



НАЦИОНАЛЬНЫЙ БАНК КАЗАХСТАНА

Financial Stability Report of Kazakhstan 2023

Astana, 2024

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List of Acronyms and Abbreviations

Agency/AFR	Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market
JSC	joint-stock company
AIC	agro-industrial complex
STB	a second-tier bank
BCBS	Basel Committee on Banking Supervision
BNS RK/ BNS ASPR	Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan
RK	and Reforms of the Republic of Kazakhstan
DA	domestic assets
GDP	gross domestic product
EKR	East Kazakhstan Region
HLA	highly liquid assets
DL	domestic liabilities
SCB	State Credit Bureau
GQPS	government and quasi-public sector
GSs	government securities
MP	monetary policy
UAPF	the “Unified Accumulative Pension Fund” JSC
EU	European Union
ECB	European Central Bank
GFER	gold and foreign exchange reserves
WKR	West Kazakhstan Region
LOLR	loans of last resort
RML	residential mortgage loan
IE	Individual entrepreneur
FDIs	foreign direct investments
PIT	personal income tax
CPI	consumer price index
IF	investment fund
FSI	financial stability index
FVI	financial vulnerability index
CCB	countercyclical capital buffer
CCP	central counterparty
RDA	ratio of placing part of the bank’s resources in domestic assets
SRC MF RK	State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan
QPS	quasi-public sector
DR	debt ratio
HCC	“Housing Construction Company” JSC
KMG	NC “KazMunayGas” JSC
PRC	People’s Republic of China
CIT to the RB	Corporate income tax from large businesses to the republican budget
KASE	Kazakhstan Stock Exchange
KDIF	“Kazakhstan Deposit Insurance Fund” JSC
KSF	“Kazakhstan Sustainability Fund” JSC
LB	local budget
IMF	International Monetary Fund
LEA	local executive authority
SME	small and medium-sized enterprises
MCI	monthly calculated index

MF RK	Ministry of Finance of the Republic of Kazakhstan
MFO	microfinance organizations
IFOs	international financial organizations
NBK/National Bank	National Bank of the Republic of Kazakhstan
RK	
VAT	value-added tax
FNGS	foreign non-government securities
NF RK	National Fund of the Republic of Kazakhstan
OCP	open currency position
OEMFA	organizations engaged in microfinance activities
IBGP	bonds of the issuer with government participation
UN	United Nations Organization
OECD	Organization for Economic Cooperation and Development
FD	financial derivatives
RB	republican budget
RK	the Republic of Kazakhstan
RF	the Russian Federation
FCC	freely convertible currency
NKR	North Kazakhstan Region
IO	insurance organization
Council	Council for Financial Stability of the Republic of Kazakhstan
USA	United States of America
CEP	Council on Economic Policies
TPS	thermal power station
IPM	investment portfolio managers
FI	financial instrument
US Fed	US federal Reserve System
CSD	“Central Securities Depository” JSC
CPs	credit partnerships
ECDCO	export customs duty for crude oil
LE	legal entity/ entities
AQR	Independent Asset Quality Review
FRED	Federal Reserve Economic Data
FSAP	Financial Sector Assessment Program
FX LCR	liquidity coverage ratio in foreign currency
EUR	euro
GBI-EM	Government Bond Index – Emerging Markets
KZT	Kazakhstan tenge
LCR	liquidity coverage ratio
LTV	loan-to-value ratio
NDF	non-deliverable forward
NPL/NPL 90+	loans past due 90+ days on principal and/or interest accrued (non-performing loan)
NSFR	net stable funding ratio
PD	probability of default
PDL	short-term pay-day loans
PSs	pawnshops
RUB	Russian ruble
SREP	Supervisory Review and Evaluation Process

TONIA	Tenge Over Night Index Average
TWINA	Tenge Week Index Average
UCL	unsecured consumer loans
USD/US\$	US dollar
WEO	World Economic Outlook
\$/bbl	US dollars per barrel of oil
pp	percentage point
y/y	year-on-year
q/q	quarter-on-quarter
sq.m	square meter
thous.	thousand
mln	million
bln	billion
trln	trillion

Key Findings

Macroeconomic Conditions

In 2023, risk factors affecting financial stability in the Republic of Kazakhstan were at moderate levels. Imbalances in the financial system were declining throughout the year amid lower growth of lending and slower price growth in the residential real estate market.

In 2023, Kazakhstan saw strong economic growth of 5.1%, along with deceleration in inflation to 9.8%. The impact of external factors on the volatility of the tenge was limited.

In 2023, real income of the population restored its growth. Despite this, in 2023, there was a low growth in household spending adjusted for inflation. This observation speaks in favor of the population's growing propensity to save; this was also driven by the restrictive monetary policy of the NBK, aimed at stimulating savings and reducing inflationary pressure.

Fixed capital investments, despite their nominal growth, remain low in relation to the size of the economy.

Government Securities Market

In 2023, the uneven maturity structure of government securities persisted, which partly already had a high volume to be paid in the near term after a large issue of short-term bonds in 2022. The imbalance in repayments was exacerbated by payments on bonds issued in 2023 and Eurobonds awaiting large repayments in the period from 2024 to 2027.

The NBK is also introducing a framework for the institution of primary dealers to develop the government securities market and to increase its liquidity and efficiency. Thus, the growth in the activity of market investors is already in some way associated with monitoring the activity of participants in the primary and secondary markets within the framework of this innovation. In general, an increase in the share of market investors in 2023 was also observed due to active participation of second-tier banks in the primary and secondary government securities market: second-tier banks became the largest buyers in the primary market, ahead of the UAPF, in terms of the volume of purchased bonds of the Ministry of Finance of the Republic of Kazakhstan.

The zero-coupon yield curve remained inverted throughout 2023 amid expectations of interest rate cuts by market participants. Long-term government bond yields at auctions were at 11.5–12% in 2023. At the end of 2023, given the lowering of the base rate, the yield curve declined at the short end.

Residential Real Estate Market

In 2023, prices in the primary residential real estate market showed a minor rise (since March 2023), while prices in the secondary market declined during the first three quarters of 2023 with a slight recovery in Q4. Despite a significant decrease in the volume of concessional programs, prices in the residential real estate market remained stable, and activity remained at a high level. The number of purchase and sale transactions went down by 20.5% in 2023 compared to 2022, but still exceeds pre-pandemic levels. The number of apartments commissioned in 2023 increased by 20.2% after a decrease in 2022.

Given the reduced volume of concessional mortgage programs, the volume of market mortgage loans grew significantly. Thus, the share of marketed mortgage loans increased from 15.5% in 2022 to 34.6% in 2023.

Loan Portfolio Quality

The quality of the corporate loan portfolio of the banking sector in 2023 improved thanks to reduction in both doubtful and non-performing loans. The share of problem loans in the corporate portfolio decreased across all business entities, while the quality of the SME portfolio remained the lowest. Given this, the provisioning ratio of problem loans in the corporate portfolio increased slightly.

On an industry basis, banks continue to lend primarily to the non-tradable sector of the economy, where the bulk of problem loans are concentrated. Thus, the quality of loans in the service sector, manufacturing, trade, construction and real estate is the lowest. At the same time, the concentration of debt among a limited number of corporate borrowers is gradually decreasing, but still remains high.

The high growth rates of the portfolio of unsecured consumer loans are persisting. It is noteworthy that borrowers with a high level of total debt made the main contribution to growth. In general, the level of credit risk for the retail loan portfolio is at an acceptable level, but remains highly sensitive to changes in household income.

In 2023, assets of organizations engaged in microfinance activities continued to grow, driven by microloans for consumer purposes. However, the total number of borrowers and loans of OEMFA remained virtually unchanged. There was also a minor deterioration in the quality of the microloan portfolio during the year.

Liquidity and Funding Risks

At the end of 2023, the volume of highly liquid assets slightly increased, and banks' liquidity ratios remained at levels exceeding the regulatory ones. The main approach to the distribution of liquidity surplus by banks was to place it mainly in government securities and in accounts with the NBK. Liquidity risks for most banks remained at a moderate level due to a significant stock of highly liquid assets, which constituted approximately a third of the banks' total assets.

There were no significant changes on the bank funding side. After its growth in 2022, the share of non-residents in deposits of individuals and legal entities stabilized in 2023. At the same time, diversification of the funding base continued due to reduction in the share of the quasi-public sector.

The level of dollarization reached its all-time low over the past 16 years, with a significant decrease in the share of foreign currency deposits observed in both the retail and corporate segments. The net open foreign exchange position in the banking system was not exposed to strong volatility and did not exceed the maximum values.

I Macroeconomic Conditions

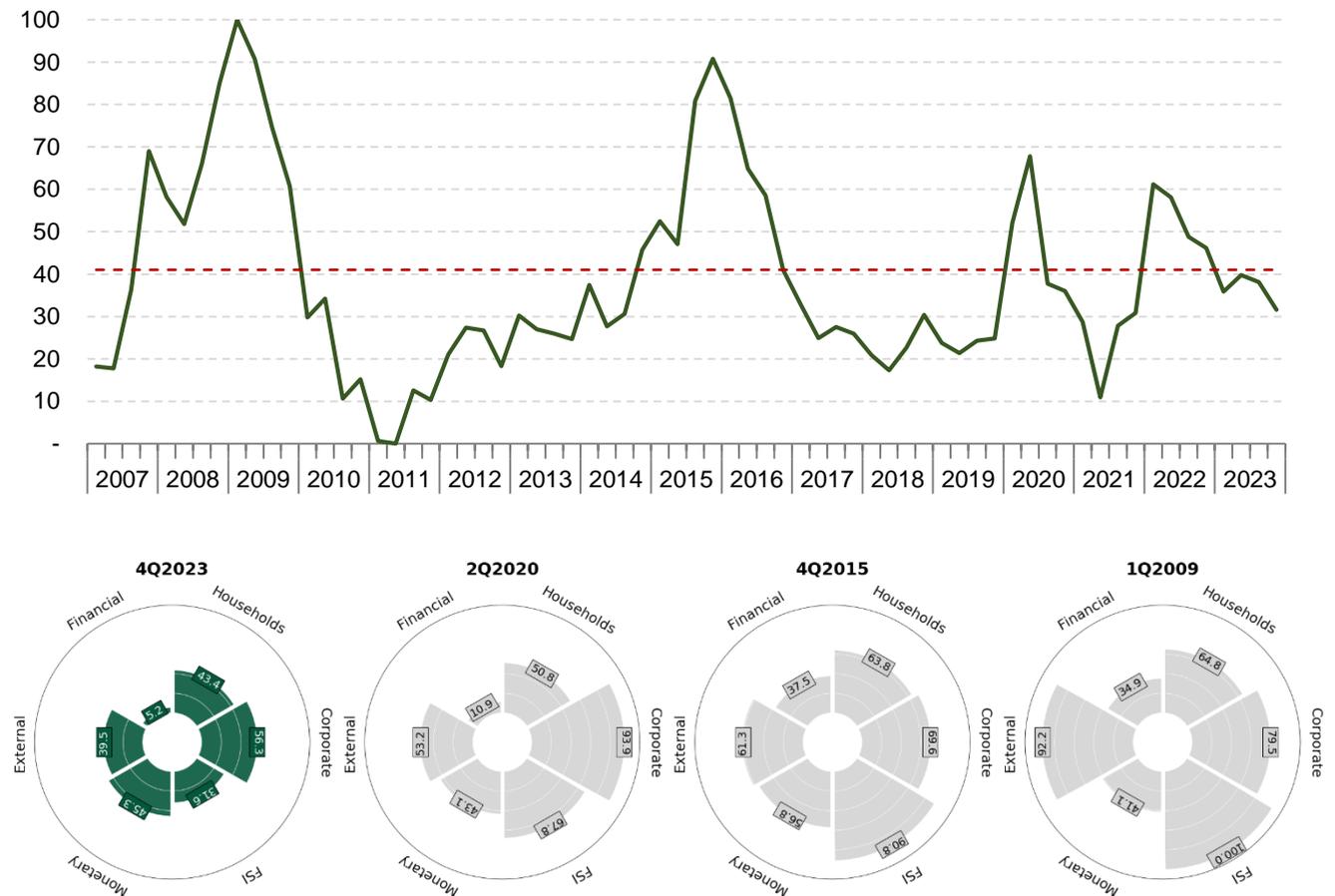
In 2023, risk factors affecting financial stability in the Republic of Kazakhstan were at moderate levels, decreasing to stable levels by the end of the year. Imbalances in the financial system have been declining throughout the year amid a slowdown in lending growth and deceleration in price growth in the residential real estate market.

In 2023, Kazakhstan saw significant economic growth of 5.1%, along with deceleration in inflation to 9.8%. The impact of external factors on the volatility of the tenge exchange rate was limited.

The National Bank adhered to a restrictive monetary policy aimed at reducing the inflation rate. Fixed capital investments, despite nominal growth, remain low relative to the size of the economy.

During 2023, the Financial Stability Index (FSI) was relatively close to the high-risk zone, falling to stable levels at the end of the year compared to 2022. The reduction in financial stability risks was largely driven by deceleration in the inflation rate, the recovery of real household income, reduced volatility in financial markets and the continuing decline in dollarization of the economy.

Figure 1.1 **Financial Stability Index and its Components**



Source: National Bank computations

Note: FSI has been calibrated compared to the previous version

The growth of real household income helped reduce risks in this sector, but risks remain moderate due to the growth of the retail loans to deposits ratio. Despite the decline in oil prices in 2023 to US\$82.2/bbl, the price level remained favorable for reducing the external sector risks. The deceleration of inflation and volatility in the foreign exchange market in 2023 helped reduce risks in the monetary sector, but the inflation rate at the end

of 2023 remained at a relatively high level, thus monetary risks remain moderate. Risks in the financial sector remain low amid the continuing decline in dollarization, compliance with prudential standards by financial institutions, and reduced volatility in financial markets in 2023. Risks in the corporate sector remain high due to a slowdown in industrial production growth and a decline in the business confidence index.

Box 1.1 *Financial Vulnerability Index (FVI)*

In order to identify early signs of instability and better prepare for future crises, the NBK is developing new indices to monitor financial stability conditions. Monetary, fiscal, and macroprudential policies can be activated to mitigate or even prevent crises. In line with international trends, the Financial Vulnerability Index (FVI) was developed, whose main purpose is to assess potential risks over the medium and long term by measuring vulnerability of the financial system to shocks. The index allows assessing the overall vulnerability of the financial system by taking into account both financial imbalances caused by the asset market bubbles and excessive accumulation of loans, and the resilience of financial institutions to adverse shocks from internal and external sources. Adding the FVI to the information and analytical toolkit will allow for a comprehensive assessment of financial stability conditions.

The FVI consists of three main components: asset prices, credit accumulation, and soundness of financial institutions. The index reflects a wide range of factors, including valuation in asset markets, the size of debt in credit markets, and the financial position of financial institutions. The indicators selected for the index are sensitive to changes in economic activity and reflect the sentiments and expectations of economic agents.

The calculation of FVI includes several stages. At the first stage, the parameters are standardized (Z-score) to bring different components to comparable values. The second stage is index aggregation. Then the index values are converted to a scale from 0 to 100.

FVI increases due to the inclination of economic agents to take risks and accumulate loans, as well as the growth of prices for real and financial assets. At the same time, the index takes into account the resilience of financial institutions to various shocks. Unlike the FSI, which reflects the current state of financial stability, FVI assesses the level of vulnerability of the financial system, as a result of which its dynamics to a greater extent reflects the accumulation of imbalances, which can later negatively affect financial stability and the FSI in particular.

The Financial Vulnerability Index, which reflects the level of imbalances in the financial system, has been declining throughout 2023. The main factors that influenced the FVI dynamics are the slowdown in lending to both natural persons and legal entities, as well as the slowdown in prices in the real sector, in particular, in the residential real estate market. Thus, in 2023, there was a decrease in the factors overheating the markets of financial and real assets.

The decrease in the FVI was also nurtured by an increase in the stability indicators of the banking sector and the growth of real household income in the second half of 2023. Indicators such as the household debt burden and the rise in prices of financial assets remain at relatively moderate levels.

Figure 1.2 Financial Vulnerability Index

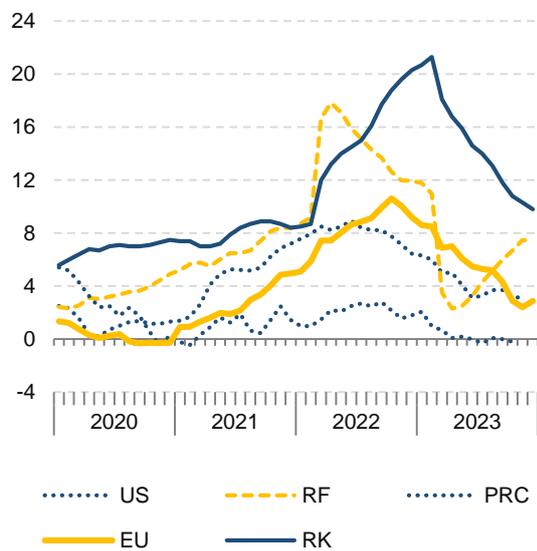


Source: National Bank computations

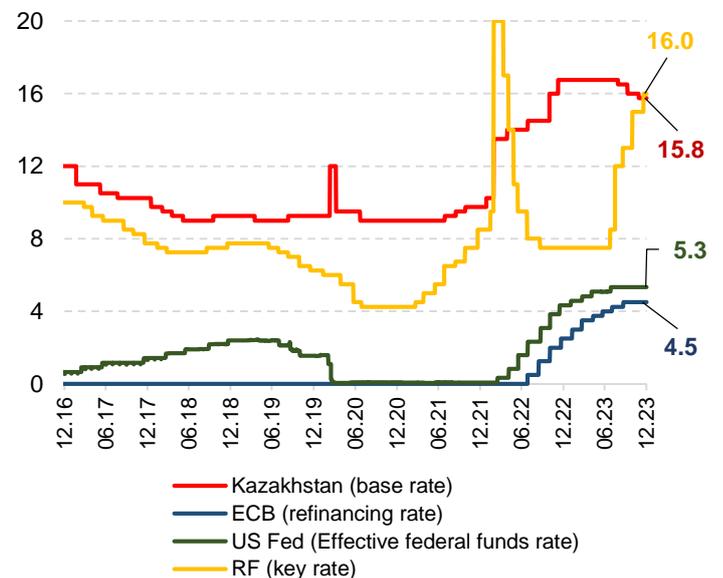
The weakening of global inflationary pressure was stemming from positive dynamics in food prices (declining prices for grain and meat, moderate growth in sugar prices), the contractionary monetary policy of central banks, as well as lower energy prices. At the same time, central banks of developed countries keep rates unchanged. The US Federal Reserve points out that a high level of rates will be maintained for a longer period. In December 2023, annual inflation in Russia was 7.5%.

Figure 1.3 Despite the easing of the global inflationary pressures, central banks of developed countries were adhering to the contractionary monetary policy

Dynamics of inflation, y/y, pp



Policy interest rates of countries, pp

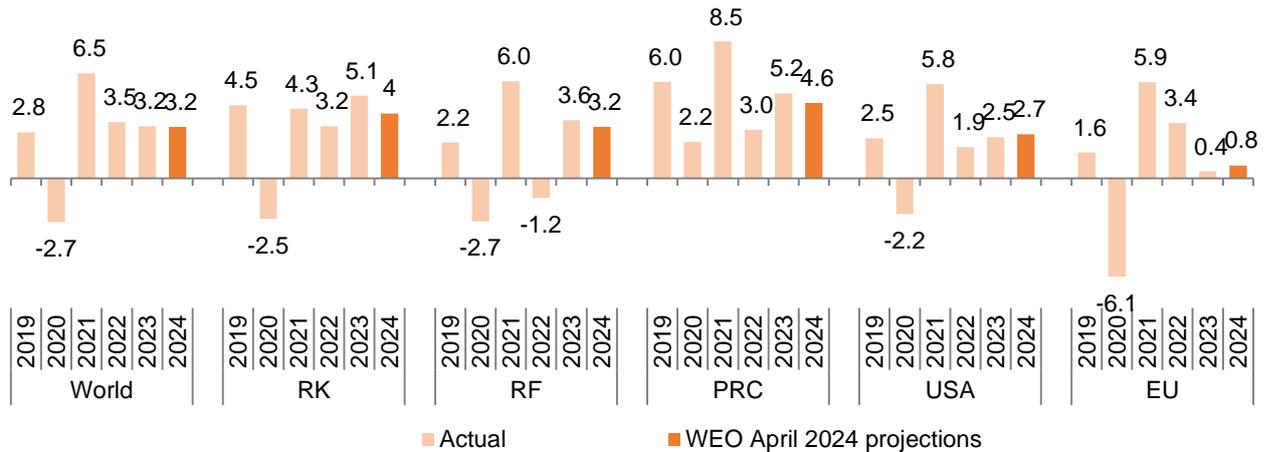


Source: FRED, BNS ASPR RK, US Fed, ECB, Bank of Russia

According to the IMF data for 2023, global economic growth continued its downward trend, reaching 3.2% (y/y) compared to 3.5% in 2022 (WEO, 2024Q1). In 2024, global economic growth is expected to be at 3.2% (y/y). Factors restraining the global growth may include a possible deterioration in the geopolitical situation as well as a downturn in developed economies. The economic growth rate in Kazakhstan in 2023 showed a significant outperformance relative to the global economy and amounted to 5.1% in real terms, a significant increase compared to 3.2% in 2022.

