollarization in the Banking System, MoM, %



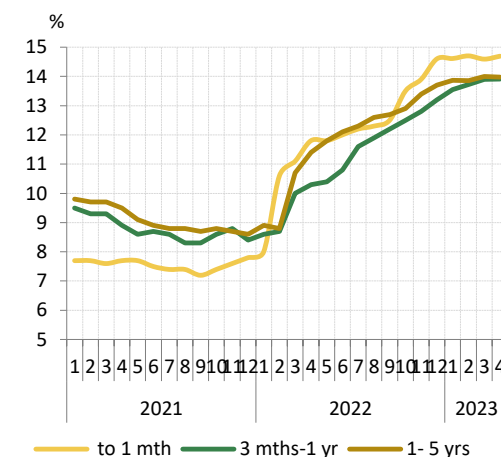
Source: NBK

Figure 28. Interest Rates on Corporate Deposits, %



Source: NBK

Figure 29. Interest Rates on Retail Deposits, %



Source: NBK

2.8. Credit Market

Lending to the economy (the balance) in the first quarter of 2023 continued to slow down due to decelerating growth rates of both lending to the population and to business entities.

Positive rates of increase in overall lending are supported by expansion of lending to the population and businesses in the national currency.

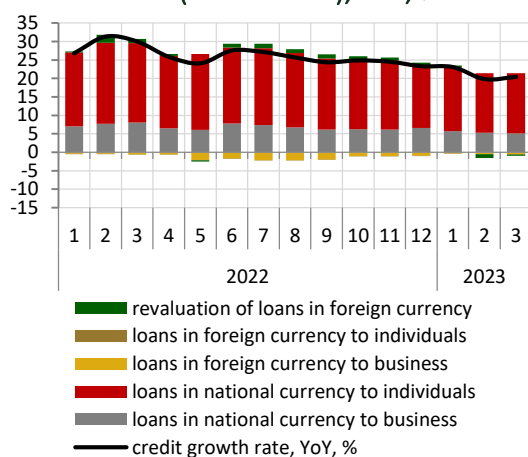
Within the structure of loans to the population, the growth of mortgage loans decelerated significantly because of the last year's high base. The consumer lending somewhat accelerated, including given the low base in 2022.

Expansion of lending to businesses was observed in all sectors except communication and agriculture.

The change in the policy of interim loans from Otbasy Bank at the end of 2022 as well as the imposition of limits on the program "7-20-25" from the beginning of 2023 resulted in the increased cost of mortgage loans. After big marketing campaigns were completed in the first quarter of 2023, the interest rate on consumer loans showed a minor growth. Rates on loans to businesses gradually increased in the first quarter of 2023 virtually in all sectors of the economy, excluding agriculture and the industry.

The annual expansion of lending to the economy (the balance) slowed to 20.4% in March 2023 from 23.3% at the end of 2022 (Figure 30). The growth of lending remained high largely due to retail lending in the national currency. A sizable positive contribution was also made by loans to businesses in the tenge, which increased in annual terms by 14.1% in March 2023 owing to a significant expansion of lending to small entities.

Figure 30. Credits to the Economy from STBs (the balance), YoY, %



Source: NBK

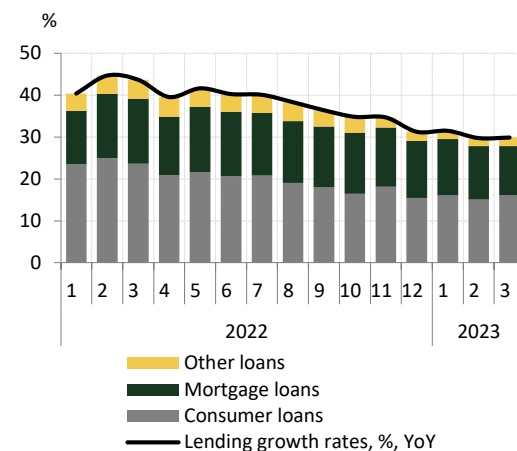
Retail Loans. The annual growth of retail loans kept slowing down to 29.9% in March 2023 from 31.3% compared to a quarter before (Figure 31), including deceleration of mortgage loans from 41.8% to 35.1%. Despite a sizable buildup of accumulated mortgage loan portfolio, the volume of new mortgage loans provided during the first quarter of 2023 went down by 33.3% YoY (Figure 32). The decrease in the mortgage portfolio volumes was stemming from the limits imposed from early 2023 on the program “7-20-25”, the tightening of rules on interim loans from Otbasys Bank, as well as the high base of 2022. These factors also caused an increase in the interest rate on mortgage loans from 9.5% in December 2022 to 11.0% in March 2023 (Figure 33).

Consumer loans continued to grow, having accelerated in annual terms from 25.3% in December 2022 to 26.9% in March 2023. Such increase was observed amid the low base in 2022 in connection with the January events as well as a dramatic aggravation of the geopolitical situation in February 2022.

After completion of big marketing campaigns at the end of 2022, the weighted average interest rate on new consumer loans in the tenge grew by 1.5 pp during the first quarter of 2023 and in March made up 18.8% (the rate in March 2022 accounted for 19.4%) (Figure 33).

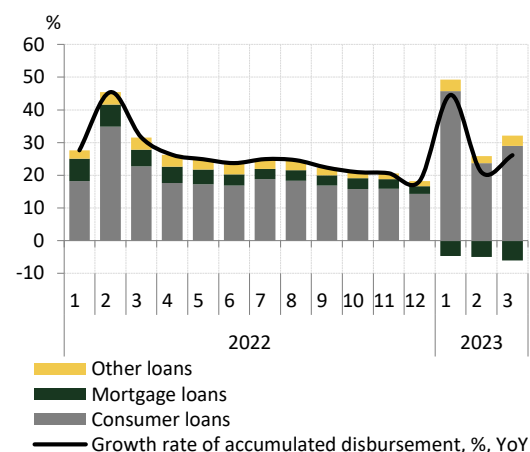
Loans to Businesses. In March 2023, the annual growth of loans to businesses (the balances) slowed down to 9.2% from 13.9% in December 2022 (Figure 34). The growth was observed in all key sectors excluding the communication sector (-24.5%) and construction (-15.9%). Loans to businesses in the sectors of industry and trade accounted for more than a half of loans in the structure of business by economic sectors, which have expanded by 7.9% and 10.6%, respectively, over the year.

Figure 31. Retail Loans from STBs (the balance), YoY, %



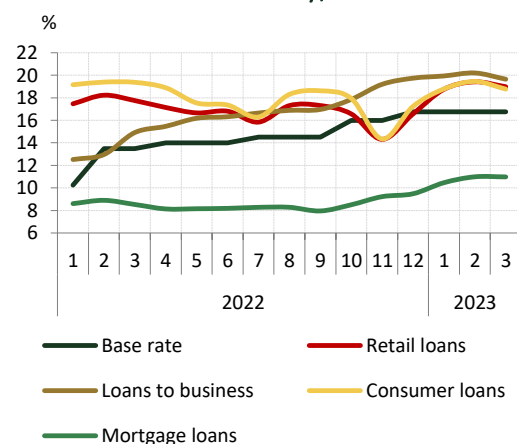
Source: NBK

Figure 32. New Retail Loans Provided by STBs, YoY, %



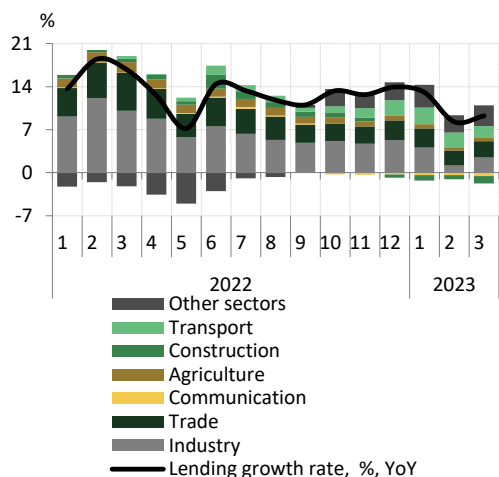
Source: NBK

Figure 33. Interest Rates on Loans in the National Currency, %



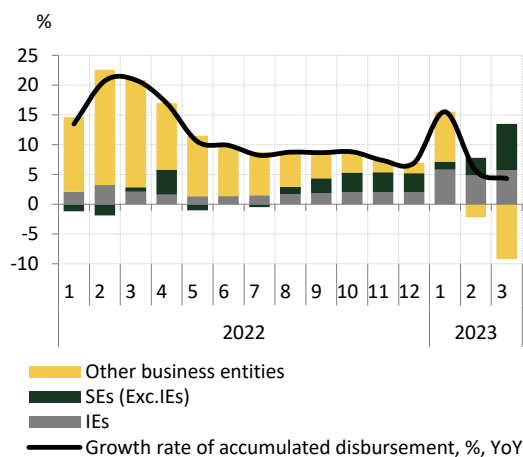
Source: NBK

Figure 34. Loans to Businesses from STBs (the balance), YoY, %



Source: NBK

Figure 35. New Loans to Businesses Provided by STBs, YoY, %



Source: NBK

In the first quarter of 2023, lending activity of business entities has been in the positive zone largely due to expansion in lending to small enterprises. During the first quarter of 2023, disbursement of new loans to small enterprises (other than individual entrepreneurs) and individual entrepreneurs went up by 36.2% and 97.3%, respectively, compared to the first quarter of 2022. However, this has been partially offset by a 12.6% reduction in new loan disbursements to medium and large entities (Figure 35).

Given the monetary policy pursued and high uncertainty about the foreign economic situation, the weighted average rate on loans to businesses in the tenge went up to 19.7% in March 2023 from 14.9% in March 2022 (in December 2022 – 19.7%). Since the beginning of 2023, interest rates on loans to businesses have been also increasing in all sectors, with the exception of a minor decline in interest rates on loans to industry entities and a seasonal reduction of interest rates on loans to the agricultural sector.

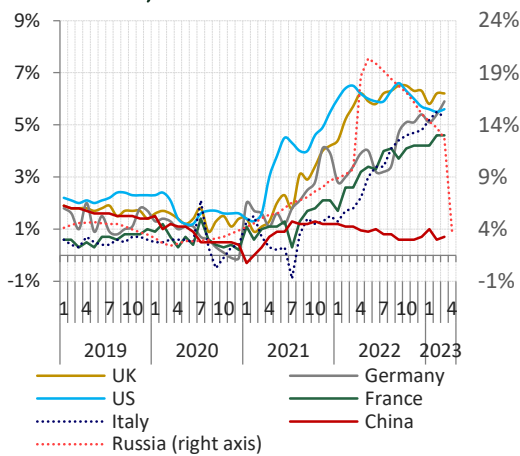


03

MACROECONOMIC CONDITIONS

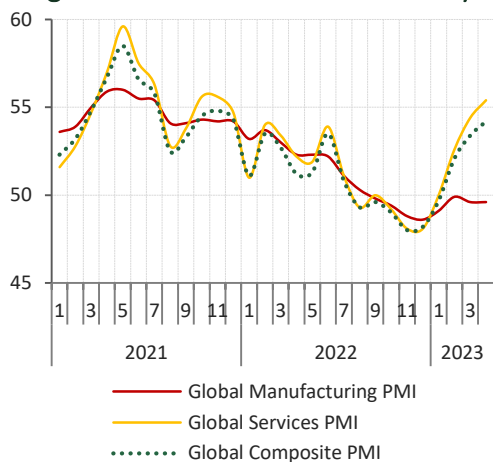
III. MACROECONOMIC CONDITIONS

Figure 36. Dynamics of Core Inflation, YoY



Source: National statistical offices

Figure 37. Global Business Activity



Source: PMI by S&P Global

3.1. External Sector

Prices in the global energy markets keep falling compared to the last year. Thus, the price of non-ferrous metals has declined from 10.0% to 35.0% on average over the year, Brent oil prices in March 2023 dropped nearly by 33.0%, and prices of natural gas and coal – by more than 50.0%.

