



NATIONAL BANK OF KAZAKHSTAN



Monetary Policy REPORT

FEBRUARY 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	14
1.4. Risks in the Medium Term	16
1.5. Forecast of the Current Account of the Balance of Payments	17
II. MONETARY POLICY	21
2.1. Decisions on the Base Rate	21
2.2. Money Supply	22
2.3. Money Market	22
2.4. Foreign Exchange Market	23
2.5. Stock Market	25
2.6. Deposit Market	26
2.7. Credit Market	29
III. MACROECONOMIC CONDITIONS	33
3.1. External Sector	33
3.2. Development of the Domestic Economy	36
3.3. Labor Market	41
3.4. Inflation	45
3.5. Fiscal Policy	50
BASIC TERMS AND DEFINITIONS	55
LIST OF KEY ABBREVIATIONS	58
BOXES	
Box 1. Impact on Kazakhstan's Economy Made by China's Opening after the Pandemic	34
Box 2. Development of E-Commerce Worldwide and in Kazakhstan: Effect on Inflationary Processes and the Monetary Policy	43
Box 3. Assessing Inflation Factors with the Help of Dynamic Factor Model in 2022	48
Box 4. The Middle-Income Trap	52



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 **February 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 taken will help cool off inflationary processes in the country with the further goal of stabilizing and reducing inflation in the medium term to its targets.

Inflationary processes, despite relative stabilization, are shaping at a high level due to stable domestic demand, restructuring of logistics and production chains, stimulating fiscal policy and high and unstable inflation expectations. Monthly inflation rates, despite their deceleration, continue to build above an

all-time average. Estimates of inflationary expectations among the population indicate that the existing inflationary background continues to be perceived by the people as high. A clear downward trend has not yet been formed. This creates an obstacle to a rapid slowdown of inflation.

The growth rate of Kazakhstan's economy accelerated, exceeding the National Bank's expectations. All sectors of the economy have been demonstrating positive dynamics, with significant acceleration in the service sector.

The external background is developing more favorably; the risks of a global recession have declined. Inflationary processes are decelerating in many countries, including Kazakhstan's trading partners. This is nurtured by a lower pressure in the mineral and commodity markets, as well as by the improving situation with supply chains. The global oil market is expected to show moderately positive dynamics. Global demand is anticipated to go up in 2023, with China making the largest contribution to the growth due to the reopening after the pandemic.

Given new scenario-based conditions as well as external and internal factors, inflation forecasts have been revised slightly downward. Annual inflation will be in the range of 9-12% in 2023, 6-8% in 2024 and 4-6% in 2025. At the same time, the forecast range has been expanded in 2023 due to uncertainty regarding the fiscal stimulus in Kazakhstan and inflation dynamics in trading partner countries.

The improvement in inflation forecasts is driven by a projected decline in the FAO Cereals Index, good harvest in Kazakhstan, appreciation of the real exchange rate of the tenge and a moderate impact of the migration shock on services compared to our assumptions factored in the last forecasting round.

Forecasts for Kazakhstan's economic growth are also improved due to more positive expectations regarding oil production and exports, with the gradual recovery of economies in the trading partner countries. The GDP growth in the next three years is expected to be in the order of 3.5-4.5%. Robust growth in the domestic demand will be supported by the stimulating government spending and favorable oil prices.

Forecast risks from the external environment are persisting due to uncertainty of the geopolitical situation and high world food prices. On the part of external environment, inflation risks are associated with a possible acceleration of monthly inflation rates in Russia because of increased state budget expenditures, weakening of the ruble and sanctions.

Pro-inflation factors within the country are associated with the much-needed reforms of tariffs for regulated utility services and in the fuel and lubricants market. The effect from implementation of these reforms can accelerate the rise in prices for a wide range of goods and services. I'd like to make a point that we did not include these factors in the assumptions of the baseline scenario. Therefore, their realization may entail changes in our forecasts.

Given the current environment, the National Bank sees the need to maintain the base rate at the existing level during the first half of 2023. This is necessary to stabilize inflation and gradually reduce it in the medium term.

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

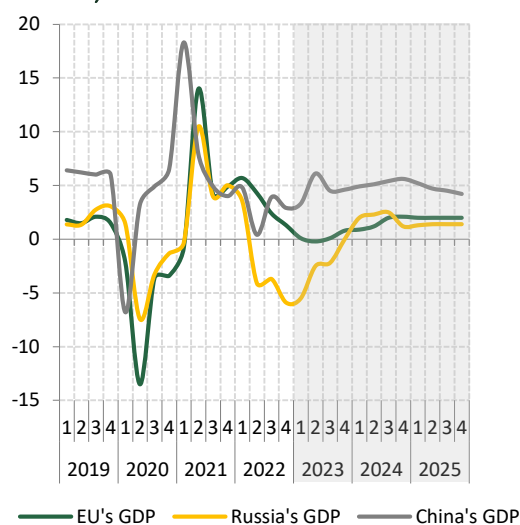


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PROSPECTS OF THE DEVELOPMENT OF THE MACROECONOMIC SITUATION

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 preceding “November-December 2022” forecasting round, external conditions somewhat improved. In particular, by the end of the last year, inflationary pressure slightly weakened in many countries for the first time over a long period. This, on the one hand, caused a slowdown in the pace of rate hikes by central banks, and on the other hand, slightly increased activity in the industrial sector and services. In addition, China announced the end of the zero-tolerance policy for Covid-19, and in the EU, the impact of energy crisis was more moderate. As a result, in the second half of 2022, the growth rates of a number of major economies proved to be more sustainable than anticipated before. Due to some improvement in the present situation, the IMF raised its global economic growth outlook for 2023 from 2.7% to 2.9%. Growth is expected to accelerate to 3.1% in 2024.

The development of the global economy under a more pessimistic scenario is not ruled out. The main risks still include high inflation in the world and the associated tight monetary policy of large central banks, a sudden worsening of the situation with coronavirus in China as well as an escalation of geopolitical developments in the world.

The EU economy in 2023 will slow down to 0.2% (YoY) against projected high inflation, tight monetary policy of the ECB and the expected downturn in the US and worldwide. In the largest European economies (Germany, France, Italy and the Netherlands), a recession is probable. Growth is expected to be rather sluggish in 2024-2025 (Figure 1). Over the forecast horizon, one of the main risks for the EU economy is a possible shortage of natural gas and other energy sources due to the refusal of Russian supplies, interruptions in supplies from other regions and colder than usual weather conditions.

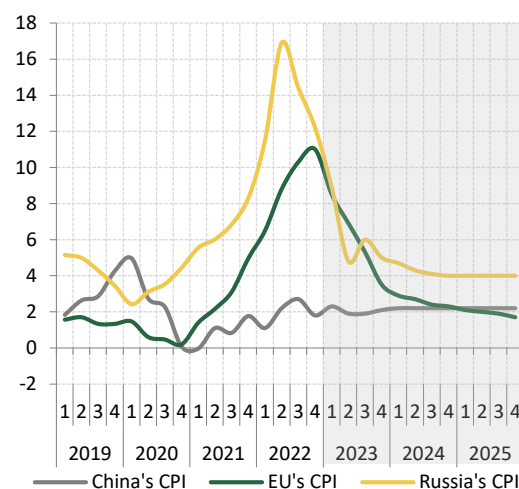
The Chinese economy after a long lockdown is expected to be under pressure in the first half of 2023. As the country adapts to new conditions, the situation will improve significantly. Domestic demand will be the main growth driver.

At the same time, feeble global demand for exported products, continuing problems in the real estate market, low investment activity and a possible strengthening of protectionist policies in Western countries will have a downward pressure. In general, growth is expected to accelerate from 3.0% (YoY) in 2022 to 4.6% (YoY) in 2023 and to 5.3% in 2024. The comeback to potential levels is expected by 2025 (Figure 1). Forecasts for the Russian economy have not changed significantly. At the same time, it is expected that this year the economy will not contract as rapidly as previously projected. In many ways, this will be ensured by a more moderate reduction in exports and oil production. The expected increase in budget spending should also provide some positive momentum. The main constraining factors will be the sanctions regime, a tight labor market and weak consumer demand. Therefore, the 2023 forecast had been (-2.6%) (YoY). In 2024, due to adaptation to new conditions the Russian economy will boost by 2.0% (YoY), and in 2025 – by 1.4% (YoY) (Figure 1).

As a result of the monetary policy pursued by central banks, coupled with the expected slowdown in the global economy and, consequently, weaker dynamics of demand, global inflationary pressures will gradually slow down. However, even taking this into account, inflation in many countries will still remain at a high level. According to the IMF forecasts, in 2023 the global inflation will slow down from 8.8% in 2022 to 6.6% and to 4.3% in 2024. In developed countries, inflation is projected to decelerate to 4.6% (YoY), and by 2024 – to 2.6% (YoY). In developing countries, inflation will be building at higher levels. The forecast for 2023 was 8.1% (YoY), and for 2024 – 5.5% (YoY).

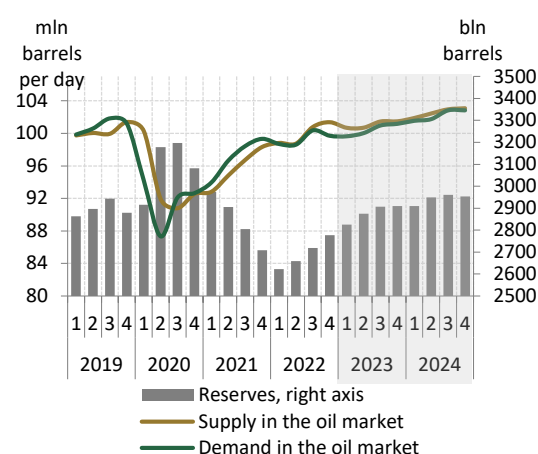
Inflation in the EU is projected to remain high over almost the entire forecast horizon. The peak will be in the first quarter of this year. Further, it is expected to gradually slow down by the end of 2023 to 3.5% (YoY), and by the end of 2024 to 2.3% (YoY). The target is expected to be achieved no earlier than mid-2025. Inflation forecasts for China remained almost unchanged. In Russia, according to forecasts, because of the pent-up consumer demand, inflation will decelerate sharply in the second half of 2023 and will account for 5.0% (YoY) by the year-end, in 2024 it will be 4.0% (YoY) (Figure 2) (Table 1).

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



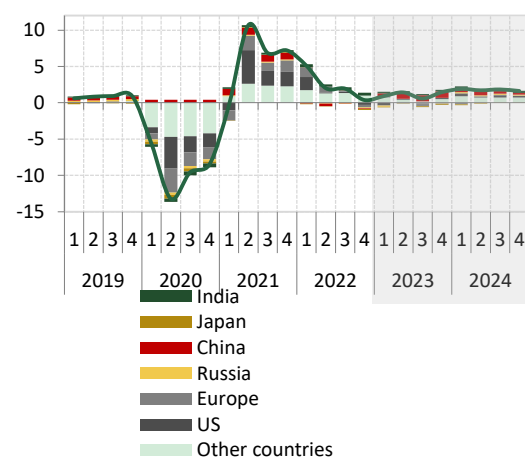
Source: Eurostat, National Bureau of Statistics of China, Rosstat, CB RF, Consensus Ecs., NBK estimate

Figure 3. Dynamics of the Global Oil Market, Million Barrels a Day



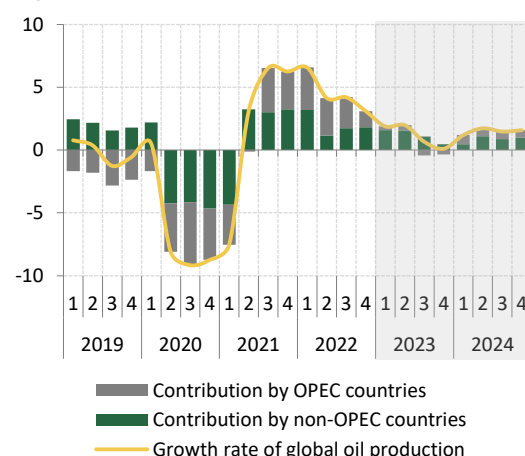
Source: EIA

Figure 4. Global Oil Consumption, YoY



Source: EIA

Figure 5. Global Oil Production, YoY, %



Source: EIA

As a result of deceleration of inflationary processes globally, a number of large central banks slowed down the pace of rate hikes at the end of 2022. It is expected that this spring the US Fed will raise its policy rate to 5.0-5.25% per annum, thereafter further increases will be temporarily suspended. Market participants expect that the easing of the Fed's policy may begin as early as the end of this year. In turn, the ECB, due to the higher level of current prices, is likely to pursue a more aggressive policy than the US Fed.

Forecasts for the further development of the world oil market as a whole are assessed as moderately positive. The EIA predicts that Brent oil prices will fall to an average of \$83.6 per barrel in 2023. In 2024, prices will continue to fall; the price will average \$77.6 per barrel for the year. The expected decline in prices will be associated with faster growth in oil production (mainly due to the US, Canada, Brazil, Guyana, Norway) than its consumption (the growth will occur mainly due to China and India). Projected surplus in 2023 may increase to 0.6 million barrels per day, and in 2024 – up to 0.4 million barrels per day (Figure 3).

Owing to better prospects for China's economic recovery, forecasts for global oil demand have improved. International organizations expect that in 2023 the demand for oil will reach a record level. At the same time, almost half of the expected increase will come from China, even though the path and speed of the country's recovery from the pandemic is still uncertain. An additional contribution to the growth of oil consumption will be made by India and the United States. (Figure 4)

Forecasts regarding oil production are also slightly revised upward. The United States, Canada, Brazil and Guyana are expected to be the key growth drivers over the forecast horizon. Russian oil production in 2023 compared to 2022 will be lower than an average of 1 million barrels per day.

An expected curtailment is explained, on the one hand, by the imposed embargo and, on the other hand, by a voluntary cut of oil production. Among OPEC countries, acceleration of oil production is anticipated in the Saudi Arabia and UAE (Figure 5).

According to the baseline scenario, in 2023 Brent oil price is expected to gradually increase from its current levels to 90 US dollars per barrel. On average, in 2023 the oil price will be 87.7 US dollars per barrel and will gradually decline to 85 US dollars in 2024. Under the optimistic scenario, Brent oil price will make up 110 US dollars per barrel, and under the pessimistic scenario – 50 US dollars per barrel (Figure 6) (Table 2).

Table 1. Forecast Assumptions under the Baseline Scenario

	2022	2023	2024	2025
GDP, YoY, %				
China	3.0 (3.2)*	4.6 (4.5)	5.3 (5.0)	4.7 (4.6)
EU	3.4 (3.1)	0.2 (0.1)	1.6 (2.1)	2.0 (2.3)
Russia	-2.5 (-2.9)	-2.6 (-3.1)	2.0 (2.0)	1.4 (1.4)
Inflation, YoY, %				
China	1.8 (2.9)	2.1 (2.2)	2.2 (2.2)	2.2 (2.2)
EU	11.0 (10.5)	3.5 (3.0)	2.3 (2.1)	1.7 (1.8)
Russia	12.2 (12.5)	5.0 (5.0)	4.0 (4.0)	4.0 (4.0)

Source: forecast by Consensus Ecs, NBK computations

* – the preceding forecast as part of the “November-December 2022” forecasting round is shown in the parenthesis

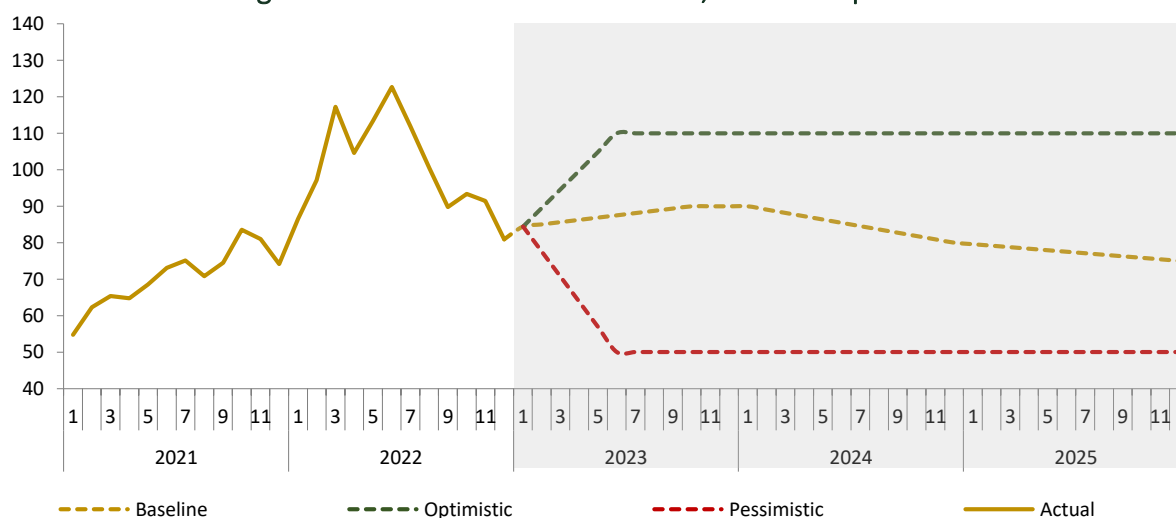
Table 2. Forecast Assumptions regarding the Oil Price

	2022	2023	2024	2025
Pessimistic scenario	100.8	58.6 (53.6)*	50.0 (50.0)	50.0 (50.0)
Baseline scenario		87.7 (89.9)	85.0 (85.2)	77.3 (78.8)
Optimistic scenario		103.6 (108.6)	110.0 (110.0)	110.0 (110.0)

Source: NBK computations

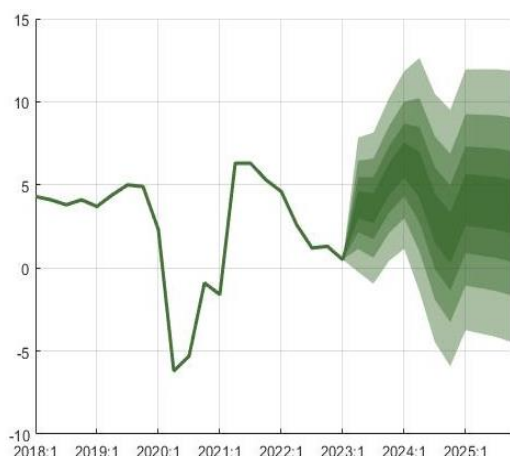
* – the preceding forecast as part of the “November-December 2022” forecasting round is shown in the parenthesis

Figure 6. Scenarios for Brent Oil Price, US Dollars per Barrel



Source: EIA, NBK computations

Figure 7. GDP, YoY, %



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

1.2. Dynamics of the Economic Development under the Baseline Scenario

Forecast estimates for economic growth rates this year have been revised compared to the previous forecasting round. The main prerequisites for the revision included higher oil production estimates as well as a stronger fiscal impulse.