Figure 1.4 Real GDP growth in Kazakhstan increased to 5.1%, despite a decline in the global economic growth

Estimate and forecast of the real GDP growth, y/y, pp



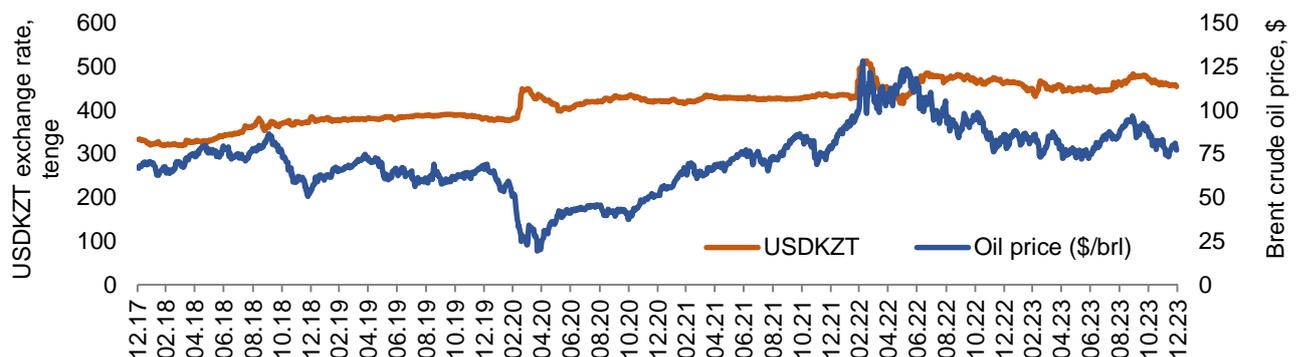
Source: IMF WEO (October 2023), BNS ASPR RK

According to the IMF, moderate economic growth rates in Kazakhstan are expected to continue at 4.0% in 2024. The constraints on growth were a 17% decline in oil prices in 2023, as well as a slowdown in global economic growth. The highest growth was demonstrated by such sectors as construction (13.3%), wholesale and retail trade; car and motorcycle repair (11.3%), information and communication (7.1%), transport and warehousing (7.1%), and provision of accommodation and catering services (6.5%). Negative dynamics were observed in the agricultural sector with a decrease of 7.7% in 2023 (against a 9.1% growth in 2022).

World oil prices in 2023 decreased compared to 2022. The average annual Brent price in 2023 was US\$82.2/bbl, which is by 17% lower than in the previous year. In 2022, against the geopolitical shock and logistical problems, the average annual oil price was US\$99/bbl with the year-maximum of US\$127.98/bbl in March 2022. The exchange rate of the tenge against the US dollar was, accordingly, more volatile in 2022 than in 2023. In 2022, the correlation between oil prices and subsequent export revenues is most pronounced in the first half, when increased revenue from oil exports led to a subsequent strengthening of the exchange rate. The highest exchange rate of the tenge against the US dollar in 2022 was 512.19 tenge in March; the lowest was 414.67 tenge in June. In 2023, the US dollar to tenge exchange rate was more stable with an average annual value of 456.28 tenge.

Figure 1.5 In 2023, the exchange rate dynamics were less dependent on world oil prices

Oil price and the USDKZT exchange rate

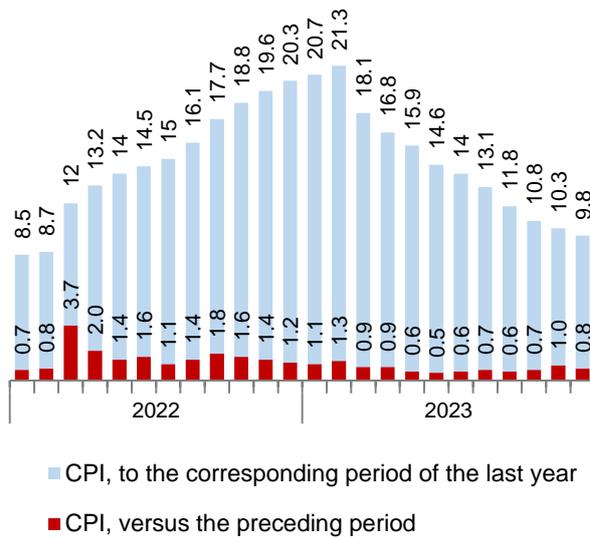


Source: National Bank, Bloomberg

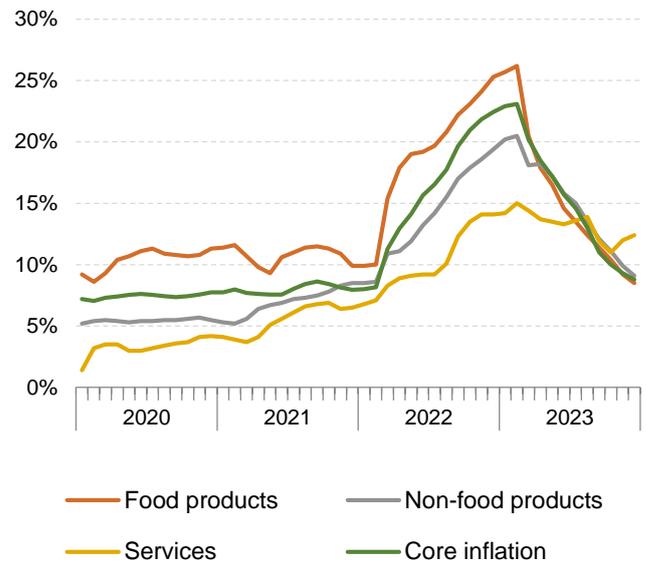
The inflation rate in Kazakhstan has decreased by a half since the beginning of the year to 9.8% in December 2023 (20.3% by the end of 2022). Prices for food products have gone up by 8.5% over the year, for non-food products – by 9.1%, and for paid services – by 12.4%. Since February 2023, inflation has decelerated in all of its components due to the weakening of global inflationary pressure, a steady decline in world food prices, and the monetary policy pursued.

Figure 1.6 Inflation in Kazakhstan, while reaching its peak in February 2023, was decelerating throughout 2023

CPI dynamics, pp



Dynamics of inflation components, y/y



Source: BNS ASPR RK

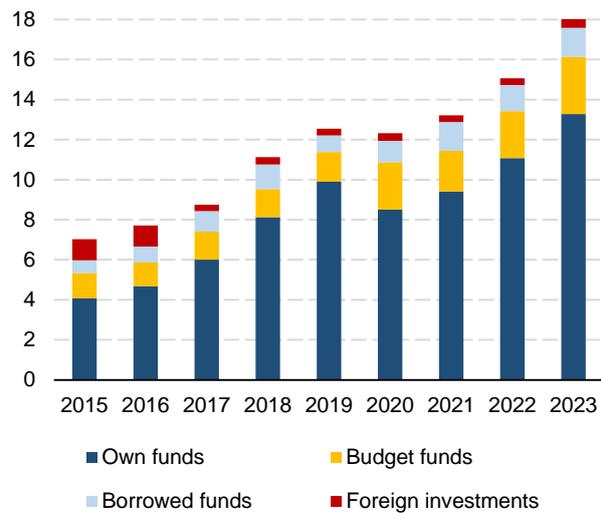
Note: the core inflation is a base index that excludes fruits and vegetables, utilities (regulated), rail transport, communication, gasoline, diesel fuel and coal.

In 2023, the NBK continued to implement a monetary policy aimed at maintaining financial stability and reducing inflation to the target. At the same time, pro-inflationary factors included stable consumer demand, steadily high levels of government spending, rising prices for utility services and fuel, along with persistently high inflation expectations.

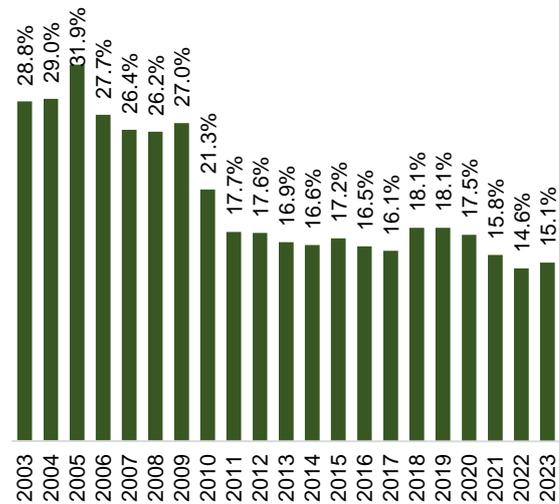
The volume of fixed capital investments in nominal terms increased from 15.1 trln tenge to 18 trln tenge. The growth rate of fixed capital investments amounted to 13.7% y/y. Own funds remain the predominant sources of investment (73.6% of the total volume). The main share of fixed capital investments in 2023 traditionally falls on the primary sector. Thus, mining and quarrying account for 26.3%, manufacturing – 9.4%. Further, real estate operations – 17.9%, transport and warehousing – 14% and agriculture, forestry and fisheries – 5.4%. The construction, financial and insurance sectors demonstrated a downturn.

Figure 1.7 *Despite significant growth in nominal terms, the increase in fixed capital investments was below the economic growth rates*

Fixed capital investments, trln tenge



Fixed capital investments, as % of GDP



Source: BNS ASPR RK, National Bank computations

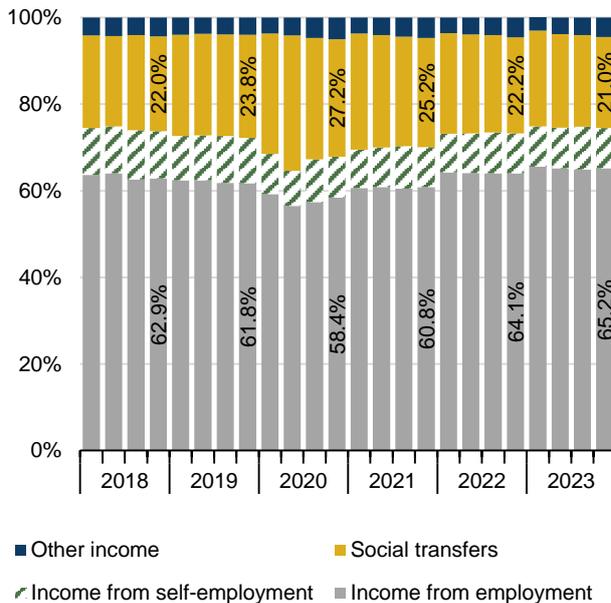
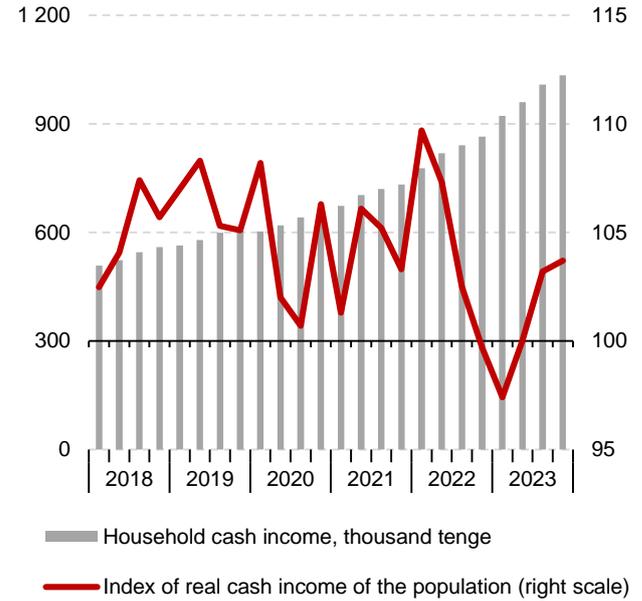
It is worth mentioning that there is a relatively high depreciation of fixed assets in certain sectors. At the same time, 59.5% of the total costs are for construction and major repairs of buildings, and more than a quarter of the total costs are for the purchase of machinery, equipment and vehicles. The degree of PPE depreciation in the “electricity, gas, hot water supply” sector during the period from 2014 to 2022 exceeds 50%¹. In November 2023, it was announced that 1.5 trln tenge would be raised from the UAPF funds in order to modernize the economy and implement projects in the field of energy, transport and industry. In addition, it is planned to build new coal-fired thermal power plants and new transport hubs in 2024, including at the expense of international financial organizations.

1.1 Households

In 2023, real income of the population restored its growth rate, in the 4th quarter of 2023 it accounted for 3.7%. Despite this, in 2023, the household spending showed low growth, taking into account the adjustment for inflation. This fact confirms the increase in the population's propensity to save, which is a consequence of the contractionary monetary policy of the NBK, stimulating savings of the population and aimed at reducing inflationary pressure.

As inflationary pressure was easing throughout 2023, real income of the population recovered and grew by 3.7% y/y in Q4 2023. There were no significant changes in the income structure. Thus, the share of income from employment did not change during the year, remaining at about 65%. The share of social transfers in the income structure continued to decline and amounted to 21% by the end of the year. This trend can be explained by reduction in the volume of benefit payments and other support measures to help individuals who faced income loss during the pandemic, due to the end of the pandemic and the restoration of business activity. In addition, during the year, there was a 1.1% increase in the share of other income.

¹ NBK's Monetary Policy Report, February 2024

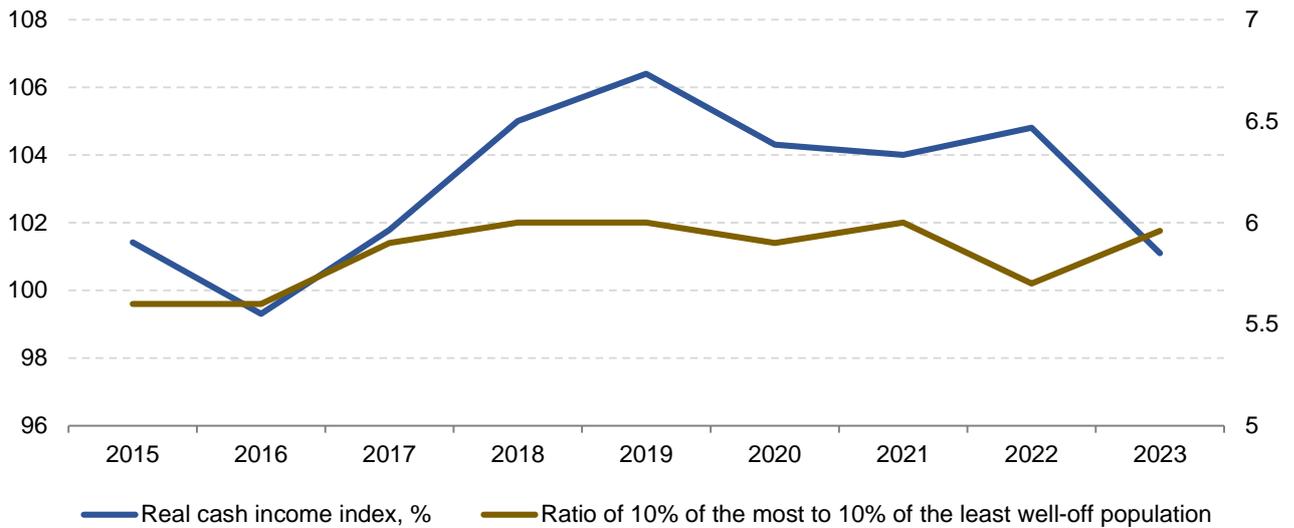
Figure 1.8 Real household income index went up in 2023
Structure of household money income

Household income and real income of the population


Source: BNS ASPR RK, National Bank computations

Note: the "other income" category includes income received from property, from renting of apartments, interest on bank deposits, lottery winnings, inheritance, etc.

Nominal cash income for 2023 showed an increase of 19.6%. Compared to the corresponding periods of the previous year, the highest growth was demonstrated by income from self-employment, which increased by 21.7% over the year. This trend indicates an intensification of entrepreneurial activity of the population. In addition, this category includes income of individuals from the sale of agricultural products, which is an indication of greater involvement of the rural population of the country in economic activity. By the end of the year, there was also an increase in the growth rate in the category of "other income", which in the 3rd and 4th quarters of 2023 increased by 20.6% and 17.8% compared to the corresponding periods of the previous year. This category, which includes financial assistance from relatives, grew to a greater extent owing to an increase in income from property, home rent, interest on deposits in banks. In the absence of declaration of income received, the observed increase in these categories of income can lead to the growth of the shadow economy.

One of the indicators of income inequality of the population is the R/P 10% ratio. This indicator is considered as the ratio of the income of 10% of the population with the highest income to the income of 10% of the population with the lowest income. The dynamics of the ratio is quite stable and had no significant changes after the crisis periods of 2014 and 2020. In many ways, the value of this indicator points to the absence of significant changes in the level of social inequality.

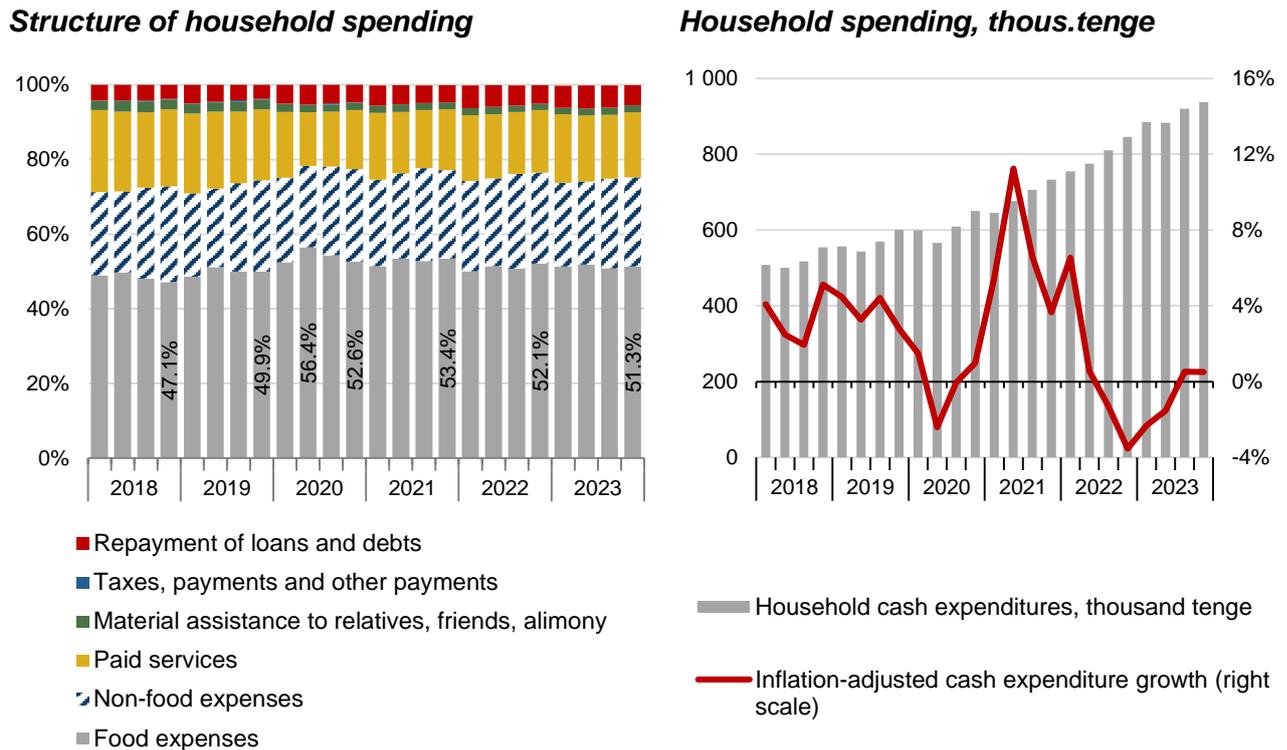
Figure 1.9 The level of differentiation of household income is increasing**R/P 10% ratio and real income of the population****Source:** BNS ASPR RK**Note:** the R/P 10% ratio is calculated as the ratio of the income of 10% of the population with the highest income to the income of 10% of the population with the lowest income

Household spending accounts for more than 50% of Kazakhstan's GDP by the end-use method, and, therefore, household balances have a significant effect on aggregate demand. In 2023, the growth rate of real consumption was more moderate compared to prior years, indicating significant inflationary pressure on the household spending.

The share of spending on non-food products in 2023 compared to last year decreased by 5.0%, while the share of paid services increased by 3.5%. The share of taxes, fees and other payments increased by 10.9%. The share of spending on food has not changed significantly compared to prior periods. With stable domestic demand for food products and growth in industries characterizing domestic demand, there is a lag in industries characterizing domestic output, that is, supply. This situation creates preconditions for inflationary pressure in the future.

In 2023, nominal consumer spending grew by 13.2%, driven by an increased spending on non-food products and paid services (*Graph 1.10*). Expenditures on non-food products increased by 8.1% compared to 2022. Expenditures on paid services showed the highest growth in Q1, increasing by 21.7% compared to the same quarter of 2022, and have grown by 17.8% over the year as a whole. Such dynamics are largely stemming from reforms in the utilities sector. The nominal growth of spending on food in 2023 was 14.3%.