Given the relief of pressure in the global energy markets, a sharp deceleration in energy prices is observed in the structure of consumer inflation in many countries. Thus, in the EU countries, in March 2023 the cost of energy slowed down to 2.6% (YoY) from 16.6% (YoY) in February 2023. In the US, as of end-April 2023, the decline in energy prices reached 5.1% (YoY).

Despite the marked slowdown/decline in energy price growth, consumer inflation in countries still significantly exceeds the target levels. The fact that the inflationary background in the world is still elevated is evidenced by the dynamics of core inflation, which in March 2023 continued to accelerate in many countries (Figure 36).

Due to uncertainty associated with high inflation and unstable geopolitical background worldwide, the output in the industry continues to contract, which is proved by leading indicators of Manufacturing PMI. At the same time, the service sector keeps growing (Figure 37).

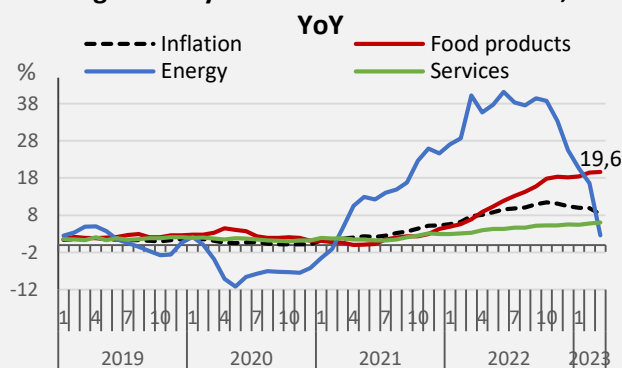
In the context of elevated inflationary environment in May 2023, predictably, the US Fed raised its policy rate once again. This time, the increase was by 25 bp to 5.0%-5.25% per annum. For its part, the ECB slowed the pace of interest rate increase to 25 bp to 3.75% per annum.

Box 3. Food Inflation in the EU

Since November 2022, world food prices have been declining. However, in spite of this, food prices continue to rise in the EU countries. Due to the fact that food production is predominantly concentrated within the EU, the impact of external prices is limited. In the context of the current rise in food prices, increased production costs and lower production volumes of goods have had an upward impact.

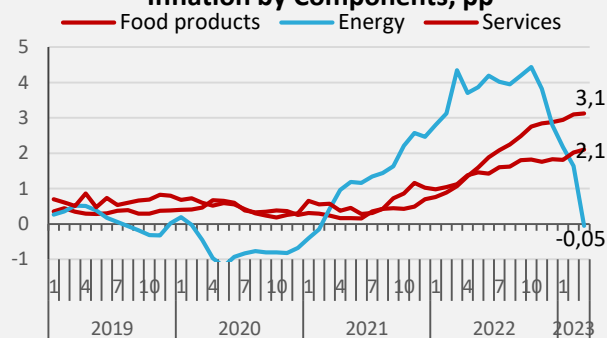
Present Situation. In March 2023, the consumer inflation in the EU decelerated to 8.3% (YoY) from 9.9% (YoY) in February 2023. This was largely due a sharp slowdown in the energy price growth (from 16.6% (YoY) in February 2023 to 2.6% (YoY) in March 2023). However, lower energy prices had not eased the pressure on food products in the EU. In March 2023, the growth rates of food prices in the EU reached the all-time highs and amounted to 19.6% (YoY) (in February 2023 – 1.5%, YoY) (Figure 1). The overall contribution to the annual inflation went up to 3.12 pp (Figure 2).

Figure 1. Dynamics of Inflation in the EU, YoY



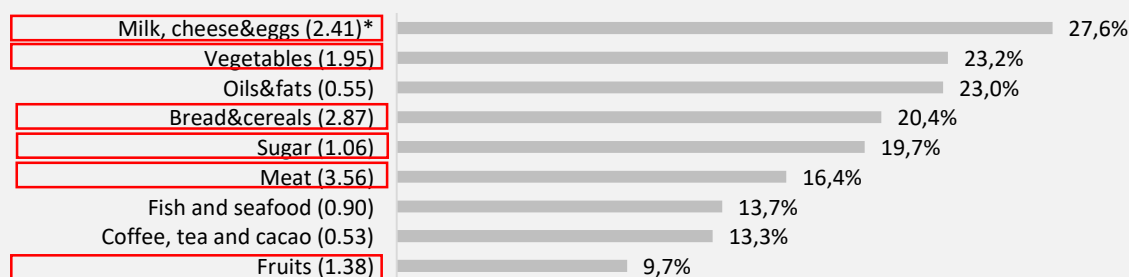
Source: Eurostat

Figure 2. Contribution to the Annual Inflation by Components, pp



All items of the food basket demonstrate the increase in prices. In March 2023, the largest price rise is observed among the following groups of goods (Figure 3):

Figure 3. Growth Rates of Prices for Some Groups of Foods, March 2023, YoY



Source: Eurostat

* the weights of goods in the EU consumer basket for 2023 are shown in the parenthesis, according to Eurostat

Goods shown in Figure 3 made the following contribution to the overall consumer price growth in the EU in March 2023: from 0.11 pp (fruits) to 0.56 pp (milk, cheese, eggs). The total contribution was 2.26 pp. On a country-by-country basis, the highest growth in prices for the above food products is observed in the Baltic and Eastern European countries (Table 1). Among large European economies, Germany takes the lead in terms of prices for milk, eggs, vegetables, bread and cereals.

Table 1

EU Countries with Maximum and Minimum Growth in Food Prices, March 2023, YoY

Meat		Bread and cereals		Milk, cheese and eggs		Vegetables		Fruits		Sugar	
Hungary	35.6%	Hungary	56.4%	Hungary	64.4%	Hungary	41.9%	Hungary	27.1%	Hungary	33.6%
Slovakia	30.5%	Lithuania	32.0%	Serbia	42.5%	Portugal	35.5%	Portugal	20.7%	Czech Rep.	32.2%
Latvia	26.6%	Latvia	29.2%	Slovakia	35.7%	Slovakia	32.1%	Serbia	18.9%	Latvia	30.7%
Estonia	26.0%	Slovakia	27.2%	Germany	34.8%	Serbia	31.7%	Poland	17.4%	Slovakia	28.9%

Switzerland	2.5%	Switzerland	8.1%	Switzerland	8.5%	Switzerland	9.1%	Austria	2.9%	Switzerland	5.3%
Italy	9.2%	Norway	10.1%	Norway	5.8%	Greece	8.5%	Greece	0.7%	Norway	2.0%

Source: Eurostat

Price Growth Factors. Main price growth drivers were identified on products (Figure 3) with the highest price growth as of end-March 2023, having a high weight in the basket (meat, milk, bread and bakery, fruits and vegetables, sugar).

External Factors. European countries have a high level of food self-sufficiency (Table 2). As a result, the impact of world food prices in the EU is limited.

Table 2

Self-sufficiency Level* in the EU, %

	2021	2022	2023
Meat, beef	117.3%	114.2%	113.7%
Fresh dairy products	103.8%	102.7%	103.0%
Creamery butter	110.6%	109.6%	109.3%
Cheese	112.3%	111.4%	112.0%
Fresh tomatoes	95.5%	93.8%	-
Peaches, nectarines	103.8%	103.2%	-
	Season of 2020/2021	Season of 2021/2022	Season of 2022/2023
Cereals	113.0%	104.7%	113.3%
Fresh apples	116.2%	116.4%	111.6%
Sugar	91.3%	97.6%	90.4%
Oils	60.0%	59.6%	63.0%
Corn	84.4%	83.4%	84.0%

Source: European Commission

* the production/consumption ratio

Internal Factors.

Among internal factors, first of all, the food producer prices should be pointed out. In February 2023, their annual growth accounted for 20.3% (YoY). Prices of sugar producers went up by 77.3%, bread prices – by 19.9%, meat prices – by 19.0%, and prices of dairy products – by 18.9%.

Most European enterprises operate on natural gas. Considering that the production of many food products is an energy-intensive process, gas was one of the first catalysts for rising producer prices, which appreciated significantly after the imposition of sanctions against Russia. After the rise in gas prices, prices of electricity, heating and transport services, which are also an integral part in the production chain, began to trigger a chain reaction.

Another major cost item for food producers that has had an upward impact is forage and fertilizers (for example, in the production of eggs, feed costs can reach up to 60-70% of the cost of production), whose production is declining. Thus, forage production has been steadily declining since December 2021. The decline in production is attributed to a rise in utility services (feed production is one of the energy-intensive industries), increased technological requirements from the government, and a reduction in the production of corn, an important ingredient in forage. Fertilizer production has also been decreasing since April 2022. This year, the contraction has intensified and in February 2023 amounted to 21.5% (YoY).

Apart from the increased expenditures for energy, forage and fertilizers, food producer prices were also growing under the pressure of high costs associated with labor force.

Given an increase in the main production costs, food production in the EU has been steadily declining since autumn 2022. In January-February 2023, the situation improved slightly, but despite this, growth remained sluggish (in February 2023, the growth was 0.4%, YoY). The reduction in production volumes is also caused by adverse weather conditions in the EU and in the countries-suppliers of products (India, Brazil), as well as the spread of avian influenza.

Some analysts believe that food prices in the EU are rising due to the influence of the “inexplicable” part of inflation (not related to their own producers and energy carriers), when large food producers or vendors use inflation as an excuse for unreasonable price increases (the so-called “greedflation”). This hypothesis is possible because, according to financial statements, most of the largest European food producers (Nestle,

Unilever, Kraft, Mars, JBS, FriesLandCampania) in spite of higher production costs as of end-2022 managed to generate high net earnings.

Measures for Price Stabilization. The EU countries are trying in every possible way to minimize the consequences of high prices. For example, Portugal decided to temporarily reduce the value added tax to zero for basic foodstuffs, Spain – for bread and olive oil. Hungary has taken more aggressive action and imposed price caps on some products. France, in turn, has entered into an agreement with major retailers to sell essential goods at a discount.

Forecasts. Different international organizations anticipate that food prices in the EU in 2023 will continue to grow but at a more moderate pace. Deceleration will take place due to the following reasons – energy prices reached their ceiling, Ukraine will continue to export grain, and draughts are of seasonal nature and are highly unlikely to happen two years in a row.

The ECB, in its March forecast as compared to projections made in December 2022, lowered the EU inflation forecast for 2023 from 6.3% (YoY) to 5.3% (YoY). The estimate for 2024 was improved from 3.4% (YoY) to 2.9% (YoY). In terms of food inflation, the ECB also anticipates deceleration of price growth that will be accompanied by a decline in energy prices, and lower prices of agricultural producers.