As part of the preceding forecasting round, due to suppressed oil production, weakening external demand in early 2023, export growth was expected to be feeble, thereby contributing to preservation of moderate economic growth rates. Meanwhile, in early 2023, oil production has been actively returning to potential levels.

This year, the output of oil and gas condensate is expected to be higher than in 2022. In the course of forecasting, the production of oil and gas condensate in 2023 is estimated to be 90.5 mln tons, which is in line with the announced plans of the Ministry of Energy. Besides, the fiscal impulse has been revised upward due to the need to implement large infrastructure projects and to ensure the social focus of government spending. **As a result, at end-2023 a real GDP growth is expected to be within 3.5-4.5% (Figure 7).**

In 2023, a positive contribution to the economic growth is anticipated from all GDP components. Consumer demand will be demonstrating positive dynamics owing to the growth of real wages and real income of the population. In 2023, a positive contribution to the growth of income will be made by the increase in salaries to some budget sector employees, growing minimum wage and indexation of retirement benefits. A moderate positive contribution is anticipated from the gross formation due to a further implementation of infrastructure programs as well as completion of works under the plant construction project at the TCO. Continuation of mortgage programs will support a moderate growth of investments into residential construction.

Domestic demand will be also supported by a more stimulating fiscal impulse in 2023 that will be slowly decreasing in 2024-2025, while remaining in the positive zone.

At the same time, imports (as a result of a strong real exchange rate of the tenge and fiscal stimulus) as well as a positive real interest rate will be curbing the economic growth.

The dynamics of real exports that will be making a positive contribution to the economic growth due to an anticipated larger crude oil output in 2023 have been subject to significant revision compared to the preceding forecasting round. Such revision is associated with solution of problems with oil production at the Kashagan oil field and oil exports via the CPC pipeline that occurred in 2022.

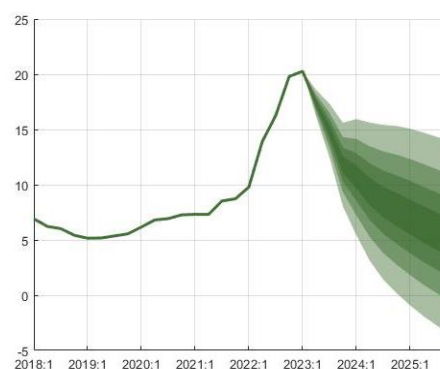
Forecasts of GDP growth for a medium term have not undergone significant changes compared to the preceding forecasting round. In 2024-2025, given the increasing oil production including at the Tengiz oil field growth rates of exports remain high. This will ensure that **GDP growth rates will stay within 3.5-4.5% in 2024. In 2025, the economy** will be growing closer to its equilibrium and the growth rates will also account for **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 due to the fiscal stimulus, as well as exports owing to the growth in oil production. Thus, the output gap will exert pro-inflationary pressure on the economy.

According to the National Bank's forecasts, in 2023 the annual inflation will be within 9-12%. Inflation deceleration from its existing rate is expected after February 2023 (Figure 8).

Previous inflation estimates were slightly revised downward in light of the earlier exhaustion of the Russian migration shock in the fall of 2022, which affected the actual dynamics of unregulated services, as well as the observed appreciation of the tenge. At the same time, due to uncertainty of the fiscal stimulus and the dynamics of inflation in Russia, the forecast inflation range was slightly expanded.

Figure 8. Inflation, Quarterly Average, YoY, %



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

Meanwhile, it should be noted that this forecast does not include the realization of risks that were considered by the National Bank as part of the February 2023 forecasting round (see Section 1.4. Risks in the Medium Term). These risks could significantly adjust the path of inflation and require an appropriate monetary policy response.

In February 2023, the annual inflation will remain above 20%. In the coming months, it will begin to gradually decelerate, which will be due to the influence of a number of factors. Thus, gradual disappearance of the high base in 2022, a high real interest rate, gradual decline in world food prices, a favorable grain harvest in 2022, a slowdown of external inflation as well as decreasing inflation expectations will lead to inflation deceleration in Kazakhstan.

However, the inertia of inflationary processes and a positive output gap as a result of fiscal stimulus will prevent a steady slowdown in inflation. Thus, in 2023-2025, the annual inflation will not reach its target values, although it will approach them at the end of 2025.

In the short term, the main contribution to the formation of inflationary processes will continue to be made by food inflation, which will also peak in February 2023. At the same time, the decline in world prices for agricultural products will contribute to a slowdown in the growth of domestic prices of producers of agricultural products and food products, which, in turn, will lead to deceleration in the growth of food prices. On the other hand, persistently high production costs amid disruption of supply chains and increased volatility of inflation expectations will limit the slowdown in food inflation.

Non-food inflation will also make a significant contribution to the formation of headline inflation in the short term. Meanwhile, it will slow down, which will be due to the withdrawal of the high statistical base of 2022 from the calculation, the gradual weakening of the global inflationary background, including in the trading partner countries as well as a decline in inflation expectations.

In 2023, the growth rates of prices and tariffs for paid services will also slow down. A moderate rise in prices for regulated services is expected, as well as stabilization of inflation for certain types of services, where the prices were growing because of the migration shock in 2022 (rental, hotel services, catering services, hairdresser's and personal care services, outpatient services).

In 2024-2025, inflation will continue to decelerate; however, it will still build above the target. In 2024, inflation will be within 6-8%, in 2025 – 4-6%.

The medium-term estimates for inflation have been revised downward. This is associated with lower inflation expectations, and gradual reduction of the external inflationary background (Table 3). Moreover, world cereal prices are expected to decline in the medium-term due to sufficient quantity of stocks, cheapening of transportation expenses and mainstreaming of logistics.

Thus, gradual disappearance of the high base of 2022, the growing real interest rate and decreasing inflation expectations, gradual decline in world food prices, a favorable grain harvest, and an easing external inflationary background will drive deceleration of inflation in Kazakhstan. On the other hand, a positive output gap as a result of fiscal stimulus and the inertia of inflationary processes will prevent inflation from slowing down.

Table 3. Forecasts under the Baseline Scenario

	2023	2024	2025
GDP, YoY, %	3.5-4.5 (3-4)	3.5-4.5 (3.5-4.5)	3.5-4.5 (3.5-4.5)
CPI, Dec. to Dec. of the preceding year, %	9-12 (11-13)	6-8 (7-9)	4-6 (4-6)
Brent oil, in the US dollars per barrel, yearly average	88	85	77

Source: NBK computations

* –henceforth, the preceding forecast as part of the “November-December 2022” 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 2025. Such dynamics of oil prices will be driven by the lowering global demand for oil due to the negative dynamics of the economies of importing countries (a prolonged global recession in the light of a tense geopolitical situation) with a concurrent increase in oil production due to 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 goods, 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 counter-cyclical fiscal rule coming into effect from 2023, such domestic demand dynamics will be less subdued. As a result, **GDP growth rates will be 2.5-3.5% in 2023 and 3-4% in 2024-2025.**

Under the pessimistic scenario, inflation will slow down 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 11-14%, in 2024 – 7-9%, and in 2025 – 5-7%.**

Should the global economy develop under the **optimistic scenario**, oil prices are projected to 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 4-5%, in 2024 – 4.5-5.5%, and in 2025 – 4-5%.**

In case of the optimistic scenario, prices will be declining to their targets faster than under the baseline scenario. This will be ensured by the robust dynamics of the tenge exchange rate and a lower external inflationary pressure. **In 2023, inflation will be building within 8.5-10.5%, in 2024 – 5-7%, and in 2025 – 3-5%.**

Table 4 (a). Forecasts under the Pessimistic Scenario

	2023	2024	2025
GDP, YoY, %	2.5-3.5 (1.5-2.5)	3-4 (3-4)	3-4 (3-4)
CPI, Dec.to Dec. of the preceding year, %	11-14 (14-16)	7-9 (10-12)	5-7 (5-7)
Brent oil, in the US dollars per barrel, yearly average	59	50	50

Table 4 (b). Forecasts under the Optimistic Scenario

	2023	2024	2025
GDP, YoY, %	4-5 (3.5-4.5)	4.5-5.5 (4.5-5.5)	4-5 (4.5-5.5)
CPI, Dec.to Dec. of the preceding year, %	8.5-10.5 (10-12)	5-7 (6-8)	3-5 (4-6)
Brent oil, in the US dollars per barrel, yearly average	104	110	110

Source: NBK computations

1.4. Risks in the Medium Term

Compared to the preceding forecasting round, the risks of inflation acceleration somewhat increased and remain significant, both on the part of external factors and on the part of internal factors (Figure 9).

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

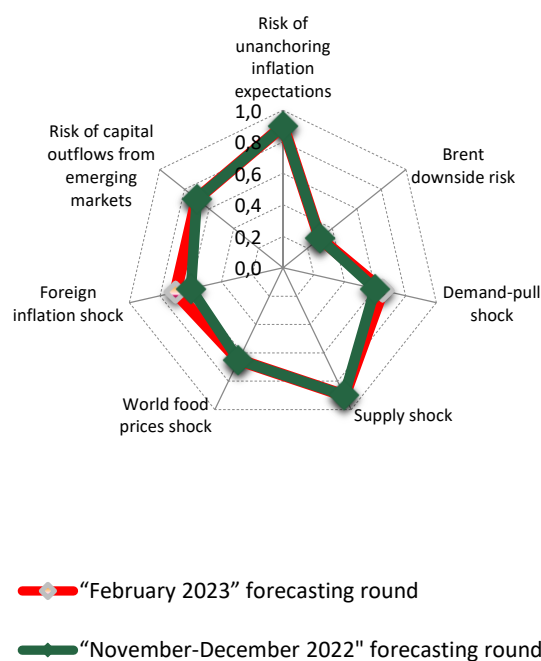
Compared to the preceding forecasting round, the risk of importing external inflation somewhat increased both in the short-term and medium-term perspective. Thus, in Russia, despite the expected deceleration of inflation due to low price growth rates after the shocks of early 2022, stronger price growth is possible again in the context of the observed weakening of the ruble, growing budget spending and rising costs of the economy because of a change in supply sources.

Moreover, the risk of importing high global food inflation remains high. Despite the gradual mainstreaming of export supplies in the world and favorable expectations about the production of food products, the long-term underutilization of acreage in Ukraine, adverse weather conditions due to the changing climate may cause a strong increase in world food prices in the medium term.

The risk of capital outflow from emerging markets in favor of developed ones also remains high. Due to the increased inflationary pressures in the world, the central banks of developed countries may tighten their monetary policies more aggressively, thereby increasing the pressure on the exchange rates of emerging markets.

At the same time, the risk of a significant drop in oil prices is less pronounced. Moderately positive expectations for the growth of the global economy and some increase in oil production in the world with a concurrent reduction of production in Russia somewhat limit the emergence of a serious surplus worldwide. Nonetheless, a possible global recession and a sizable drop of the demand for oil, especially the demand from China, may cause a decline in prices for oil and other primary products.

Figure 9. Risk Map based on the Expert Judgment



Source: NBK's computations

Among internal factors, the risks of accelerating inflation on the part of supply factors remain high. A longer restructuring of logistics links with Russia may reduce the supply of goods or lead to an increase in their cost. In addition, the risks of higher prices for fuel and lubricants and regulated utility services remain high due to the much-needed reform aimed at transitioning to market pricing, maintaining the profitability of production and financing investments in major repairs, which, in addition to direct impact on inflation, may also have a multiplier effect on prices for a wide range of goods and services.

Therefore, the risk that inflation expectations would anchor at high levels due to a high existing inflation and sensitivity to the behavior of prices for food and fuel and lubricants also remains eminent.

Finally, the risk of inflationary pressure from the domestic demand has slightly increased given a stronger fiscal stimulus this year. In addition, the Government has amended the Budget Code to allow adjustments to the national budget without complying with the budget rule in 2023, which increases uncertainty about the amount of fiscal stimulus this year. Due to the low fiscal discipline and periodic review of public spending upwards in prior years, it is not excluded that the budget parameters in subsequent years may be further revised towards expanding the expenditure side, which may become an additional source of pro-inflationary pressure in the economy. Moreover, the risk of stronger demand for consumer goods from Russian citizens persists because of sanctions and geopolitical escalation.

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

According to the National Bank's estimates, the current account of the balance of payments will be gradually transiting from the surplus zone of 2022 to the deficit zone by the end of 2025. The expected reduction of the surplus will be caused by the projected decline in prices for commodities and a steadily growing demand for imports. Under the baseline scenario, the current account surplus will contract significantly – from 6.3 billion US dollars in 2022 to near-zero levels of 0.1 billion US dollars in 2023 (Figure 10).

However, there is a time lag of up to three months between the actual shipment of oil for export and its reporting in official statistics. Given the delay in reporting the oil exports in official statistics, the reduction in the surplus, in reality, will be less significant. According to the National Bank's estimates, the current account surplus adjusted for the time lag in the oil exports statistics will decrease from 6.1 billion US dollars in 2022 to 2.2 billion US dollars in 2023 and to 1.6 billion US dollars in 2024. In 2025, the deficit of 0.6 billion US dollars is projected.

The dynamics of export of goods will be mainly determined by the oil component. Despite the downward path in projection of oil prices, oil exports will be supported by the growth in production volumes at the large oil fields. Therefore, the lag-adjusted oil exports will grow from 46.8 billion US dollars in 2022 to 48.6 billion US dollars in 2023 and to 50.7 billion US dollars in 2024. In 2025, oil exports are expected to decrease to 49.2 billion US dollars as a consequence of the prevailing effect of declining prices over the effect of growing output.

Over the forecasting horizon, due to the impact of divergent factors, non-oil exports will remain at the levels of 2022. The factors that put pressure on the non-oil component will be the redirection of gas to the domestic market, adjustment of world prices for gas, coal and cereals as well as planned repairs at three large refineries in 2023. Growth in non-oil exports will be supported by an increase in domestic production of uranium and ferroalloys.

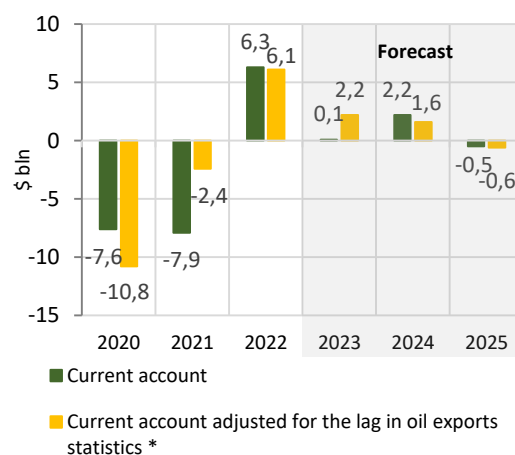
As a result, export of goods in 2023 will amount to 86.0 billion US dollars, in 2024 – to 88.3 billion US dollars, and in 2025 – to 86.2 billion US dollars.

Import of goods according to the balance of payments methodology will continue to grow over the forecasting horizon, exceeding the all-time high of 2022 of 49.7 billion US dollars. The increase in volumes of imports will be driven by the insufficiency of Kazakhstan's production to cover the growing needs of the population and business, by implementation of government initiatives and programs to support the economy, as well as by growth of global inflation because of disruption in global logistics chains.

According to forecasts, import of goods in 2023 will amount to 52.9 billion US dollars, in 2024 – to 55.6 billion US dollars, and in 2025 – to 56.2 billion US dollars.

In the medium-term perspective, despite a decline in projected prices of oil, growing volumes of oil production and high metal prices will preserve returns of foreign direct investors at historically high levels. Accrued interest payable will start decreasing from 2024 as a result of anticipated easing of the monetary policy by central bank-issuers of reserve currencies from the second half of 2023. Thus, the income balance deficit will reach 29.2 billion US dollars in 2023 and 29.4 billion US dollars in 2024, decreasing to 28.6 billion US dollars in 2025.

Figure 10. Current Account,



Note. In the official trade statistics on the export of oil and gas condensate compiled by the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan and the ASPR BNS of the Republic of Kazakhstan, there is a peculiarity in accounting. It involves the following: the oil actually shipped in month t is reported in official statistics based on the date of submission of the final declaration, that is, with an approximate delay of up to 3 months. The current account of the balance of payments adjusted for the lag in oil exports statistics is an estimated current account where oil exports are recorded on a timely basis

Source: NBK's forecast

The balance of services will remain in the deficit zone. The export of services will increase due to transport services because of the pipeline transit of Central Asian gas to China and trips owing to an increase in the number of individuals who have entered Kazakhstan. Import of services will grow following the recovery of tourist flow abroad after the lifting of quarantine restrictions, as well as due to an increase in freight volumes following the projected growth in import of goods.

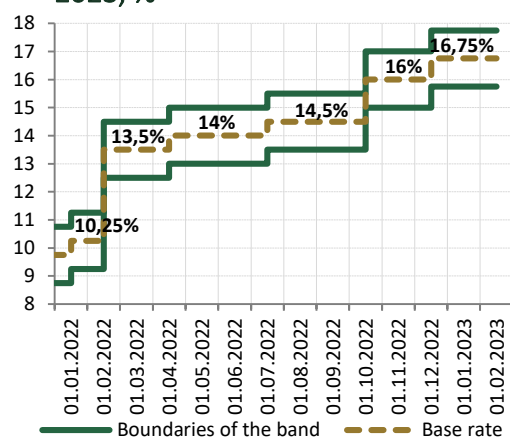
Therefore, over the forecast horizon the deficit in the balance of services will remain at the levels of 2022: in 2023, the deficit will amount to 1.6 billion US dollars, in 2024 – to 1.7 billion US dollars, and in 2025 – to 1.9 billion US dollars.



02

MONETARY POLICY

Figure 11. Base Rate Band in 2022-2023, %



Source: NBK

II. MONETARY POLICY

2.1. Decisions on the Base Rate

In January 2023, the Monetary Policy Committee decided to keep the base rate at 16.75%. The decision was made in conditions when actual inflation corresponded to the National Bank's projected values.

The balance of inflation risks remains biased towards pro-inflationary risks due to a high steady part of inflation and historically high inflation expectations. The negative impact of the restructuring of logistics chains on the economy remains. In the meantime, pressure from the external environment started to weaken – inflationary processes in many countries are beginning to slow down, including in the countries of trading partners.

At the end of 2022, the annual inflation reached 20.3% against the National Bank's forecast of 20-21%. Prices for food and non-food products showed the greatest growth, while the rise in prices for paid services remained unchanged.

Meantime, monthly inflation has been slowing for three months in a row amounting to 1.2% in December 2022 (in September – 1.8%); however, it still exceeds its all-time average.

The Monetary Policy Committee of the National Bank of the Republic of Kazakhstan made the decision to keep the base rate at 16.75% per annum with the band of ± 1 pp from February 27, 2023 (Figure 11). The decision was based on the updated forecasts of the National Bank, the data analysis as well as assessment of the balance of inflation risks.

Taking into account the forecast dynamics and inflation risks, the National Bank intends to maintain the base rate at the existing levels in the first half of this year. This will enable to stabilize inflation and ensure its gradual deceleration in the medium term.