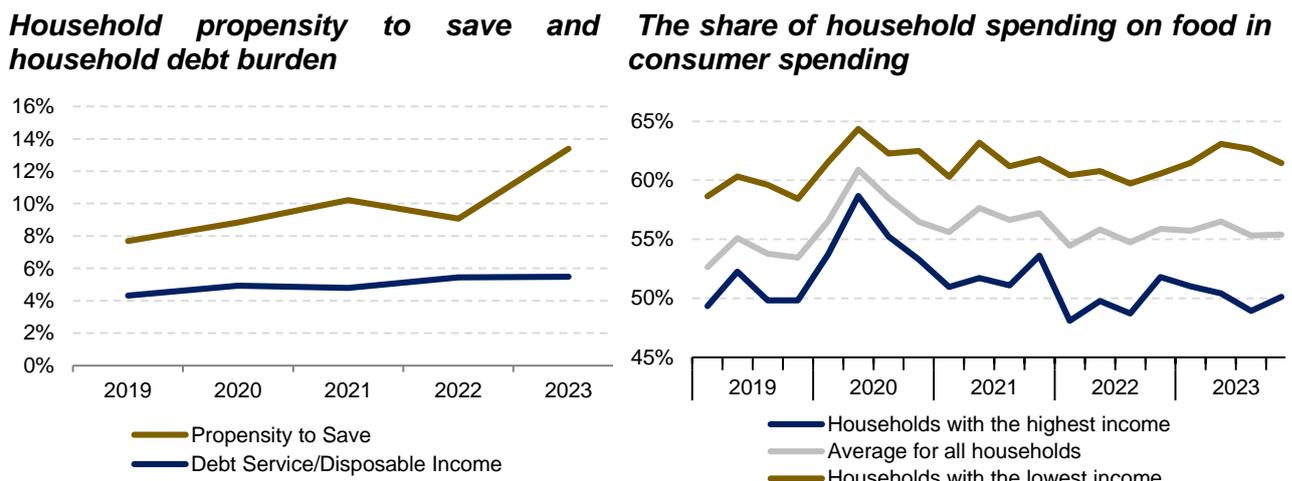
Figure 1.10 Growth rates of household money spending are decelerating



Source: BNS ASPR RK, National Bank computations

An analysis of household balance sheets by deciles shows that households with the lowest income are more sensitive to inflation than other categories of the population. In addition, low-income households suffer more from high prices for food and fuel. When considering the ratio of spending on food and consumer spending for households with the lowest income, this indicator exceeds 63%. Macroeconomic shocks, further inflationary pressures and income shocks can have a significant negative impact on both the ability of these households to access credit and the ability to service the debts they incurred.

Figure 1.11 Household propensity to save is growing



Source: National Bank computations, BNS ASPR RK

Note: Households with the lowest income are those in Decile 1. Households with the highest income are those in Decile 10.

Propensity to save (α) is calculated as: $\alpha = 1 - \frac{\beta}{\gamma}$, where:

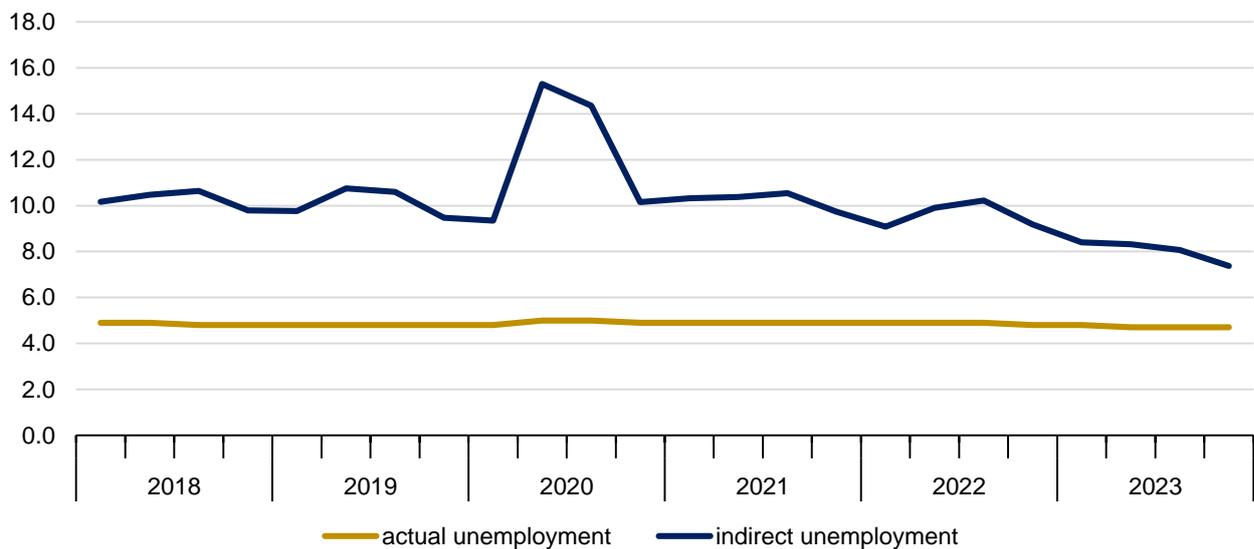
β – household consumer spending

γ – household disposable income, i.e. income minus taxes, fines, mandatory payments and financial assistance to relatives

In 2023, the National Bank focused on implementing a contractionary monetary policy, keeping the base rate at 16.75% during the first half of the year. Incoming statistics show that these measures helped limit the demand and significantly increase the population's propensity to save, thus curbing inflation. In 2023, according to the official data, the inflation-adjusted household spending demonstrated a low growth, despite a significant recovery in real income of the population. The estimated indicator of the population's propensity to save increased significantly from 9% in 2022 to 13% in 2023. However, given a high share of food expenditures in the structure of household spending, a significant increase in the population's propensity to save may also signal negative expectations of the population for future periods.

The official unemployment rate among the population remains steadily low at below 5%. Thus, by the end of 2023, this indicator accounted for 4.7%, reaching its all-time low in the last 10 years. Greater involvement of the labor force in economic activity has a positive effect on both the well-being of the population and the long-term productivity and stability of the rest of the economy. Continuing this trend will help reduce the difficulties of debt servicing for a larger number of vulnerable borrowers. In addition, it is also important to pay attention to indirect unemployment, which fell to 7.4% in Q4 2023.

Figure 1.12 *The unemployment rate is decreasing*



Source: BNS ASPR RK

Note: the level of indirect unemployment includes the unemployed population, part of the economically inactive population, part of the temporarily unemployed and forced underemployment

Box 1.2 *The Law “On Restoring Solvency and Bankruptcy of the People of the Republic of Kazakhstan”*

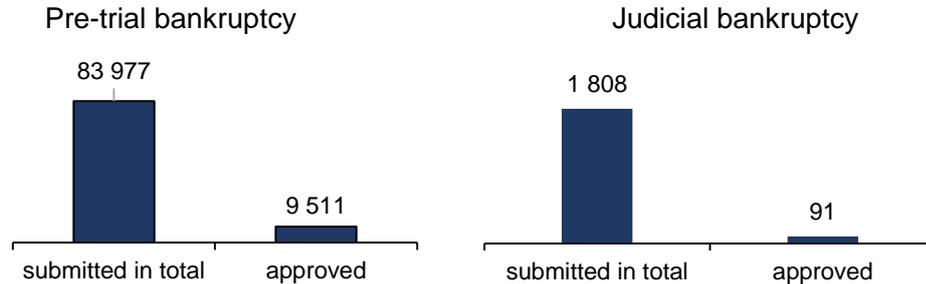
Since March 3, 2023, the Law “On Restoring Solvency and Bankruptcy of the People of the Republic of Kazakhstan” has come into force in the Republic of Kazakhstan. The Law provides for 3 types of procedures: extra-judicial bankruptcy, judicial bankruptcy and restoration of solvency. All three procedures are initiated only by the debtor himself/herself, the creditor has no right to file for bankruptcy of the debtor.

As of 12.02.24, since the Law came into effect, 83,977 people applied for pre-trial bankruptcy, of which 65,918 were rejected, and 9,511 people were declared bankrupt²,

² The difference between approved, rejected and total applications is explained by the presence of unprocessed applications.

the approval rate is 11%. 1,808 people applied for bankruptcy proceedings, of which 91 people were declared bankrupt, thus the approval rate is 5%.

The number of filed and approved applications for bankruptcy as of February 12, 2024



In the regional distribution of those filing for bankruptcy, the Turkestan region (13.2%), Almaty region (11.8), Almaty (8.3%) and Zhambyl region (7.8%) predominate. In the age distribution at the time of filing, the young population aged 18-41 years prevails with a share of 58.1%, the category of 42-65 years ranks second with a share of 39.8%, and the category of retired people over 66 years old account for 2.2%.

1.2 Money Market

In 2023, given the decline in dollarization of deposits of bank clients, as well as the persistently high interest rate in the tenge, STBs began to prefer to keep highly liquid assets in the tenge, additionally serving the purpose of maintaining a net foreign exchange position close to zero. As a result, in 2023, there was an increase in excess tenge liquidity. The bulk of liquidity withdrawal during the year occurred due to short-term notes. At the end of the year, the NBK reduced the issue of notes in order to redirect demand to the MF RK government securities and to the NBK deposit auctions. As a result, competition among participants for limited volumes of notes increased, which reduced rates in the primary placement market of notes.

Some participants experienced an increase in the need for liquidity, which was driven by the chosen strategy of financing a position in the securities portfolio using borrowed funds. The increased need for borrowed funds led to a significant growth in the repo market in 2023 and an increase in the share of the repo market at longer terms. As a result, high concentration in attraction of liquidity persisted throughout the year.

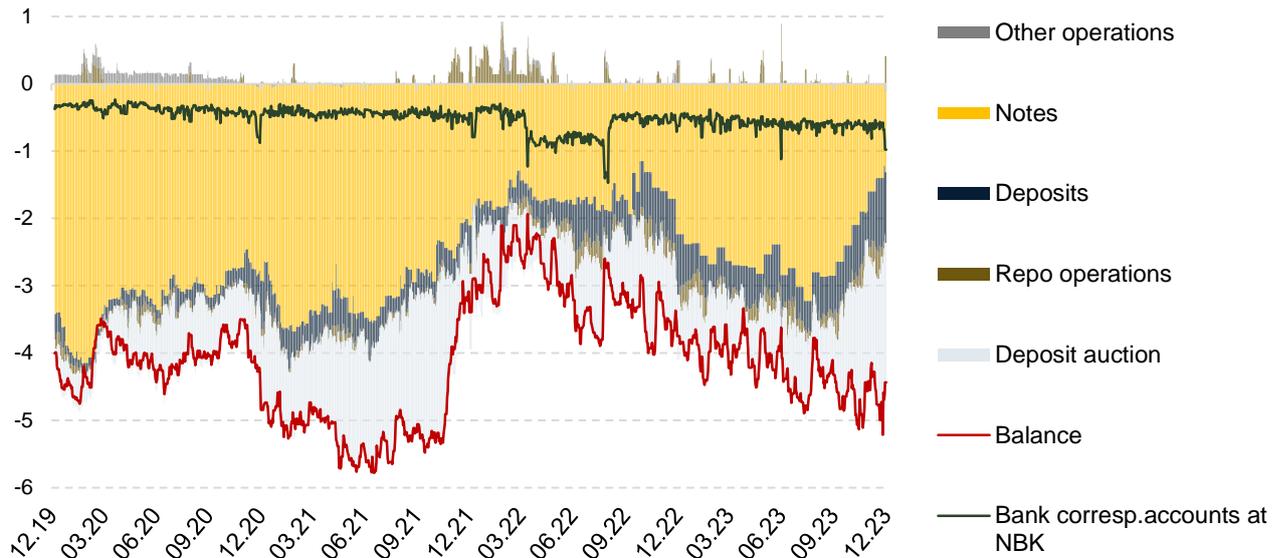
At the end of 2022, foreign currency deposits of clients increased in some banks. In order to comply with the limits of the foreign exchange position and conduct their core operations in the tenge, those banks actively participated in the foreign currency swap market, which was reflected in a significant increase in the market in 2023.

In 2023, the spread between the TONIA rate and the NDF rate on the USD/KZT currency pair was close to zero. At the same time, the negative spread between the TONIA rate and the consumer price index was decreasing during the first half of the year. At the end of May, the spread became positive and continued to widen until the end of the year. Thus, the tenge rate was offsetting expectations of a change in the exchange rate, and in the second half of the year, it began to offset inflation.

1.2.1 NBK's Instruments

In 2023, the Kazakh financial sector continued to operate in conditions of liquidity surplus, and the NBK remained a net buyer of liquidity. In 2023, the volumes of excess liquidity withdrawn by the NBK increased significantly, and at the end of 2023, the balance of the NBK operations at the end of the year amounted to 4.4 trln tenge (18% higher than at the end of 2022).

Figure 1.13 *Position on the NBK operations, trln tenge*

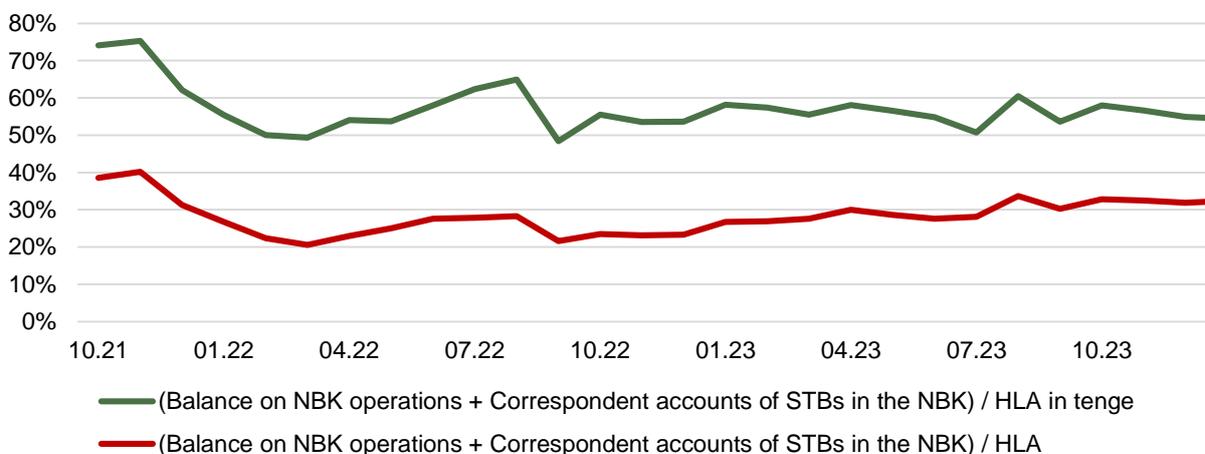


Source: NBK

At the end of the year, deposit auctions accounted for the largest volume, their share in the total volume of liquidity withdrawals was 51%. During the year, the NBK notes were the main instrument for sterilization of excessive liquidity. However, by the end of 2023, the share of notes in liquidity withdrawals had significantly decreased, amounting to 25%.

In general, the ratio of liquidity withdrawn by the NBK and highly liquid assets has not changed a lot. Thus, at the beginning of 2023, the balance of the NBK operations and correspondent accounts of STBs at the NBK to highly liquid assets was about 58%, and at the end of the year this figure was 54%. At the same time, the volume of highly liquid assets in the tenge has generally increased, which explains the increase in the level of withdrawn liquidity. To a greater extent, the increase in highly liquid assets in the tenge was driven by reduction in highly liquid assets in foreign currency, which was caused by reduction in clients' foreign currency deposits in STBs and a corresponding decrease in the need to balance the foreign exchange position. Thus, by the end of 2023, highly liquid assets in the tenge went up from 7.5 to 10 trln tenge (by 2.4 trln tenge, or 33%), while highly liquid assets in foreign currency went down from 8.8 to 6.8 trln tenge (by 2 trln tenge, or 23%).

Figure 1.14 *Position on the NBK operations to highly-liquid assets*

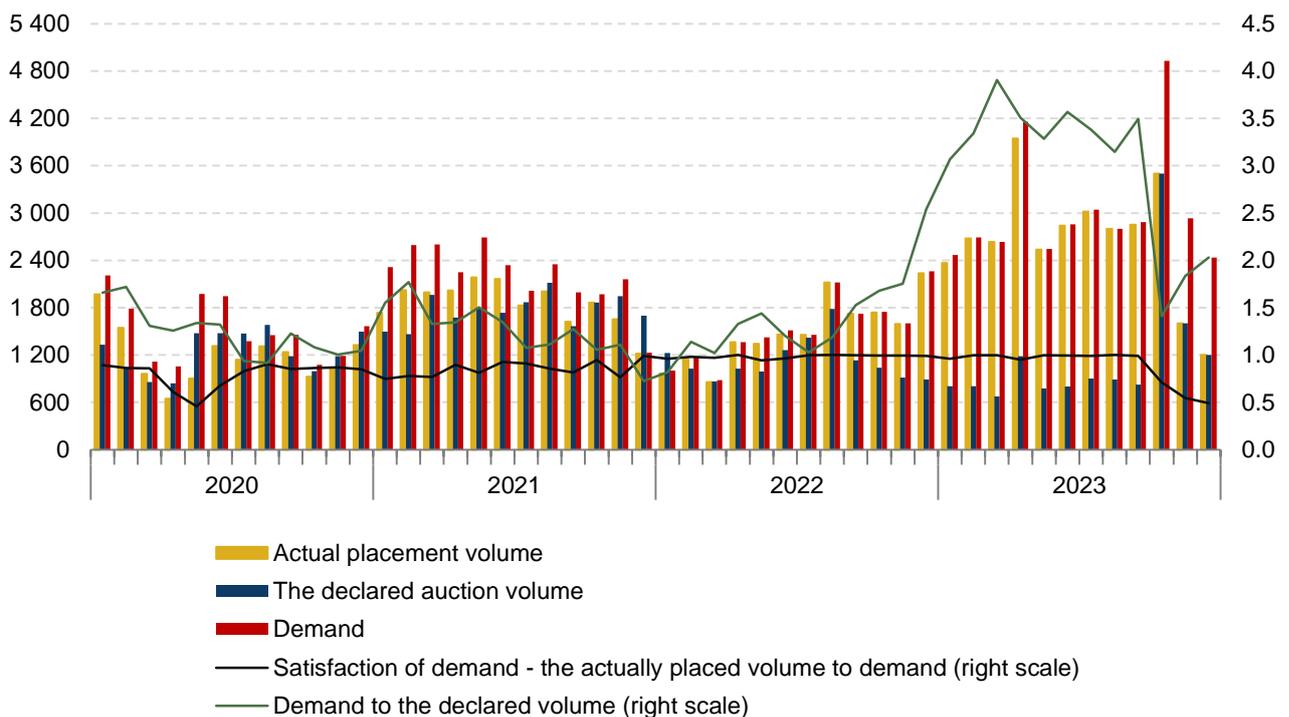


Source: NBK, NBK computations

Overall, in 2023, the volume of liquidity withdrawal through notes increased significantly compared to 2022. The demand for notes during 2023 significantly exceeded the announced placement volumes (*Figure 1.15*). The average demand for one auction of one-month notes in 2023 was about 1.4 trln tenge. The average daily position in the NBK notes in 2023 was about 2.5 trln tenge. Starting in October, the NBK stopped satisfying the volumes requested by the market, which was caused by decreased volume of notes in circulation in general. In prior years, the NBK began to communicate to the market its intention to gradually reduce the volume of notes issued. In 2020, the issue of one-year notes was discontinued. In 2022, the issue of notes with maturity of 3 and 6 months was ceased and the frequency of issuing 28-day notes was reduced. At the beginning of 2024, the NBK plans to reduce the frequency of note issuance: instead of two issues per month, notes will be issued once a month, and by the end of Q1 2024, the NBK intends to reduce the volume of notes in circulation to 500 bln tenge.

The NBK first issued notes in 2016 to remove excess liquidity and build a “short” segment of the risk-free yield curve. At that time, there were no short-term securities in the market that could be used as collateral in the repo market as well as in order to determine rates on the short-term segment of the yield curve. At present, the need for short-term risk-free securities is satisfied by the Ministry of Finance, thus enabling the NBK to reduce the issuance of notes.

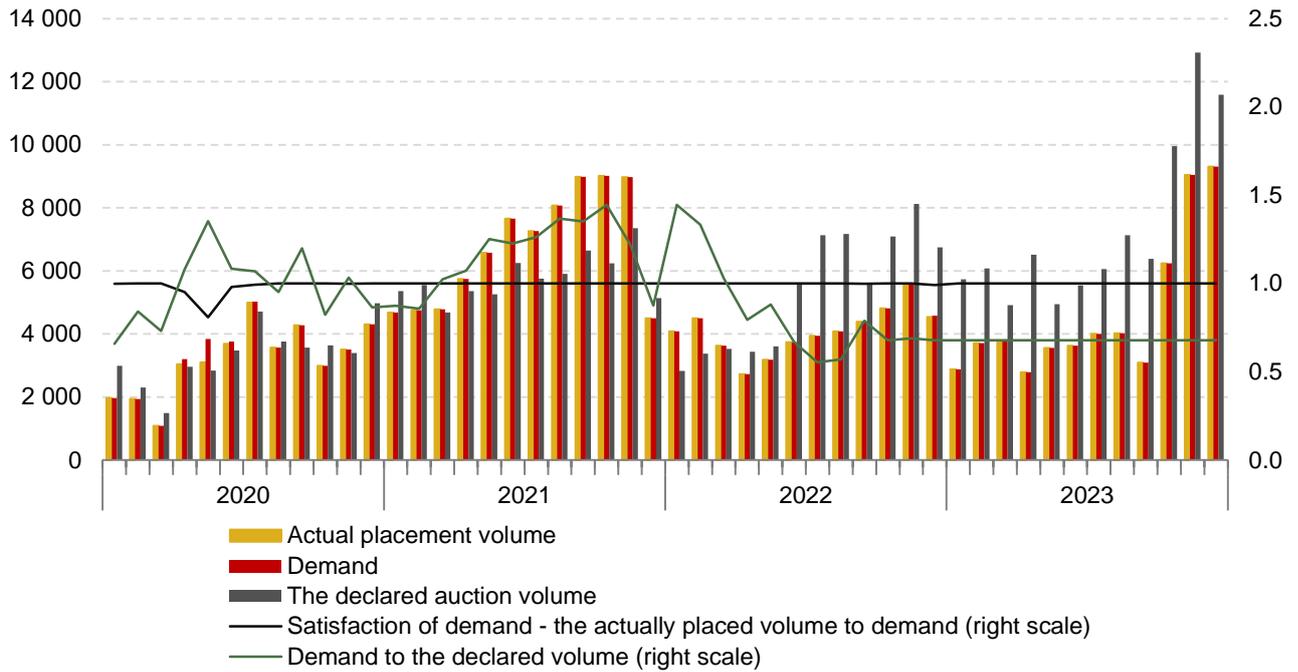
Figure 1.15 *The demand for the NBK notes, bln tenge*



Source: NBK

Note: Actual placement volume is reported at actual value

The NBK will continue to pursue a monetary policy aimed at reducing inflation, but gradually the deposit auction will become the main instrument of liquidity withdrawal. For the NBK, deposit auctions are a preferred instrument for withdrawing liquidity due to their greater efficiency in temporarily “mopping up” liquidity compared to notes. Notes, in turn, can be used as collateral in repo transactions to attract liquidity.