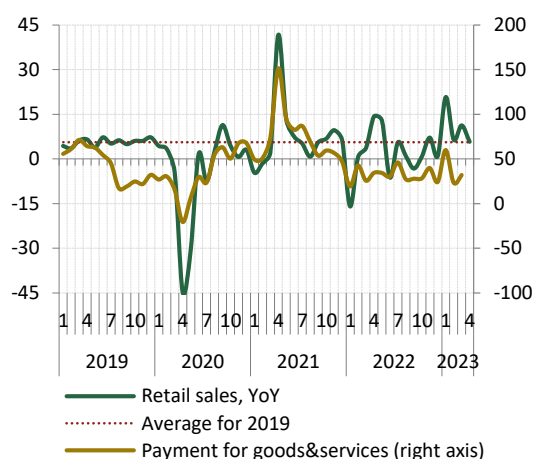
3.2. Development of the Domestic Economy

Robust consumer demand is proved by data on retail sales and cashless payments for goods and services. At the same time, a more active realization of consumer demand is constrained by reduction in real income of the population because of high inflation.

Despite their relative volatility, annual growth rates of retail sales have been demonstrating a positive trend in real terms. As of end-January-April 2023, retail sale of goods and services went up by 10.2% (YoY) in real terms, in April 2023 the growth made up 5.8% (YoY), reaching the pre-pandemic values of 2019. Alongside with that, there is a high correlation between the dynamics of retail sales and payments for goods and services via payment cards. Payments by the population for goods and services in the first quarter of 2023 increased by 37% (Figure 38).

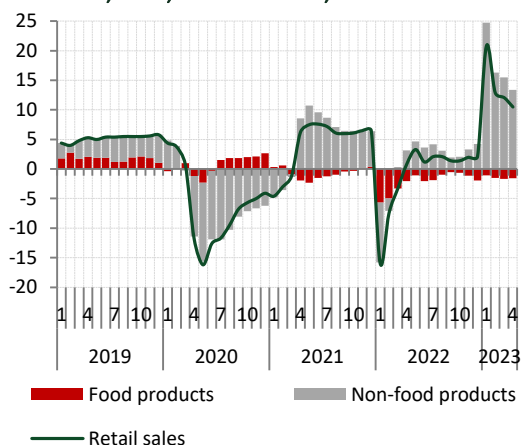
Non-food products account for the main share (72% in the first quarter of 2023) within the structure of retail sales; realization of non-food products in January-April 2023 expanded significantly by 18.7% (6.6% in 2022). Amid decreasing real income of the population, such expansion is supported by the growth of consumer lending (by 39.2% in the first quarter of 2023, YoY), installment purchases as well as the demand from the citizens of the Russian Federation. In turn, the heightened demand drives the

Figure 38. Dynamics of Retail Sales and Payments for Goods and Services via Payment Cards, YoY, %



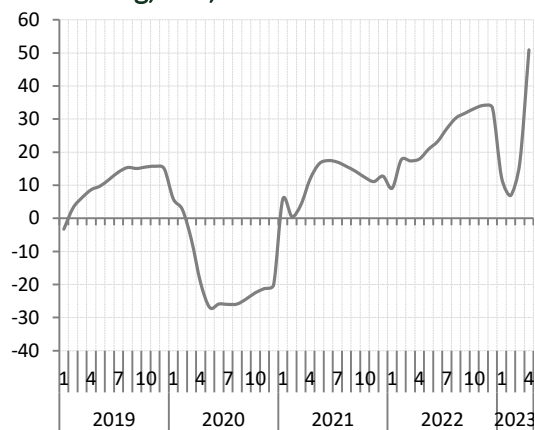
Source: ASPR BNS, NBK

Figure 39. Structure of Retail Sales, YoY, Cumulative, %



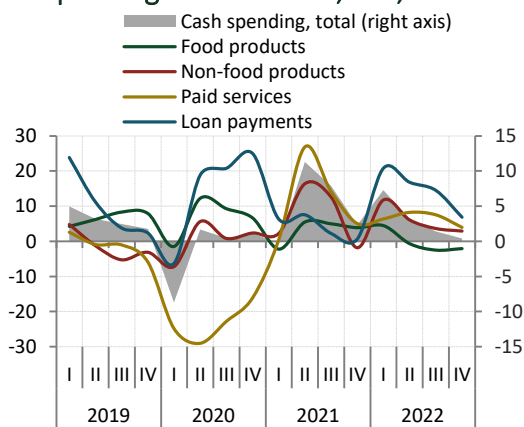
Source: ASPR BNS, NBK computations

Figure 40. Services Related to Catering, YoY, %



Source: ASPR BNS

Figure 41. Household Cash Spending in Real Terms, YoY, %



Source: ASPR BNS, NBK computations

increase in import of non-food products whose growth in the first quarter of 2023 amounted to 67.2% in annual terms. At the same time, there is a persistent trend of reduction in retail trade of food products that has been observed since the second quarter of 2021 (Figure 39). Despite a 1.2% (YoY) growth in wholesale trade of food products in January-April 2023, retail sale of food contracted by 5.5% (YoY) during the same period. According to the ASPR BNS RK, in 2022 the population reduced the consumption of nearly all major foodstuffs, including bread and bakery and cereals – by 4.4% (YoY), meat, fish and seafood, fruits – by 5%, vegetables – by 3.7%, dairy products – by 7.1%, sugar and confectionery – by 6.7%.

This may be driven by the post-pandemic recovery in demand from the population for “dining out”, in particular the services of cafes, restaurants, and ceremonial events. Thus, catering services have shown stable growth since the beginning of 2021. After its slowdown in February, the volume of these services in April 2023 increased by 50.9% in annual terms (Figure 40).

Real household spending on food has been declining for the third consecutive quarter (Figure 41). On the one hand, this dynamics proves the trend of changing consumer preferences. The growth rates of real spending on paid services remain in the positive zone. On the other hand, the reduction in spending on foodstuffs may also be stemming from a significant increase in food production over the past year. In general, the growth rate of real household spending remains positive, despite the deceleration trend. It is worth noting that loan repayments increased significantly in the structure of spending in 2022 (a 14.7% growth, YoY).

At the same time, intensive inflationary processes and a corresponding decline in real income of the population held back a more active realization of consumer demand. Despite the growth of nominal income in the economy, real income remained at low levels, with a transition into the negative zone in the first quarter of 2023 (Figure 42).

In the structure of real cash income, all types of income decreased, with the exception of wages of hired workers, which is due to the growth of nominal wages in the real sector (Figure 43).

The growth of investment activity in the first quarter of 2023 accelerated. As of end-January-April 2023, fixed capital investments went up by 18% (YoY).

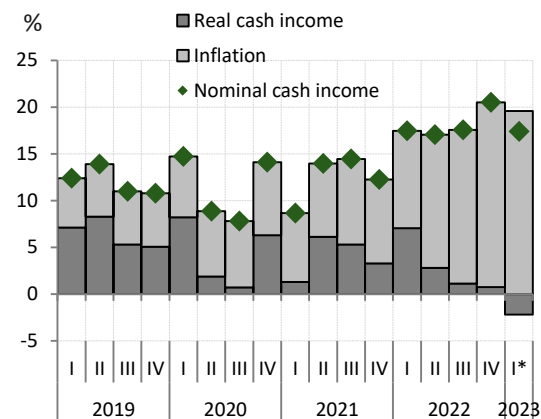
All components demonstrate growth within the structure of investments (Figure 44). Construction works and major overhaul account for the largest portion of investments (the share – 58%); their growth amounted to 19.9% (YoY) in January-April 2023. It is worth mentioning that a half of investments in this category (45%) were directed to public works construction (road and utilities infrastructure, industrial facilities, etc.), 35% – for residential construction, and 17% – for construction of non-residential buildings.

In January-April 2023, investments in property, plant and equipment (machinery, equipment, transport vehicles) went up by 16.4% (YoY). Other expenditures in the investment volume including investments in intangible fixed capital (creation and acquisition of computer software and databases, exploration and evaluation of mineral reserves) grew by 12.7% (YoY).

At the sector level, the main contribution to the growth of investments was made by investments into the industry (a 18.1% growth, YoY), including the mining industry – by 17.3%, manufacturing industry – 7%. Given the modernization of utilities infrastructure because of a strong wear and tear, investments into the water supply increased by 60.5% and electricity supply – by 42.6% in annual terms. Positive growth rates of investments are observed in all sectors of the economy except the construction sector, financial and insurance activities, arts, entertainment and leisure as well as provision of other services.

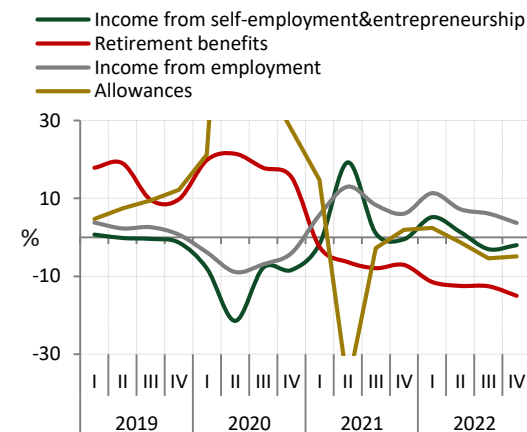
Own funds of enterprises remain as the prevailing source of investments; their share in January-April 2023 was 80.3%. The public sector's share in investment financing amounted to 11.1%. Government investments are

Figure 42. Cash Income of the Population, YoY



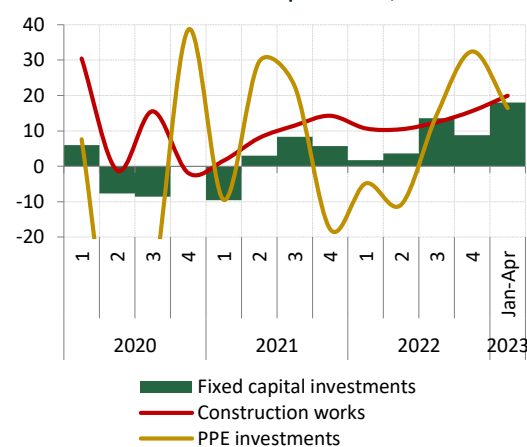
Source: ASPR BNS, NBK computations

Figure 43. Structure of Cash Income of the Population, YoY in Real Terms



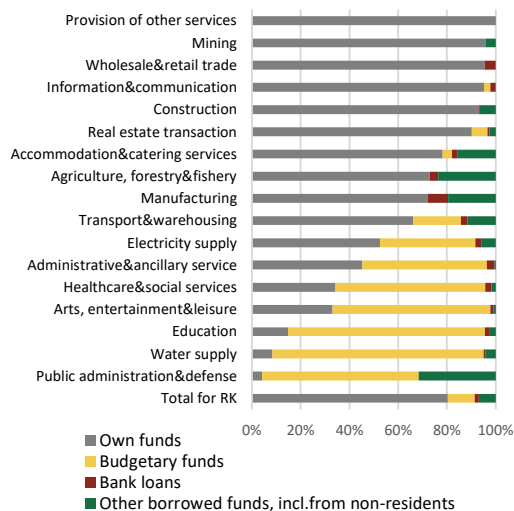
Source: ASPR BNS, NBK computations

Figure 44. Fixed Capital Investments and Components, YoY



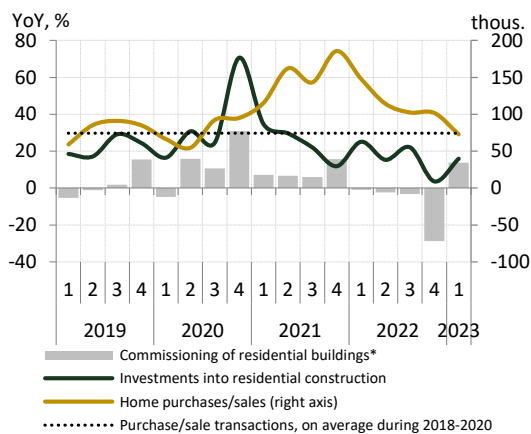
Source: ASPR BNS

Figure 45. Funding Sources for Fixed Capital Investments, by Economic Sectors, %



Source: ASPR BNS, NBK computations

Figure 46. Investments into Residential Construction and Activity in the Real Estate Market



Source: ASPR BNS, NBK computations

* Commissioning of total floor area of residential buildings per 1000 individuals

allocated mainly to the water supply and electricity supply, the public sector, arts, entertainment and leisure. Enterprises in most branches of the real sector finance their investments with their own funds. Bank loans as a source of funding are used extremely rarely (Figure 45).