2.2. Money Supply

The money supply was growing at a moderate pace. Claims on the economy (retail and corporate lending) continued to make a significant contribution to expansion of the money supply during November 2022 - January 2023. In January, the annual growth of reserve money remained unchanged.

In January 2023, the money supply in the economy amounted to 33.8 trillion tenge (Figure 12), having increased by 13.5% YoY. Retail loans (11.5 pp) and loans to business to a lesser extent (2.4 pp) continued to make the main contribution to the annual growth in money supply. The National Fund's account in the tenge also increased the money supply because of transfers to the budget; however, its positive contribution was offset by a negative contribution of net claims on the Government. The buildup on the Government's accounts in January 2023 has a seasonal nature in connection with a low level of budget spending at the beginning of the year.

The money supply in the tenge has accelerated its growth rate since May 2022, reaching 20% in January of this year (Figure 13). Credits to the economy act as the main growth driver; their increase continued to demonstrate high rates despite some deceleration.

The reserve money, after its growth in October 2022, started to gradually contract and in January 2023 came back to the figures of January of previous year.

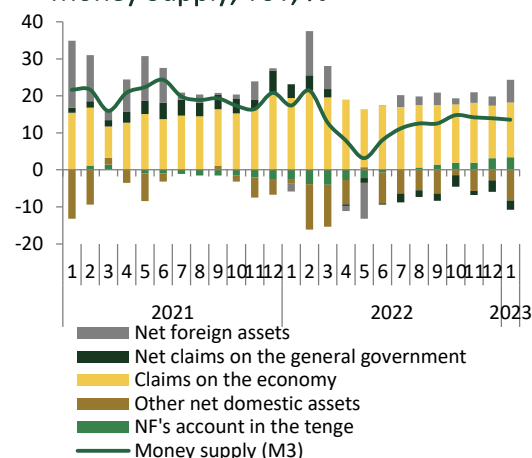
2.3. Money Market

During the period from November 2022 through January 2023, the balance of the NBK's operations (liquidity surplus) increased. In this context, money market rates in this period were setting closer to the lower boundary of the band, except for some periods.

A major growth in the balance of NBK's operations occurred in December due to the increased budget spending. In January 2023 as a whole, the balance of the NBK's operations went up by 23.1% compared to October 2022, and by the end of January amounted to 3.6 trillion tenge.

Figure 12.

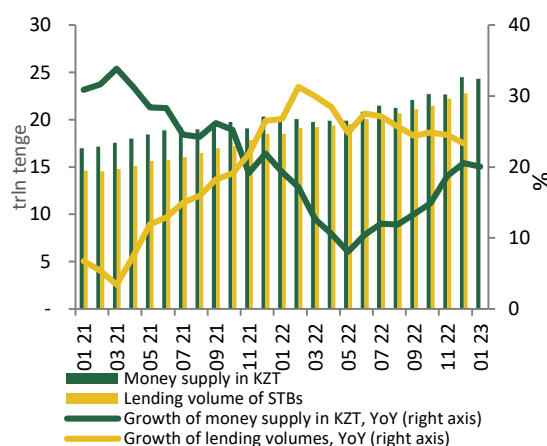
Money Supply, YoY, %



Source: NBK

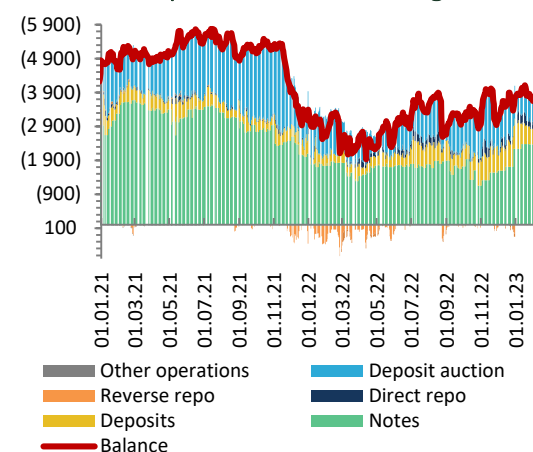
Figure 13.

Money Supply in the Tenge and Lending Volumes of STBs



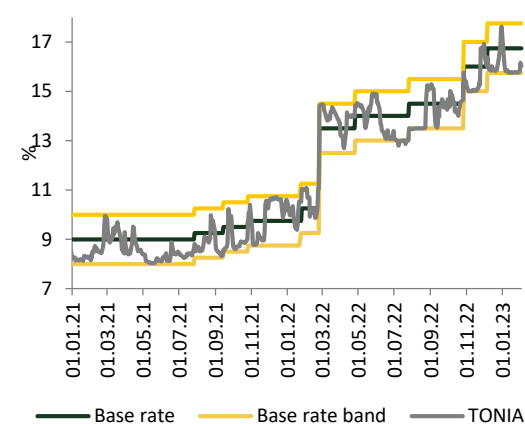
Source: NBK

Figure 14. Exposure on the National Bank's Operations, billion tenge



Source: NBK

Figure 15. Interest Rate Band and TONIA



Source: NBK, KASE

The bulk of liquidity was withdrawn via notes (2.4 trillion tenge), deposit auctions (0.7 trillion tenge) and deposits (0.4 trillion tenge) (Figure 14).

In November 2022 - January 2023, the volumes of liquidity withdrawn by the NBK through notes and deposits went up. Average daily volumes of notes in circulation in November 2022-January 2023 amounted to 1 818.5 billion tenge, having increased by 7.6% compared to August-October 2022. Deposit volumes totaled 669.4 billion tenge (a 31.3% increase).

The money market rate TONIA had risen following the increase of the base rate in December 2022 and generally during the period from November 2022 through January 2023 was forming primarily closer to the lower boundary except for the end of November and December 2022. The average TONIA for three months made up 15.8% (Figure 15). The spread between TONIA and the base rate on average during November 2022-January 2023 had been negative at (-)0.6 pp.

2.4. Foreign Exchange Market

Amid global depreciation of the US dollar, high oil prices and the increase of the base rate and interest rates on the tenge deposits, in November 2022-January 2023 the exchange rate of the tenge was appreciating.

In the environment of decreasing inflationary pressure, central banks of developed countries somewhat slowed down the pace of monetary tightening. This helped increase the risk appetite and strengthen the currencies of developing countries, including the tenge (Figure 16).

At the end of 2022, the US Fed started to slow down the pace of raising its policy rate. Thus, after a 75 bp increase in November 2022, in December the rate was raised by 50 bp to 4.25-4.5%, and on February 1, 2023 – already by 25 bp to 4.5-4.75%. This was accompanied by a 9.2% deceleration of DXY in January 2023 compared to the level of October 2022 and by reduction in the yield on the 10-year Treasury bonds from 3.7% to 3.4% (Figure 17). The ECB has also lowered the pace of increasing the interest rate by raising it twice by 50 bp to 2.5% in December and to 3.0% – on February 2, 2023.

The Bank of Canada has also made the decision to raise the policy rate on two occasions: by 50 bp to 4.25% and by 25 bp to 4.50%. In doing so, the abovementioned central banks signaled their readiness to raise the interest rates further until achieving the inflation target.

In November 2022-January 2023, oil quotes were demonstrating volatile pattern fluctuating within the range of 76-99 US dollars per barrel. Excess morbidity in China, which later resulted in deceleration of industrial production and reduction in retail sales, had negatively affected the oil price dynamics in November 2022. The increasing reserves of fuel in the US and concerns about recession had also negatively influenced the oil market. At the same time, the rise of oil prices in January 2023 was also nurtured by a more modest pace of monetary tightening by central banks of developed countries as well as by the lifting of quarantine restrictions in China.

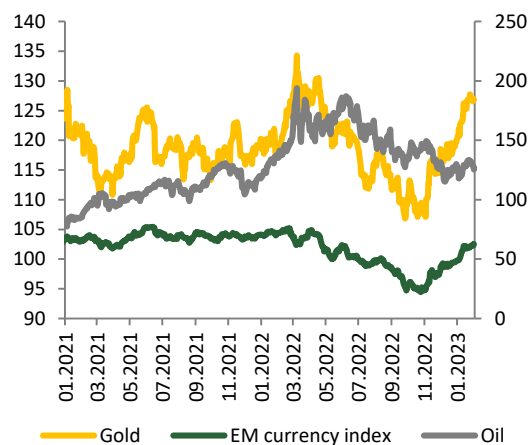
Despite that, oil quotes in January 2023 continued to decline from the beginning of November 2022 by 10.9% from 94.8 to 84.5 US dollars per barrel.

The situation in the domestic foreign exchange market was more stable compared to August-October 2022. The supply in the domestic market was supported by foreign exchange sales of quasi-government sector entities and transfers from the National Fund to the national budget. During November 2022-January 2023, foreign exchange sales from the National Fund totaled 759 million US dollars.

Along with that, due to a better balance in the foreign exchange market, the norm of mandatory sale by quasi-government sector entities were lowered from 75% to 50%. Foreign exchange sales by quasi-government sector entities during November 2022-January 2023 amounted to 781.7 million US dollars.

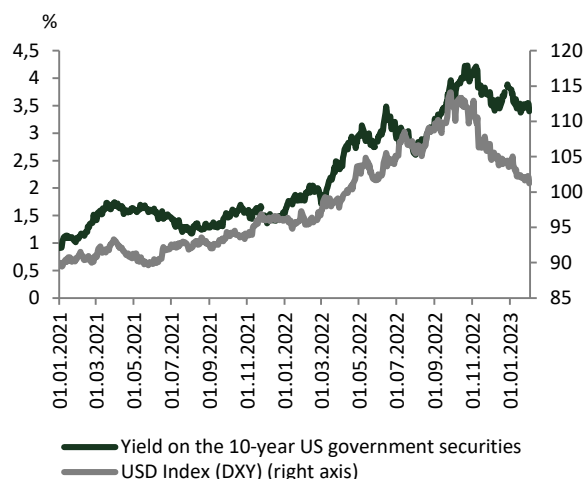
Given that, the exchange rate of the tenge in November 2022-January 2023 was fluctuating within the range of

Figure 16. Dynamic of the Emerging Market Currency Index, and of the Price of Gold and Oil (31.12.2019=100)



Source: Refinitiv

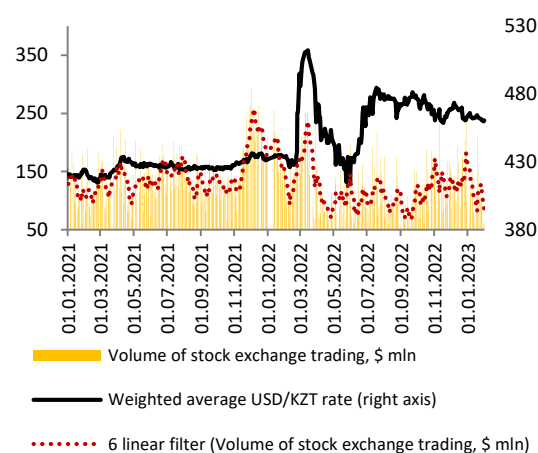
Figure 17. Yield on the 10-Year US Treasuries, DXY



Source: Refinitiv

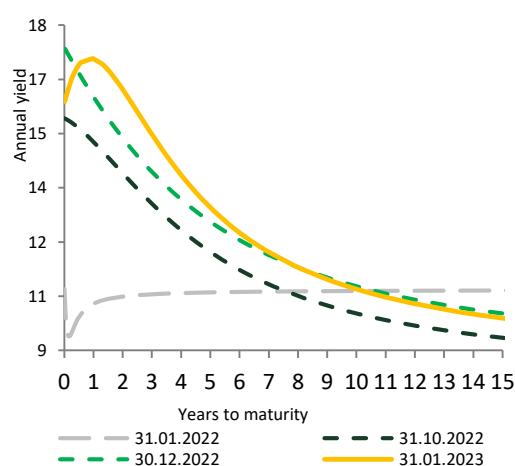
Figure 18.

Dynamics of the Exchange Rate of the Tenge and the Trading Volume



Source: KASE, NBK

Figure 19. Risk-Free Yield Curve, %



Source: KASE, NBK

458.6-473.5 tenge per US dollar (Figure 18). Average daily volume of stock exchange trading in November 2022-January 2023 went down by 32.3% YoY and equaled 125.7 million US dollars (in August-October 2022 – 102.6 million US dollars, in November-January 2021 – 185.6 million US dollars). Reduction in the trading volume may indicate that the demand for foreign exchange is decreasing amid high oil prices and a significant interest rate differential between deposits in the tenge and foreign currency deposits.

2.5. Stock Market

In November-December 2022, a risk-free yield curve was of an inverted (reverse) shape. However, in January 2023, it became hump-shaped.

Overall, the yield curve dynamics over a short segment was divergent. In November – December, there was an upward shift on the shortest segment of up to one year but in January, there was a downward shift. On medium-term segments from one year to 7 years, the yields were growing, and long-term segments from 7 years to 15 years retained a downward trend.

The December increase of the base rate led to an upward shift of the yield curve on a short-term and medium-term segments (Figure 19).

The volume of trading in government securities during the period from November 2022 through January 2023 continued to grow relative to August-October 2022 primarily owing to the primary market.

Issuance of government securities in the primary market in November 2022-January 2023 went up by 27.8% compared to August-October 2022 and equaled 1 320.2 billion tenge.

Borrowings by the MF RK of 1306.7 billion tenge account for a significant portion in the issuance. The remaining volume fell on local executive authorities amounting to 13.5 billion tenge (for 0.35-4.25% with maturity from 1 to 2 years).

Maturities of government securities issued by Kazakhstan's Ministry of Finance varied from 1 to 16 years.

Yields on government securities of different maturities issued by the MF RK and placed in the primary market changed from 13.85-15.70% in August-October 2022 to 11.50-17.01% in November 2022 – January 2023

Corporate bond market grew from 792.9 billion tenge in August-October 2022 to 939.7 billion tenge (a 18.5% growth) in November 2022 - January 2023

The weighted average yield on placed bonds in January 2023 increased to 17.04% (15.68% in October 2022). The KASE BMY index has risen from 12.10% at end-October 2022 to 12.85% at end-January 2023 due to the increase of the base rate (Figure 20).

The KASE Index from November 2022 to January 2023 increased by 5.3% (Figure 21). All representatives in the index list appeared to be in the positive zone except the shares of stock of “Kazakhtelecom” JSC (-7.0%). A rise in the index over the reviewed period was furthered by an improved financial position and a corresponding strong recovery of quotes of “Bank CenterCredit” JSC, “KCell” JSC, “National Atomic Company “Kazatomprom” JSC, “National Company “KazMunaiGas” JSC and “Kaspi.kz” JSC.

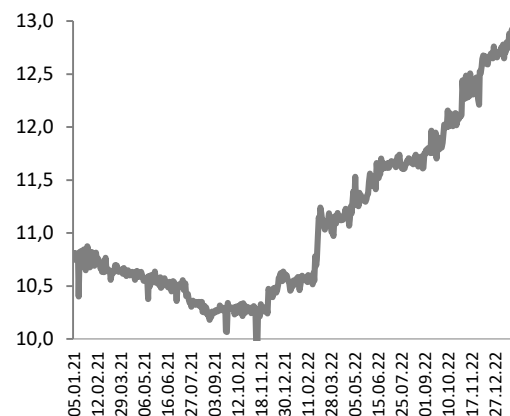
The global financial market in November 2022 - January 2023 had also demonstrated a moderate growth of 5.3% compared to August-October 2022. The main reason was deceleration in growth of the base consumer price index in the USA, which had a positive effect on investor risk appetite.

2.6. Deposit Market

Overall volume of deposits with depository organizations continued its annual growth in January 2023, while in December 2022 an all-time high was achieved.

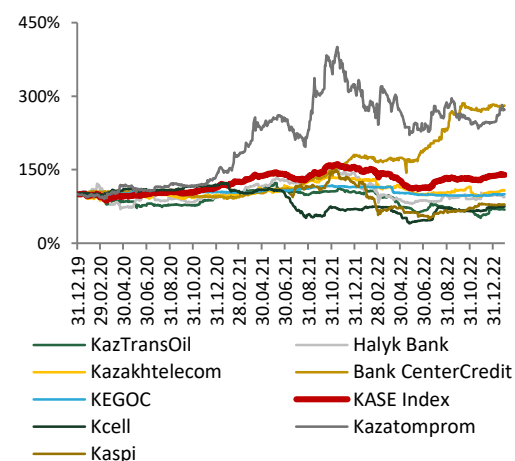
Overall dollarization in the banking system decreased in January 2023 to the 10-year minimum due to an outstripping growth of the tenge deposits compared to foreign currency deposits. Decline in the total number is related to the decreased dollarization of deposits, both retail and corporate ones.

Figure 20. Yield on Corporate Bonds, % per Annum



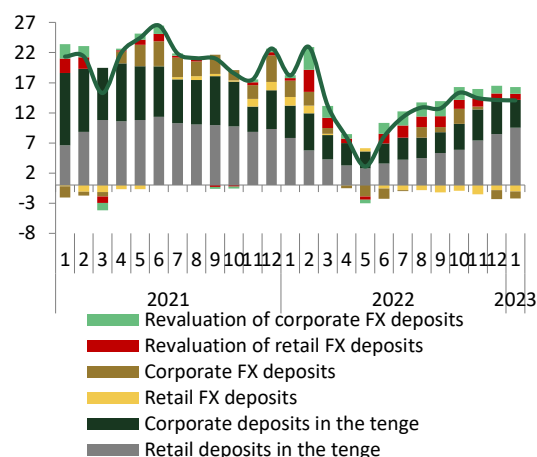
Source: KASE, NBK

Figure 21. KASE Index (Dec.2019=100)



Source: KASE

Figure 22. Contribution by Components to the Growth in Deposit Volume, YoY, %



Source: NBK

Following the increase of the base rate, market interest rates on deposits have risen.

Deposits. In January 2023, deposits continued showing its growth trend, the increase accounted for 14.1% YoY (in January 2022 – 18.2%) (Figure 22).

At end-2022, the deposit volume reached its record of 30.9 trillion tenge. Growth was nurtured, to a greater extent, by an increase in the tenge deposits, while growth in foreign currency deposits was insignificant. In the structure of corporate deposits, the tenge deposits increased, while foreign currency deposits showed a decline. Individuals amplified their deposits both in the national and in foreign currencies.

In January 2023, deposits with depository organizations within the total deposit volume slightly decreased by 1.1% MoM to 30.6 trillion tenge due to the reduced volumes of foreign currency deposits (by 2.8% MoM) held both by individuals and corporate entities. Retail deposits in the tenge also showed a minor decline, while corporate deposits in the tenge have virtually remained unchanged.

In annual terms, deposits in the national currency in January went up by 22.0% as a result of growth in corporate deposits by 13.9%, and in retail deposits – by 30.7%.