Figure 1.16 The demand for deposit auction of the NBK, bln tenge

Source: NBK

The demand for deposit auctions was moderate throughout 2023. The NBK's supply for deposit auctions exceeded demand, market participants preferred to place liquidity in the NBK notes. Starting in October, as the volume of note placements was limited, the demand for deposit auctions began to grow. The average daily position in deposit auctions in 2023 was about 1 trln tenge.

1.2.2 Repo Market

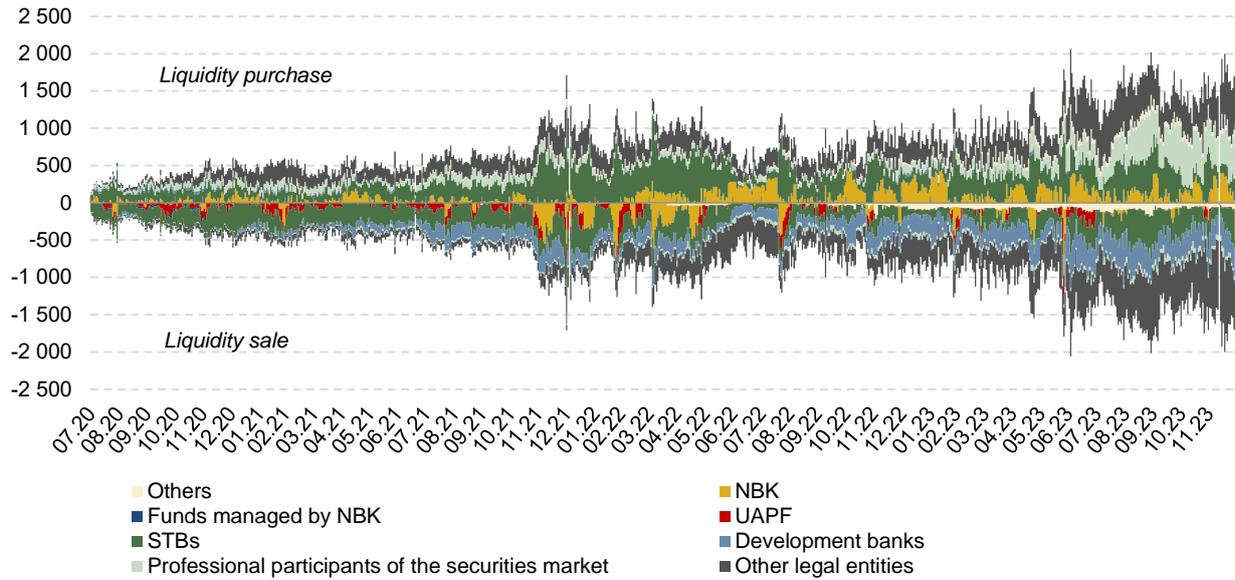
The tenge repo market grew significantly in 2023. Thus, the annual volume of transactions increased by 52% from 197.8 trln tenge in 2022 to 300.2 trln tenge in 2023. A sizable growth in the repo market was observed starting from July 2023, the volume of transactions in July increased by 41% compared to the previous month (up to 30.3 trln tenge compared to 21.5 trln tenge in June) and amounted to about 31 trln tenge per month until the end of 2023.

High rates on government securities have served as one of the main drivers of the repo market growth in recent years. Some participants choose a strategy of financing a position in government securities by using borrowed funds obtained in the repo market, in anticipation of a subsequent decrease in interest rates and, as a result, reduction in the cost of financing, as well as a positive revaluation of the government securities portfolio.

It is worth mentioning that, despite the constant increase in the volume of the repo market in recent years, its growth potential has not been exhausted. Thus, taking into account that the volume of government securities in circulation exceeds the average daily volume of transactions in the repo market by 16 times³, and the fact that government securities are the most frequently used collateral, in terms of its availability, the repo market may continue to grow.

³ The average daily volume of transactions in the repo market in 2023 amounted to 1.2 trln tenge, while the average volume of government securities in circulation in 2023 amounted to 19.2 trln tenge.

Figure 1.17 Daily volumes of the repo market in bln tenge

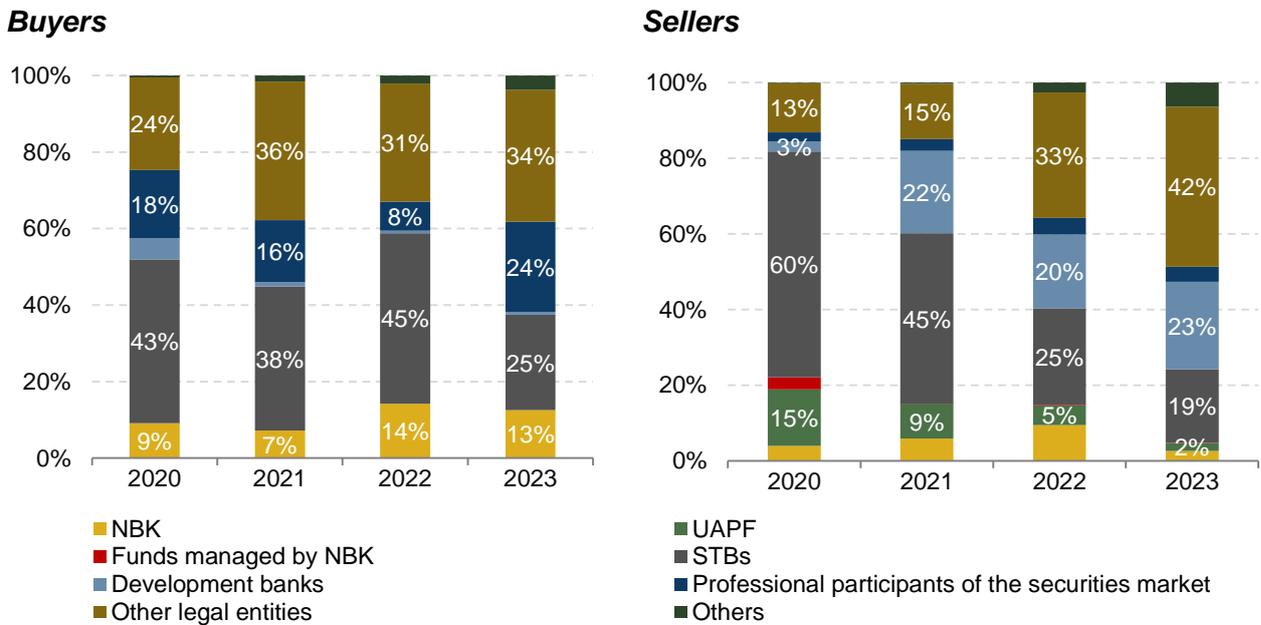


Source: KASE

The increase in market volumes is largely caused by the increased need for liquidity from one participant, which contributed to maintaining high concentration in the repo market.

In 2023, there was a significant change in the distribution of participants in the repo market: the largest participants were historically second-tier banks, but in 2023 other legal entities – clients of brokers – became large participants. Thus, the share of banks in attracting liquidity decreased from 45% in 2022 to 25% in 2023. At the same time, the share of other legal entities – clients of brokers – increased in 2023 to 34% (from 31% in 2022). The share of professional participants in the securities market also went up significantly (from 8% in 2022 to 24% in 2023).

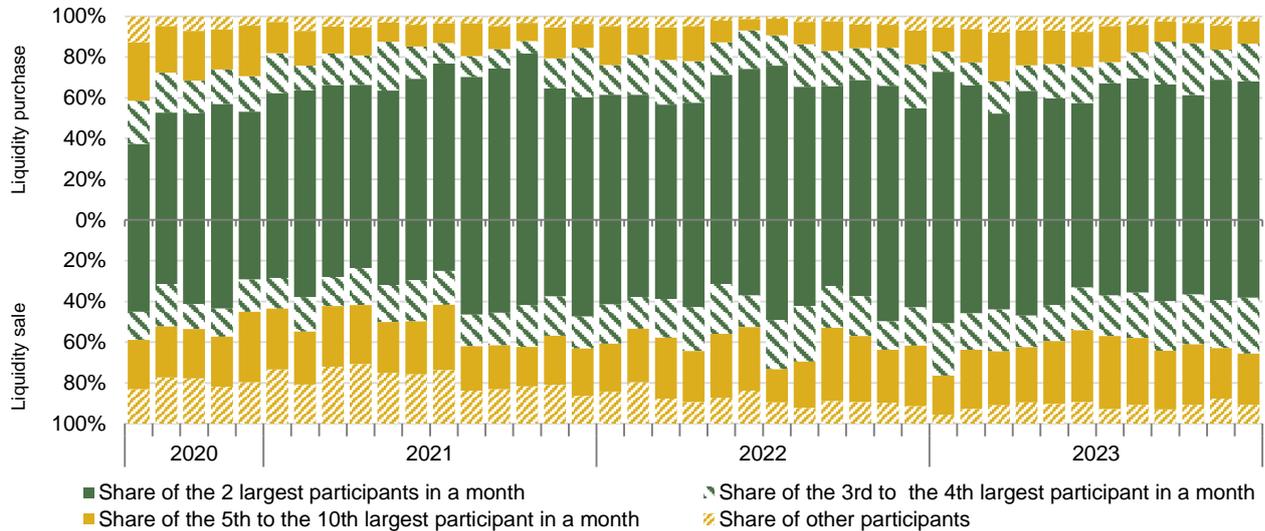
Figure 1.18 Percentage of liquidity sellers and buyers in the repo market



Source: KASE

In terms of liquidity placement, there were also changes in the distribution of roles, with brokers' clients - other legal entities - becoming the largest participants. The share of other legal entities was 42%. The share of STBs, in turn, continued to decline in 2023, with the share of STBs in liquidity placement amounting to 19% over the year. Significant volumes of liquidity placement continued to be coming from development banks, with the share of development banks amounting to 23% in 2023.

Figure 1.19 The share of participation in the tenge repo market of the largest participants, a month, as %



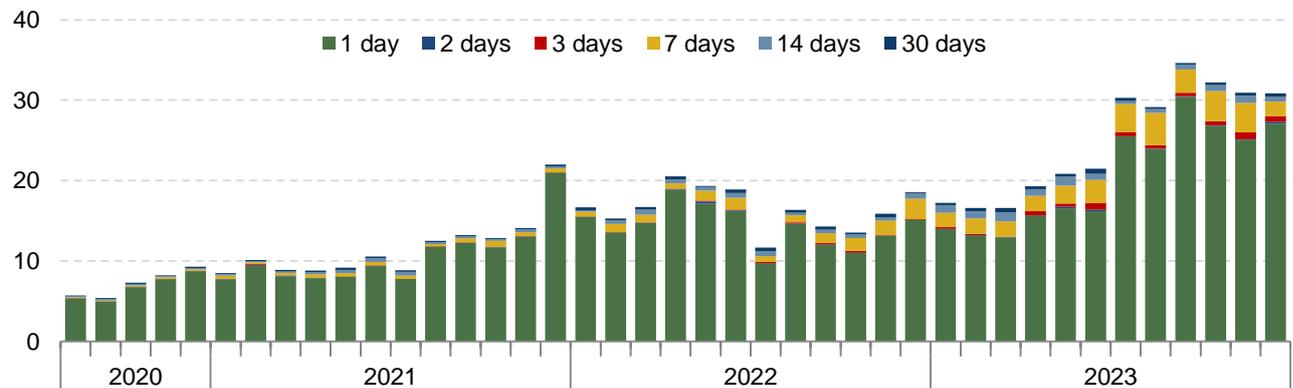
Source: KASE, NBK computations

Note: the largest participants are determined for each period separately. Concentration is determined by the initial buyer/seller (broker) without dividing by its clients.

Market concentration remains high, especially in terms of liquidity attraction. On average, about 64% of monthly liquidity was attracted by the two largest buyers in 2023. High concentration on the liquidity attraction side indicates a significant need for liquidity, which can potentially serve as a source of risk. There is also high concentration on the liquidity placement side, on average, about 41% of liquidity placement was secured by two liquidity sellers per month.

The overnight repo market remains the most active compared to repo transactions with other maturities: taking into account the volume of transactions, 82% of repo transactions were overnight repos. However, the share of 7-day repos continued to increase in 2023, 11% of transactions in 2023 were seven day repos (in 2022, the share of 7-day repo was 7%).

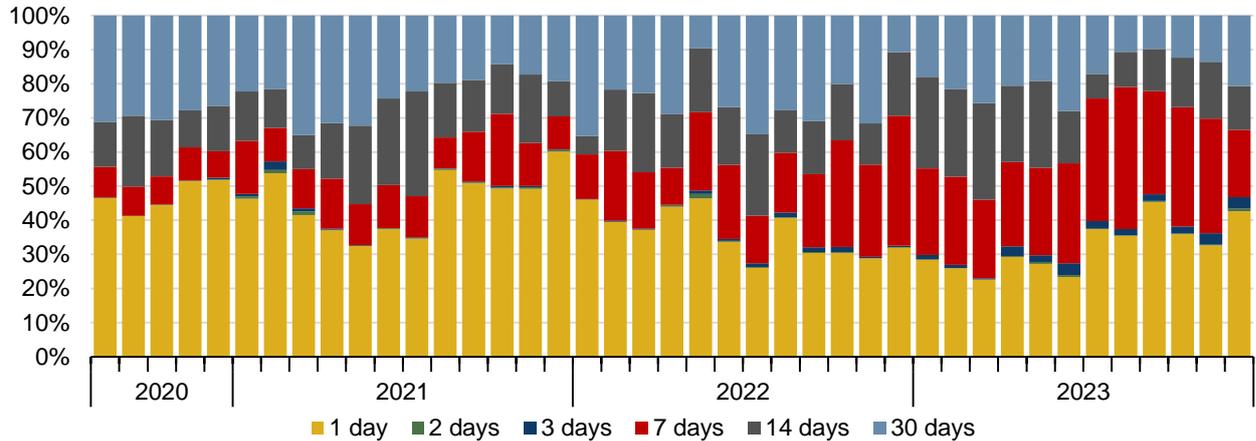
Figure 1.20 The operation volume in the repo market, by maturity, trln tenge



Source: KASE

In addition, when comparing repo transactions with different maturities, it is not enough to compare only the volumes of transactions – their duration must be taken into account. Graph 1.21 shows the distribution of repo transactions with different maturities, where the duration is used as a weight. Thus, taking into account the duration of transactions, only 33% of liquidity in 2023 was distributed using overnight repo, and the share of 7-day repos increased to 30% in 2023. Fourteen and thirty-day repos accounted for 17 and 18%, respectively.

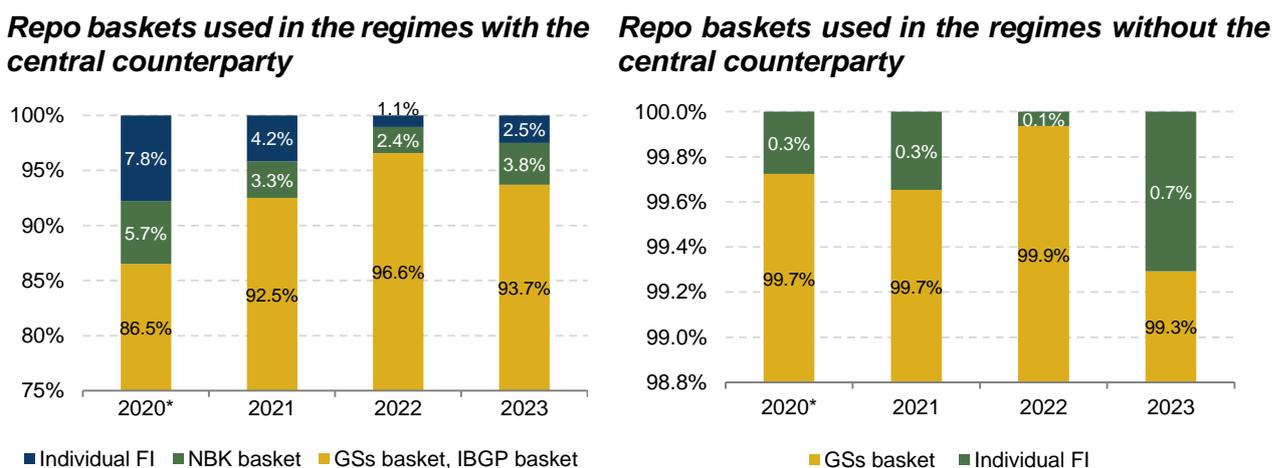
Figure 1.21 The share of automatic repo transactions weighted by maturity, %



Source: KASE, NBK computations

In 2023, most participants preferred to enter into Central Counterparty (CCP) transactions. The share of CCP transactions in 2023 made up 98%. Participants still prefer to use the basket of government securities as collateral – both for transactions with and without CCP. Thus, in using the CCP, in 2023 the share of transactions with the basket of government securities and the basket of bonds of issuers with a government share was 94%. In using the regime without the CCP, the share of transactions with government securities is even higher – in 2023 it was 99.3%.

Figure 1.22 Repo baskets used in the regimes with and without the central counterparty, %



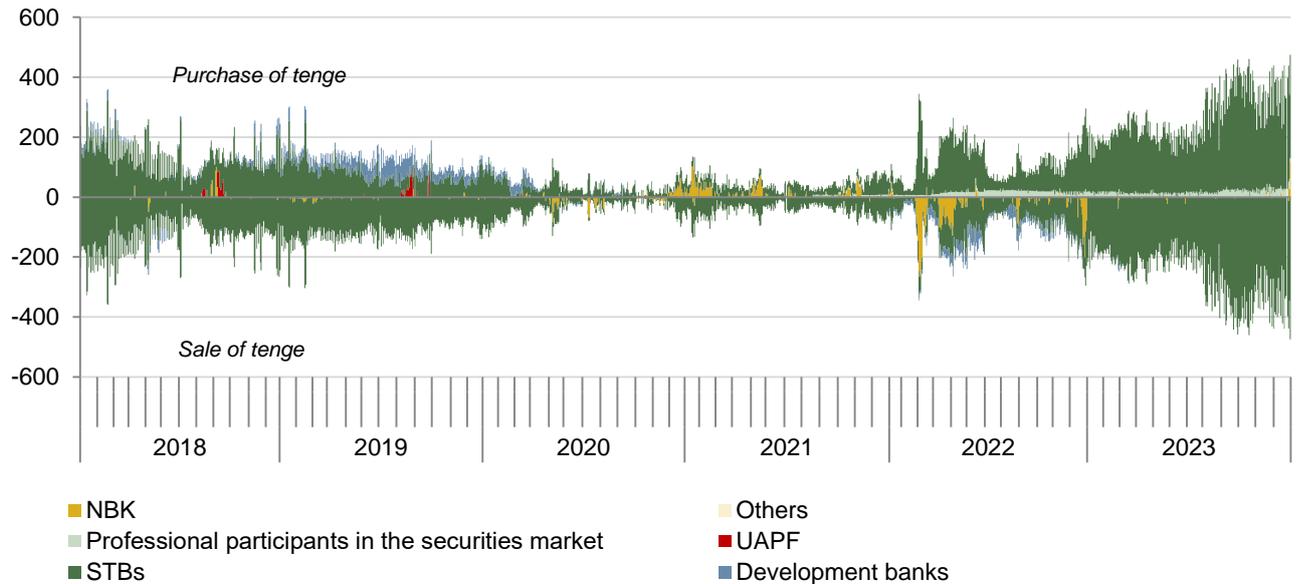
Source: KASE, NBK computations

Note: *data from August 2020 - after the transition of trading to the ASTS+ system; the following debt securities listed on the Exchange's official list, denominated in tenge, and issued by: 1) a national company of the Republic of Kazakhstan; 2) an organization in which 75 or more percent of the total number of issued shares or of the paid-up statutory capital are state-owned, a national holding company or a national management holding company; 3) an organization in which 75 or more percent of the total number of issued shares or of the paid-up statutory capital are owned by a subsidiary of a national holding company or a subsidiary of a national management holding company.

1.2.3 Swap Market

In 2023, there was a significant increase in the volume of the FX swap market. Thus, the volume of transactions in the FX swap market for the USD/KZT currency pair in 2023 amounted to 62.8 trln tenge, which is by 125% higher than the volumes in 2022 (28 trln tenge). Thus, when expressed in the tenge, the annual volume of the swap market in 2023 reached an all-time high since 2014, comparable volumes were observed only in 2017, when the annual volume was about 61.9 trln tenge. The main driver of the swap market growth was the increase in foreign currency deposits among individual participants and the corresponding need to equalize the currency position.

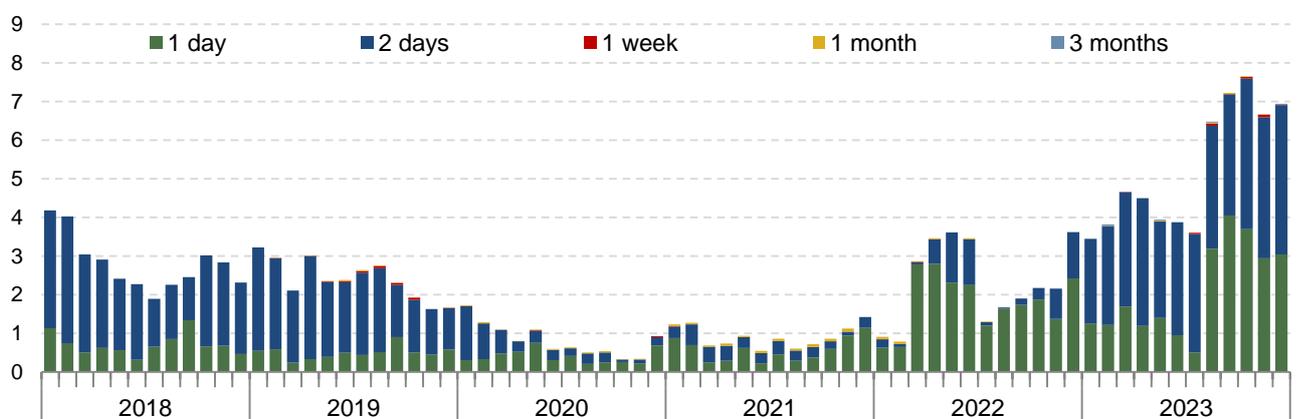
Figure 1.23 The volume of the USD/KZT FX swap market, bln tenge



Source: KASE

The main volume of transactions in the FX swap market is among maturities of one and two days. In 2023, the volume of two-day swaps exceeded that of one-day swaps. Thus, the share of two-day FX swap transactions was 59%, 40% of transactions were concluded with a term of one day. For comparison, in 2022, 78% of transactions were concluded with a term of 1 day, and the share of two-day swaps was 22% only.