After a sharp increase in 2021-2022, due to the implementation of housing programs and the use of a part of pension savings for improving living conditions, the real estate market is returning to equilibrium. Thus, in the first quarter of 2023, the number of purchase and sale transactions amounted to 73 thous., which corresponds to all-time averages (Figure 46). On the supply side, in the first quarter of 2023, the volume of commissioned residential buildings demonstrated a 13.8% growth in annual terms after contraction in the fourth quarter of 2022. Investments into residential construction went up by 13% (YoY), with own funds of construction companies and the population remaining as the main source of funding (Figure 47).

Exports of goods as of the end the first quarter of 2023 decreased by 2.1% in annual terms. The main contribution to reduction in exports in value terms is made by decreased exports of oil and metals (Figure 48). During January-March 2023, oil exports declined by 7.6%. In the country-by-country structure, physical volumes of supplies contracted: shipments to the Netherlands – by 25.9%, and to Turkiye – by 34.9%; moreover, the demand from Lithuania and Brunei dropped to zero (Figure 49). A 25.5% increase in oil purchases by Italy is also worth mentioning; its share went up from 27.6% to 37.8%.

As for metals, copper exports declined in kind by 21.6% given a cut in the domestic production. Besides, due to the problems with realization of output, exports of iron ores decreased. Exports of zinc went down because of reduced production due to depletion of ore mines and worsened logistics conditions.

Among agricultural products, the demand for Kazakhstani meat on the part of Russia and Uzbekistan increased.

A low base of barley exports in 2022 because of crop reduction in 2021 amidst draught and decline in planted acreages led to a two-fold growth of exports in the first quarter of 2023. Moreover, exports of rice decreased by 13.3% due to a poor harvest, caused by a shortage of water and decline in planted acreages in 2022.

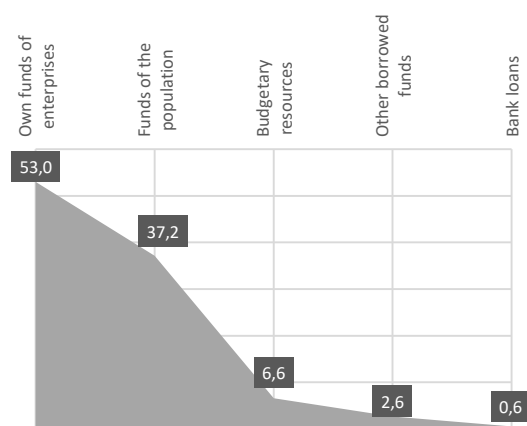
Imports in January-March 2023 went up by 43.8% given the growing imports of non-food products and interim goods. It should be noted that the country-based structure of imports has been changing lately. This is an evidence of the setting up of new supply chains in Kazakhstan's foreign trade. Thus, the share Russia notably decreased from 39.7% in the first quarter of 2022 to 26.9% in the first quarter of 2023, whereas there was an increase in the shares of the EU (from 13.4% to 18%) and China (from 21.6% to 23.5%) (Figure 50). The growth of imports from China and the EU accounted for 56.4% and 92.4%, respectively (Figure 51).

Among food products, the physical volumes of imports of dairy products and tea increased. Given the increased supplies from Brazil and Russia, sugar imports expanded. In addition, imports of vegetable oils and fats went up significantly.

Among non-food items, there is a substitution of Russian imports of detergents and cleaning products by goods from Turkmenistan, Turkey and Iraq. The import of medications, hygiene products and cosmetics from China expanded significantly. Imports of clothing, telephones, monitors and projectors, cars and computers went up notably.

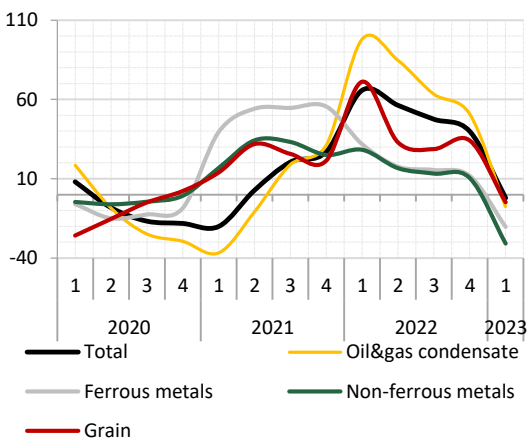
As part of investment and interim goods, there is an increase in imports of pipes made of ferrous metals, vehicles for the transportation of goods, transformers, fertilizers, equipment for agriculture, various pumps and refrigeration equipment.

Figure 47. Sources of Investments into Residential Construction, %



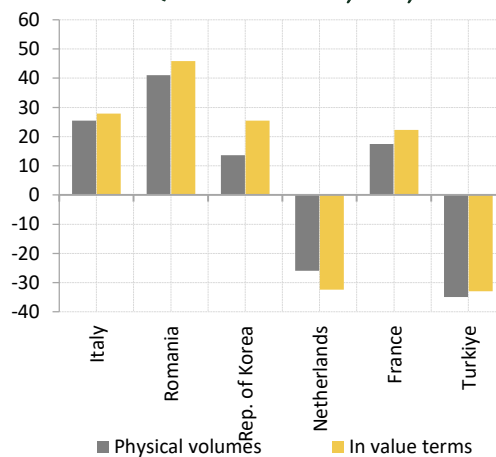
Source: ASPR BNS, NBK computations

Figure 48. Exports by Major Groups of Goods, Cumulative, YoY, %



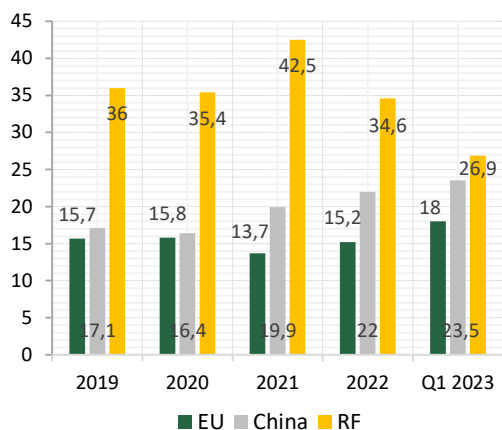
Source: SRC MF RK, ASPR BNS, NBK computations

Figure 49. Oil Exports by Countries in the 1st Quarter of 2023, YoY, %



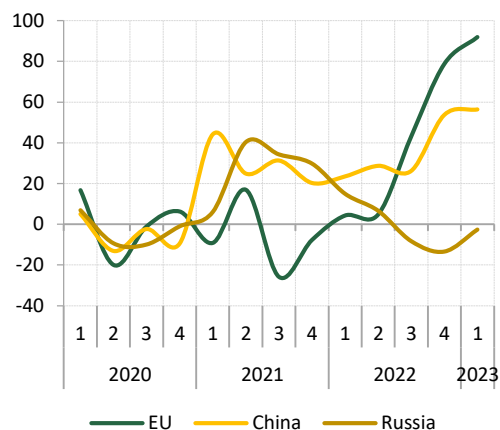
Source: ASPR BNS

Figure 50. Shares of Countries in Imports, %



Source: SRC MF RK, ASPR BNS, NBK computations

Figure 51. Imports by Countries, YoY, %



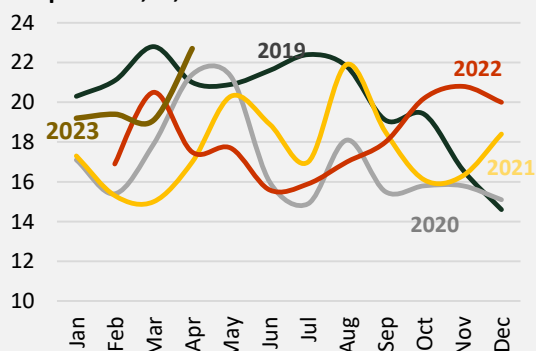
Source: SRC MF RK, ASPR BNS, NBK computations

Box 4. Dynamics of Savings Behavior of the Population

Households put money away based on various factors: the level of turnover, interest rates, inflation and inflation expectations, and the development prospects for the country's economy. In addition, the level of savings in the long term is influenced by the demographic structure of the population, the cultural characteristics of the country and other factors.

What Percentage of the Population is Saving?

Figure 1. Percentage of Saving Population, %, 2019-2023



responses (neither good nor bad timing), and their share is growing (Figure 2).

The balance of responses (the difference between the percentage of respondents who consider the current time to be good and bad for savings) has been gradually decreasing since 2020 due to reduction in pessimistic answers. This may indicate that the behavior of the population is shifting towards more savings sentiments.

In general, over the last four years, the percentage of saving population in Kazakhstan has been in the range of 15%-23%, in April 2023 it reached 23%. Out of those, more than a half of the interviewed keep their savings at a bank deposit, and more than one third – in cash.

The majority of respondents when assessing the optimality of timing for making savings tend to give neutral

Figure 2. Assessing the Optimality of Timing for Savings

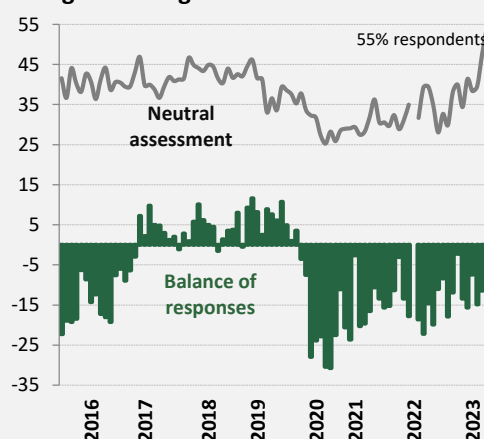
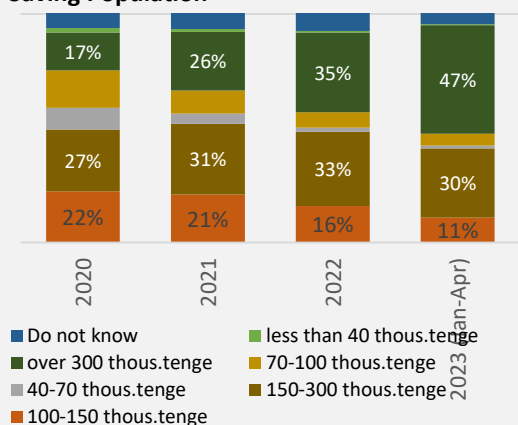


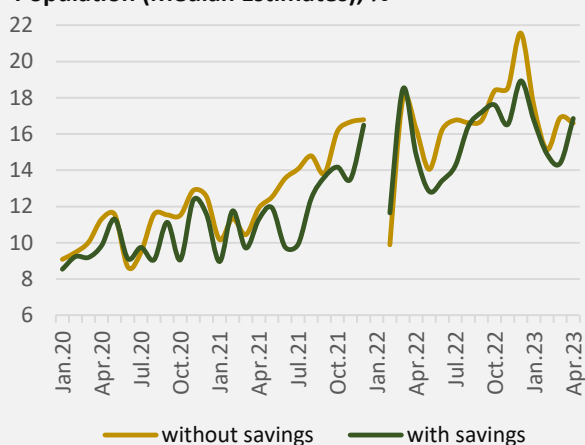
Figure 3. Income Structure of the Saving Population



encourage more savings. At the same time, the formation of savings may be constrained by the rising inflation and inflation expectations.