Foreign currency deposits decreased by 0.3% YoY. In terms of foreign currency equivalent, both corporate deposits and retail deposits showed a decline (an overall reduction in foreign currency deposits made up 6.1%). Reduction in corporate foreign currency deposits, coupled with the growth in the tenge deposits, probably indicates a partial overflow of funds from foreign currency deposits to the tenge deposits. Among other things, this was due to a large interest rate differential between deposits in the tenge and in foreign currency. The program for protection of the tenge deposits that provides for accrual of compensation (premium) on retail deposits in the tenge, for its part, helped controlling the outflow of resources from deposit accounts in the national currency.

At end-January 2023, non-term deposits¹ accounted for a significant portion of the tenge deposit base within the structure of retail deposits (55.4%, in January 2022 – 49.5%); the percentage of savings deposits amounted to 9.9% (in January 2022 – 12.3%). The growth of non-term deposits in the tenge, on a YoY basis, was 47.8% or 2.0 trillion tenge, whereas savings deposits went up by 6.2% (or 64.1 billion tenge).

At the same time, deposits of non-residents demonstrated a significant expansion of 3.8 times YoY in January 2023. This was largely related to the inflow of foreign currency resources (starting from mid-2022) to foreign currency accounts of individuals in light of migration of Russian citizens.

Deposit Dollarization. In January 2023, deposit dedollarization trend was ongoing, in January dollarization accounted for 31.1%, in October 2022 – for 35.3% (Figure 23).

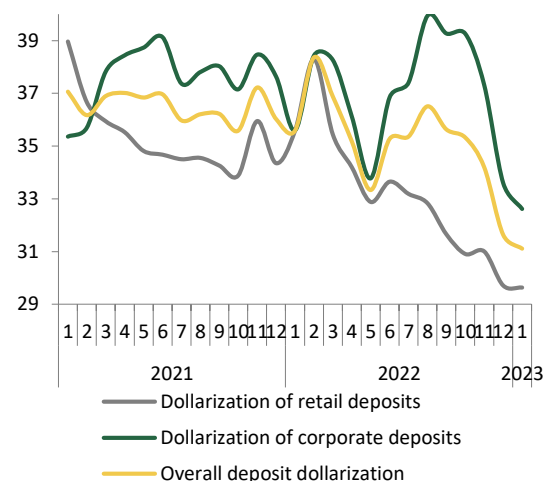
The gap between dollarization of corporate entities and individuals is shrinking. Over the year, dollarization of corporate deposits has decreased from 35.6% in January 2022 to 32.6% in January 2023, and that of retail deposits – from 35.6% to 29.6% (Figure 23).

Dollarization of retail deposits (including non-residents) was decreasing nearly in all segments by amounts. Nonetheless, dollarization of large accounts has remained high. Thus, the share of foreign currency deposits held on accounts of individuals in the amount from 50 to 500 million tenge amounted to 66.0% in January 2023, whereas it has made only 12.2% on accounts from 1 million to 3 million tenge.

Deposit Rates². Following the increase of the base rate and the growth of KDIF maximum interest rates, weighted average interest rates on corporate and retail deposits carried the growth trend.

Thus, interest rates on corporate deposits with maturity up to one month that account for a major portion of attracted deposits (83.8% of all corporate term deposits in the tenge) almost doubled to 14.6% in January 2023 compared to 7.9% in January 2022.

Figure 23. Deposit Dollarization, %

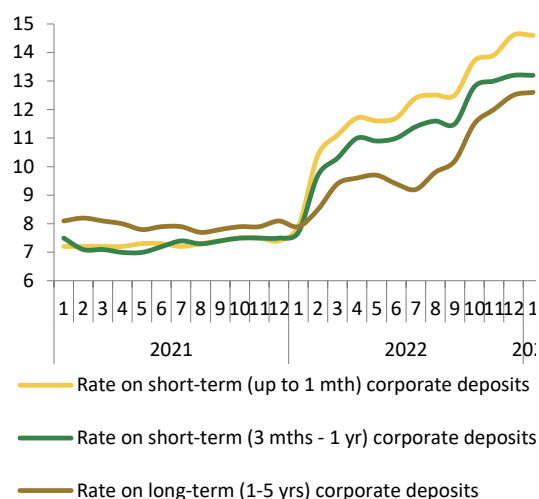


Source: NBK

¹ According to the KDIF methodology for calculating and setting maximum rates on retail deposits

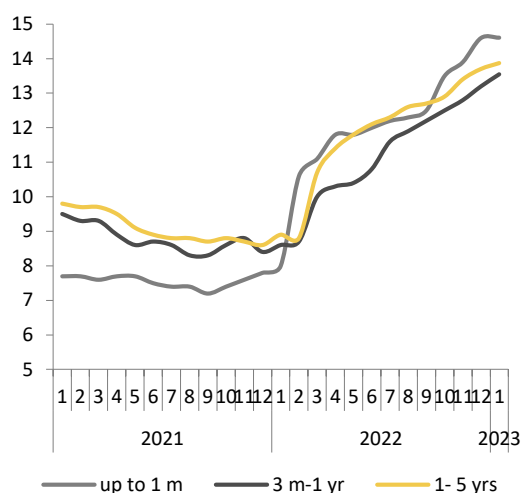
² According to monetary statistics

Figure 24. Interest Rates on Corporate Deposits, %



Source: NBK

Figure 25. Interest Rates on Retail Deposits, %



Source: NBK

Interest rates on deposits with the term from 3 months to 1 year (share – 9.9%) also increased significantly from 7.7% to 13.2%. Rates on long-term deposits from 1 to 5 years (share – 0.8%) increased from 7.9% to 12.6% (Figure 24).

Interest rates on term deposits of individuals also demonstrated an upward path: short-term tenge deposit rates of up to 1 month (share – 20.5% of all term deposits of individuals in the tenge) increased to 14.6% in January 2023 from 8.0% in January 2022. Interest rates on deposits from 3 months to 1 year (share – 31.2%) have risen to 13.6% from 8.6%, on deposits with the term from 1 to 5 years (share – 43.8%) went up to 13.9% from 8.9% (Figure 25).

2.7. Credit Market

Total volumes of credits to the economy (the balance) in 2022 increased mainly due to retail lending, which continued to grow amid high inflation expectations and concessional lending programs. However, the annual growth in retail loans slowed down because of the more modest dynamics of consumer lending. Mortgage lending was growing due to an active utilization of resources under the “7-20-25” housing program and expansion of lending by Otbasys Bank.

Given the increased demand for loans, lending to businesses accelerated in the 4th quarter of 2022.

Interest rates on retail loans decreased as a result of decreasing rates on consumer loans; interest rates on loans to businesses increased following the raise of the base rate.

Total volumes of credits to the economy (the balance) in 2022 increased by 23.3% YoY, amounting to 22.8 trillion tenge.

A major contribution to the growth in loans was made by retail lending in the national currency.

Loans to businesses in the tenge also made a significant contribution, having increased by 18.6% over 2022 (Figure 26).

The annual growth of retail loans kept slowing down from 36.4% in September 2022 to 31.3% in December. Expansion of consumer loans on a YoY basis decelerated from 28.9% to 25.3%, and of mortgage loans – from 44.7% to 41.9% (Figure 27). The “7-20-25” program and an active ramp-up of lending by Otobasy Bank acted as the drivers for strong growth of mortgage lending at end-2022. In turn, the growing mortgage lending contributed to the growth of consumer loans in the environment of increasing demand for durable goods. High inflation expectations of the population also served as an additional growth factor for consumer loans.

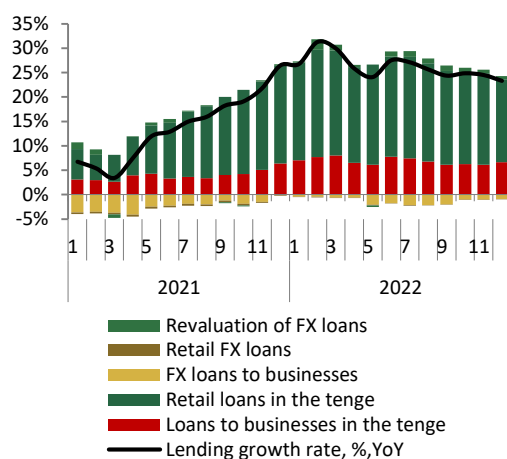
Due to the marketing campaigns launched by banks, a high percentage of installments as well as competition among banks, interest rate on consumer loans in the tenge over the year decreased by 1.7 pp to 17.2% at end-December 2022 (the rate in September 2022 – 18.6%).

The weighted average rate on mortgage loans has increased by 1.0 pp over the year to 9.5% in December 2022 (in September 2022 – 8.0%), including in the environment of growing interest rates on interim loans from Otobasy Bank (Figure 29). The change in the base rate is largely affecting the rates on market-based mortgage loans; however, due to a high share of non-market concessional programs (interest rates of Otobasy Bank and under the “7-20-25” program), the overall interest rate on mortgage loans is formed well below the level of the base rate.

In the fourth quarter of 2022, the number of applications for bank financing increased on the part of all business entities. Given that, loans to businesses (the balance) demonstrated a minor acceleration on a YoY basis from 11.0% in September 2022 to 13.9% in December.

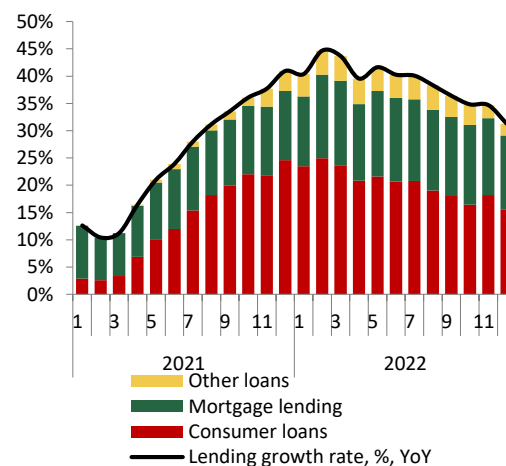
Loans to small businesses went up by 22.8% (including loans to individual entrepreneurs – by 40.3% to 984 billion tenge), to large businesses – by 11.8%, whereas loans to medium-sized businesses decreased by 2.9%.

Figure 26. Credits to the Economy from STBs, YoY, %



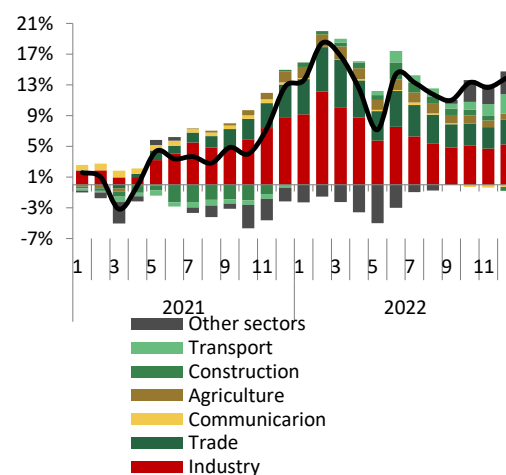
Source: NBK

Figure 27. Retail Loans from STBs, YoY, %



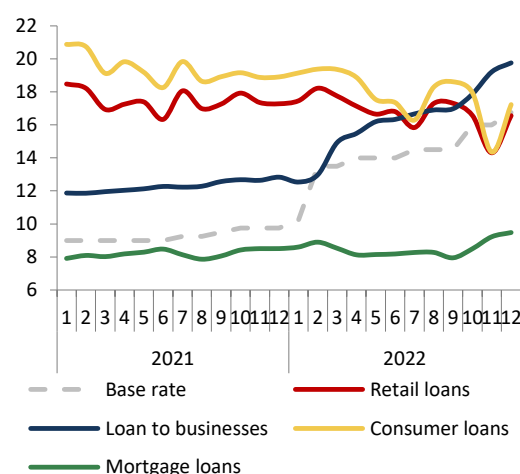
Source: NBK

Figure 28. Loans to Businesses from STBs, YoY, %



Source: NBK

Figure 29. Rates on Loans in the National Currency, %



Source: NBK

On an industry basis, growth is observed in all sectors except construction (-6.7%) and communication (-12.7%). Loans to entities in the industry and trade went up by 16.8% and 13.6%, respectively, and made a major contribution to the growth in loans to businesses (Figure 28).

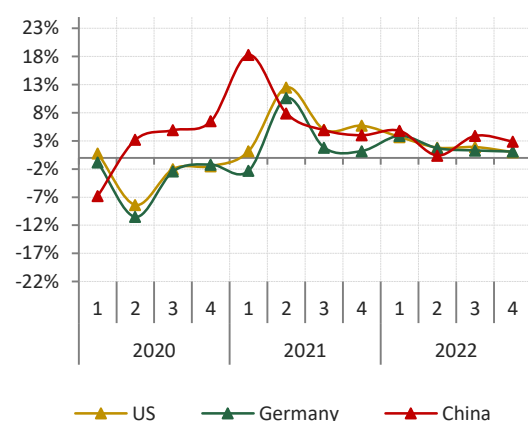
Based on the monetary policy pursued, the weighted average interest rate on corporate loans in the tenge grew from 12.8% in December 2021 to 19.7% in December 2022 (September 2022 – 17.0%). The change of the base rate affected the cost of financing of all sectors, such sector as trade to a greater extent (7.5 pp growth), and transport to the least extent (by 4.6 pp).



03

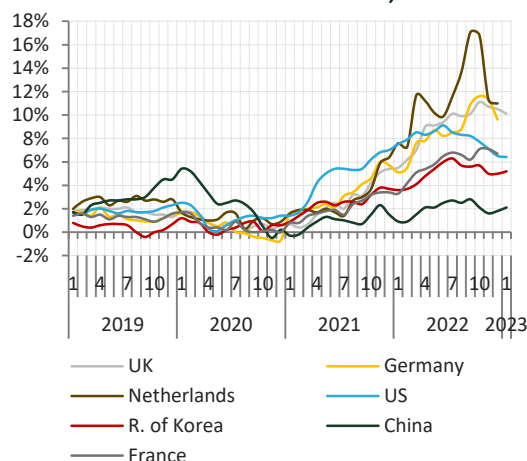
MACROECONOMIC CONDITIONS

Figure 30. Economic Activity in a Number of Countries, YoY



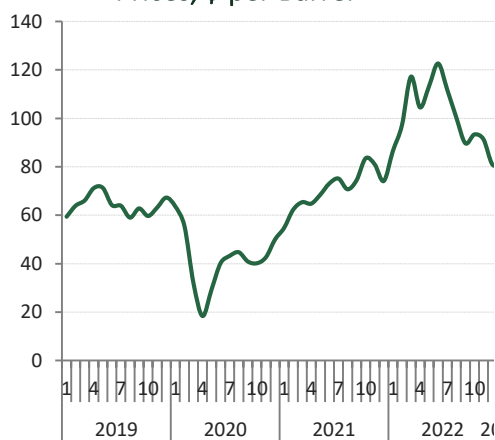
Source: National statistical offices

Figure 31. Inflation in Some Countries of the World, YoY



Source: National statistical offices

Figure 32. Dynamics of Brent Oil Prices, \$ per Barrel



Source: EIA

III. MACROECONOMIC CONDITIONS

3.1. External Sector

In the environment of persistently high inflation, the growing uncertainty and tight monetary policy pursued by large central banks, the global economic activity continues to slow down. Growth rates of the US, China and Germany, which account for almost 40% of the global GDP also decelerated concurrently (Figure 30). At the same time, in January 2023 the outstripping indicators of business activity in the industry and services point to some stabilization of the situation. In China, after the opening, activity in the service sector showed quite significant growth.

Global inflationary pressure in December of the last year continued to weaken amid declining energy prices. In a number of European countries, including Germany, a two-digit inflation turned to single digits (Figure 31).

At the beginning of 2023, given a speed-up in the growth of prices for food products and the non-food component, inflation in China accelerated to 2.1% (YoY). Inflation in the US slightly decelerated and made up 6.4% (YoY), with the market-based forecasts of 6.2% (YoY).

The US Fed, as expected, at the December meeting raised the rate by 25 bp to 4.5-4.75% per annum. In turn, the ECB raised all three key interest rates by 50 bp – the base interest rate on loans to 3.0%, the rate on deposits – to 2.5%, and the rate on margin loans – to 3.25%.

At the beginning of January 2023, the situation in the global oil market was somewhat volatile. Brent prices were right away falling to 77 US dollars per barrel. Higher volatility occurred amid increased fears of a global recession, weak economic data in the US and excess morbidity in China. By now, the sentiment on Brent has improved markedly (Figure 32). Moderate optimism was supported by expectations about the growth of oil consumption in China after the pandemic, positive forecasts for oil demand by the IEA and OPEC as well as Russia's decision to reduce oil production in the near future.

Box 1. Impact on Kazakhstan's Economy Made by China's Opening after the Pandemic

Almost three years passed and China abandoned its zero-tolerance policy for Covid-19. It is expected that the first time the opening will be accompanied by a high level of morbidity. The peak is likely to occur in the 1st quarter of 2023. It may take from six months to a year to develop herd immunity.

At present, operational data indicate that the Chinese economy has begun to gradually pick up momentum. In January 2023 compared to December 2022, the decline in business activity in the industry has slowed down. The PMI in the service sector as a result of a concurrent growth of supply and demand has increased by 4.9 points to 52.9 points over the month. The published data on passenger traffic also indicate that the situation improved. According to the CAAC, in January 2023, passenger air travel in China increased by 34.8% (YoY), which is almost 74.5% of the figure for January of the pre-pandemic 2019. There is also some improvement in the youth unemployment rate, which has fallen from 17.1% in November 2022 to 16.7% in December 2022.

In terms of the global economy, the opening of China has led to some increase in volatility in the markets. In particular, in January 2023 versus December 2022, there was a rise in the price of copper – by 8.0%, zinc – by 6.2% and aluminum – by 4.3% (China's share in world consumption of refined copper, nickel and zinc reaches 50%). Moreover, given that China consumes about 14% of world oil, Brent prices also reacted with growth. Among food products, world prices for rice have gone up (a 10.7% rise in January 2023 versus December 2022).

As the recovery continues, the IMF expects China's economic growth to accelerate to 5.2% in 2023 (in October 2022, the forecast was 4.4%), and to 4.5% in 2024. Growth is also expected to accelerate in other countries under the influence of spillovers from the opening of China. First of all, in the countries that previously depended on expenses of Chinese consumers for tourist places, shopping centers and so on. These include Hong Kong, Thailand, Singapore, Malaysia, South Korea and Taiwan. Another group of countries that have the opportunity to benefit from the opening of China is led by energy exporting countries. Goldman Sachs estimates that stronger demand from China could boost current Brent prices from 15 US dollars to 20 US dollars per barrel. For many other countries, the opening of China could result in continued high inflation and tighter financial conditions. For European countries, in addition to high inflation, the effect from the opening of China may also lead to a shortage of liquefied gas.