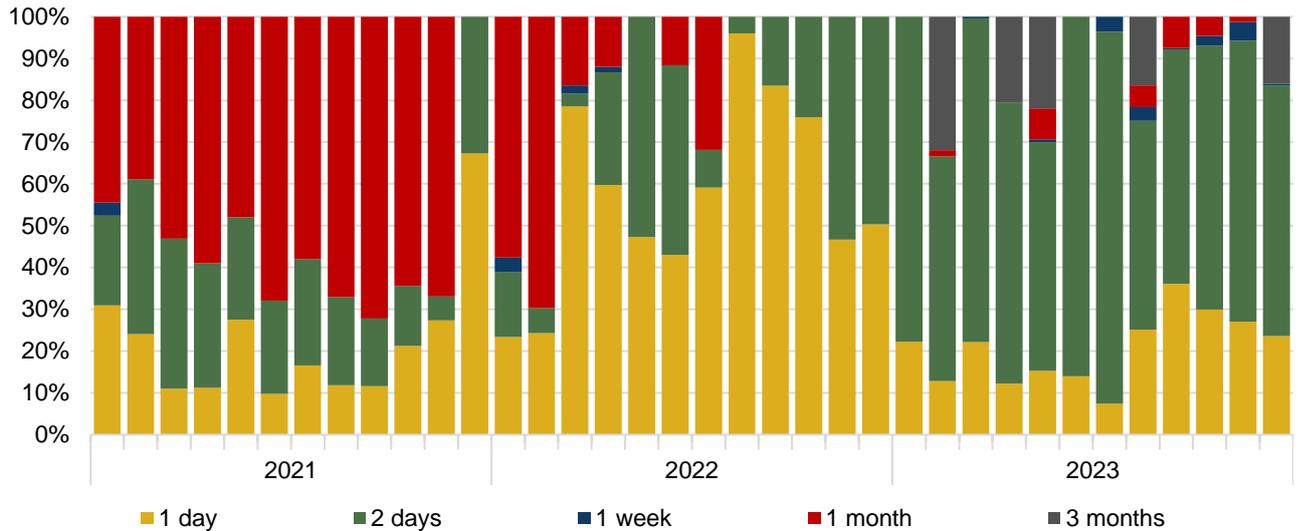
Figure 1.24 The volume of the USD/KZT FX swap market, by maturity, trln tenge



Source: KASE

The weighting by maturity showed that the share of 3-month FX swap transactions increased in 2023. Thus, when weighted by maturity, about 10% of the liquidity in the market was distributed using a 3-month swap. The increase in demand for long-term swaps is due to the increased need for hedging currency risk among individual participants.

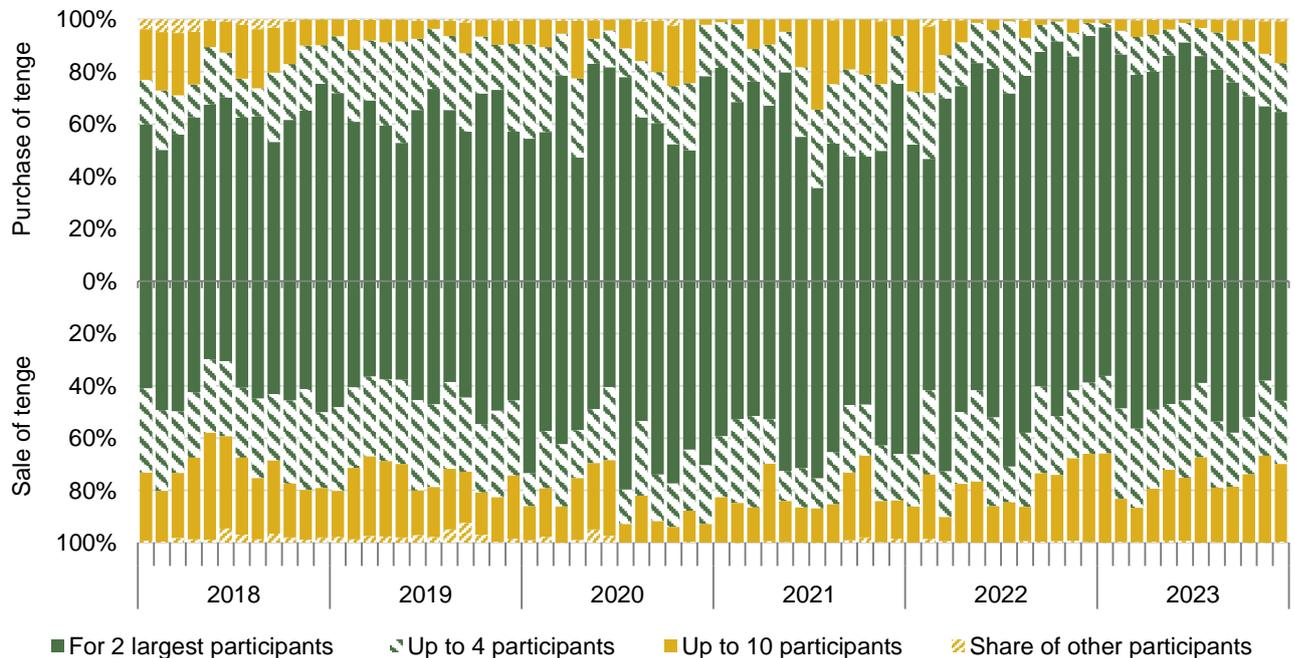
Figure 1.25 The share of USD/KZT FX swap operations weighted by maturity, as %



Source: KASE, NBK computations

Due to the need to balance the foreign exchange position, some participants experienced an increase in concentration on the tenge attraction side of the currency swap market. On average, in 2023, the two participants attracting the largest volume in a month accounted for about 80% of the monthly transaction volume. In January, the share of the two largest participants in the month on the attraction side amounted to 97% of the monthly transaction volume.

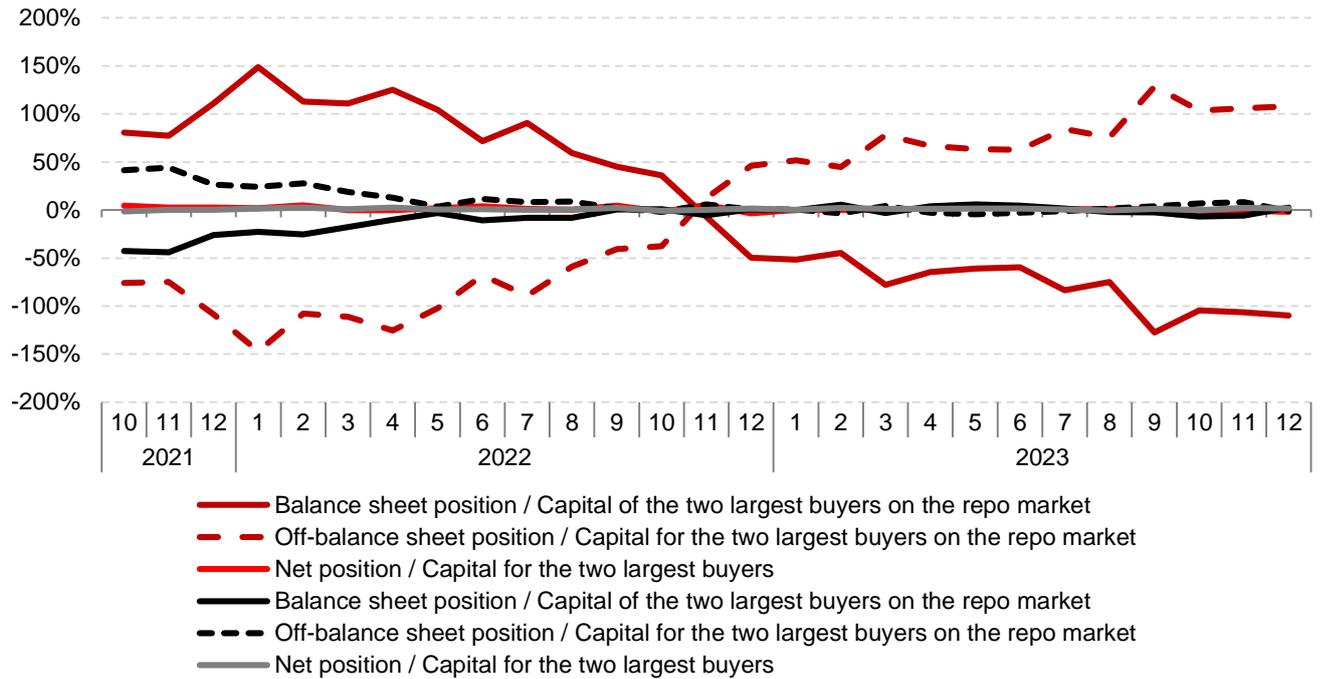
Figure 1.26 Concentration of the USD/KZT FX swap market



Source: KASE, NBK computations

Figure 1.27 shows the US dollar foreign exchange position of the largest buyers of the tenge liquidity in the currency swap market in 2023. In the third quarter of 2022, some second-tier banks began to increase their US dollar liabilities due to the growth of customer deposits. The buildup in foreign currency deposits at some banks led to the emergence of a short balance sheet position, which the banks closed with an off-balance sheet position by entering into a FX swap.

Figure 1.27 *STBs' currency position on the US dollar*

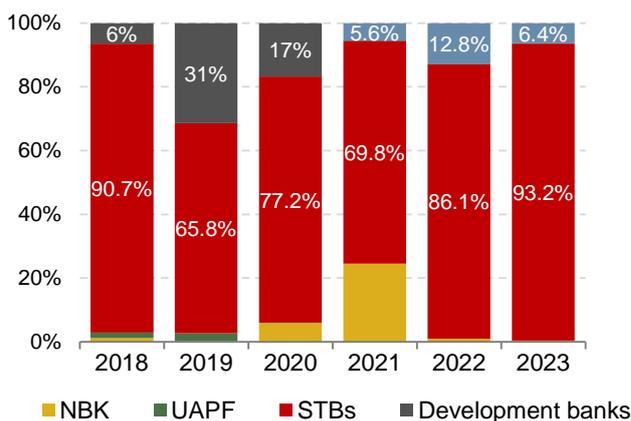


Source: NBK, NBK computations

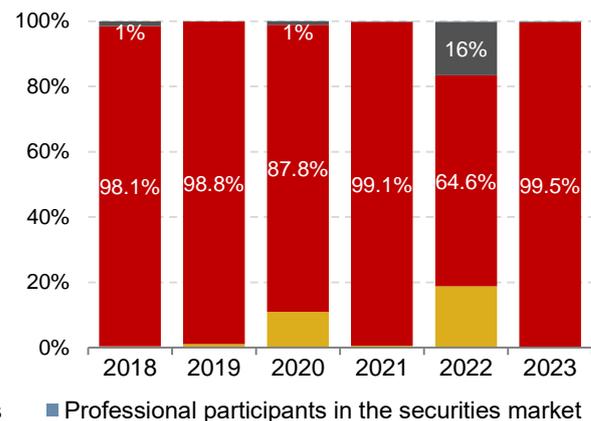
As before, second-tier banks continued to be the main participants in the FX swap market in 2023, the share of other participants significantly decreased. The NBK's participation was minimal both on the side of providing and withdrawing the tenge liquidity. On the side of attracting liquidity, the share of professional participants went down to 6.4% in 2023 compared to 12.8% in 2022. The participation of development banks, which actively placed liquidity in 2022, was insignificant and limited to one month.

Figure 1.28

Tenge purchases in the FX swap market



Tenge sales in the FX swap market

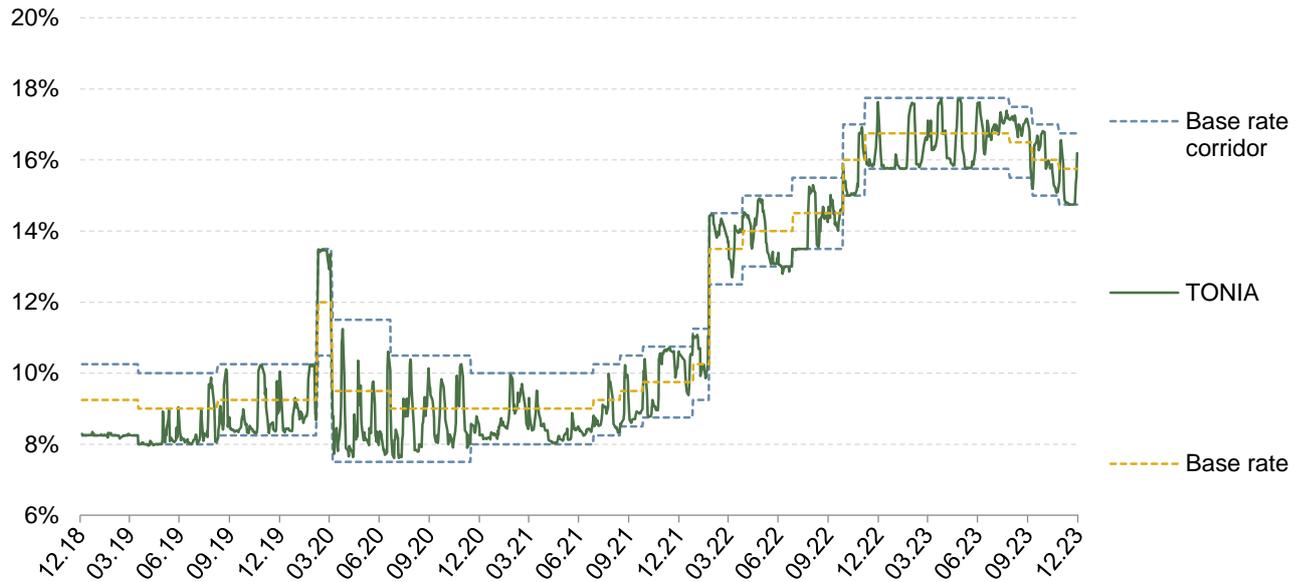


Source: KASE, NBK computations

1.2.4 Interest Rates

In the first half of 2023, the base rate remained at 16.75%. Against the slowing inflation, the NBK began to gradually lower the base rate, starting in August 2023 (August – 16.5%, October – 16%, November – 15.75%). The operational benchmark of the monetary policy – the TONIA index – was within the interest rate corridor of the base rate during 2023. In December 2023, TONIA on several occasions fell close to the lower bound of the interest rate corridor due to an increase in the level of excess liquidity, as well as changes in the instruments of monetary policy implementation and reduction in the volume of notes issued.

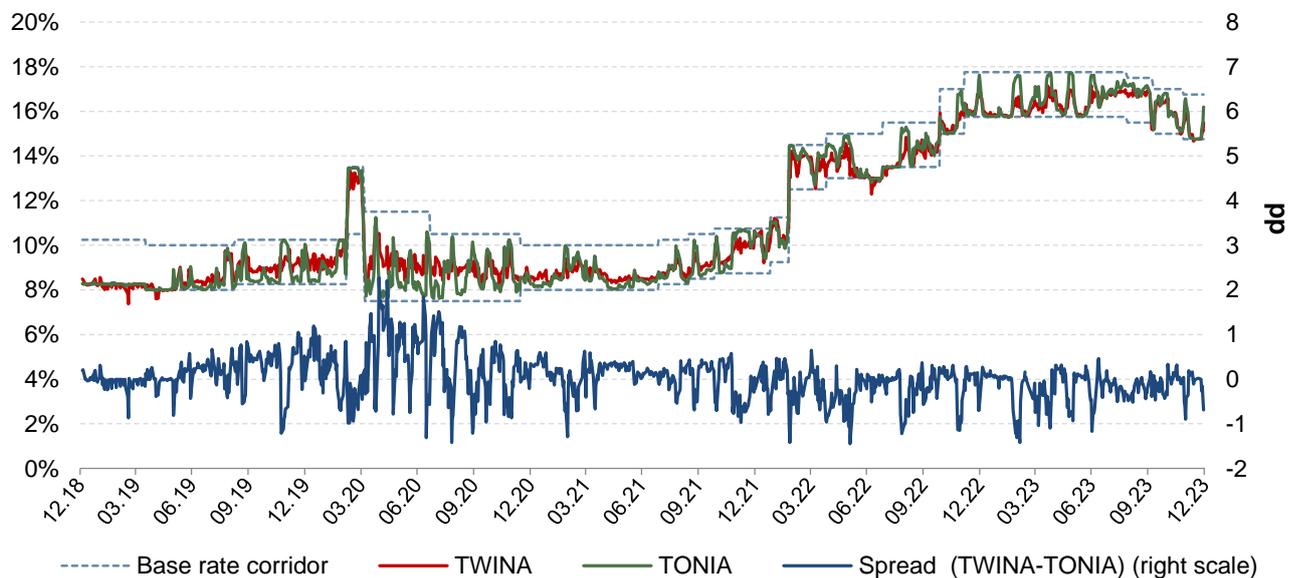
Figure 1.29 TONIA index - the operating benchmark of the base rate



Source: KASE, NBK

The 1-day and 7-day repo market still has a high correlation of rates. At the same time, 1-day repo rates are more volatile. The average spread of TWINA and TONIA in 2023 was 0.15 pp. In December 2023, TWINA, like TONIA, fell below the lower bound of the corridor.

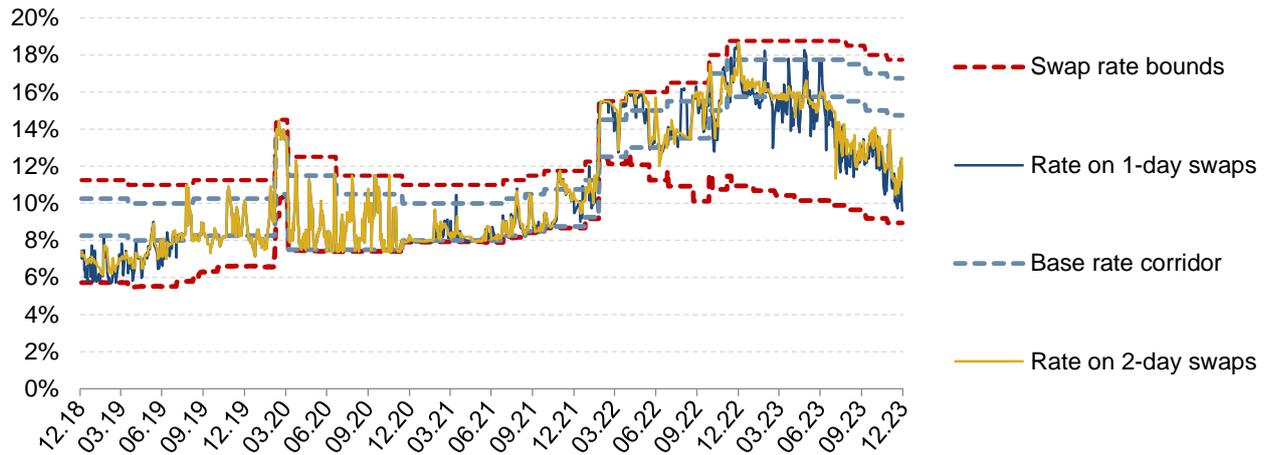
Figure 1.30 Interest rates in the repo market



Source: KASE, NBK

Due to a sizable widening of the spread between the base rate in the tenge and the Fed rate in the US dollars in 2023, the bounds of the swap corridor are much higher than the bounds of the base rate corridor. As a result, the NBK's participation in the FX swap market is minimal, since entering into transactions with the NBK is extremely unprofitable provided that there is an alternative to concluding transactions with a market counterparty. Thus, on the side of withdrawal of the tenge liquidity, the NBK's share of participation in 2023 amounted to 0.4%, and on the side of provision of the tenge liquidity – 0.2%. Thus, rates in the FX swap market reflect the cost of liquidity for market participants in the tenge and in foreign currency.

Figure 1.31 Interest rates in the FX swap market



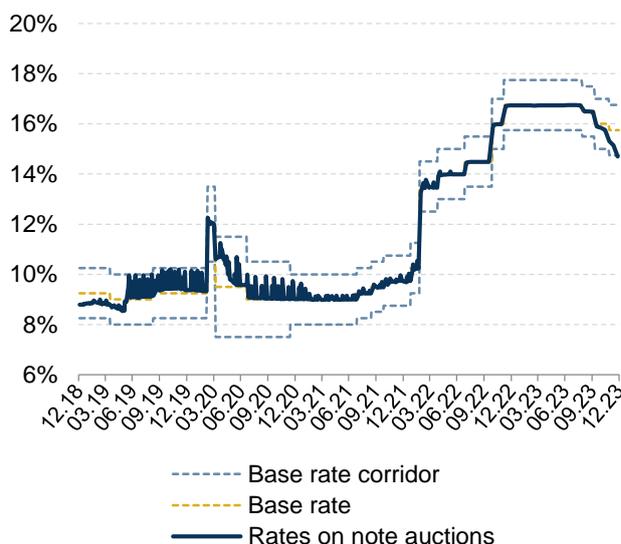
Source: KASE, NBK

In 2023, there was a significant widening of the spread between repo rates and swap rates. Swap rates began to decline significantly in August 2023, with the negative spread between swap rates and the TONIA index exceeding 5 percentage points on some days. This indicator remained high until the end of the year, with the average spread during 2023 between the 1-day swap rate and the TONIA rate being -2.2 percentage points, and between the 2-day swap rate and the TONIA rate being 1.83 percentage points.