Inflation Expectations

Figure 4. Inflation Expectations of the Population (Median Estimates), %



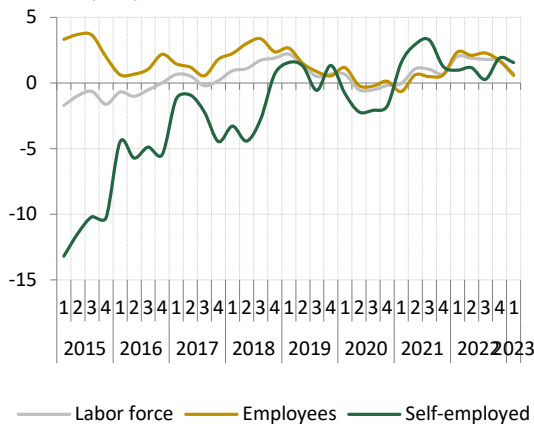
As a rule, savings are shaping a more financially literate community. In this regard, such categories often add up to lower inflation expectations. According to the survey, in Kazakhstan, inflation expectations of the saving population are inconsiderably lower than those of households that do not have savings – on average by 1 pp (Figure 4). At the same time, during the periods of shock events, both categories react almost identically.

Savings and Income

As a general rule, the higher the level of household income, the higher the marginal propensity to save. According to the results of the survey, more than 70% of the saving population have income from 150 thousand tenge. In the structure of savers, the share of respondents with a higher average monthly income increased (Figure 3).

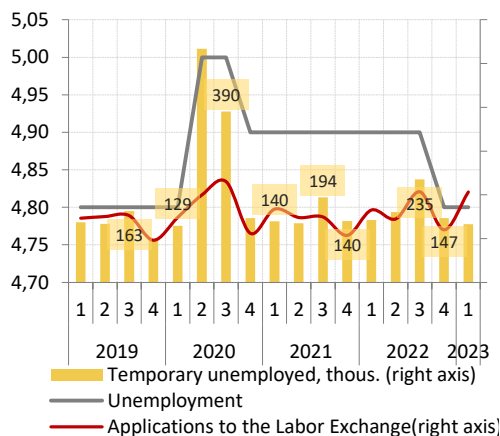
The highest share of savings is observed in the age group of 25-34 years (25%). Also important are the expectations of households regarding the change in their income in the future and the economic situation in the country in general. Estimates of changes in personal financial standing in a year are generally optimistic. At the same time, since 2020, this optimism has been declining, which may

Figure 52. Employees and Self-Employed, YoY



Source: ASPR BNS

Figure 53. Unemployment Rate and the Temporary Unemployed Population, %



Source: ASPR BNS

3.3. Labor Market

In the first quarter of 2023, the annual rate of labor force growth in the labor market decelerated due to lower growth rates of hired workers. Unemployment in the first quarter of 2023 remained at 4.8%, but the youth unemployment rate for ages 15-28 has gone up to 4.1% from 3.8% in the fourth quarter of 2022.

As a whole, in the first quarter of 2023, the employed population amounted to 9.032 thous. individuals (a 0.8% growth, YoY). The growth rate of the number of employees is decelerating and the self-employed population show a higher growth rate compared to the first quarter of the preceding year. It should be noted that the growth in the number of employed occurs mainly due to demographic processes, rather than a decrease in unemployment, since the dynamics of growth in the number of employed people correlates to a large extent with the dynamics of changes in the labor force (Figure 52). The structure of employed population compared to the previous year remained virtually the same: 76.4% of the total number of people employed in the economy are hired workers whereas 23.6% belong to the self-employed.

In the first quarter of 2023, employment growth was observed in many sectors of the economy compared to the corresponding quarter of last year, except for agriculture, construction, real estate transactions, administrative and ancillary services, public administration and defense, as well as arts, entertainment and leisure. However, it should be noted that most of the employed were people engaged in trade, education, industry and agriculture.

The annual dynamics of change in the self-employed at the sector level remained divergent in the first quarter of 2023. Thus, there was a decrease in the number of self-employed in information and communication, arts, entertainment and leisure, financial and insurance activities, real estate transactions, agriculture, construction, and manufacturing. Along with this, a significant increase in the self-employed in the field of education, professional, scientific and technical activities, healthcare and social services is worth mentioning.

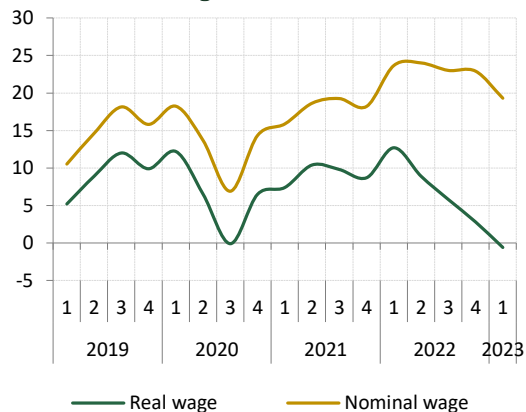
In the first quarter of 2023, the number of applications by the population to the employment authorities increased and the number of temporarily unemployed people decreased (YoY) (Figure 53). At the same time, in the first quarter of 2023, the number of temporarily unemployed reached pre-pandemic levels.

Despite a significant rise in nominal wages in the economy by 19.3% (YoY), according to ASPR BNS RK estimates, the growth rate of real wages decreased due to high inflation (Figure 54). Growth rates of the payroll fund remain strong, although slowing slightly amid a faster slowdown in the private sector's payroll fund (Figure 55).

However, generally, the observed quarterly expansion of the payroll fund strengthens the upward trend in the cost of production in the economy. Growth in the cost of goods and services sold accelerated in some sectors of the economy in 2022 with a slight slowdown in the fourth quarter (Figure 56).

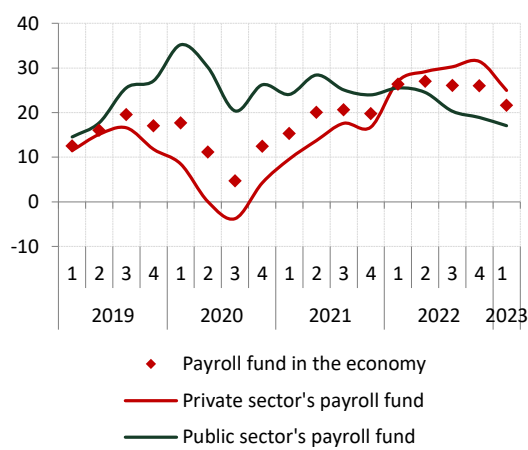
The rate of productivity growth in the first quarter of 2023 accelerated compared to the preceding quarter. The sectoral performance dynamics show that many industries are demonstrating a positive growth trend. At the same time, in some sectors of the economy, productivity grows faster than real wages, while in others it is accompanied by reduction in wages. Pro-inflationary wage growth, i.e. outperforming productivity growth is seen in sectors such as accommodation and catering services, mining, communication, and administrative and ancillary services (Figure 57).

Figure 54. Growth Rate of Nominal and Real Wage, YoY



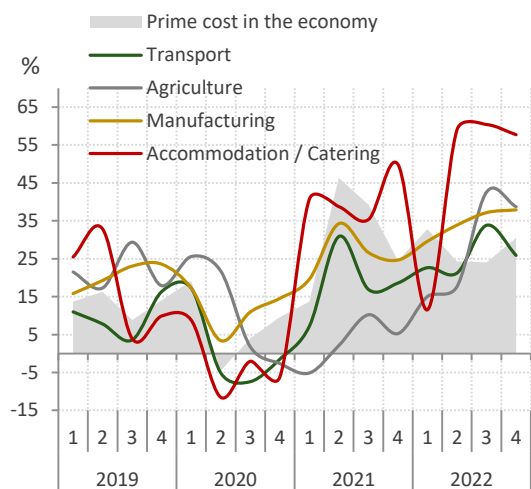
Source: ASPR BNS

Figure 55. Payroll Fund Dynamics, YoY, %



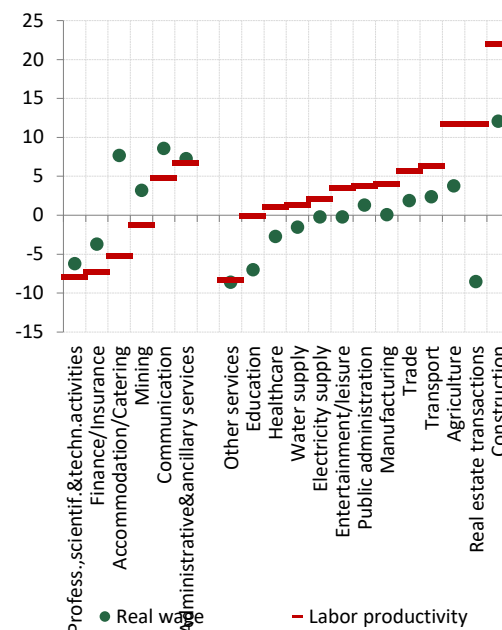
Source: ASPR BNS, NBK computations

Figure 56. Prime Cost, by Economic Sectors, YoY



Source: ASPR BNS, NBK computations

Figure 57. Labor Productivity and Real Wages by Types of Economic Activities in the First Quarter of 2023, YoY

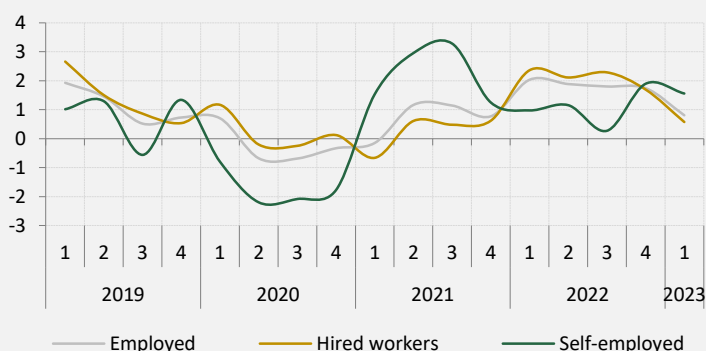


Source: ASPR BNS, NBK computations

Box 5. Review of the Labor Market in Kazakhstan after the Pandemic

The COVID-19 pandemic has greatly affected the global labor market, causing significant changes in the economy and labor relations. Many households and businesses have faced financial losses because of the lockdown and restrictive measures imposed to contain and prevent the spread of infection in Kazakhstan. According to the World Bank Enterprise Survey⁸ in Kazakhstan, about 4.6% of firms went bankrupt within a year after the onset of the pandemic. If we take into account those firms that could not be contacted during the survey, this figure rises to 28.9%. The total number of hours worked per week decreased by 36.4%. As a result of the COVID-19 pandemic, about 17% of firms reported a reduction in the number of temporary workers, while about 5.5% of firms increased the number of temporary workers; this may be driven by an increased demand for the supply of goods and services.