For Kazakhstan, China is one of the key trading partners. In order to see how our economy will be affected by the opening of China after the pandemic, it is proposed to consider the main structure of exports and imports between countries. For these purposes, a comparative analysis of the statistical data for the pandemic year 2019 with the period of the pandemic shock of 2020-2022 was carried out. During this period, despite the pandemic, **exports** to China showed a steady increase. The growth of exports in 2020 versus 2019 was 17.7%, in 2021 – 22.1%, and in 2022 – 64.5%. The main export items in 2019 (in value terms) were oil-well gases (share – 20.1%), refined copper (19.4%), crude oil (14.7%), copper ores (9.2%), ferroalloys (9.2%) and zinc (7.0%). Over time, the structure of exports has somewhat changed. In particular, there was an increase in the share of crude oil (to 31.1%), copper ores and concentrates (to 15.5%). In turn, the share of oil-well gases decreased to 9.2%, ferroalloys – to 5.9%, and zinc – to 0.4%.

Considering exports during the pandemic in physical terms, China actively continued to purchase iron, copper ores and concentrates (Table 1). At the same time, the consumption of precious metal ores and zinc decreased. In addition, with growth in 2020, in 2021-2022, the supply of uranium, ferroalloys and copper decreased. In the structure of minerals, in 2020 exports of crude oil increased by 55.4%, in 2021 – by 47.0% and in 2022 – by 2.2 times. For three years in a row, there was a decline in oil-well gas exports.

In the group of food products, compared to 2019, supplies of wheat declined significantly (in 2022 – by 11.6 times). However, despite a reduction in wheat supplies to China, they were reoriented towards Central Asian countries and Iran. As for China, in 2020 exports of flax seeds went up by 13.2 times, in 2021 – by 4.5 times, and in 2022 – by 14.5 times. Exports of sunflower oil also increased.

Table 1

Exports of Goods to China in Kind, % change versus 2019

Commodity Group	Unit of measurem.	2019	2020	2021	2022
Wheat and meslin	tons	422 587.65	-42.8%	-74.6%	-91.3%
Flax seeds, crushed and uncrushed	tons	11 541.05	1221.9%	353.2%	1352.6%
Sunflower oil	tons	41 361.62	6.8%	-84.9%	77.8%
Iron ores and concentrates	tons	1 683 088.33	279.2%	176.7%	234.0%
Copper ores and concentrates	tons	664 780.69	42.5%	24.6%	82.9%
Zinc ores and concentrates	tons	52 982.55	77.5%	-19.4%	272.7%
Ores and concentrates of precious metals	tons	94 993.50	-15.5%	-14.5%	-40.1%
Crude oil	tons	2 460 428.70	55.4%	47.0%	117.3%
Oil-well gases	thous.cub.m	7 432 748.00	-0.9%	-13.4%	-31.8%
Radioactive chemical elements	tons	7 999.75	56.5%	-7.4%	-8.9%
Ferro-alloys	tons	720 563.20	28.7%	-13.0%	-19.1%
Refined copper	tons	275 404.76	18.3%	-14.3%	-0.1%
Unprocessed zinc	tons	234 504.77	-5.2%	-15.7%	-93.2%

Source: ASPR BNS RK

During the analyzed period, **imports** from China in 2020 decreased by 6.0%. Further, as the epidemiological situation in Kazakhstan improved, following performance in 2021 versus 2019, imports increased by 21.2%, and in 2022 – by 61.8%. In 2019, in the structure of imports from China (in value terms), the largest share was made up of: machinery and equipment (45.7%), chemical industry products (11.6%), metals and their products (11.1%), textile products (6.6%), shoes and headwear (4.3%), pre-cooked food products (2.8%). In 2022, the share of machinery and equipment in imports from China increased to 55.5%, and that of textiles – to 10.8%. At the same time, the share of metals and their products decreased to 8.1%.

In physical terms, during the pandemic (2020-2022), Kazakhstan, due to the transition to a distant work mode, increased purchases of computers and telephones (Table 2). There is also an increase in the supply of textile products in 2020 by 12.4%, in 2021 – by 66.5%, and in 2022 – by 72.5%. However, supplies of tires, covers, bulldozers, electrical transformers, and power generating units decreased in 2020. Purchases of all listed goods in 2021-2022 went up again. Amidst a general shortage of chips, deliveries to Kazakhstan were limited.

Table 2

Imports of Goods from China in Kind, % change versus 2019

Commodity Group	Unit of measurem.	2019	2020	2021	2022
Telephone sets	tons	2 167.93	11.6	12.5	36.8
Computing machines	pcs.	391 853.00	178.4	57.7	150.1
Electrical generating units	tons	8 573.46	-1.5	125.0	369.1
Bulldozers	pcs.	416.00	-19.2	10.1	54.3
Transformers	tons	7 475.26	-47.1	19.9	16.1
Diodes, transistors and semi-conductor devices	tons	32 390.20	-45.4	-81.1	-81.4
Tires and covers	tons	38 957.96	-0.5	1.8	72.8
Metals and their products	tons	578 302.51	-29.1	-32.5	-18.6
Textile and textile products	tons	143 966.93	12.4	66.5	72.5

Source: ASPR BNS RK

Thus, an analysis of the structure of exports and imports between countries shows that the opening of China for Kazakhstan is more positive. First, the export of Kazakhstani products and, accordingly, export proceeds may increase significantly. Second, due to the opening of China, the likelihood of growing transit traffic through Kazakhstan to other partner countries of China increases. On the other hand, the boom of the Chinese economy and the associated potential rise in energy prices significantly intensifies the risks of increased volatility in the markets, pressure on the foreign currency and rising global inflation.

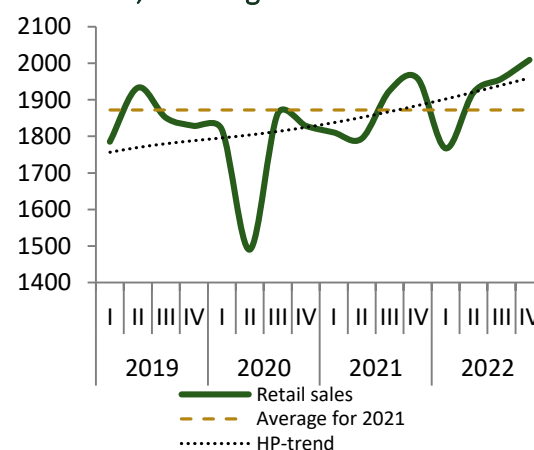
3.2. Development of the Domestic Economy

In the fourth quarter of 2022, the consumer demand remained positive; however, it was considerably limited by declining real income of the population.

After a short-term dip in the first quarter of 2022, the volumes of real retail turnover recovered, exceeding the average levels of 2021 and the all-time potential (Figure 33). At the same time, volatility of trade turnover in 2022 slightly increased due to the influence of high inflationary expectations of the population, which spurred the hedge buying by the population, as well as additional demand from the citizens of the Russian Federation against the backdrop of increased geopolitical tensions (Figure 34).

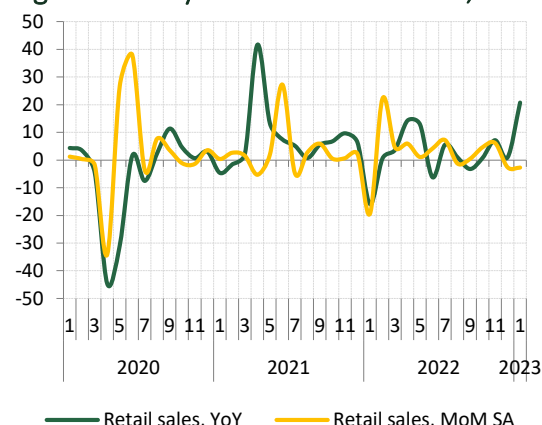
Given positive demand, the movement of money across the cards of the population also showed an upward trend. The growth rate of household payments for goods and services in 2022 showed a positive trend (Figure 35).

Figure 33. Retail Sales in the 2014 Prices, Bln Tenge



Source: ASPR BNS, NBK computations

Figure 34. Dynamics of Retail Sales, %



Source: ASPR BNS, NBK computations

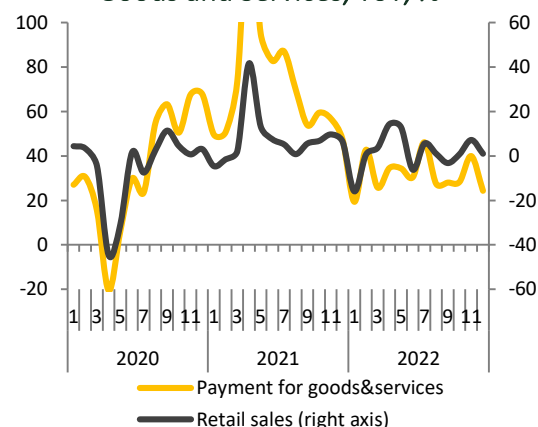
Despite the stable growth of food production in the country and an insignificant increase in imports, the turnover of trade in food products showed a negative trend. In general, the trend of reduction in the retail turnover of food products was observed back in 2021; in particular, there is a decline in the consumption of meat and meat products, dairy products, bread and bakery, sugar and drinks. At the same time, the wholesale turnover of food products in 2022 increased by 18.3% (YoY). This may be due to the post-pandemic recovery in demand for services by the population, the services of cafes, restaurants, celebrations, as well as an increasing pattern of “eating out” in particular.

However, high 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 revenues in the economy, real income remained at low levels with a transition into the negative zone by the end of the year (Figure 36).

In the structure of real income, a negative contribution was made by all components, with the exception of wages for hired workers. As for social transfers, by the end of the year there is a significant acceleration of real budget expenditures for transfers.

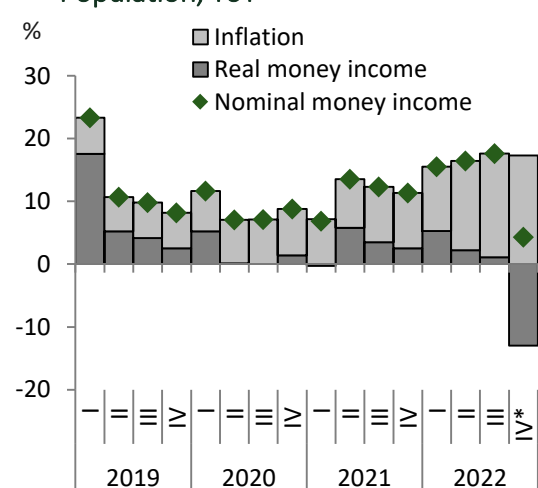
In 2022, the payroll fund showed a sizable expansion, where a part of it was the growth in minimum wages (contribution to the growth – 9 pp) (Figure 37). In the fourth quarter of 2022, the private sector’s payroll fund continued to grow against slowing growth rates in the public sector. However, despite an over 20% growth of nominal wages, acceleration of inflationary processes by the end of the year led to a significant deceleration in real wages in the economy. Thus, according to preliminary data of the ASPR BNS, in the fourth quarter of 2022, real wages in annual terms slowed down significantly (to 2.8%) compared to the beginning of the year (Figure 38).

Figure 35. Card Payments for Goods and Services, YoY, %



Source: ASPR BNS, NBK computations

Figure 36. Cash Income of the Population, YoY



Source: ASPR BNS, NBK computations

*data for the 4th quarter of 2022, preliminary

At the same time, the growth rate of real wages exceeds the growth rate of labor productivity, which, in the context of moderate economic activity, also showed the deceleration trend, thus creating additional pro-inflationary pressure on the supply side.

A significant expansion of the payroll fund directly affects the costs of producers and, along with other factors, leads to an increase in the cost of production in the economy (Figure 39). In some industries, a record-high cost growth was observed last year. In addition, non-manufacturing expenses were growing unprecedentedly in 2022, reflecting the increasing spending on distribution, realization, advertising, logistics and other expenses.

Investment activity in the economy continued to grow in the fourth quarter of 2022, however, its growth decelerated to 8.8% (YoY) compared to the third quarter of 2022. The pickup of fixed capital investments was observed virtually in all sectors of the economy except the manufacturing industry, professional, scientific and technical activities, arts, entertainment and leisure. In 2022, investments into the sectors providing utility services decreased. In particular, the decline accounted for 1.7% (YoY) in the water supply sector and for 3.1% (YoY) – in the electricity supply industry. Fixed capital investments in the electricity supply industry have been going down for a third year in a row; this, along with high depreciation of PPE, causes breakdowns and failures of power plants, and also increases the risk of their occurrence in the future. According to ASPR BNS, at the end of 2021, the degree of depreciation of property, plant and equipment of enterprises in the sector of electricity, gas, steam, hot water supply and air-conditioning amounted to 71.7%, of which the depreciation of structures reached 78%, and machinery and equipment — 62.2%.

In January 2023, fixed capital investments continued to grow, accelerating to 18.3% (YoY).

Figure 37. Dynamics of the Payroll Fund, YoY, %

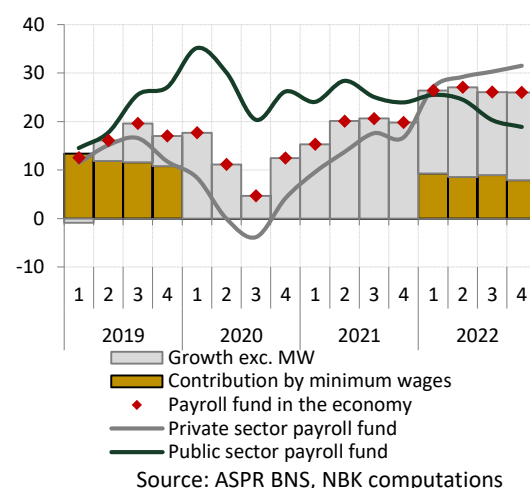


Figure 38. Dynamics of Wages in the Economy, YoY, %

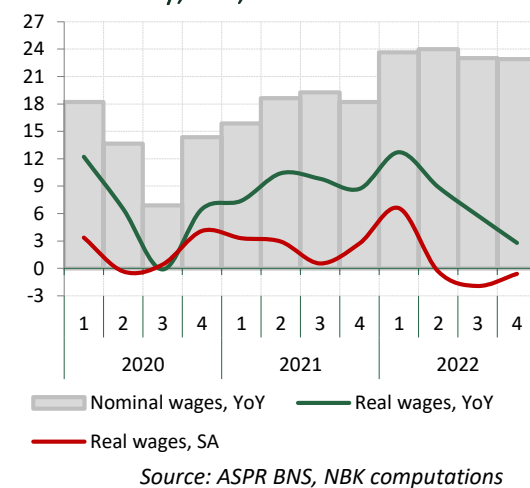


Figure 39. Prime Cost in the Economy, YoY

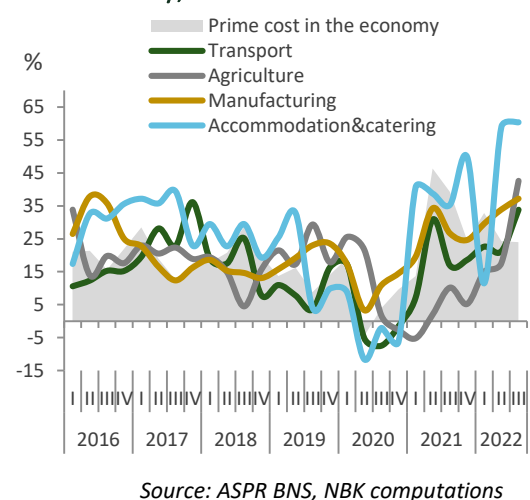
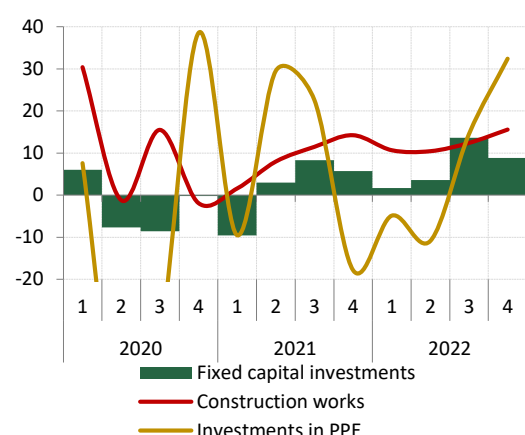
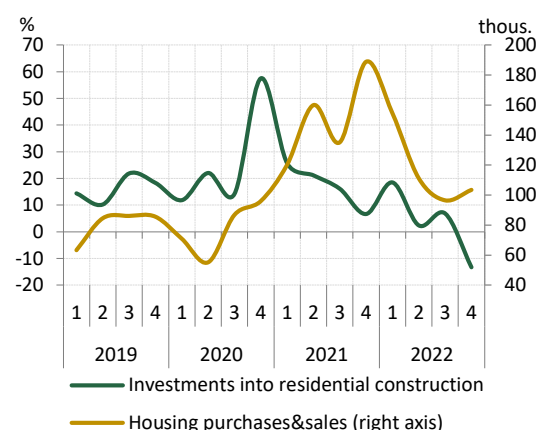


Figure 40. Fixed Capital Investments and Components, YoY



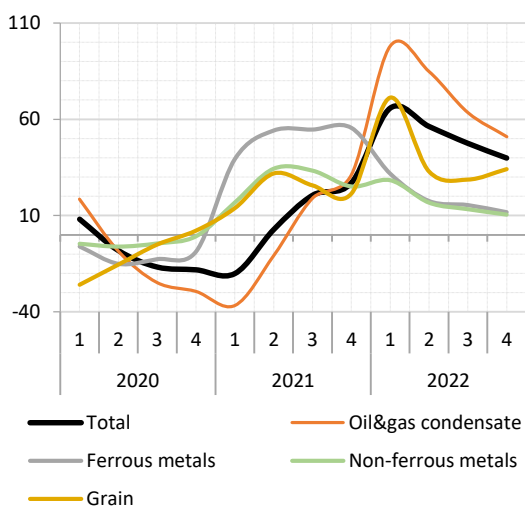
Source: ASPR BNS, NBK computations

Figure 41. Investments into Residential Construction in Real Prices and Activity in the Real Estate Market



Source: ASPR BNS, NBK computations

Figure 42. Exports by Major Commodity Groups, Cumulative, YoY, %



Source: SRC, ASPR BNS NBK computations

In terms of technology costs, the construction and major overhaul works continue to be the main source of investments with a 10.3% growth (Figure 40). In the fourth quarter of 2022, investments into the PPE renewal continued to expand and accounted for 32.4% (YoY).

PPE of enterprises remain the dominating source of investments in 2022. The public sector's share in investment financing amounted to 15.5%.

In the fourth quarter of 2022, real growth rates of investments into residential construction have declined by 13.3% (YoY) for the first time since 2018 (Figure 41). The number of housing purchase and sale transactions in the fourth quarter of 2022 increased compared to the preceding quarter, however, it remains well below the levels of 2021, when an opportunity to use retirement savings for improving housing conditions was provided.