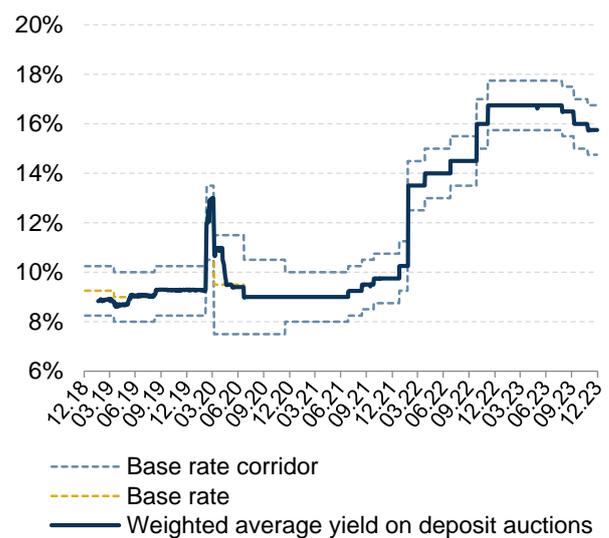
In 2023, note auction rates, as in prior years, were formed around the base rate until October 2023. The spread between note auctions and the base rate during this period was -0.01 percentage points. The reduction in the volume of notes placed in the last months of 2023 enhanced competition among second-tier banks, as a result, starting from October 2023, the negative spread began to widen with each auction. At the last auction in December, the notes were placed below the lower bounds of the base rate corridor.

Figure 1.32 Interest rates on the open market operations

Rates on note auctions



Rates on deposit auctions



Source: NBK

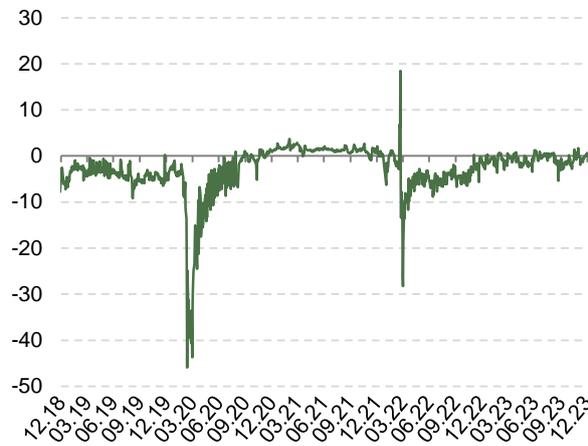
The cutoff rate for deposit auctions in 2023 was still equal to the base rate. Recall that in July 2020, the NBK began placing deposit auctions at the base rate.

In 2023, the spread between the TONIA rate and the NDF rate for the USD/KZT currency pair was close to zero, which excluded the possibility of arbitrage and made strategies designed to weaken the tenge unprofitable. The spread close to zero between

the TONIA rate and the NDF rate for the USD/KZT currency pair indicates that the tenge interest rate offsets for expectations of a change in the exchange rate.

Figure 1.33 Spread between TONIA rate and NDF rate on the USD/KZT currency pair and the consumer price index

Spread between TONIA rate and NDF rate on the USD/KZT currency pair, pp



Spread between TONIA rate and the consumer price index, pp



Source: KASE, BNS ASPR RK, NBK computations

Note: when calculating the spread between the TONIA rate and the consumer price index, the monthly weighted average TONIA rate was used.

Due to the gradual deceleration in inflation in 2023, the negative spread between the TONIA rate and the consumer price index was decreasing during the first half of the year. At the end of May, the spread became positive and continued to widen until the end of the year. Thus, the positive spread between the TONIA rate and the consumer price index indicated that the interest rate in the tenge began to offset for inflation in the second half of the year.

1.3 Foreign Exchange Market

At the end of 2023, the official exchange rate was 454.69 tenge per US dollar, having appreciated by 8 tenge, or 1.7% over the year. The maximum figure of the official exchange rate was 482.24 tenge per US dollar, and the minimum was 431.06 tenge per US dollar. Despite the strengthening of the currency by the end of the year, in Q3 the tenge depreciated given the strengthening of the global US dollar index against emerging market currencies and an increase in importers' demand for foreign currency. Under the free-floating exchange rate regime, the exchange rate of the national currency reflects the consensus of market participants' expectations on the impact of macro shocks. The year 2023 was a stabilization period after a number of external and internal shocks of prior periods, which did not require foreign exchange interventions by the National Bank.

The average daily trading volume on the Kazakhstan Stock Exchange in 2023 amounted to 151 mln US dollars, with a maximum value of more than 290 mln US dollars. The absolute growth in trading volume on the KASE is partly driven by the growth in the number of participants in trades due to the dominant position of the Exchange in the region. In the on-exchange spot market, the ratio of shares of the USD/KZT, RUB/KZT, EUR/KZT and CNY/KZT currency pairs remains unchanged in the period of 2022-2023, with the absolute dominance of the US dollar.

The growth in volumes in the off-exchange currency market for all currencies is observed from 2021 to 2023 by more than 4 times, from 13,466 to 52,794 bln tenge. The trading of the RUB/KZT pair demonstrated the largest volume in 2022, amounting

to 1,350 bln tenge. In 2023, the volume for this currency pair decreased by more than 4 times, and the volume of the USD/KZT pair has been growing since 2021.

1.3.1 Dynamics of the National Currency Exchange Rate and the Foreign Exchange Market

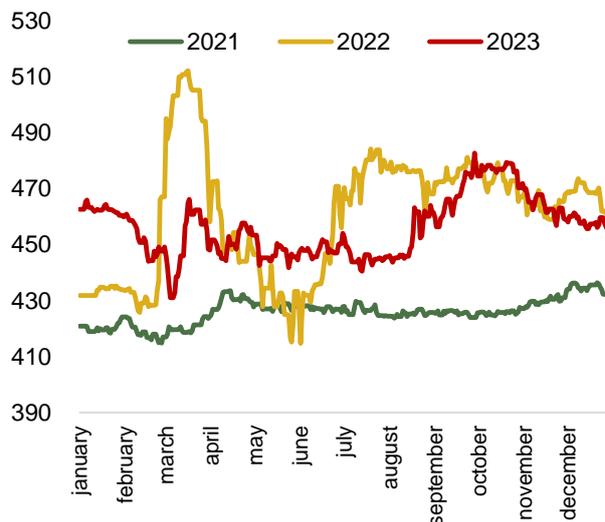
In 2023, the US dollar/tenge exchange rate appreciated by 8 tenge, or 1.7% (Dec/Dec) (*Figure 1.34a*), in particular in the second half of the year. In March-April, the rate demonstrated pronounced volatility with the currency appreciating by 5 tenge during the month. Despite the strengthening of the rate by the end of the year, in Q3 there was a weakening of the rate given the strengthening of the global US dollar index against emerging market currencies and an increase in importers' demand for foreign currency. During the same period, the maximum figure over the year was reached – 482.24 tenge per US dollar. Despite fluctuations in the oil price during the year and a 10% appreciation in 2023, the dynamics of the USD/KZT exchange rate were less volatile (*Figure 1.35*). In 2023, the NBK did not conduct any foreign currency interventions.

When analyzing the three-year period of 2021-2023, 2022 was the year with the highest volatility (*Figure 1.34a*). The year of 2021 is characterized by relatively stable dynamics of the national currency exchange rate with a strengthening of 10.9 tenge, or 2.6% y/y. The exchange rate weakened in Q3 2021, which led to the NBK's currency interventions in November-December in the amount of 239 and 252 mln US dollars, respectively⁴.

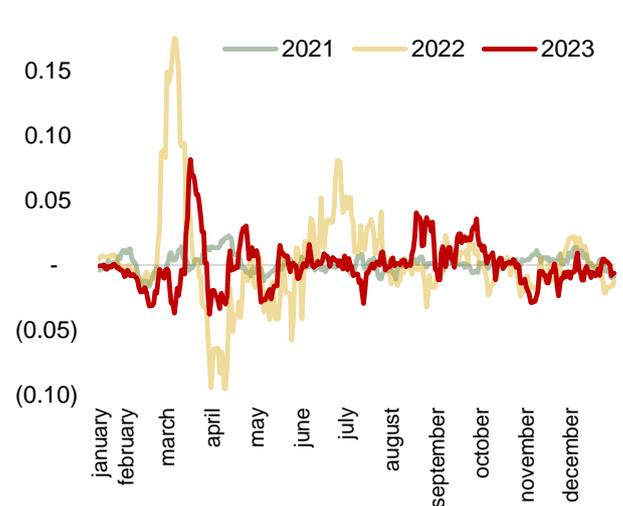
Assessing the dynamics of the USD/KZT exchange rate, the greatest volatility during the year was observed in 2022, especially in the period of February - April (*Figure 1.34b*). High volatility of the US dollar to the tenge exchange rate is associated with geopolitical shocks and falling oil prices.

Figure 1.34 The most volatile period for the national currency exchange rate against the US dollar (USD/KZT) was the year of 2022, mainly because of external shocks

a) The national currency exchange rate USD/KZT in 2021–2023



b) Dynamics of the USD/KZT exchange rate in 2021–2023



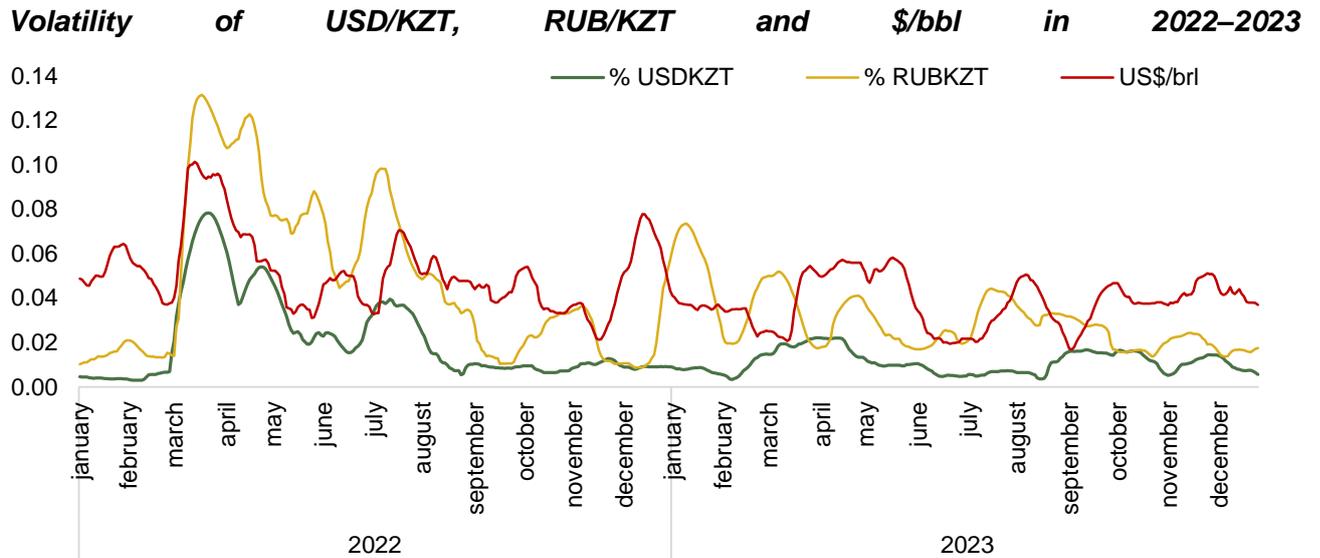
Source: NBK computations

Note: %, a 30-day moving average

The main shocks that affected the Kazakh foreign exchange market in 2022 were the January events and the escalation of the geopolitical conflict that began in February 2022. The NBK intervened in the first half of 2022; the volume of net interventions in 2022 amounted to USD 1.4 bln per year.

⁴ <https://nationalbank.kz/ru/news/foreign-exchange-market-interventions/rubrics/2208>

Figure 1.35 *The national currency exchange rate against the US dollar and Russian ruble and the oil price had similar trends in the first half of 2022, while such correlation had not been observed in later periods*



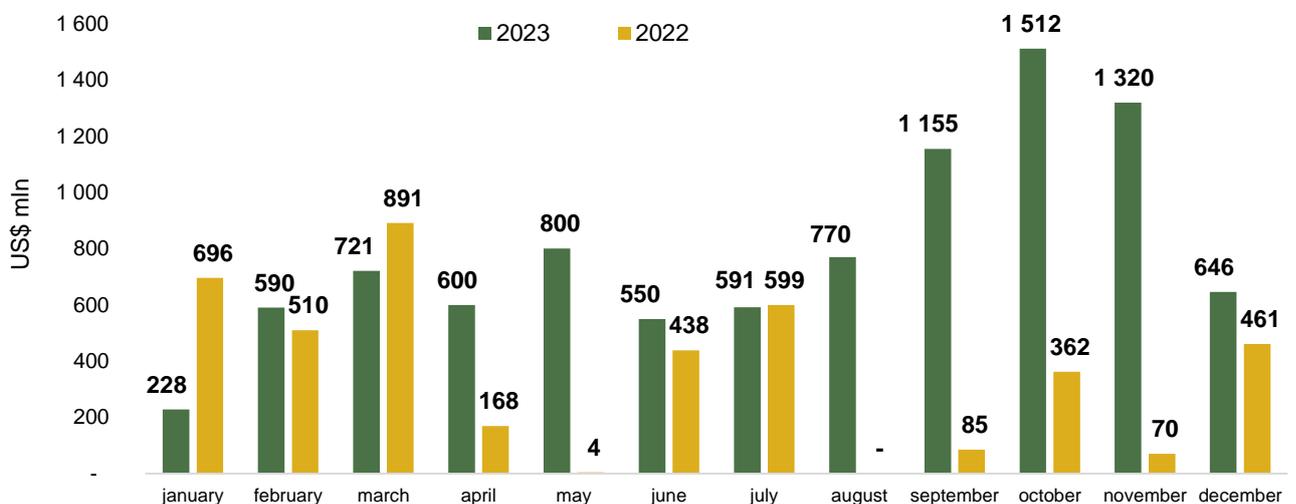
Source: Bloomberg, NBK computations

Note: volatility is a natural logarithm of a standard deviation for 30 days

The sale of currency from the NF RK was carried out as part of attracting transfers to the republican budget, of which the guaranteed and earmarked transfers in total amounted to 4 trln tenge in 2023. The volume of conversions from the National Fund of the Republic of Kazakhstan increased in total by more than 2 times in 2023 compared to 2022 (Figure 1.36). The total volume of conversions amounted to 9.5 bln US dollars in 2023, and 4.3 bln US dollars in 2022. A significant increase in the volume of currency sales occurred in the 4th quarter of 2023 given the acquisition of the KMG stock for the NF RK in the amount of 1.3 trln tenge.

In 2023, the share of currency sales to the NF RK in the total trading volume amounted to 26% (in 2022 – 14%). The total USD/KZT trading volume on the KASE in 2023 amounted to US\$37 bln compared to US\$29.7 bln in 2022 (an increase of 24.7%). A significant increase in volumes was observed in September – November 2023 due to the conversion of transfers to the budget. During this period, the volume of sales from the NF RK exceeded those in the same period of 2022 by more than 7 times.

Figure 1.36 *Volume of foreign exchange sales from the NF RK*

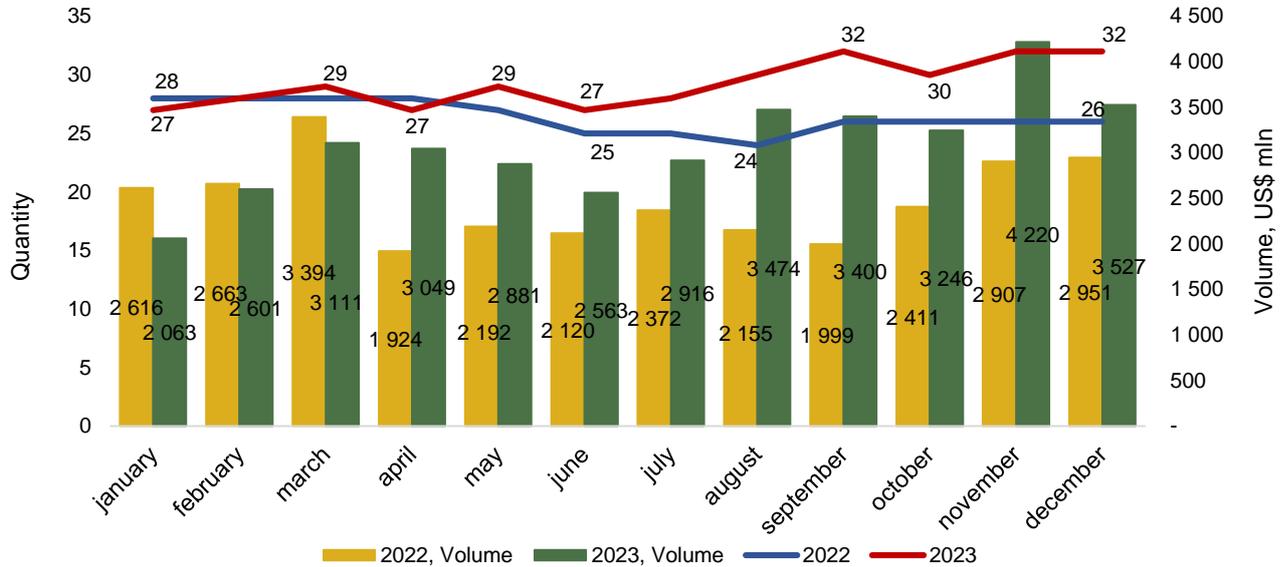


Source: NBK web site

1.3.2 The USD/KZT On-Exchange Currency Market

The average daily volume of exchange trading in 2023 was US\$151 mln with a maximum of over US\$290 mln on May 3, 2023. For comparison, in 2022, the average daily volume was US\$122 mln with a maximum of over US\$250 mln. The absolute growth in trading volume on the KASE is partly driven by the increase in the number of participants in trading due to the dominant position of the Exchange in the region (*Figure 1.37*).

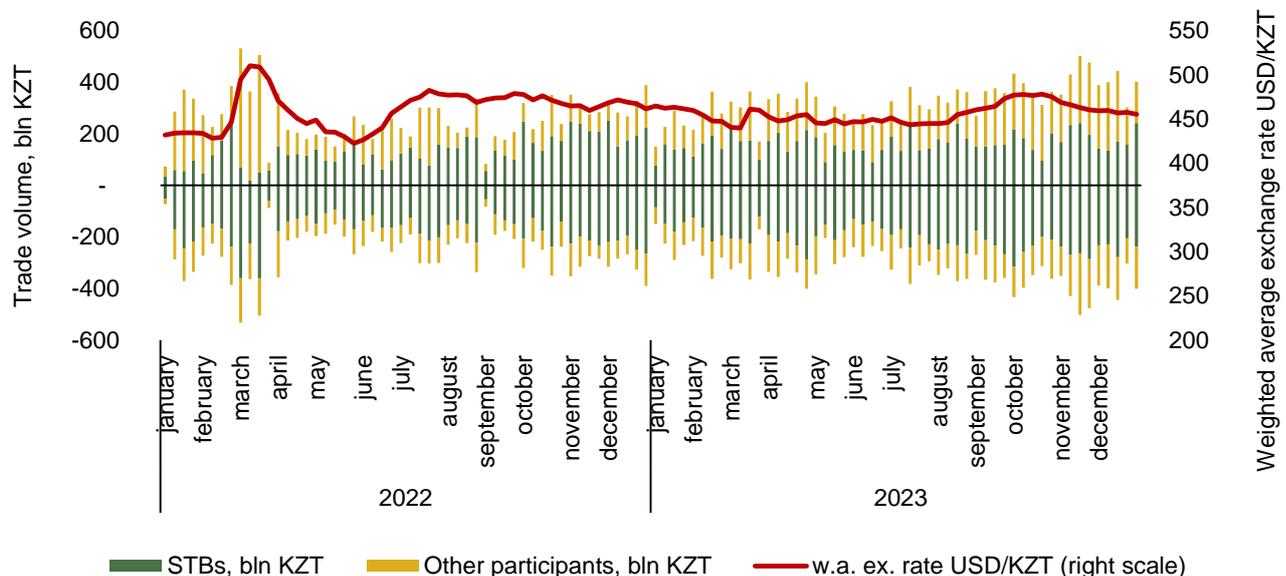
Figure 1.37 The number of active participants in the KASE trades and trading volumes in the on-exchange spot market



Source: KASE

Second-tier banks remain key participants among those trading on the KASE. In 2023, STBs were net buyers of currency, maintaining the trend from 2022. In 2023, along with the growth in trading volume, the share of other professional participants in the on-exchange market apart from STBs also increased. The share of other participants in the sale of currency exceeded the share in the purchase of currency both in 2022 and in 2023 (*Figure 1.38*).