Figure 1. The Employed, Hired Workers and the Self-Employed, YoY



Source: ASPR BNS RK

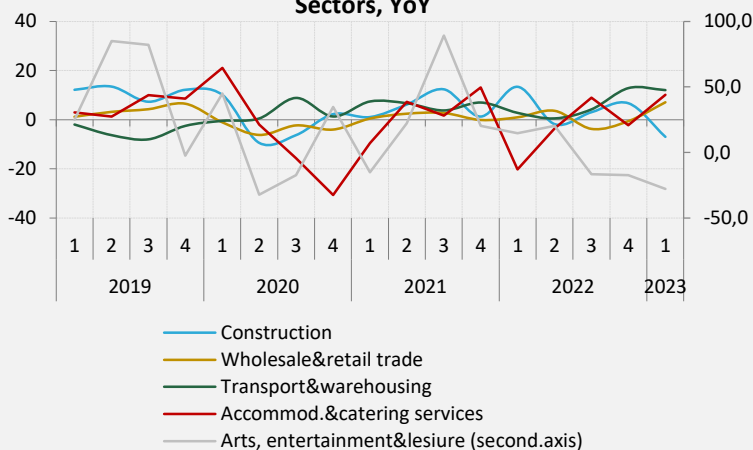
The largest number of layoffs was registered in the trade and other service sectors. Large enterprises had a higher rate of layoffs compared to small and medium-sized companies due to the larger number of employees. According to the official data from the ASPR BNS, the unemployment rate in the country had increased exponentially from 4.8% to 5.0% in 2020. A high employment level was observed

⁸ World Bank Enterprise Survey presents a survey of representative samples of the formal, non-agricultural, non-extractive private sector with 5 or more employees in Kazakhstan. The data is on 1446 firms, of which 871 responded to the survey, 157 declined, and 472 firms could not be re-contacted. More details at: <http://www.enterprisesurveys.org>.

in the regions of Mangistau, North Kazakhstan, Turkestan as well as in the cities of Almaty and Shymkent.

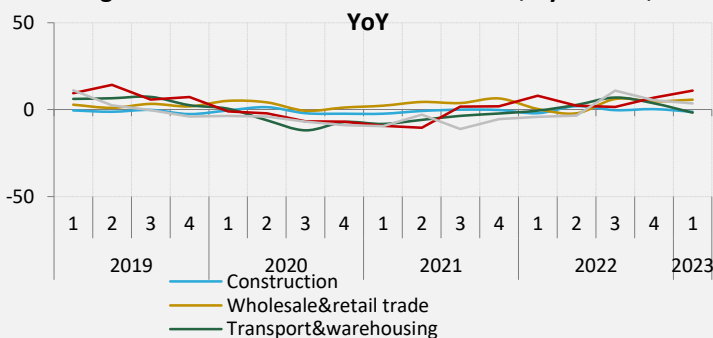
The growth dynamics of the employed and hired workers were similar to those of 2020, showing a contraction in 2020 with a recovery as early as the second quarter of 2021 (Figure 1). A significant drop was observed in the number of self-employed, since this category of workers is more vulnerable than hired workers. The dynamics of change in the self-employed population shows a significant reduction in 2020 in the sector of arts, entertainment and leisure, in the provision of accommodation and catering services (Figure

Figure 2. Growth Rate of the Self-Employed, by Sectors, YoY



Source: ASPR BNS RK

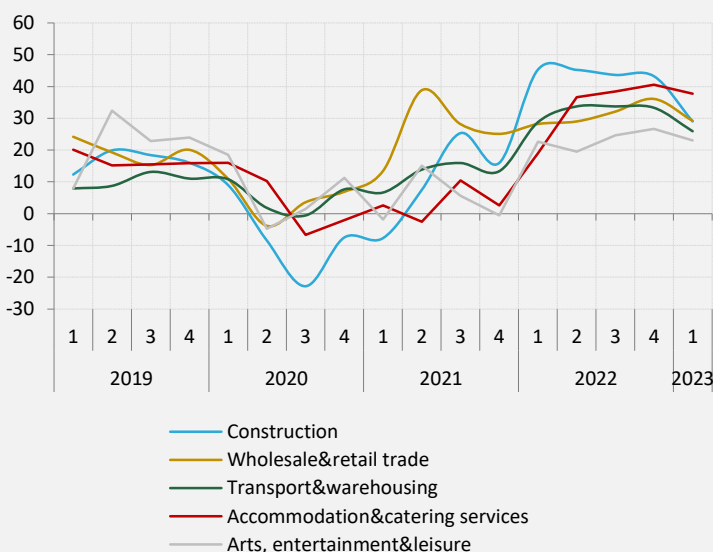
Figure 3. Growth Rate of Hired Workers, by Sectors, YoY



Source: ASPR BNS RK

sectors.

Figure 4. Payroll Fund Growth Rate, by Sectors, YoY



Source: ASPR BNS RK

2), as well as in healthcare, education and communication. At the same time, the number of self-employed in construction, trade as well as in real estate transactions decreased less significantly. At the same time, the sectors in which the number of self-employed has increased are transport and warehousing, professional, scientific and technical activities. Financial and insurance activities show a high growth in the number of employees.

The number of hired workers in 2020 was also declining in many sectors of the economy, but in general, the dynamics was less volatile compared to the self-employed. Hired workers accounting for more than 70% of those employed in the economy represent the dominant part of the working population. The arts, entertainment and leisure, accommodation and catering services, transportation and warehousing sectors saw a significant drop in the number of hired workers during the pandemic in annual terms (Figure 3). However, wholesale and retail trade, water supply, education and healthcare showed an increase in the number of hired workers compared to other

The reduction in the number of employees in industries was accompanied by a corresponding decrease in the volume of production of goods and the provision of services. In general, in 2020, the economy contracted in real terms by 2.5%, including the decline was shown by such industries as trade, transport, accommodation and food services, professional, scientific and technical activities, administrative and ancillary services, services of hairdressing and beauty salons, etc.

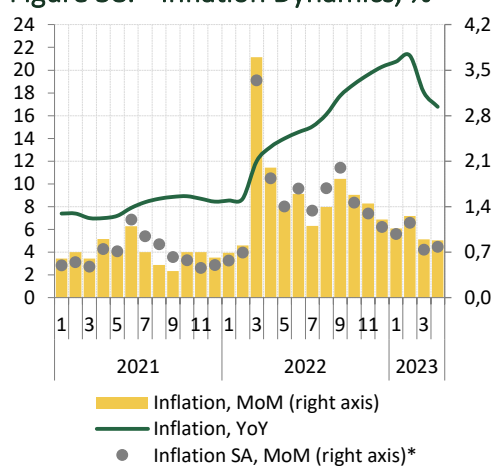
Since the pandemic, an average of 19 employees across firms in Kazakhstan have experienced pay cuts, bonus cuts, and the average pay cut was about 40.7% according to the World Bank Enterprise Survey. In terms of sectors, according to the ASPR BNS, the slowdown in the payroll

fund growth rate was observed in construction, accommodation and catering services (Figure 4). In addition, a significant reduction in wages was also experienced by employees engaged in financial and insurance activities, real estate transactions, professional, scientific and technical activities, as well as activities in the field of administration.

To keep their businesses running, enterprises have had to adapt to severe restrictions. During the pandemic, 22.2% of firms introduced a new or improved product/service and more than 40% of firms started or expanded their practice of remote work in Kazakhstan, according to the World Bank Enterprise Survey. At the same time, the current situation shows that distance working remains relevant in various sectors of the economy in the post-COVID period. This format of work allows reducing labor and economic costs, which is an important factor for enterprises. According to the National Report “Labor Market of Kazakhstan: on the Way to Digital Reality”⁹, experts estimate that 29% of those employed in the economy can work online, referring mainly to highly qualified people who do not need to be physically present at the workplace. And the sectors with the smallest number of employees able to switch to remote work include the industry, construction, and agriculture. From a business point of view, the advantage of distance working is the ability to reduce costs by providing and maintaining jobs.

Thus, the self-employed population turned out to be more vulnerable during the pandemic. Due to the restrictive measures, workers in sectors such as the arts, entertainment and leisure, accommodation and catering services, transport and warehousing, and construction have become more vulnerable. Sectors that have generally seen growth in hired workers and the payroll fund are education and healthcare. At the same time, wholesale and retail trade did not suffer much, as demand for consumer goods remained moderate. The COVID-19 pandemic has given impetus to transformations in the labor market in Kazakhstan. Enterprises have increased their online commerce practices, are actively implementing the capabilities of delivery services, and are also more open to the transition to distance work.

Figure 58. Inflation Dynamics, %



Source: ASPR BNS, NBK computations

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

3.4. Inflation

In April 2023, monthly inflation was 0.9%. In annual terms, its growth slowed down to 16.8% from the peak of 21.3% observed in February of this year (Figure 58).

Monthly growth rates of inflation have been gradually decelerating since September. Meantime, they remain high exceeding average monthly values in 2017-2021 (0.9% in April 2023, versus 0.6% in April on average, in 2017-2021).

Monthly seasonally adjusted inflation is gradually approaching the upper boundary of the target band (Figure 59).

⁹National Report “Labor Market in Kazakhstan: On the Way to Digital Reality”, 2022, <https://iac.enbek.kz/ru/node/1451>

The same trend is observed in estimates of seasonally adjusted inflation that went down to 0.5% – 1% in April 2023 from 0.8% – 3% in September 2022¹⁰.

Among the goods that showed increased volatility and, therefore, were excluded from core inflation indicators, sugar and confectionery, hospital services, furniture, audiovisual equipment, household appliances and soft drinks should be mentioned.

Thus, inflationary pressure in the economy is gradually weakening. This is facilitated by reduction in global inflationary pressure, a decline in world food prices as well as in import prices against the strengthening of the tenge exchange rate.

The domestic demand remains robust but a high base rate nurtures its moderate dynamics.

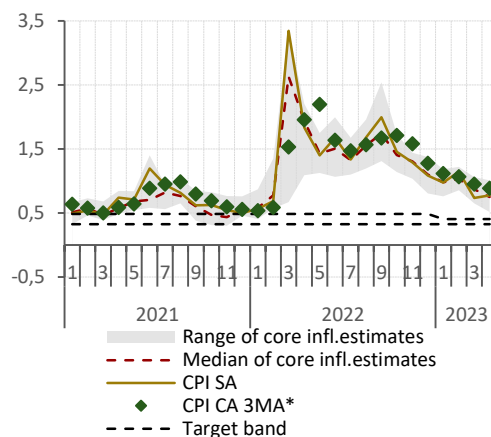
More active inflation dynamics is restrained by still high costs in the economy that are driven by high transportation costs, the growing payroll fund in the real sector, expenditures for raw materials and supplies.

Prices of **food products** (Figure 60) in April 2023 have risen by 0.9% compared to the preceding month. However, the annual price growth for this group of goods slowed down from 26.2% in February to 17.9% in April of this year mainly due to a gradual exhaustion of the effect of the 2022 high base.

Bread and bakery, meat and dairy products made a significant contribution to the annual food inflation. An aggregate contribution of these products to the rise in food inflation made up 11.4 percentage points (Figure 61).