In 2022, exports of goods in nominal terms increased by 39.9% (YoY) due to a sizable rise in world prices of crude oil (Figure 42). Crude oil exports went up by 50.9% (YoY) in value terms, while physical supplies of oil slightly decreased (by 0.8%, YoY), despite repairs at the Kashagan oil fields in the middle of the year. In terms of countries, there was a ramp-up of oil supplies in kind to China by 47.8%, and the Republic of Korea – by 74%, whereas supplies to the Netherlands declined by 25.4%, and to India – by 31.7% (Figure 43). Exports of inorganic chemicals, precious metals and rare earths have grown significantly by 39.1% due to the increased demand from Russia.

In the structure of ferrous metals, exports of iron ore continue to fall due to the reduced production and problems with supplies to Russia. Exports of some non-ferrous metals are growing, to China and Georgia in particular, given the upturn in production. Thus, supplies of lead went up by 9.9%, supplies of zinc ores and concentrates increased whereas exports of aluminum and zinc decreased (by 8.9% and 6.5%, respectively).

Exports of hard coal to Ukraine, Belarus and Russia have decreased with a concurrent increase in supplies to the EU countries and Türkiye. The reduction in production, coupled with the initiative to re-direct natural gas from exports to the domestic market, led to a 19.6% decline in exports.

In the structure of food products, exports of oils and fats to Uzbekistan and China and wheat exports to Afghanistan increased. The demand for wheat on the part of Central Asian countries expanded.

At end-2022, imports went up by 20.8% (YoY) in value terms mainly due to the growing imports of interim goods. On a country-by-country basis, there is an increase in imports from the EU countries (by 33.9%, YoY) and China (33.5%). However, imports from Russia at end-2022 declined by 1.5% (YoY) (Figure 44). It is worth mentioning that the share of Russia in Kazakhstan's imports structure decreased in 2022 against the increased share of China and the EU (Figure 45).

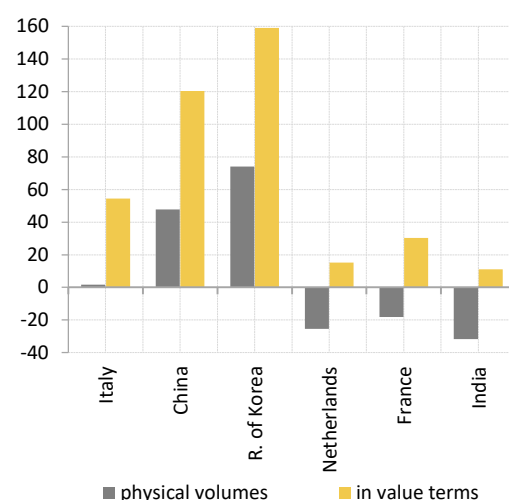
In the structure of food products in kind, imports of milk and dairy products from Russia and Iran went up. A ban for sugar exports imposed by Russia in March-August 2022 led to a significant growth in imports of sugar from Brazil and India. Imports of alcohol beverages from Russia and Uzbekistan went up noticeably. Imports of meat from the US and Belarus declined.

Among non-food products, the import of telephone sets, medicines, tires and covers, monitors and projectors increased. The supply of clothing from China and Turkey expanded. Meanwhile, imports of passenger cars declined. Due to the withdrawal of large manufacturing enterprises from the Russian market, the import of detergents and scouring products from Russia has decreased.

In the structure of means of production and interim products, the supply of diesel internal combustion engines from Belarus increased. Demand for imported auto parts, heating machinery and equipment, motor vehicles for transportation of goods also went up.

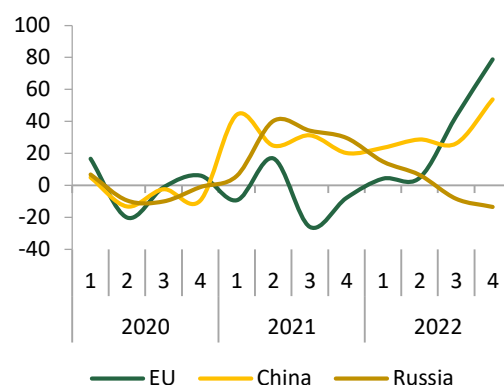
The annual growth of export price index slowed down significantly in the fourth quarter of 2022, being driven by deceleration of annual rates of depreciation of the tenge and a slower growth of world prices for minerals. In addition, the growth in prices for ferrous and non-ferrous metals

Figure 43. Oil Export on a Country-by-Country Basis During 2022, YoY, %



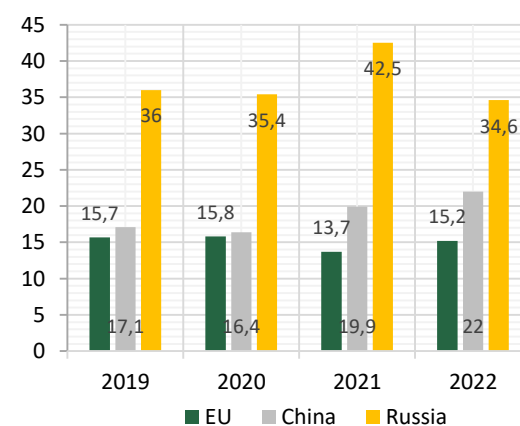
Source: ASPR BNS

Figure 44. Imports on a Country-by-Country Basis, YoY, %



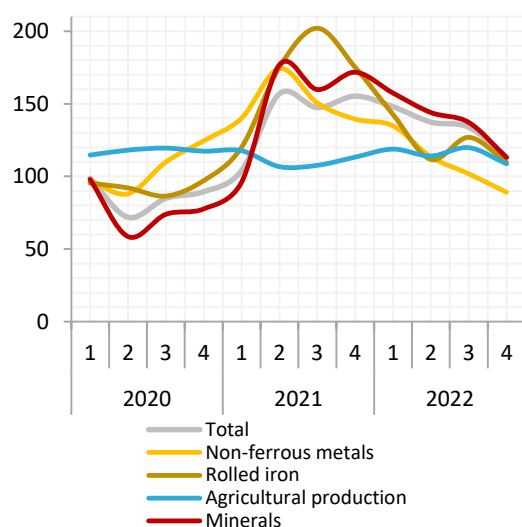
Source: SRC, ASPR BNS, NBK computations

Figure 45. Shares of Countries in Imports, %



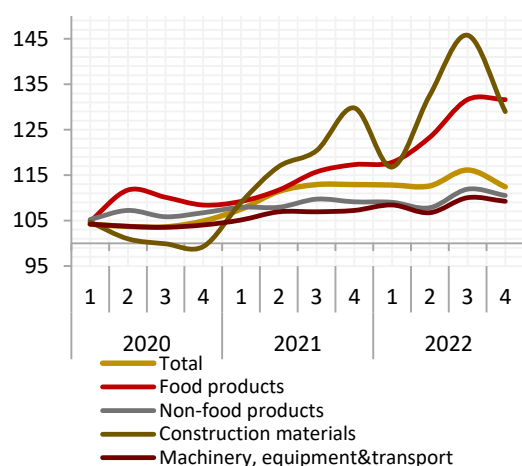
Source: SRC, ASPR BNS, NBK computations

Figure 46. Export Price Index, in the Tenge, YoY



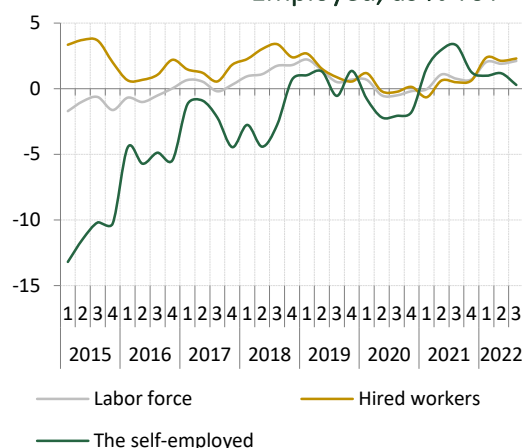
Source: ASPR BNS

Figure 47. Import Price Index, in the Tenge, YoY



Source: ASPR BNS

Figure 48. Employees and Self-Employed, as % YoY



Source: ASPR BNS

slowed their growth in the fourth quarter of 2022 due to the removal of the 2021 high base from the calculation. Growth rates of export prices for agricultural production decelerated due to declining world prices in the environment of sufficient quantity of global stocks (Figure 46).

Given a lower rate of depreciation of the tenge, import inflation in the fourth quarter of 2022 slowed down from 16.1% to 12.4% due to decelerating prices for investment and interim goods (Figure 47). Prices for construction materials were showing significant deceleration in the light of removal of the 2021 high base from the calculation.

3.3 Labor Market

In the fourth quarter of 2022, the labor market retained the trends of prior quarters. During the year, the labor force was growing being determined both by the increase in the number of the employed population and the unemployed. In the fourth quarter of 2022, unemployment rate slightly decreased to 4.8%.

In 2022 as a whole, the labor market was characterized by positive dynamics. Both the numbers of hired workers and the self-employed individuals were demonstrating moderate growth. Generally, the structure of employed population in 2022 remained stable; there was no overflow of employees between categories. The dynamics of growth in the employed population almost completely repeats the dynamics of labor force. That is, the growth in employment is largely determined by demographic processes (Figure 48).

In 2022, the growth in the number of hired workers was observed in many sectors of the economy. In 2022, the number of self-employed individuals was increasing at a more moderate pace. In the fourth quarter of 2022, annual growth rates slightly accelerated. At the same time, on the industry basis, the dynamics of changes in this category of workers remained differently directed. Thus, the number of self-employed in agriculture, information and communication, arts, entertainment and leisure, real estate transactions went down. Along with this, it is worth mentioning the growth in the number of self-employed individuals in the manufacturing industry, water supply, construction, transport, and education. However, in some industries, the dynamics of change in the self-employed population remains divergent.

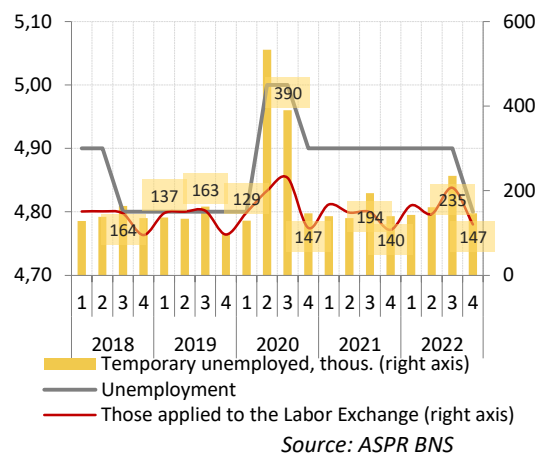
Concurrently with the growth of employed population, in 2022 the temporary unemployed population was growing and the number of applications from the population to employment agencies increased compared to the corresponding period of the preceding year (Figure 49). At the same time, in the fourth quarter of 2022, the number of temporary unemployed individuals traditionally went down compared to the preceding quarter; this is primarily explained by resumption of work by employees after vacations (specifically, in education). It is worth noting that the number of temporary unemployed people is still above the figures of prior years. This may be related to the so far moderate economic activity.

In 2022, the number of workers employed less than the established working hours decreased. The largest share among such workers falls on those who do not have a sufficient amount of work, and also due to an insufficient income.

In 2022, labor productivity is growing at a moderate pace. At the same time, despite deceleration of real growth in wages in the economy amid high inflation, labor productivity keeps growing slower. Such situation remains current for many sectors of the economy, which puts an upward pressure on net cost of production at enterprises. Some sectors of the economy show a negative trend in the labor productivity associated either with the outracing of employment compared to the added value in the sector or with the negative dynamics of business activity.

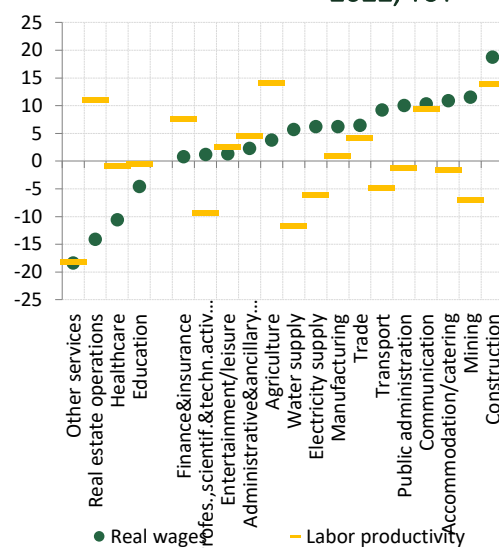
Thus, a pro-inflationary pressure is observed in many sectors of the economy. The growth of real wages in the manufacturing industry, construction, trade and communication is not accompanied by the corresponding growth of labor productivity (Figure 50). Labor productivity is declining in the mining industry, electricity supply, water supply, transport, accommodation and catering services, public administration, professional, scientific and technical activities against the growing wages.

Figure 49. Unemployment Rate and the Temporary Unemployed Population, %



Source: ASPR BNS

Figure 50. Labor Productivity and Real Wages by Types of Economic Activities in the Fourth Quarter of 2022, YoY



Source: ASPR BNS, NBK computations

Labor productivity is growing faster than real wages in such sectors as agriculture, financial and insurance activities, arts, entertainment and leisure, and activities in the sphere of administrative and ancillary service (Figure 50).

Box 2. Development of E-Commerce Worldwide and in Kazakhstan: Effect on Inflationary Processes and the Monetary Policy

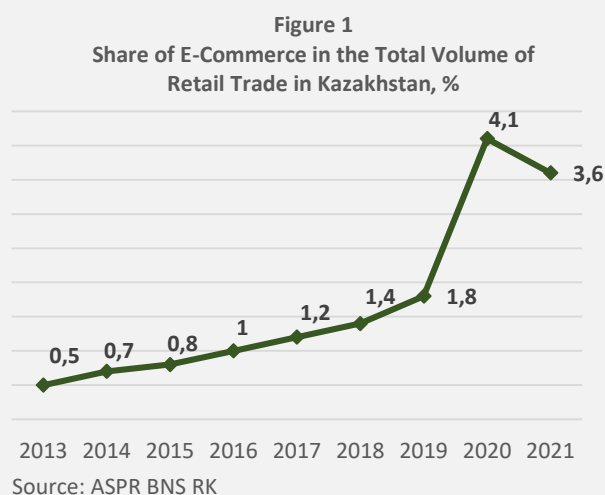
The e-commerce market includes the sale of physical goods via digital channels to a private consumer (B2C). According to Statista, in 2021 retail e-commerce in the world reached 5.2 trillion US dollars. Online channels accounted for about 18% of global retail sales. It is predicted that by 2026 trade volumes will increase to 8.1 trillion US dollars (a 56% growth).

The Chinese e-commerce market is the largest in the world, with online sales accounting for almost half of the country's retail sales. In addition, large shares of electronic retail sales were observed in the UK (36%), South Korea (32%), and Denmark (20%). Asian countries (India, Philippines, etc.) are expected to become the fastest growing e-commerce markets in the near future.

Compared to the pre-pandemic level, the population is more often using online shops for purchases. It is especially true for food products and basic goods. On the other hand, people are also coming back to offline stores after the lifting of Covid restrictions.

A specific feature of online trade in the last decade has been low sensitivity to price fluctuations, since they are not based on standard retail costs. Offline stores, in addition to production costs, incurred wages to personnel, rent and utilities, and consumables (furniture, window dressing, etc.). On the other hand, online stores only needed to invest in software and a payment platform, warehousing, and delivery costs, which usually come down due to the size of the business. However, problems in logistics chains over the past two years have also affected the pricing of goods in e-commerce. Consumers are expected to use a combination of online and offline shopping, however, the likelihood that they will choose online channels is higher than before the pandemic. GWI and Statista research shows that the share of e-commerce will be growing in the coming years.

In Kazakhstan, in 2021 the share of e-commerce in the total volume of retail trade amounted to 3.6% or 482 bln tenge (Figure 1). Compared to 0.5% in 2013, such share reached the maximum in the pandemic year of 2020 (4.1%), followed by its decline once the quarantine restrictions were eased.



In general, the use of information and communication technologies in Kazakhstan is well developed, which is a positive factor for the development of electronic commerce. 87% of the population aged 6-74 have the skills to use a personal computer, smart phone, i-pad, laptop, as well as to receive services and customer care via the Internet (2021). The share of Internet users aged 6-74 reached 93% in 2021, 94.5% of households have access to the Internet. At the same time, according to statistical surveys, the majority of households (77%) do not see the need to purchase (order) goods and services via the Internet. The main reasons listed by respondents include their preference to do shopping physically, loyalty to shops and shopping

centers as well as insufficient experience. According to outcomes of a survey conducted in 2021, 18.7% of households made purchases via the Internet.

Alongside with that, the population may use not only internal resources and domestic market places but also buy goods on foreign Internet platforms. According to the National Bank's assessments, the estimate for unaccounted imports of goods purchased by individuals via foreign Internet platforms in 2021 amounted to 749 mln US dollars³ (about 319 bln tenge at the average annual exchange rate). This, in turn, leads to a gradual re-orientation of a part of the domestic demand in the course of digital technologies development.

³ "Accounting for Cross-Border E-Commerce in the Balance of Payments Statistics", NBK's economic study (<https://www.nationalbank.kz/en/news/issledovaniya>)

Such trends make it important for central banks to understand the macroeconomic impact of inflation, changing relationships in the future. In addition, it is essential to study issues such as:

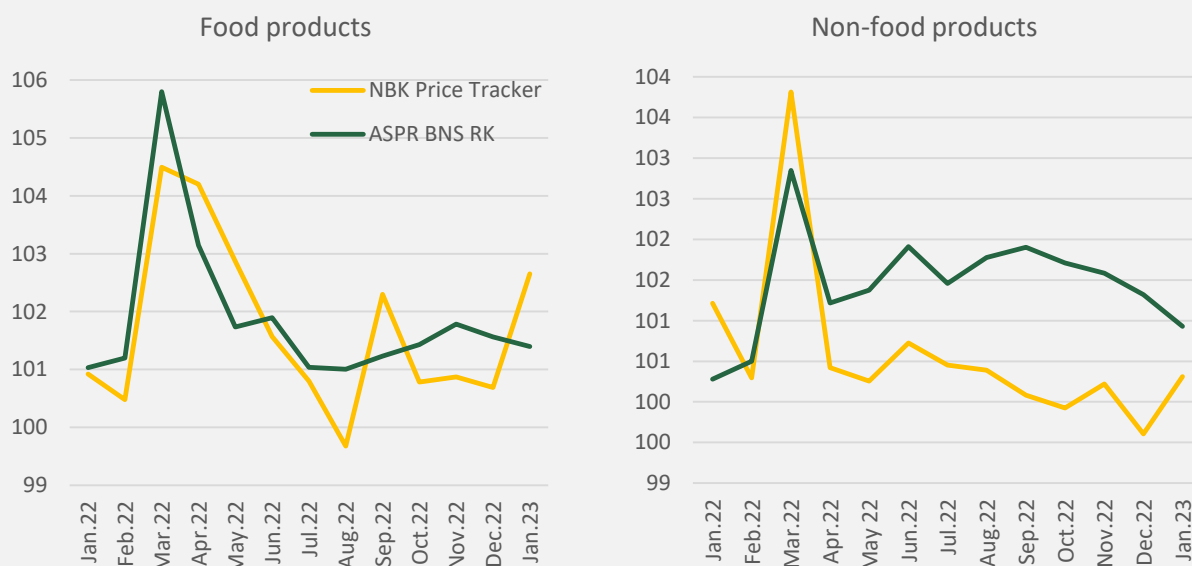
1) Difference in pricing of goods in online and offline stores, and the dynamics of changes. Presumably, online prices are cheaper than in physical stores. In a study by [Cavallo](#) (2017), the author compared prices in 56 multi-channel large retailers in ten countries. He found out that in 72% of cases, price levels in online stores and offline stores were equal. In the remaining cases, the web price was lower than the offline price. Price changes are not synchronized but the frequency of changes and an average value are similar.