Figure 1.38 The volume of USD/KZT trades, bln tenge, and the weighted average USD/KZT exchange rate (+) sale/(-)purchase

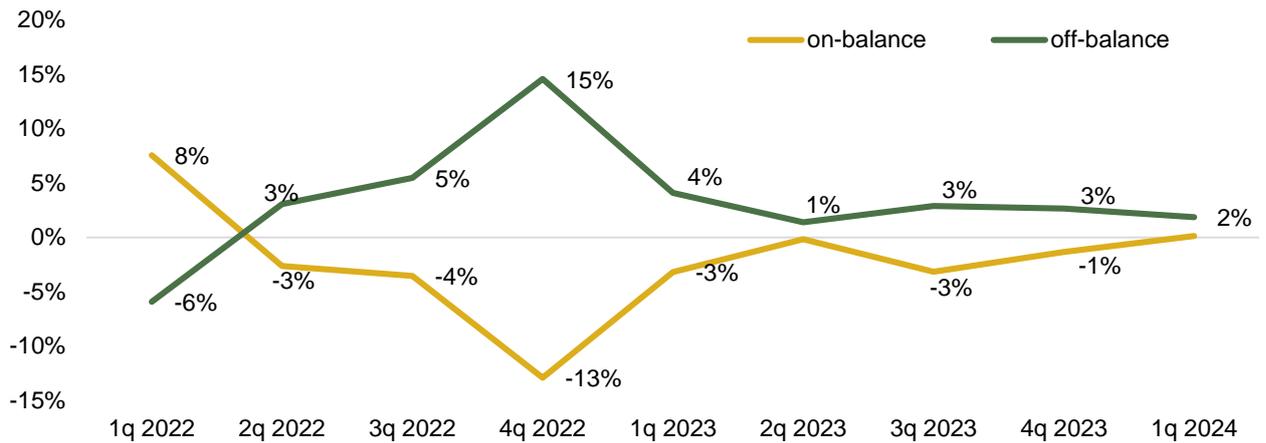


Source: KASE, NBK computations

1.3.3 Open Currency Position

Analysis of the balance sheet open currency position (OCP) in the period from Q1 2022 to Q1 2024 shows a predominance of assets over liabilities, although the gap is narrowing (*Figure 1.39*). Absolute values of balance sheet OCP indicators for the reporting period show a predominantly short position in the US dollar. In general, a long-term balance sheet short OCP may indicate the presence of some currency risks. When the exchange rate of a foreign currency strengthens, the revaluation of liabilities denominated in this currency will lead to an increase in liabilities. In terms of changes in the balance sheet and off-balance sheet parts, the largest gap is observed in Q1 2023.

Figure 1.39 Currency position to owners' equity of second-tier banks for the US dollar, %

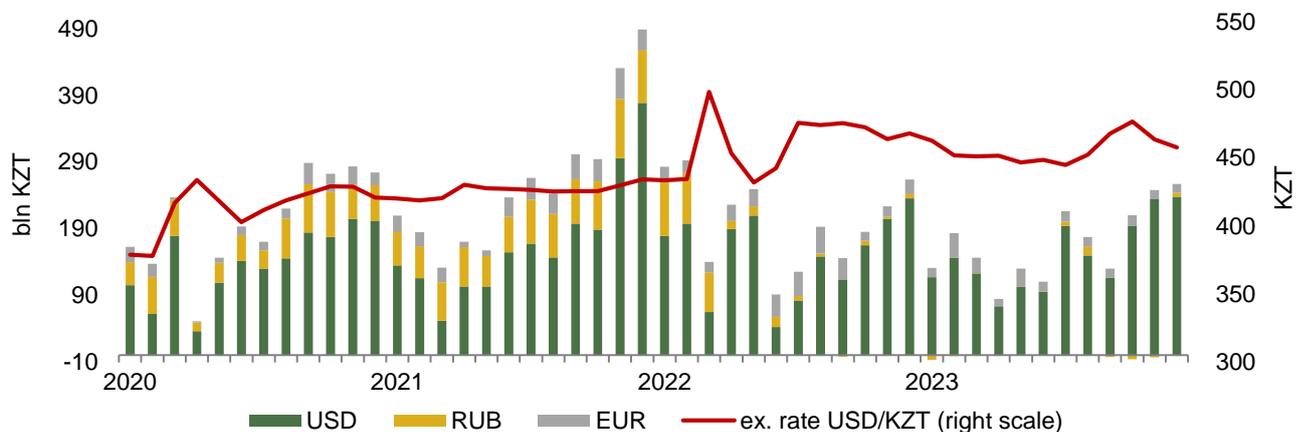


Source: NBK computations

Hedging short balance sheet OCP with off-balance sheet OCP mitigates the realization of currency risks. In terms of banks, there were no violations of currency position limits in the analyzed period, except for individual periods for some banks due to geopolitical instability and currency fluctuations.

The share of monthly net sales in the US dollars in 2023 was at least 79% per month of the total volume of exchange trading (*Figure 1.40*). The total volume of net transactions by currency was: the US dollar – 1,783 bln tenge, euro – 215 bln tenge, and rubles – 4 bln tenge. These currencies showed reduction compared to 2022. The largest decline was observed in the ruble-tenge currency pair – almost 100%, which is due to the increased volume of sales of this currency pair a year earlier due to the prolonged inflow of cash rubles into Kazakhstan against the backdrop of a geopolitical shock in the region.

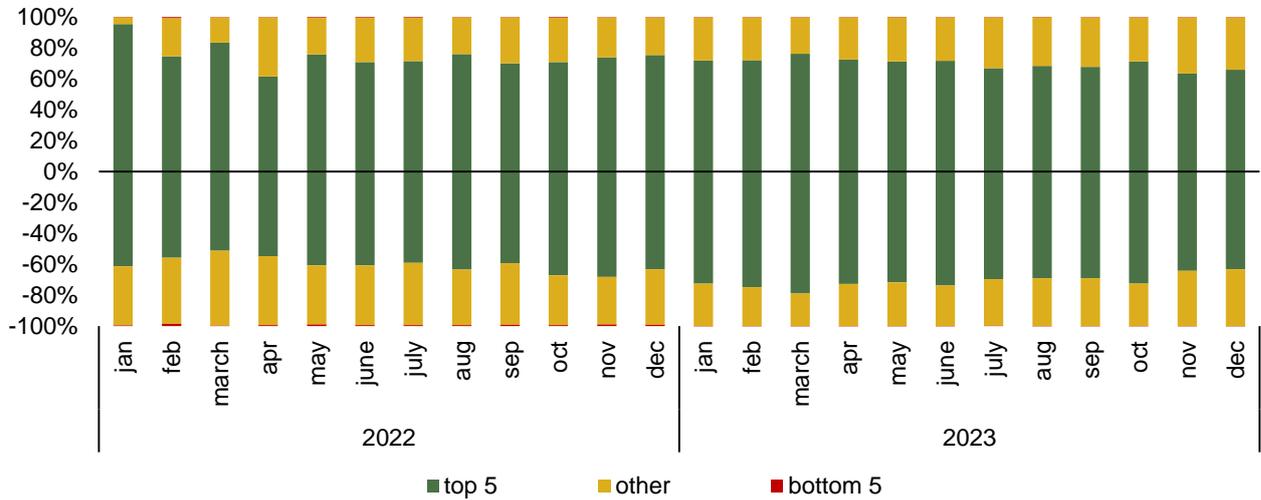
Figure 1.40 Net purchases(-)/sales(+) of foreign exchange by exchange offices



Source: NBK computations

The on-exchange spot market of trades in the USD/KZT currency pair is poorly diversified (*Figure 1.41*). The top 5 market participants, both on the buyer and seller side, account for the prevailing share in the volume of transactions. The satisfaction of supply and demand for foreign currency and a relatively even distribution of volumes throughout the year had been demonstrated.

Figure 1.41 Concentration of participants in the market of USD/KZT currency pair trading (+)sale/(-)purchase



Source: KASE, NBK computations

In the on-exchange spot market, during 2022-2023, the ratio of shares of the USD/KZT, RUB/KZT, EUR/KZT and CNY/KZT currency pairs had remained unchanged with the absolute dominance of the US dollar (*Figure 1.42*). The share of the US dollar increased by 6% in 2023, while the shares of other currencies decreased. The significant shares of the ruble and Yuan in 2022 are explained by the geopolitical conflict and subsequent sanctions against the Russian Federation and the attractiveness of the market. In 2023, the stabilization of the situation and the adaptation of market participants led to a decrease in the shares of these currencies.

Figure 1.42 Share of currencies in the volume of trades in the on-exchange FX market in 2022 and 2023

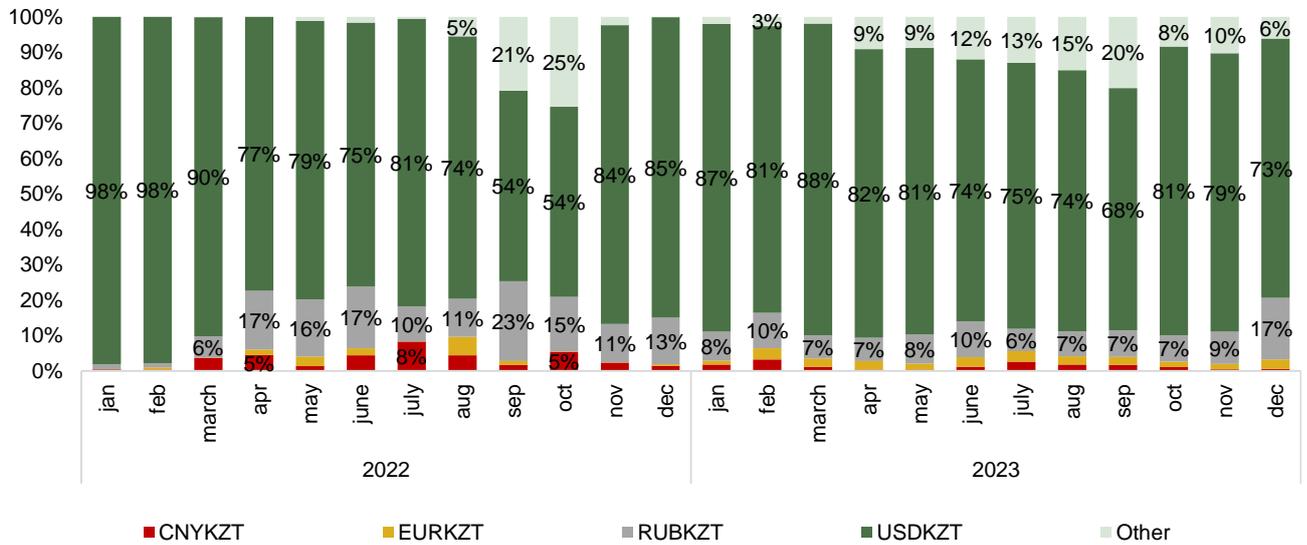


Source: KASE, NBK computations

In terms of currency pairs in the on-exchange currency market, the USD/KZT currency pair continues to dominate in the dynamics by months in 2022–2023. The most noticeable dynamics were observed in the RUB/KZT and CNY/KZT pairs. The share of the RUB/KZT pair decreased from an average monthly figure of 11.8% in 2022 to 9% in 2023. In 2022, peaks in the RUB/KZT share were observed in April and September, being caused by the geopolitical situation in the Russian Federation (*Figure 1.43*). In 2023, the dynamics of the RUB/KZT share were more monotonous with a peak value of 17% in December

(Figure 1.43). The CNY/KZT pair continues to maintain low values in terms of share, but in 2022, higher figures were observed in June-July with the largest shares of 4% and 8%, respectively.

Figure 1.43 On-exchange FX market in 2022–2023, %



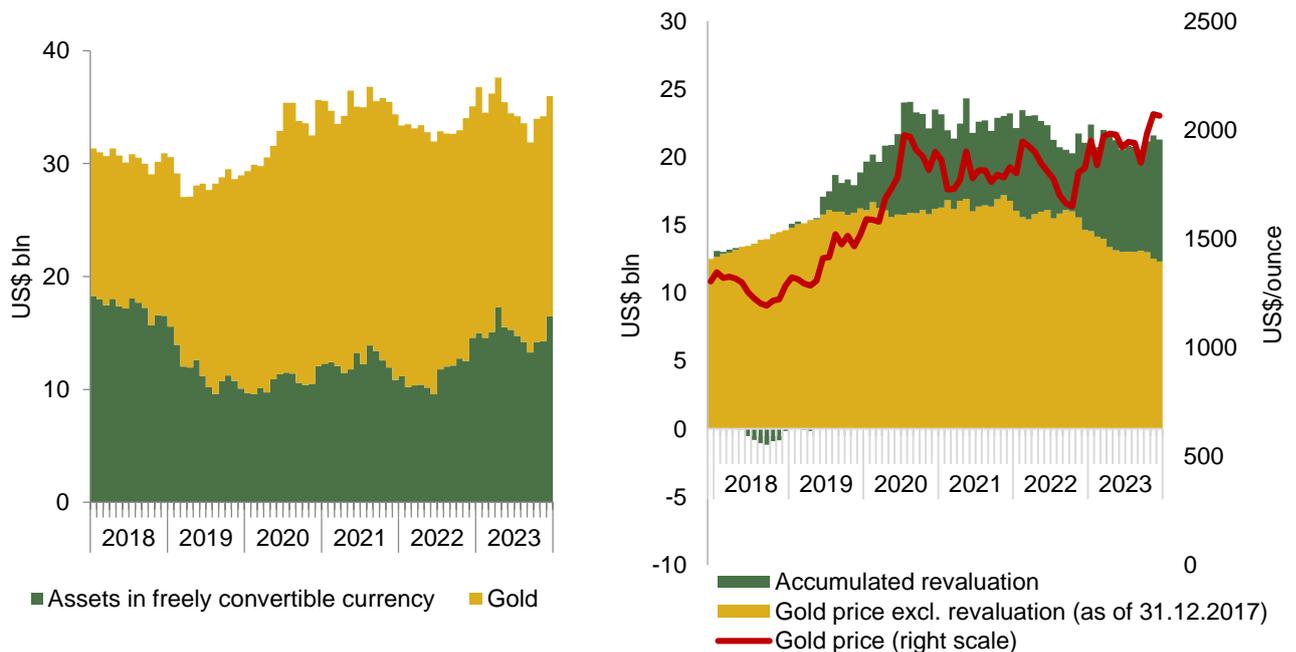
Source: KASE, NBK computations

1.3.4 Gold and Foreign Exchange Reserves

During 2023, the NBK assets in FCC went up by 12.8% and amounted to US\$16.5 bln at the year-end (Figure 1.44). The share of gold in gross international reserves decreased by 4% in 2023, thus the share of assets in foreign currency in gold and foreign exchange reserves increased from 42% to 46%. The decrease in the share of gold in gold and foreign exchange reserves (from 58% to 54%) due to the sale of gold in the external market as part of increasing the liquidity of reserves had enhanced the diversification of the portfolio (Figure 1.44).

Figure 1.44

NBK gold and foreign exchange reserves Gold reserves and revaluation

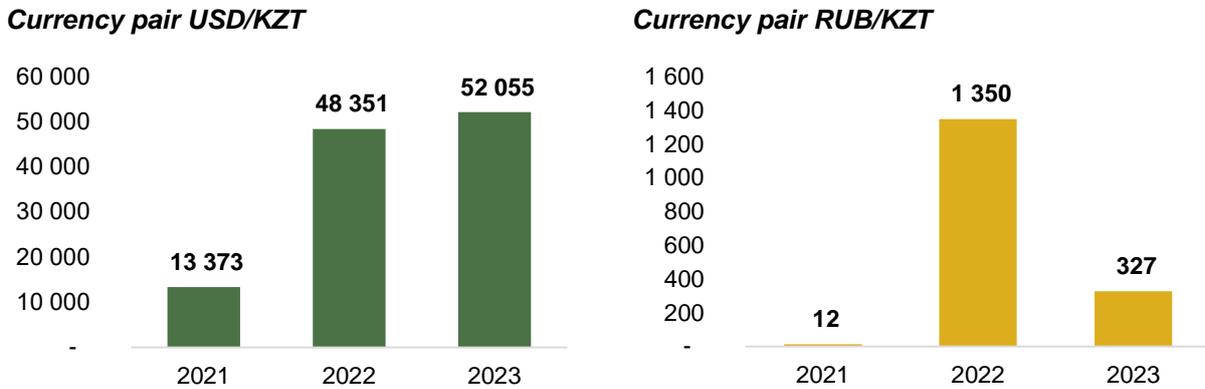


Source: NBK computations

1.3.5 Off-Exchange Spot Market

A more than four-fold growth of volumes in the off-exchange market for all currencies is observed from 2021 to 2023, from 13,466 to 52,794 bln tenge (*Figure 1.45*). Against the inflow of rubles into the country in the on-exchange and off-exchange markets, the ratio of currency pairs in the off-exchange market was shifted quite a lot. The trading in the RUB/KZT pair demonstrated the largest volume in 2022, amounting to 1,350 bln tenge.

Figure 1.45 *Volume of trades in the off-exchange market, bln tenge*

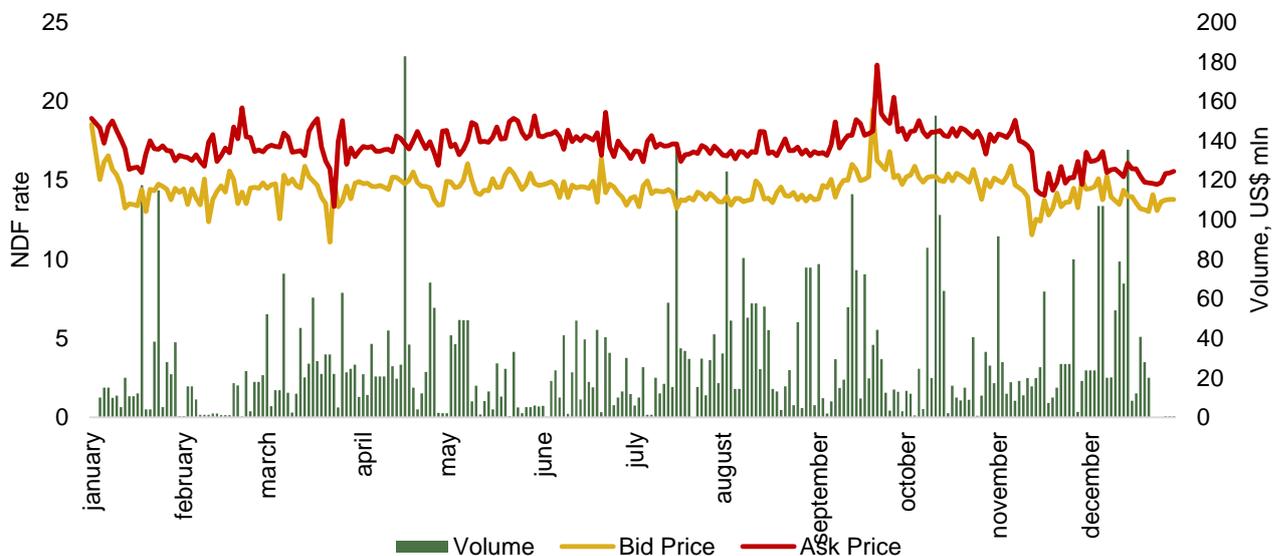


Source: KASE, NBK computations

Banks' activities in hedging currency risks are carried out in the foreign exchange markets both between residents and non-residents. Thus, the exchange rate of the tenge against the dollar has generally maintained stable dynamics followed by some strengthening since mid-October 2023, which was accompanied by high volumes of purchases by non-residents, amounting to an average of about 30 mln US dollars per day (*Figure 1.46*).

Note: A non-deliverable forward contract is an over-the-counter instrument in which two counterparties agree to deliver the difference between exchange rates at a future date. Under this arrangement, settlement risk is minimized to the amount of exchange rate risk that may arise between the date of agreement and the date of currency delivery. Such difference is calculated and paid in US dollars. Most non-deliverable forwards include US dollars as the second (base) currency. The most common contracts are those with a term of 1 month to 1 year.

Figure 1.46 *Volume of trades in the off-exchange market in 2023*



Source: Bloomberg

Note: NDF rates for 3 months have been used

1.4 Fiscal Policy

In 2023, the state and republican budget revenues were significantly lower than planned, which led to an expansion of the budget deficit and additional withdrawals of foreign currency assets of the National Fund of the Republic of Kazakhstan through the acquisition of KMG stock and the subsequent payment of dividends by the “NWF Samruk-Kazyna” JSC to the republican budget.

With the introduction of fiscal rules in 2023 and their partial compliance, the share of transfers from the NF RK in the republican budget revenues decreased significantly. However, the growth rate of budget spending remained unstable, resulting in the need to attract additional funds from the NF RK. Further compliance with fiscal rules is a prerequisite for ensuring the balance of public finances.

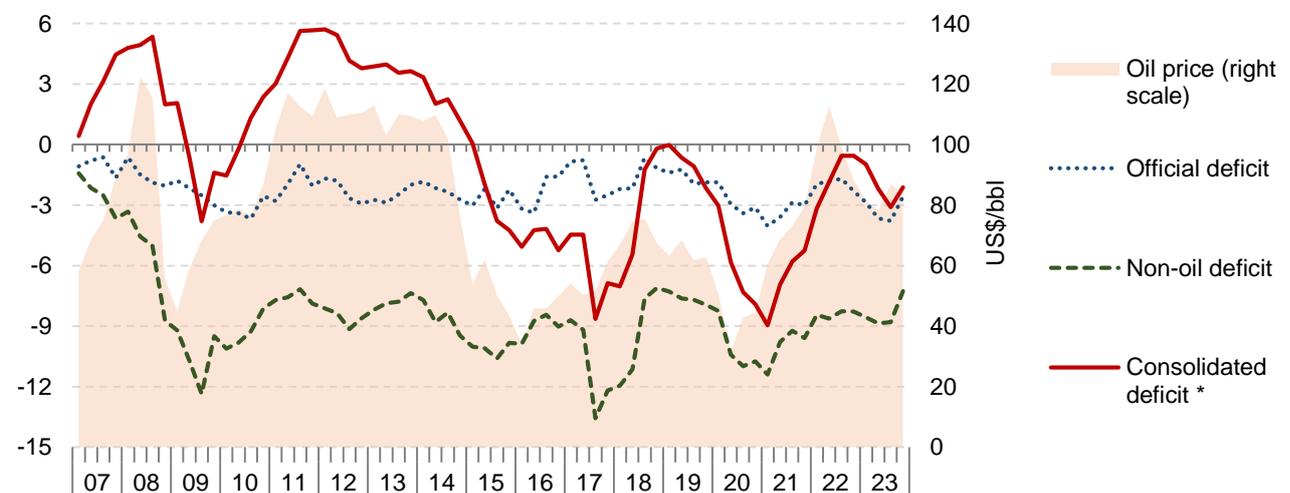
In the environment of declining global oil prices, revenues to the NF RK decreased, but net revenues to the NF RK remained positive, and the investment return on foreign currency assets of the NF RK amounted to 11.4%, thus contributing to the growth of foreign currency assets by the end of 2023.