Bread and bakery keep demonstrating a steady monthly rise in prices exceeding 1% since February 2022. Such tendency had shaped given a high level of producer costs in the food processing industry

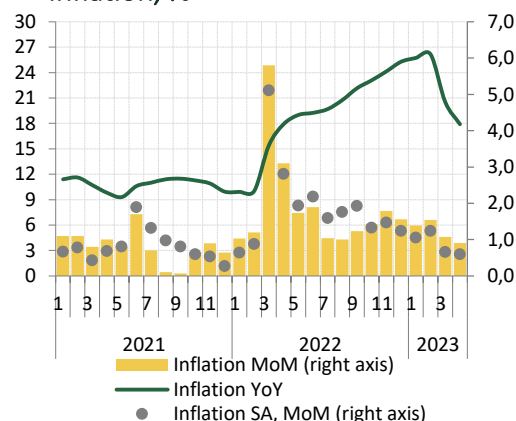
Figure 59. Seasonally Adjusted Consumer Price Index and Core Inflation Estimates, %



Source: NBK computations

*monthly moving average of seasonally adjusted CPI for the last 3 months

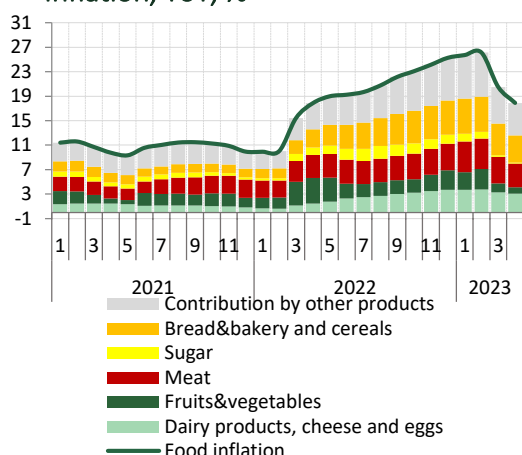
Figure 60. Dynamics of Food Inflation, %



Source: ASPR BNS, NBK computations

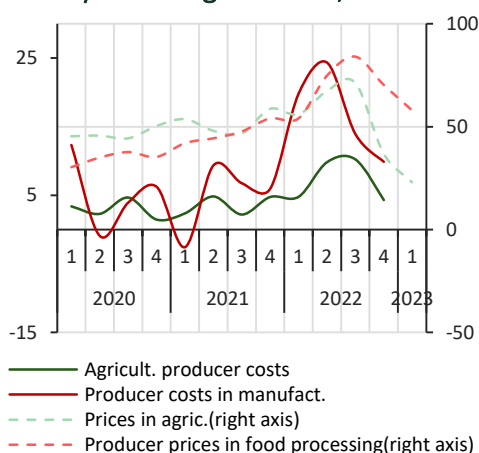
¹⁰ The range of core inflation estimates calculated using more than 60 methods. The estimates are interpreted as a range from the minimum to the maximum value. Thus, not only the change in the median of trend inflation is recorded, but also the variance of its estimates. For a more detailed description of methods for estimating core inflation, see the study "Various Core Inflation Estimates" <https://www.nationalbank.kz/ru/news/issledovaniya>

Figure 61. Contribution of Particular Products to the Food Inflation, YoY, %



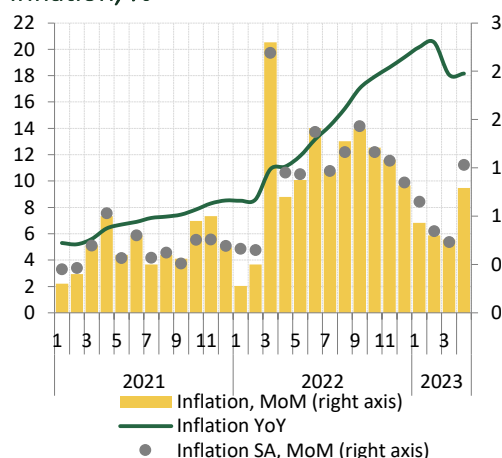
Source: ASPR BNS, NBK computations

Figure 62. Producer Prices in Agriculture and the Manufacturing Industry and Tangible Costs, YoY %



Source: ASPR BNS, NBK computations

Figure 63. Dynamics of Non-Food Inflation, %



Source: ASPR BNS, NBK computations

(Figure 62) and the rise in prices for other food products such as eggs and milk.

A high monthly rise in prices was also observed in the rice market because of poor harvest of rice producers (gross rice harvest in 2022 compared to 2021 decreased by 14.4%) given a cut in planted acreages and shortage of water for land irrigation.

On the other hands, some goods on the contrary are exerting a disinflationary effect on food inflation. Prices of sugar, for example, have been declining for an eighth consecutive month owing to the increased production given a 2.9 times increase in output in January-February 2023.

At the beginning of this year, because of frosts in the region, crop losses among agricultural producers, an imbalance in supply and demand increased. Starting from March of this year, the situation in the market has been stabilizing. Already in April, prices for fresh vegetables have declined by 0.1%, the annual price growth slowed from 27.9% in February to 3.9% in April of this year. The rise in prices for all types of vegetables decelerated and prices for cabbage, potatoes, carrots, beetroots, and garlic decreased as well.

Deceleration in the growth of agricultural producer prices to 1.4% (YoY) in April 2023 compared to 4.9% (YoY) in March 2023 also had an impact on consumer food prices. A disinflationary pressure on agricultural producer prices is exerted by slower growth of expenses in the sector, whose dynamics have not been demonstrating a significant growth compared to the increase in expenses in the manufacturing industry (Figure 62).

The rise in prices for **non-food products** (Figure 63) in April 2023 accounted for 1.3%, in annual terms – 18.2% (in March 2023 – 18.1%). The main factor for acceleration of the growth in prices for non-food products has been the raising of the marginal prices for gasoline and diesel fuel with their monthly growth accounting for 9.7% and 16.1% respectively. From April 12, 2023, the marginal prices for AI-92 gasoline have been increased to 205 tenge per litre and for diesel fuel – to 295 tenge.

Apart from that, among goods that put a significant pro-inflationary pressure, the rise in prices for personal goods, footwear and detergents and cleaning products is worth mentioning (Figure 64). Such trend has outlined against the growth in import prices that is outpacing the effect of realignment of logistics chains.

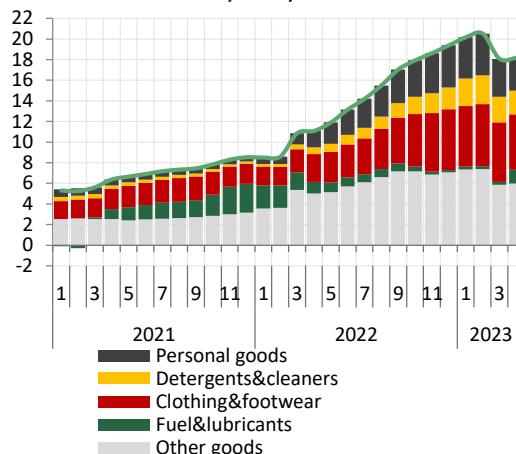
Prices for **paid services** to the population increased by 0.4% in April 2023 in monthly terms, and the annual price growth slowed down to 13.7% (Figure 65). Prices for outpatient services, including primary doctor's appointments and dental services, as well as hairdressing services, have shown high monthly growth rates since February this year (Figure 66). The acceleration of rise in prices for food services in restaurants and cafes occurred against the increasing food prices, high production costs, as well as growing wages.

Inflation expectations of the population in March-April 2023 remained volatile and heightened.

The median estimate of expected inflation over a one-year horizon increased from 14.2% in February to 16.7% in April 2023. Meanwhile, the median of perceived inflation declined from 21.2% to 19.3%. (Figure 67).

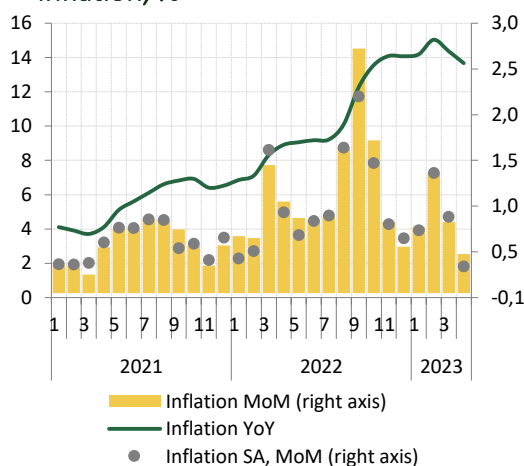
Among food products, the survey respondents noted the growth in prices over the last month for such products as dairy products, fruits and vegetable production, meat (the growth from 29% to 37%). Among non-food products, the respondents highlighted the rise in prices for fuel and lubricants (from 3% to 18%), clothing and footwear (from 12% to 20%), medications (from 13% to 25%), home care products (from 23% to 29%). Within the structure of services, the population mostly felt the increase in prices of utility services (from 16% to 24%), healthcare services (from 5% to 24%), services of communication/Internet, and restaurants. The consumer sentiment index remained weakly positive (102.9 in April 2023).

Figure 64. Contribution by Non-Food Products, YoY, %



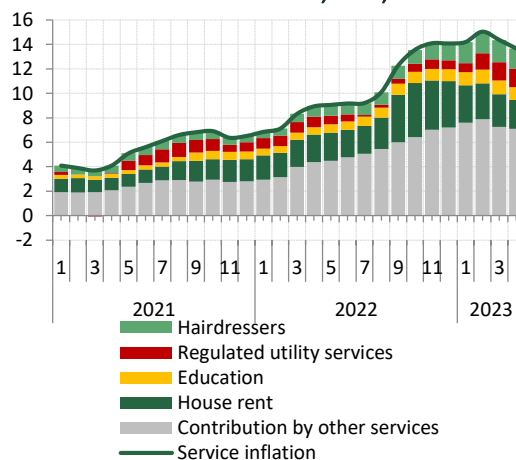
Source: ASPR BNS, NBK computations

Figure 65. Dynamics of Service Inflation, %



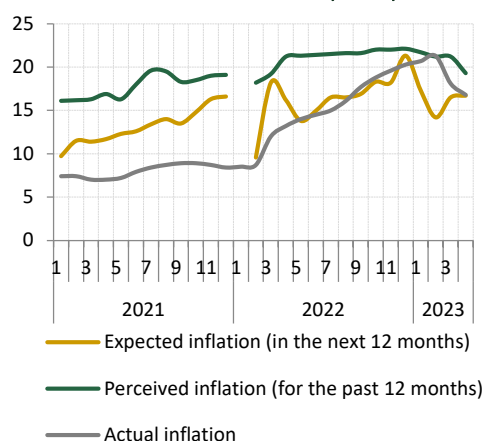
Source: ASPR BNS, NBK computations

Figure 66. Contributions to the Paid Services Inflation, YoY, %



Source: ASPR BNS, NBK computations

Figure 67. Median Estimates of Expected and Perceived Inflation, YoY, %



Source: ASPR BNS PK, FusionLab: Public poll

Box 6. Analysis of Cyclicity of Consumer Price Index Components

In pursuing the monetary policy under the inflation targeting regime, central banks carry out in-depth monitoring of inflationary processes, which includes, in addition to considering general trends in the economy, inflation expectations, price dynamics in various industries, and singling out a stable part of price growth. Steady price growth is isolated from the volatile and often unpredictable component of price change and is strongly linked to future inflation as well as to macroeconomic variables. Thus, the central bank, based on the dynamics of macroeconomic variables, can both understand the nature of steady price trends and influence macroeconomic variables and future inflation with its policy.

Usually, the relationship between inflation and macroeconomic variables is expressed using the linear Phillips equation, where, in addition to shocks, inflation expectations, indicators of economic activity (GDP gap, unemployment gap, etc.) as well as the real exchange rate (for import-dependent economies) act as explanatory variables. At the same time, if there is a relationship between the general CPI and a macroeconomic variable, then the same relationship may exist for some CPI component. Thus, in the literature, it is customary to call goods and services procyclical if the change in their prices has a positive relationship with the economic activity, and acyclical otherwise.