2) Impact of digitalization, including the development of e-commerce, on inflation dynamics. The [IMF](#) paper (2019) studies to what extent digitalization affected the inflation dynamics in the sample of 36 developed and developing countries during the period of 2000-2017. The study has concluded that digitalization exerts a statistically significant negative effect on inflation in the short term through the cost/markup channel.

For example, the comparison of online prices (the NBK System called Price Tracker⁴) and offline prices (official statistics of the ASPR BNS PK) shows the similar dynamics of both indices, moreover, the rates of changes in prices of non-food products are lower than the official statistical data. The CPI Tracker covers virtually entire set of trade items presented in the consumer basket for calculation of the CPI.

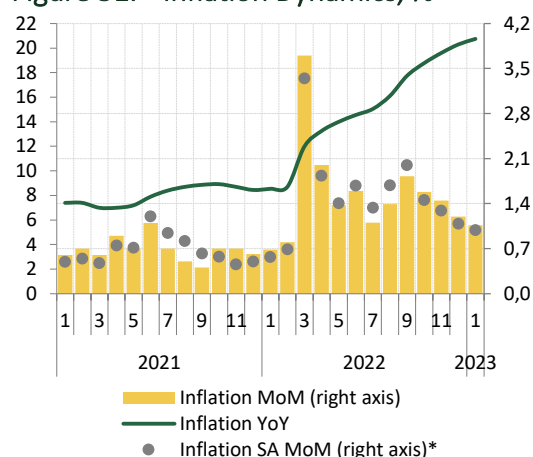
Figure 2

Monthly Dynamics of Offline Indices (ASPR BNS PK) and Online Consumer Prices (NBK Price Tracker)



⁴ CPI Tracker is a system for collecting information on the prices of goods in the consumer basket by web scraping. Look for more details in "Galymzhan System for Online Assessment of Consumer Inflation in Kazakhstan" <https://www.nationalbank.kz/file/download/65125>

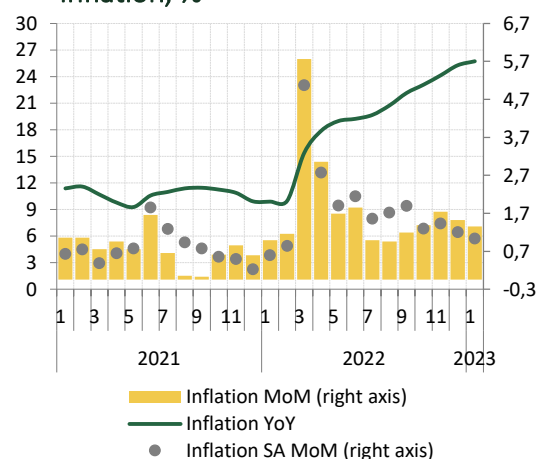
Figure 51. Inflation Dynamics, %



Source: ASPR BNS, NBK computations

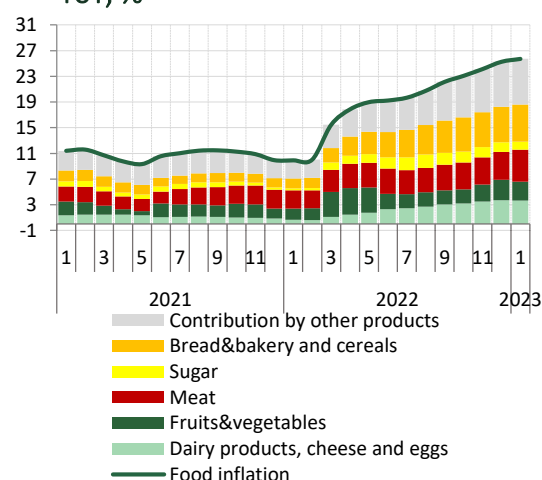
*- Seasonal adjustment was performed by using X-12-ARIMA method from 2011 until present

Figure 52. Dynamics of Food Inflation, %



Source: ASPR BNS, NBK computations

Figure 53. Contribution of Particular Products to the Food Inflation, YoY, %



Source: ASPR BNS, NBK computations

3.4 Inflation

At end-January 2023, the annual inflation accelerated to 20.7% amid rising prices for all key inflation components (Figure 51). At the same time, monthly inflation indicators have kept decelerating since September 2022.

As before, food prices continue to make the largest contribution to acceleration of the headline inflation, with their growth accounting for 25.7% in January 2023 (Figure 52). The rise in prices for non-food products accelerated to 20.2% (Figure 54) and for paid services to the population – to 14.2% (Figure 56).

Despite some deceleration in the monthly growth of food prices, in January 2023 the **food inflation** accelerated to 25.7% in annual terms. Within the structure of food component of inflation, prices for fruit and vegetable production as well as bread and bakery and cereals, meat, dairy products and eggs accelerated their growth (Figure 53).

The annual rise in prices for fruits and vegetables in January 2023 was 21.2%. Due to a record-low temperatures in the southern regions of the country and the loss of part of harvest, fresh vegetables, specifically cucumbers, onions and cauliflower, appreciated significantly in terms of price. In January 2023, the annual growth in prices for eggs accelerated to 25.8%. Nonetheless, given a significant ramp-up of the domestic production, sugar keeps cheapening for a fourth consecutive month.

The rise in prices for bread and bakery and cereals in January 2023 amounted to 34.1% in annual terms. Among cereals, the growth in prices for rice accelerated to 39.6% (YoY) given an increased demand on the part of Russia. Based on the results of January-November 2022, exports of rice to Russia went up by 60.6% (YoY) because of a poor crop of rice in Russia. In January 2023, the annual growth in prices for meat accelerated to 16.9% due to deceleration in the growth of prices for live cattle to 8.3% (YoY). Such divergent dynamics of consumer prices and producer prices may be caused by the growing costs against the appreciation of means of production and interim consumption products in the environment of disrupted logistics chains and high inflation in exporting countries.

In the context of **non-food products**, prices for goods with a high percentage of imports, including personal goods (shampoo, toothpaste, soap, etc.), clothing, construction materials, detergents and scouring products continue to rise (Figure 55). In the group of household items, the increase in the production of furniture and home textiles is noticeable. On the other hand, the administrative regulation of prices for fuel and lubricants continues to have a disinflationary effect on the non-food component. It is also worth noting that due to appreciation of the tenge against the US dollar in recent months, the growth in prices for some imported categories of non-food products has slowed down, in particular for household appliances.

In terms of **paid services** to the population, the growth rate of the cost of rent for comfortable housing (price rise in January 2023 amounted to 35.2% against 46.3% in October 2022) has been decelerating for the third month in a row against the stabilizing demand (Figure 57). On the other hand, prices for hairdresser's services as well as for outpatient services, catering services and cultural events have gone up because of appreciation of imported expendables and increased demand.

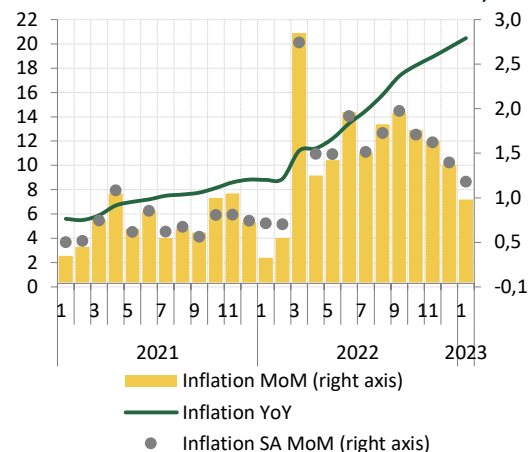
Inflation expectations of the population, having reached the all-time peak in November-December of the last year, declined in January 2023.

The median estimate of expected inflation over a one-year horizon increased from 18.3% in October to 21.3% in December 2022, having reached the maximum since the beginning of public polls. However, in January 2023 the median slowed down significantly to 17.3%.

The median estimate of perceived inflation (for the past 12 months), after reaching the peak of 22.1% in December 2022, slightly decreased to 21.7% in January 2023 (Figure 58).

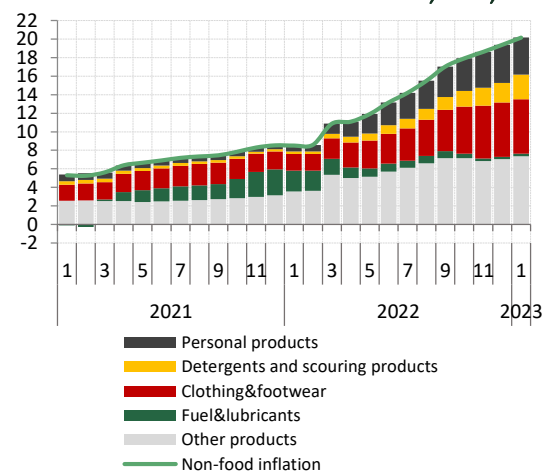
According to the results of public poll, respondents who expect price growth over a one-year horizon mainly attribute this to changes in food prices, to a lesser extent – to external events, changes in prices for gasoline and diesel fuel, and movements in the exchange rate (Figure 59). At the same time, the share of respondents on these factors (excluding the exchange rate) increased.

Figure 54. Dynamic of Non-Food Inflation, %



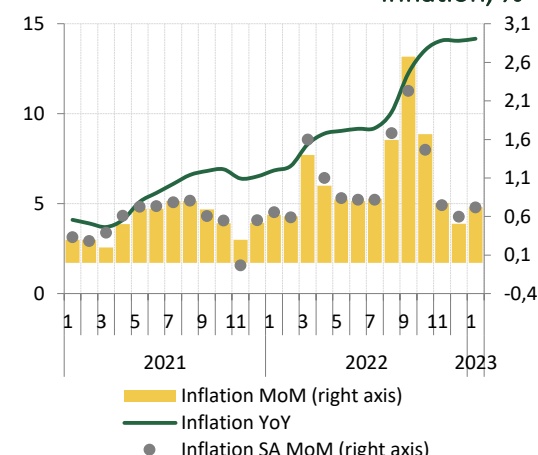
Source: ASPR BNS, NBK computations

Figure 55. Contribution by Non-Food Products, YoY, %



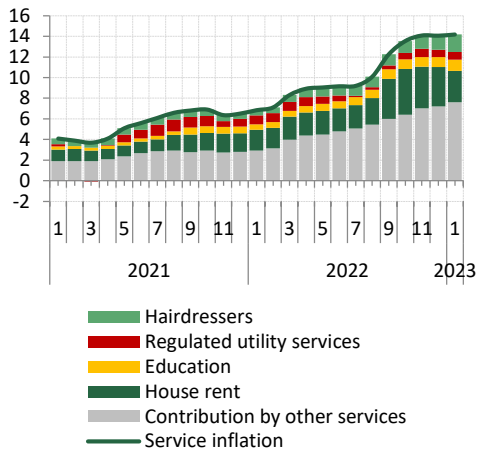
Source: ASPR BNS, NBK computations

Figure 56. Dynamics of Service Inflation, %



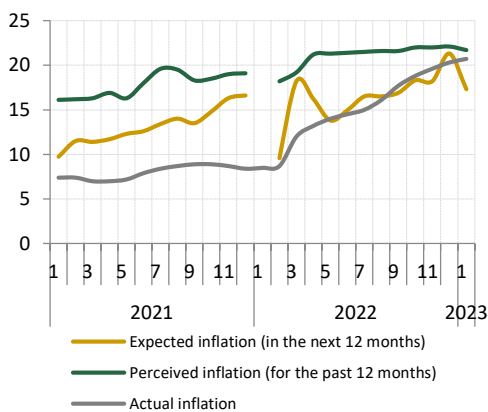
Source: ASPR BNS, NBK computations

Figure 57. Contributions to the Paid Services Inflation, YoY, %



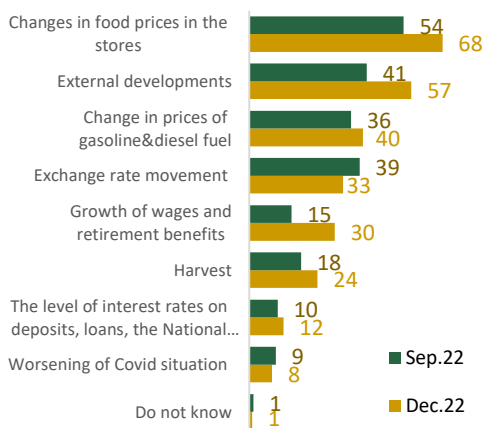
Source: ASPR BNS, NBK computations

Figure 58. Median Estimates of Expected and Perceived Inflation, YoY, %



Source: ASPR BNS PK, FusionLab: public poll

Figure 59. Price Growth Factors (as % of Respondents Anticipating the Rise in Prices a Year Ahead)



Source: ASPR BNS PK, FusionLab: public poll

Consumer sentiment of the population improved mainly thanks to more positive assessments of the country's economic development and personal financial standing.

Price expectations of enterprises somewhat slowed down based on the poll results at the beginning of the first quarter of this year.

A survey of enterprises in the real sector showed that in the 4th quarter of 2022, the growth rate of prices for final products of enterprises continued to slow down both in the economy as a whole and in industries. In the first quarter of 2023, enterprises of all types of activities expect a further slowdown in price growth. However, the level of price expectations of enterprises is still above its trend.

For the overwhelming majority of enterprises, the most important factor in setting prices for final products includes prices for raw materials and supplies (for 83.6% of enterprises), demand (81.6%) and payroll costs (70.5%). The rise in prices for raw materials and supplies as well as imported products, according to assessments of enterprises, is also slowing down. At the same time, enterprises anticipate that the demand for final products will increase.

Box 3. Assessing Inflation Factors with the Help of Dynamic Factor Model in 2022⁵

Inflationary processes are shaped under the influence of a variety of factors. Depending on the origin or nature of influence, in the economic literature these factors are divided in supply and demand factors, monetary and non-monetary factors, and others. For central banks adhering to the policy of inflation targeting it is extremely important to monitor the current trends in the development of inflationary processes and to analyze the factors that influence them.

In addition to the standard analysis of the influence of various variables on inflation, it is necessary to understand the nature of origin of key drivers of inflation dynamics. Along with the observable factors of inflation, the analysis of the impact of unobserved variables on inflationary processes is of particular importance.

In turn, the presence of a significant number of variables that affect the inflation dynamics complicates the analysis and forecasting process. Among the large amount of data, it is necessary to highlight the really significant indicators. One of the methods to solve this problem is the principal component analysis (PCA)⁶.

From the set of observed factors of inflation, which were selected based on the principle of maximum correlation with the dependent variable (inflation), and grouped in advance, five unobserved variables were obtained using the principal component analysis. The data represents inflation factors: external factor, monetary factor, fiscal factor, demand factor, and supply factor.

***For reference:** changes in 65 observable variables versus the preceding period were used in the analysis by monthly frequency from January 2011 to December 2022, which were expertly grouped by the nature of origin and influence on inflationary processes. The first step was to perform deseasonalization of all variables. Further, due to the use of the principal component analysis as a tool for determining unobserved variables, all data was normalized.*

Using regression analysis, an assessment of the impact of these factors on inflation was made. At this stage, the lagged ($t-1$) inflation rate was added to the equation that is the inertial component of inflation, as well as the potential inflation rate, which is represented in the equation as a constant. The difference between the actual value and the value derived from the equation is referred to as an undefined factor. However, the Johansen cointegration test indicates the presence of the 1st cointegration equation between this uncertain factor and the median estimate of inflation expectations with a 5% significance level at a correlation level between indicators of 45.8.

The modeling results showed that from March through August 2022, inflation in Kazakhstan was largely determined by the influence of external factors and supply factors (Figure 1). This is driven by the shock caused by a food and energy crisis in the world because of aggravation of geopolitical situation at the end of February 2022 and the ensued sanctions against Russia.

Indeed, inflation in these periods was accelerating due to the growth of import prices in the context of a pass-through of the tenge exchange rate depreciation onto domestic prices as well as the acceleration of growth in world food prices. It also led to higher production costs as a result of the disruption of logistics and production chains. However, in the following months, the influence of these factors turned into a neutral and even negative zone, which reflects the strengthening of the tenge and the adaptation of world markets to new conditions.

As one can see, the demand factor throughout 2022 had a neutral impact on inflation, however, in December 2022, the effect turned into a negative zone. Such dynamics of demand was caused by reduction in real income because of elevated inflation levels at the end of 2022.

Monetary factors exerted a disinflationary effect in May-July 2022 due to the increase of the base rate by the National Bank (in the equation, monetary factors affect inflation with the lag of $t-2$). In August 2022, given the expansion in lending, monetary factors put a pro-inflationary pressure in the economy.

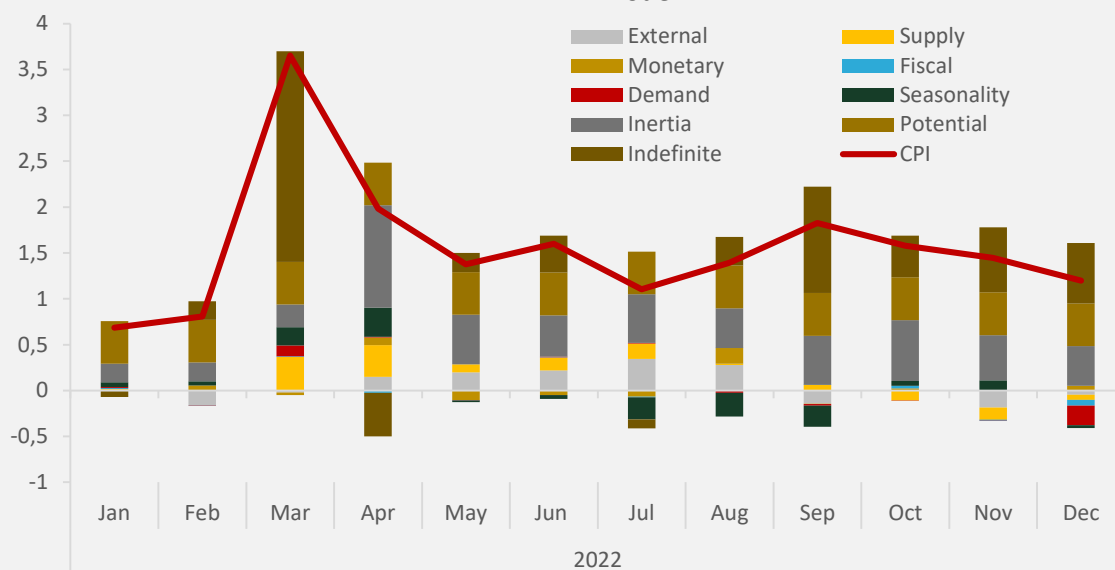
In addition, starting from April 2022, the inflation dynamics in Kazakhstan were exposed to significant inertial effect, which persisted virtually until the end of the year and was caused by a sharp acceleration of inflation in March-April.

⁵ The box has been prepared based on the results of the model presented in the NBRK study “Dynamic Factor Model of Inflation for Kazakhstan”, Economic Study, NBRK-WP-2022-4, <https://nationalbank.kz/file/download/76167>

⁶ The Principal Component Analysis (PCA) is a data analysis tool that is commonly used to reduce the dimensionality of a large number of interrelated variables while retaining as much variation as possible.

Shocks whose realization cannot be modeled affected inflation throughout 2022, intensifying in March and September.

Figure 1. Assessing the Impact of Factors on Inflation in Accordance with the Dynamic Factor Model



Source: ASPR BNS, NBK computations

3.5. Fiscal Policy

At end-2022, the revenue side of the budget was showing a substantial growth due to the increased tax revenues. Moreover, a relatively low level of budget deficit compared to 2021 was formed largely owing to larger transfers from the National Fund.

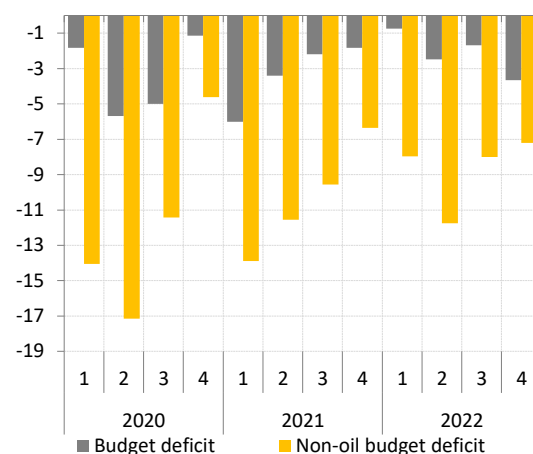
In 2022, the national budget deficit amounted to 2.4 trillion tenge, having decreased by 5.4% compared to 2021 (in 2022 – 2.4% of GDP). Reduction in the budget deficit, in the first instance, was secured by an outstripping growth of revenues (including transfers from the National Fund) over expenditures (the growth by 27.7% and 20.3%, respectively).

In 2022, the revenue side of the budget received official transfers totaling 5 491.4 bln tenge (the share in budget revenues – 34.4%), where the guaranteed transfer from the NF RK amounted to 4 030.0 bln tenge, the earmarked transfer – 550.0 bln tenge, and transfers from subordinate government authorities equaled 911.4 bln tenge. Transfers from the National Fund remain high (a 1.8% growth compared to 2021), despite a significant growth both in tax revenues and non-tax revenues. Thus, the national budget revenues excluding transfers from the National Fund went up by 42.2% compared to 2021.

In 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's estimate, amounted to 8 592.2 bln tenge (8.5% of GDP), being by 6.7% larger than in 2021 (Figure 60).

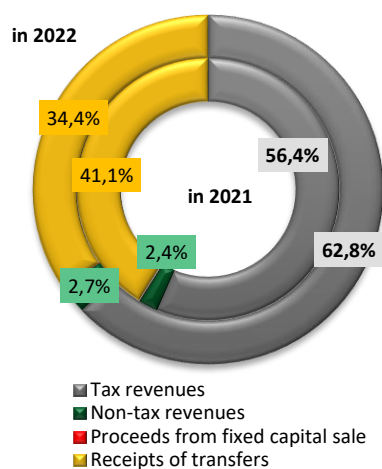
The national budget revenues in 2022 increased by 27.7% compared to 2021 and equaled 16.0 trillion tenge. The main reason for expansion in revenues is the 42.1% increase in tax revenues (the share in budget revenues was 62.8%) owing to the recovery of economic activity and rise in prices for main export commodities. The largest growth of taxes in terms of economic sectors is observed in the mining, manufacturing industry and trade.

Figure 60. Overall and Non-Oil Deficit of the National Budget, as % of GDP



Source: MF RK

Figure 61. Structure of National Budget Revenues



Source: MF RK

Within the structure of tax revenues, there was an increase in receipts from corporate income tax (a 39.4% growth, YoY) given additional tax liabilities payable by large mining and metallurgical companies, as well as in the value-added tax (by 50.5%, YoY) as a result of growing turnovers on realization of goods, works and services.

Alongside with that, at end-2022, receipts of official transfers went up by 6.7% in annual terms (their share in budget revenues accounted for 34.4%) due to the increase in the guaranteed transfer (by 50.9%, YoY) compared to 2021 (by 41.4%, YoY).

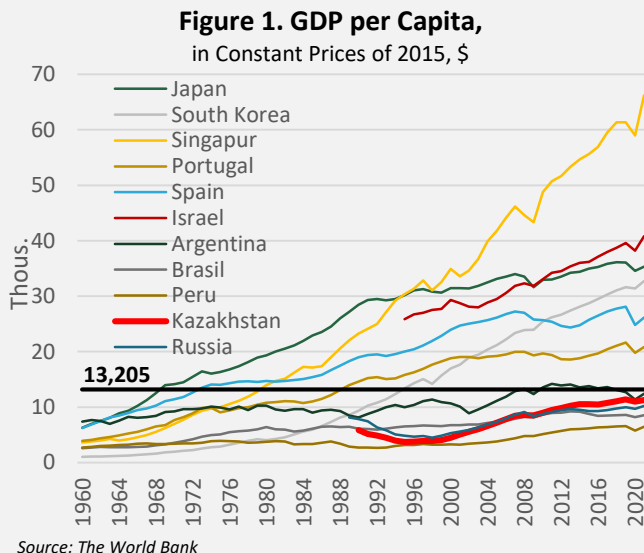
Non-tax revenues grew by 48.3% compared to 2021; a major growth in their structure fell on revenues from dividends on government blocks of shares in the national ownership as well as revenues from public assets (receipts of rental payments for the use of Baikonur space complex) and other non-tax revenues. A 5.7% growth in receipts from fixed capital sales is related to the increased sales of tangible assets from the state stockpiles (Figure 61).

In 2022, the national budget expenditures totaled 17.8 trillion tenge, having increased by 20.3% compared to 2021. The main contribution to the growth of the national budget expenditures was traditionally made by the following sectors: public services of general nature – by 62.5% (share – 5.9%), defense – by 50.1% (share – 6.0%), education – a 43.0% increase (share – 11.1%) and debt service – by 32.7% (share – 7.3%). Alongside with that, spending on social welfare and social security went up by 11.7% (share – 24.4%).

Box 4. The Middle-Income Trap

An increasing number of developing countries in the world encounter a situation of economic downturn when they reach a certain level of development, which does not allow the country to move into the category of countries with high levels of income. In 2006, the World Bank economists coined the term of “middle-income trap” to describe this kind of economic stagnation. There are several parameters for classifying a country as stuck in the middle-income trap, where the most well-known parameter is the level of GDP per capita⁷.

Developing countries with the middle or upper-middle income find themselves in this trap due to the loss of competitive advantage. Thus, they find themselves “sandwiched” between poor countries with low wages, which dominate in labor-intensive industries, and developed countries, which dominate in knowledge-intensive and technologically advanced industries.

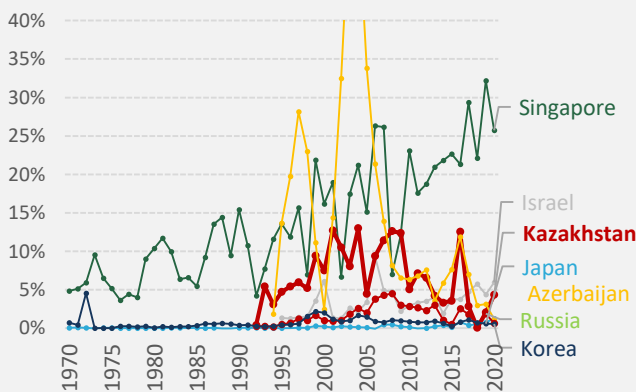


The main reasons for the emergence of the “middle-income trap” include an insufficient level of development of technologies, innovations, low levels of investment and human capital, lack of access to developed infrastructure and financing, and slowdown in productivity growth. According to the World Bank, out of 101 middle-income countries in 1960, only 13 countries moved into the category of high-income countries by 2008: Japan, Singapore, South Korea, Hong Kong, Taiwan, Portugal, Spain, and Israel (Figure 1).

At the same time, most countries in Latin America as well as the Middle East and North Africa reached the status of middle-income countries in 1960s and 1970s and have been staying there since then.

Countries that have moved into the upper-middle-income category have gone from “imitation” policies that enabled productivity gains in the early stages of development due to large technology spillovers, to “innovation” policies, which aim to develop and apply new ideas, technologies or processes in production activities.

Figure 2. Foreign Direct Investments*, Net Inflow as % of GDP



* Foreign direct investments (FDIs) are the net inflow of investments to acquire a long-term management interest (10 percent or more of voting shares) in an enterprise operating in an economy other than that of the investor.

Large-scale innovation is a major driver of growth as technology advances. It is worth mentioning that the policy of “imitation” allows using low-skilled labor but innovation requires only highly qualified specialists. This factor necessitated a policy of industrial transformation of the economy and improvement in the quality of human capital, which enabled “successful” countries to avoid the “middle-income trap”.

The reforms implemented in these countries were aimed at developing the secondary and tertiary sectors of the economy, in particular at developing high-tech sectors and increasing labor efficiency and productivity, and developing of institutions. Despite differences in the development strategies as regards the involvement of foreign capital or domestic

⁷ According to the World Bank classification, for analytical purposes, countries are grouped according to per capita gross national income expressed in the US dollars. The following boundaries are defined in 2023:

- low-income economies – less than \$1 086;
- lower middle-income economies – \$1 086-\$4 255;
- upper middle-income economies – \$4 256-\$13 205;
- high-income economies – over \$13 205.

financing (Figure 2), the main place in their development strategies was occupied by investments in human capital, continuous professional development of employees in close cooperation with employers (“continuous skill improvement strategy”) as well as increasing investments in knowledge-intensive sectors of the economy.

Kazakhstan’s persisting dependence on raw materials increases the risk of falling into the middle-income trap. Based on the analysis of experience of successful countries, the following areas for development and reform can be identified to avoid the middle-income trap:

1. Diversifying the Economy. To achieve this goal, it is necessary to train highly qualified specialists and create a scientific base to provide manufacturing industries with personnel, which will increase competencies in advancing in the technological value chain, that is, in moving from the production of lower value-added goods to the production of medium and high value-added goods.

2. Improving the Quality of Education Taking Account of Specifics of Kazakhstan’s Demography. Most of developed countries, including “successful” ones, are suffering from the population ageing and low birth rates. In Kazakhstan, on the contrary, the population is relatively young. Thus, in 2022 the younger generation prevails in the age structure of the population (the share of population aged 0-16 years old makes up 33%).

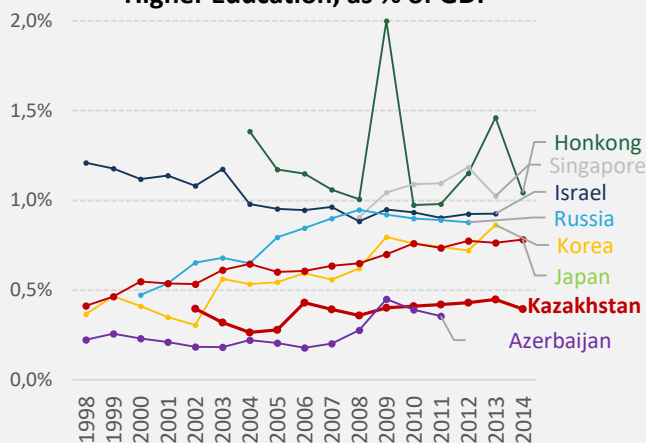
The qualitative growth of the economy requires the training of personnel for new demanded professions, using advanced training methods, primarily of technical profile (Figure 3).

3. Increasing Labor Productivity by Improving the Quality of Human Capital. The main source of comparative advantage and success of countries that have escaped the “middle-income trap” is the policy for human capital development as the main source of wealth and improving the quality of life (Figure 4).

4. Improving Innovation Development Indicators. One of the reasons why a country finds itself in the “middle-income trap” is a low level of innovation development. This is characterized by low investments in R&D⁸ and innovations, with their major portion being financed with the government spending and not by private companies. It is worth considering the example of the Republic of Korea and Israel where the government spending on R&D has been one of the highest over several decades (Figure 5).

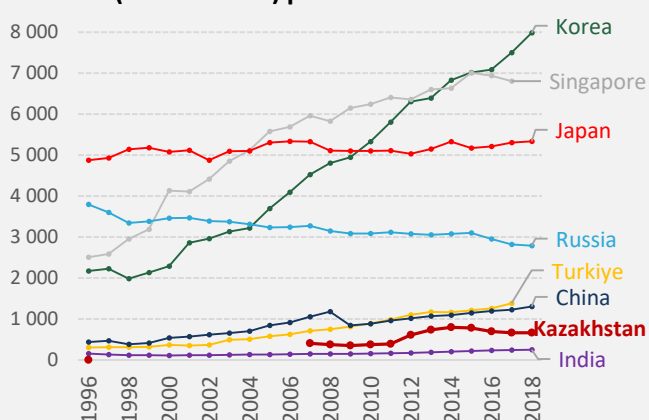
According to the ADB assessments⁹, Kazakhstan moved into the category of upper-middle income economies in 2006. However, the economy is still oriented on raw materials. Thus, on average, since 2010 the share of exports of crude oil and petroleum products in the export of goods accounts for about 60%.

Figure 3. Government Spending on Higher Education, as % of GDP



Source: UNESCO Institute for Statistics, OurWorldInData.org

Figure 4. The Number of Scientific Staff (Researchers) per Mln of Individuals



Source: UNESCO (via World Bank) OurWorldInData.org

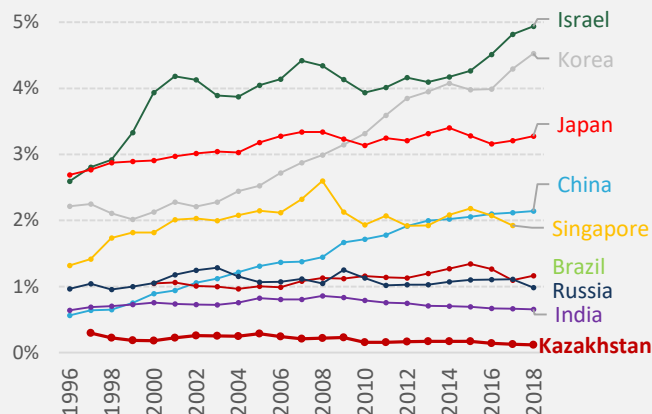
*Specialists engaged in Research and development (R&D) are professionals involved in formulating the concept or creation of new knowledge, products, processes, methods or systems. The data includes post-graduate students.

⁸ Research and development work (R&D) is a complex of works aimed at obtaining new knowledge and practical application in the creation of a new product or technology.

⁹Kazakhstan’s Twin Development Challenges: Economic Diversification and Avoiding the Middle Income Trap (www.adb.org/sites/default/files/linked-documents/cps-kaz-2012-2016-oth.pdf)

The analysis performed also showed that the economic diversification is slow. Reliance of the economy on exports of raw commodities results in significant volatility of incoming export proceeds thus affecting the exchange rate dynamics, devaluation expectations of economic agents. This, in turn, reduces confidence in the tenge and blunts the effectiveness of the monetary policy.

Figure 5. Government spending on Research (R&D), as % of GDP



Source: UNESCO Institute for Statistics, OurWorldInData.org

* Research and development (R&D) covers fundamental research, applied research and experimental development. Expenditures include current and capital expenditures (both public and private) for research.

Avoiding the middle-income trap necessitates the improvement of the human capital quality and development of knowledge-intensive sectors of the economy. However, in terms of government spending on education, R&D, and the number of scientists, Kazakhstan lags far behind many countries.

Foreign direct investments coming into the country are directed mainly to the primary sector or to the low value-added sectors. The success of implemented programs aimed to diversify the economy will promote a more effective monetary policy.

BASIC TERMS AND DEFINITIONS

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

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

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.

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

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

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.

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.

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

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

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.

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

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

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.

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.

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.

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 nongovernment non-financial organizations in the tenge at the National Bank.

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.

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 interest rate to achieve the goal of ensuring the price stability in the medium term.

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.

Transferrable Deposits refer to all deposits, which: 1) can be converted into cash at face value at any moment in time without any penalties and restrictions; 2) are freely transferable through a check, draft or endorsement orders; and 3) are widely used for making payments. Transferrable deposits represent a part of the narrow money. Other deposits primarily include savings and time

deposits that only can be withdrawn on expiration of a certain period of time, or can have different restrictions which make them less convenient for use in the ordinary commercial transactions and, mainly, meet the requirements established for saving vehicles. In addition, other deposits also include non-transferable deposits and deposits denominated in foreign currency.

LIST OF KEY ABBREVIATIONS

bln – billion
bp – basis point
mln – million
pp – percentage point
thous. – thousand
trln – trillion
ASPR BNS – Bureau of National Statistics of the Agency for Strategic Planning and Reforms
CBRF – Central Bank of the Russian Federation
CPI – consumer price index
ECB – European Central Bank
EIA – Energy Information Administration
EM – emerging markets
EU – European Union
FAO – Food and Agriculture Organization of the United Nations
Fed – US Federal Reserve System
GDP – gross domestic product
GSs – government securities
IMF – International Monetary Fund
KASE – Kazakhstan Stock Exchange
KDIF – “Kazakhstan Deposit Insurance Fund” JSC
KSF – “Kazakhstan Sustainability Fund” JSC
MED – Ministry of Economic Development of the Russian Federation
MF RK – Ministry of Finance of the Republic of Kazakhstan
MNE – Ministry of National Economy of the Republic of Kazakhstan
MW – minimum wage
NBK – National Bank of the Republic of Kazakhstan
NFRK – National Fund of the Republic of Kazakhstan
OPEC – Organization of Petroleum Exporting Countries
PPE – property, plant and equipment
Rosstat – Federal State Statistics Service of the Russian Federation
SRC – State revenue Committee
TCO – Tengizchevroil
TEA – types of economic activities