For reference. In order to identify procyclical components, the consumer price index was broken down into 66 individual components, which represent aggregated groups of goods and services. For each such component, the equation of $\pi_t^i = \alpha * \pi_{t-1}^i + \beta * OG_t + \varepsilon_t^i$, was looked at, where π_t^i – i -th CPI component at time t , OG_t – the gap of economic activity indicator at time t , ε_t^i – shock pertinent to i -th CPI component at time t , α, β – are the coefficients with explanatory variables. CPI components were taken as the price change, month to preceding month with seasonal adjustment. The measure of economic activity was the gap in the monthly manufacturing index calculated using a full-sample asymmetric Christiano-Fitzgerald filter. The sample was taken from January 2011 to January 2023. Finally, the component was considered procyclical if the coefficient with the economic activity is positive and statistically significant.

As a result of the use of the above methodology, 35 out of 66 CPI components, the majority of unregulated non-food products and services acted as procyclical components, which generally proves the positive relationship between the growth of domestic demand and price growth. All food products, as well as regulated non-food products and services, such as fuel and lubricants and utility services, have become acyclical. Moreover, the application of the Granger test to the pair of the CPI component and the economic activity indicator led to similar results when those components that showed Granger causality from the economic activity indicator acted as procyclical components.

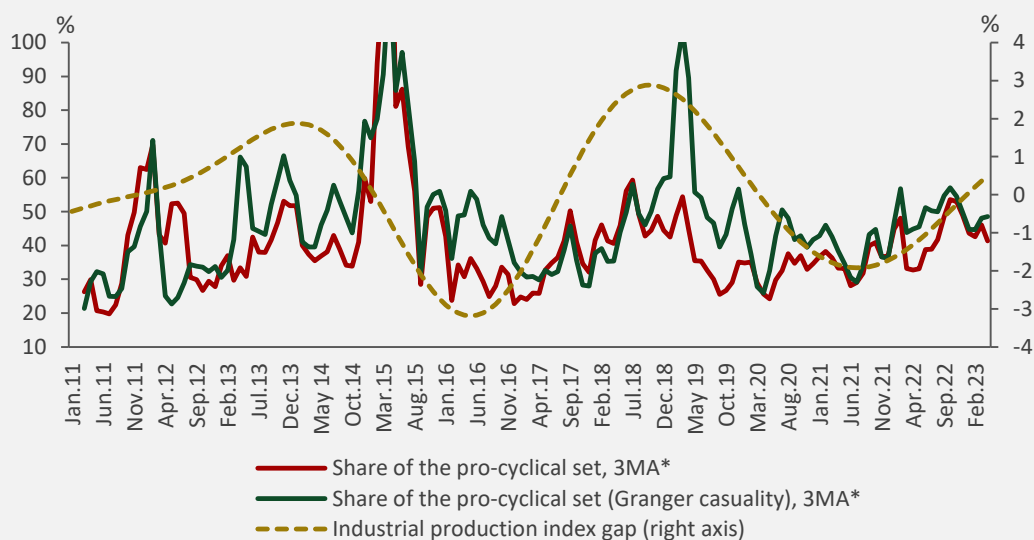
The above results, to some extent, indicate a weak dependence of food prices on demand, since, first, they are essential goods and can be consumed uniformly during business cycles, and second, they can

be subject to various random shocks, such as weather conditions. Thus, considering the selection of procyclical goods and services in case of Kazakhstan almost completely repeats the concept of core inflation by way of exclusion, when often only unregulated non-food products and services remain in the consumer basket. At the same time, it does not follow from the results that the central bank does not influence the price dynamics of food products, since inflation expectations and the real exchange rate can also affect such dynamics, which, in turn, can be influenced by the central bank through its monetary policy.

Breaking down the consumer basket into procyclical and acyclical components enables to understand what contribution to the CPI each of these groups makes, as well as to trace the very dynamics of a set of procyclical goods and services that are close in characteristics to core inflation. Thus, the share of procyclical components in the CPI was generally higher when there was a positive gap in economic activity, and demand for these goods and services increased their prices more than for acyclical components (Figure 1).

Finally, from the dynamics of the procyclical components per se, we can conclude that an average increase in the prices of procyclical goods and services during the period from the transition to inflation targeting under the free-floating exchange rate regime of the tenge before the beginning of geopolitical turmoil in 2022 (January 2016 - December 2021) was 5.9%, which is an evidence of high inflationary pressure in the economy in recent years.

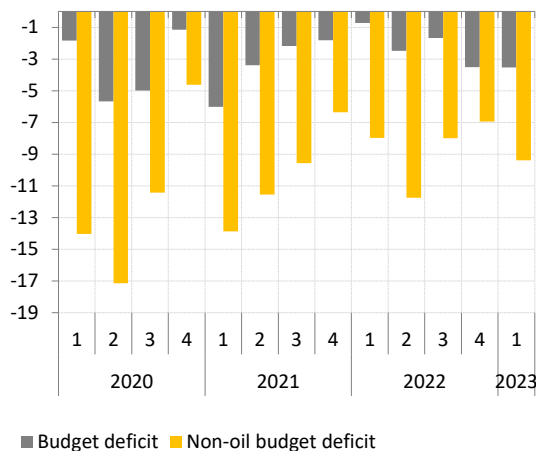
Figure 1. The Share of Contribution of Procyclical Component to the CPI (MoM, SA) and the Gap of Economic Activity Indicator



* – moving average for the last three months

Source: NBK computations

Figure 68. Overall and Non-Oil Deficit of the National Budget, as % of GDP



Source: MF RK

3.5. Fiscal Policy

As of the end of the first quarter of 2023, the budget deficit was demonstrating accelerated growth because of significant increase in the expenditure side of the budget compared to the expansion in budget revenues.

In January-March 2023, the national budget deficit equaled 830.4 bln tenge, exceeding the amount in the corresponding period of 2022 by 4 times (in the first quarter of 2023 – 3.5% of GDP). The increase in the budget deficit is in the first instance driven by an outstripping growth of expenditures over revenues (including transfers from the National Fund) (the growth of 29.2% and 13.9%, respectively).

It is noteworthy that in February parameters of the national budget for 2023 have been specified, where spending was brought up by 5.2% compared to the previous plan that was approved in December 2022. Major expenses will be allocated to the public order, defense, transport and communications, healthcare and the utilities sector.

In a more detailed breakdown, funding will be directed for supporting the social sphere, ensuring defense security, implementing government programs, developing regions, building and repairing nation-wide and local roads, supporting small and medium-sized businesses.

In January-March 2023, the revenue side of the budget received official transfers totaling 1 144.1 bln tenge (the share in budget revenues – 26.2%), where the guaranteed transfer from the National Fund amounted to 621.0 bln tenge, the earmarked transfer – 360.6 bln tenge, and transfers from subordinate government authorities equaled 9 162.2 bln tenge. Transfers from the National Fund showed a 6.5% reduction compared to the corresponding period of 2022. The national budget revenues excluding transfers from the National Fund went up by 21% compared to the corresponding period of 2022.

The non-oil national budget deficit (budget deficit excluding transfers from the National Fund and export customs duties for crude oil), according to the National Bank estimate, in the first quarter of 2023 equaled 2 203.9 bln tenge (9.4% of GDP), which is by 40.4% larger compared to the corresponding period of 2022 (Figure 68).

During January-March 2023, national budget revenues increased compared to the corresponding period of 2022 by 13.9% and amounted to 4.4 trln tenge. The main reason for the growth in revenues is a 23.2% increase in tax revenues (the share in the budget revenues made up 72.2%) due to the growing economic activity and a rise in prices for main export commodities.

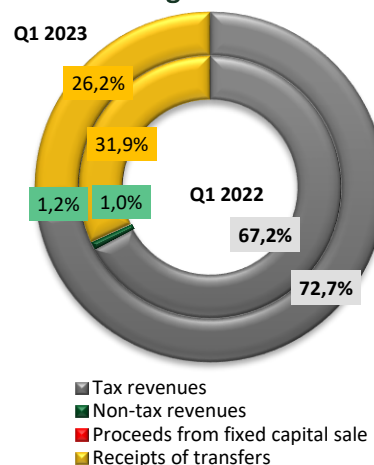
Within the structure of tax revenues, there was an increase in receipts from corporate income tax (a 20.7% growth, YoY) owing to extra tax liabilities payable by large mining and smelting companies as well as from the value-added tax (by 33.6%, YoY) as a result of growing turnovers from realization of goods, works and services.

During January-March 2023, non-tax revenues increased by 38.2% compared to the corresponding period of 2022. A major growth in their structure fell on revenues from dividends on government blocks of shares in the national ownership as well as revenues from public assets (receipts of rental payments for the use of Baikonur space complex) and other non-tax revenues (receipts from the sale of seized property). Reduced proceeds from fixed capital sale are related to the absence of sales of tangible assets from the state stockpiles.

At the same time, during January-March 2023, receipts of official transfers decreased by 6.5% in annual terms (the share in the budget revenues accounted for 26.2%) due to reduction in the guaranteed transfer (by 36.9%, YoY) and transfers from subordinate government authorities (by 13.3%, YoY) (Figure 69).

During January-March 2023, the national budget expenditures amounted to 5.0 trln tenge, having increased by 29.2% compared to the corresponding period of 2022. The main contribution to the expansion in the national budget expenditures has traditionally been made by: debt service – by 38.8% (the share – 11.1%), public services of general nature – by 17.6% (the share – 5.1%), defense – by 13.1% (the share – 4.2%) and healthcare – a 9.9% increase (the share – 10.9%). Spending on social welfare and social security grew by 12.1% (the share – 23.4%).

Figure 69. Structure of the National Budget Revenues



Source: MF RK

BASIC TERMS AND DEFINITIONS

The Base Rate is a key monetary policy instrument of the National Bank that allows regulating nominal interbank interest rates in the money market. By establishing the base rate level, the National Bank determines a target value of key interbank money market short-term interest rate 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.

Reserve Money includes cash issued into circulation by the National Bank, other than cash at the cash departments of the National Bank, transferrable and other deposits of banks, transferrable deposits of non-bank financial organizations and current accounts of government and non-government non-financial organizations in the tenge at the National Bank.

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 individuals in the national 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 national 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 over time in the average price level of a fixed basket of goods and services purchased by the population for personal consumption. 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 preceding (base) period. The index is calculated by the Bureau of National Statistics of the Agency for Strategic Planning and Reforms 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 term 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 as well 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 national 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.

Real Exchange Rate refers to a relative price of a commodity produced in two countries: the proportion of commodity exchange between countries. The real exchange rate depends on the nominal rate, on relation between exchange rates of currencies, and prices of goods in the national currencies.

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, whereby monetary policy instruments influence final macroeconomic indicators such as the economic growth, inflation.

LIST OF KEY ABBREVIATIONS

bp – basic point

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

GDP – gross domestic product

TEA – types of economic activities

GSs –government securities

EIA – Energy Information Administration

EM – emerging markets

EU – European Union

ECB – European Central Bank

CPI – consumer price index

SRC MF RK – State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan

KASE – “Kazakhstan Stock Exchange” JSC

KDIF – “Kazakhstan Deposit Insurance Fund” JSC

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

PPE – property, plant and equipment

pp – percentage point

Rosstat – Federal State Statistics Service of the Russian Federation

IMF – International Monetary Fund

MW – minimum wage

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