The government's net financial assets increased in nominal terms in 2023, but decreased relative to GDP, which narrows the fiscal space and potentially reduces sustainability in the long term.

The republican budget deficit at the end of 2023 amounted to 3.1 trln tenge, or 2.6% of GDP, having increased in nominal terms by 30.5% compared to 2022. The non-oil deficit of the republican budget in 2023 amounted to 8.8 trln tenge, or 7.4% of GDP, having decreased in relation to GDP by 1.2% compared to 2022.

Figure 1.47 The non-oil deficit decreased, however, given the purchase of KMG stock, is still high

The republican budget deficits as % of GDP



Source: MF RK, BNS RK, World Bank, National Bank computations

Note: the consolidated deficit of the republican budget was calculated as the deficit of the republican budget according to the MF RK data minus transfers from the NF RK plus receipts to the NF RK from the oil sector organizations

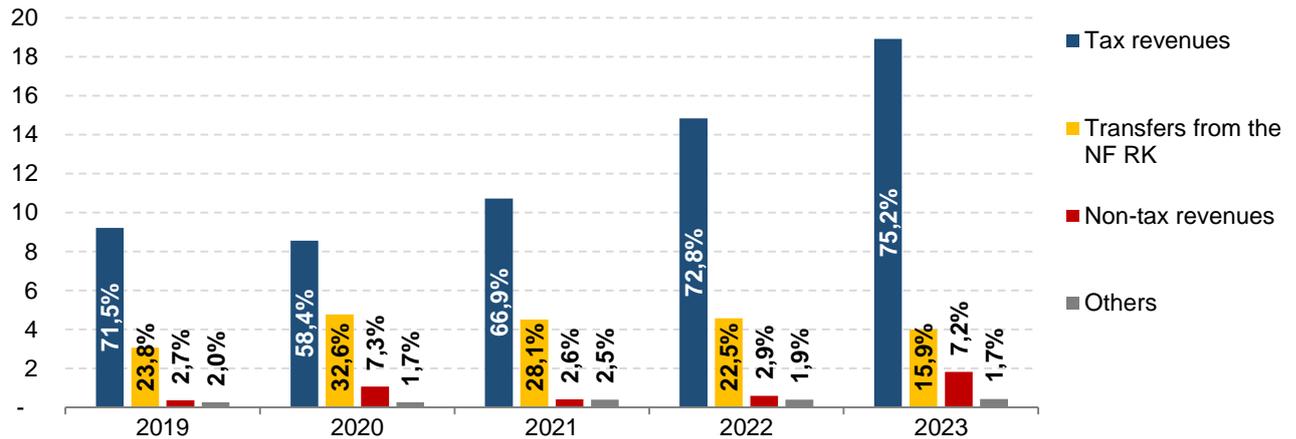
However, it is worth considering that the reduction in the non-oil deficit was significantly influenced by non-tax revenues of the republican budget in the form of dividend payments through the sale of KMG stock in the NF RK in the amount of 1.3 trln tenge, which is about 1% of GDP. Thus, if we take into account the sale of KMG stock, the non-oil budget deficit in 2023 amounted to 10 trln tenge, or 8.4% of GDP, which is significantly higher than the target value of 6.7% of GDP according to the Concept for Public Finance Management until 2030.

1.4.1 State Budget Revenues

The share of transfers from the NF RK in the structure of state budget revenues has gone down significantly to 15.9% in 2023. For comparison, the average figures for the prior 5 and 10 years were 26.1% and 27.8%, respectively. However, if we take into account the use of the NF RK funds for the acquisition of KMG stock, the share of the NF RK's asset use was 21.1% in 2023. Thus, the introduction of fiscal rules contributed to a decrease in the withdrawal of the NF RK assets.

Figure 1.48 *The share of transfers in the structure of revenues decreased significantly with the introduction of fiscal rules*

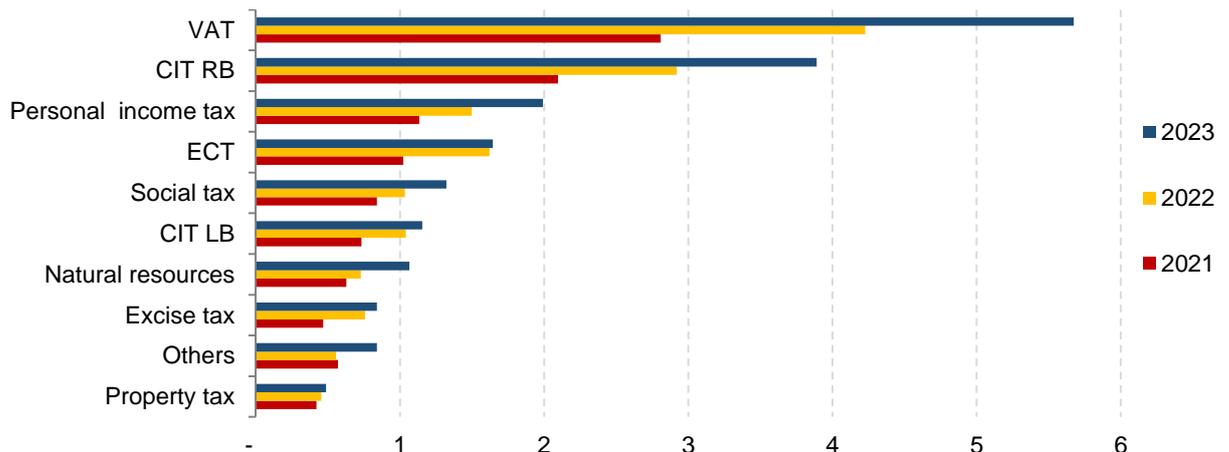
State budget revenues, trln tenge



Source: MF RK

Tax revenues to the state budget amounted to 18.9 trln tenge in 2023, an increase of 27.4% compared to 2022. The largest contribution to the growth in tax revenues was made by revenues from the value added tax (VAT), corporate income tax from large business entities transferred to the republican budget (CIT RB) and personal income tax from individuals (PIT). These revenues in 2023 amounted to 5.7 trln tenge, 3.9 trln tenge and 2 trln tenge, respectively.

Figure 1.49 *Tax revenues to the state budget, trln tenge*



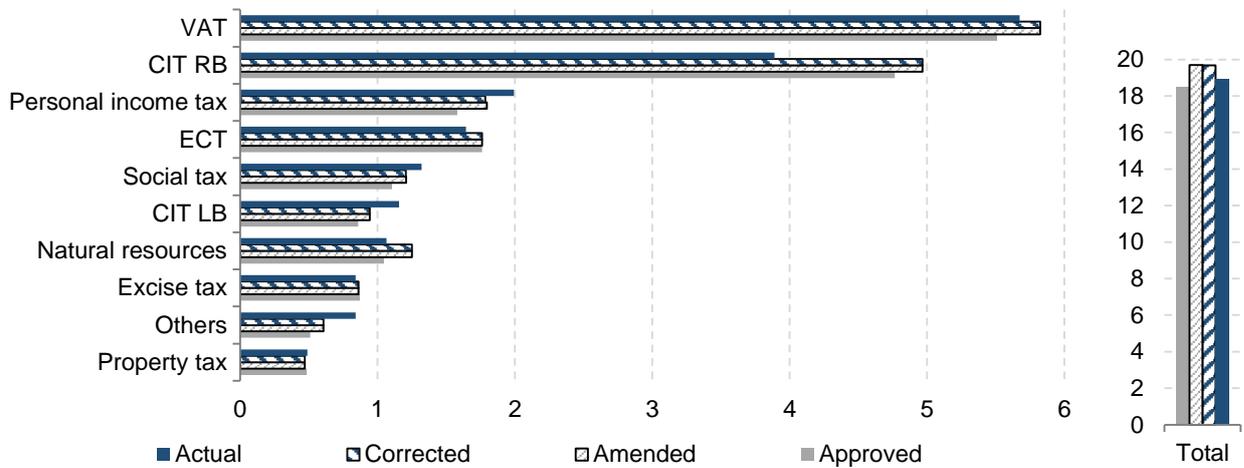
Source: MF RK

Note: since 2020, the CIT from small and medium-sized businesses are directed to local budgets.

Despite the significant growth in revenues from the CIT and VAT to the RB, the total non-fulfillment in these categories amounted to about 1.2 trln tenge. In these conditions, the Government borrowed additional funds from NF RK to finance the republican budget through the purchase of KMG stock for 1.3 trln tenge, which contributed to the growth in non-tax

revenues to the budget. Thus, due to the attraction of additional funds from the NF RK assets, the non-fulfillment of revenues to the republican budget amounted to 11.9 bln tenge, and the state budget revenues showed over-fulfilment due to the fact that plans for revenue transfers to local budgets were fulfilled in excess of the plan by 566.9 bln tenge.

Figure 1.50 Tax revenues to the state budget in 2023, trln tenge

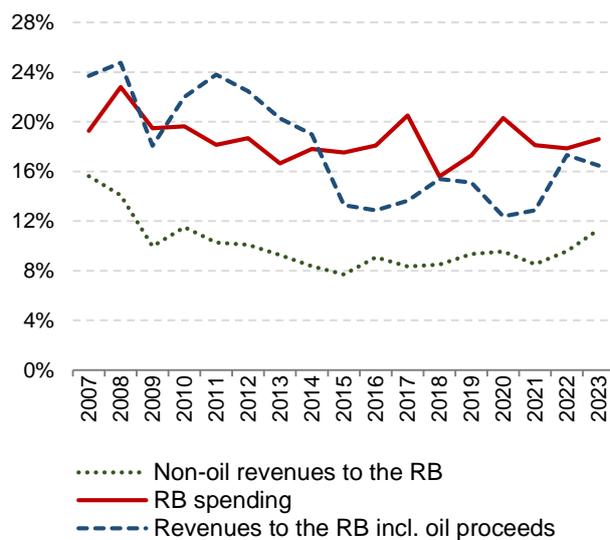


Source: MF RK

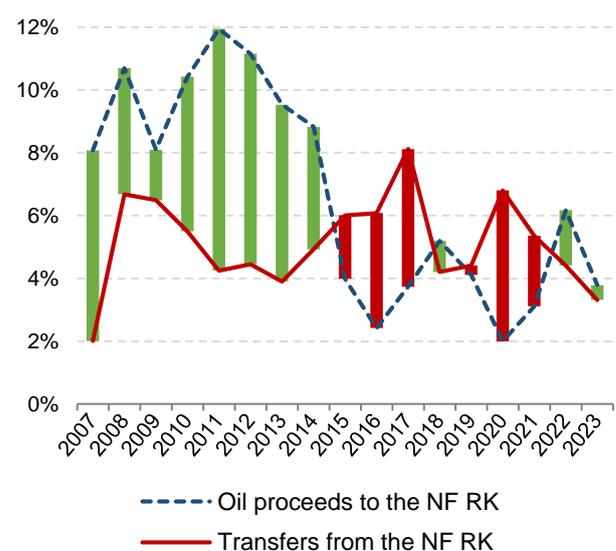
Despite the significant growth in budget revenues, the gap between expenditures and revenues of the republican budget remains significant. It is worth mentioning that in 2023, fiscal rules aimed at limiting the growth rate of expenditures were not applied during the budget amendment process. Thus, the expenditures of the republican budget in 2023, formed in the amount of 21 trln tenge, were increased by 1.5 trln tenge to 22.5 trln tenge when the republican budget was amended. The increase in budget expenditures occurred, among other things, due to the attraction of additional targeted transfers from the NF RK of 800 bln tenge.

Figure 1.51 Growth rates of budget spending are not in line with a steady path, and net accumulation of assets of the NF RK remains insignificant

Expenditures and revenues of the republican budget, % of GDP



Transfers from the NF RK and tax revenues to the NF RK, % of GDP



Source: MF RK, BNS RK, National Bank computations

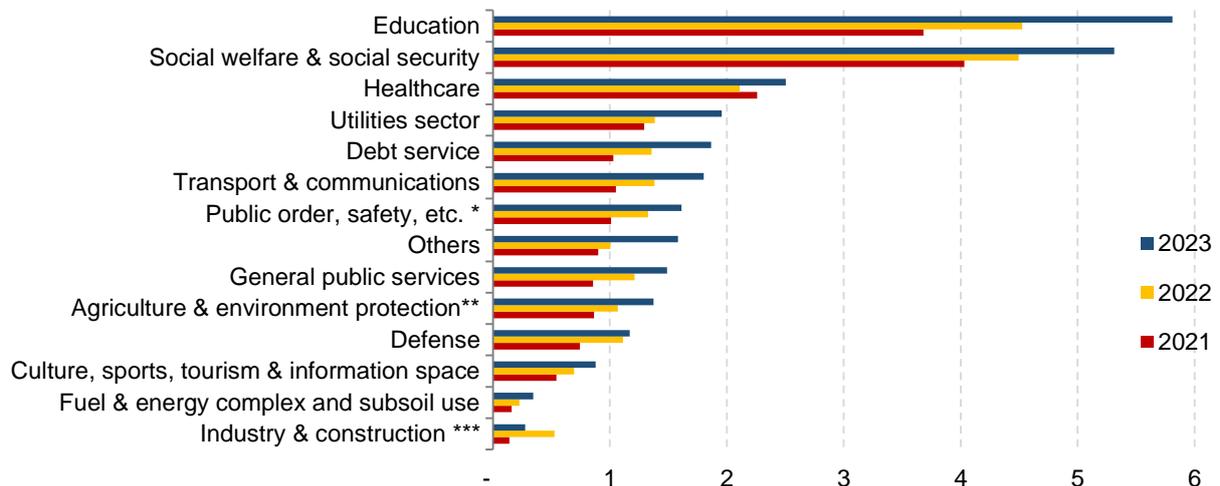
Note: Revenues to the RB including oil revenues are calculated as receipts in the RB minus transfers from the NF RK plus receipts from oil sector organizations. Non-oil receipts are calculated as receipts according to the MF RK data minus transfers from the NF RK and ECDs. In 2009, the CIT rate was lowered from 30% to 20%. The VAT rate was gradually reduced from 14% to 12% from 2007 to 2009.

Tax revenues from oil sector organizations in the NF RK amounted to 4.6 trln tenge, or 3.8% of GDP, decreasing by 28.8% compared to 2022 because of the decline in world oil prices from US\$99.8/bbl on average in 2022 to US\$82.6/bbl on average in 2023. At the end of 2023, net revenues to the NF RK amounted to 557.4 bln tenge, or 0.5% of GDP. As a result, the NF RK assets increased from 26.8 trln tenge in 2022 to 29.9 trln tenge in 2023, including due to an increase in investment return on the NF RK foreign currency assets to 11.4%.

1.4.2 State Budget Spending

State budget expenditures in 2023 amounted to 28 trln tenge, or 23.5% of GDP, an increase of 24.7% compared to 2022. The largest contribution to the growth in state budget expenditures was made by the spending on education, which in 2023 amounted to 5.8 trln tenge, or 4.9% of GDP, an increase of 28.4% compared to 2022. Expenditures on social welfare and security remain significant – 5.3 trln tenge, or 4.5% of GDP (an increase of 18.2% compared to 2022). In 2023, the largest increase in expenditures of 57.2% came from expenditures with the budget classification “other” – 1.6 trln tenge. State budget expenditures on utility services also went up significantly, having increased by 41.5% in 2023 to 2 trln tenge. Expenditures on servicing the government debt increased by 37.4% compared to 2022 and amounted to 1.9 trln tenge, or 1.5% of GDP.

Figure 1.52 *State budget spending by sectors, trln tenge*



Source: MF RK

Note: full names of categories of expenditures of the republican budget:

*Public order, security, legal, judicial, penal activities

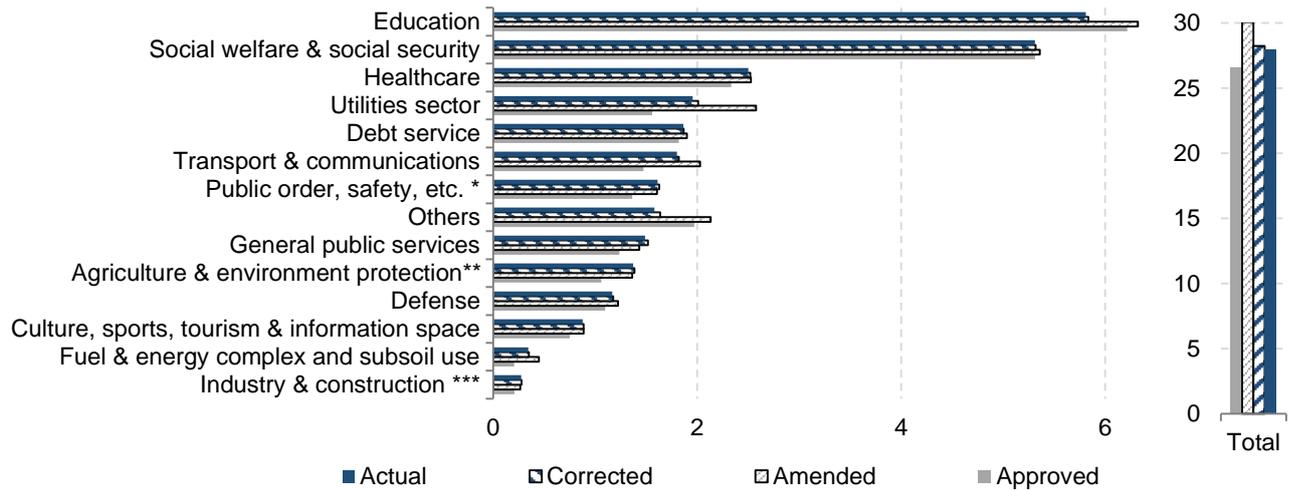
**Agriculture, water, forestry, fisheries, specially protected natural areas, environmental protection and wildlife, land relations

***Industry, architectural, urban planning and construction activities

Despite the over-fulfillment of the budget revenue plan largely due to the additional attraction of the NF RK resources, the plan for expenditures of the republican budget was under-fulfilled by 99.6 bln tenge, actually amounting to 21.4 trln tenge by the end of 2023. The plan for state budget spending was under-fulfilled by 261 bln tenge, if we take into account the corrected plan, and 2.1 trln tenge, if we take into account the amended plan, actually amounting to 28 trln tenge.

The largest contribution to the growth in expenditures when the state budget was amended was made by expenditures in the categories of “utilities” by 1 trln tenge, “transport and communication” – by 554.7 bln tenge, “agriculture” – by 302.1 bln tenge, “fuel and energy complex and subsoil use” – by 243.8 bln tenge. As a result of the state budget correction, budget expenditures were reduced by 6.1% from 30 trln tenge to 28.2 trln tenge. The largest correction was made to expenditures in the categories of “utilities” – a decrease of 569.0 bln tenge, “education” – reduction of 484.9 bln tenge, and “others” – a decrease of 495.4 bln tenge.

Figure 1.53 State budget spending by sectors in 2023, trln tenge



Source: MF RK

Note: full names of categories of expenditures of the republican budget:

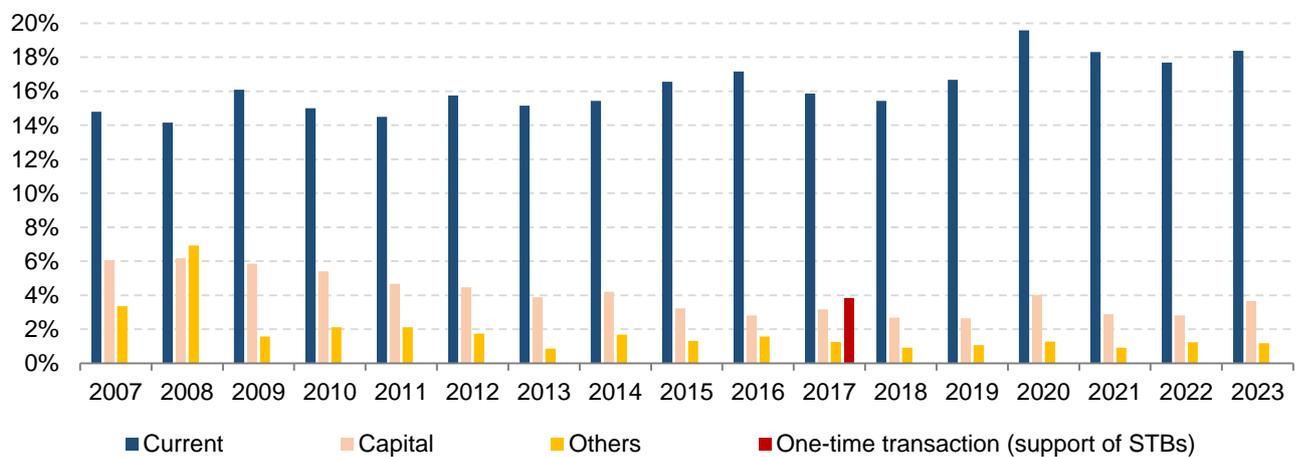
*Public order, security, legal, judicial, penal activities

**Agriculture, water, forestry, fisheries, specially protected natural areas, environmental protection and wildlife, land relations

***Industry, architectural, urban planning and construction activities

Thus, the actual execution of state budget expenditures was by 5.1% higher than the approved plan for 2023. The main contribution to the growth in actual expenditures was made by the spending on utility services – an increase of 397.6 bln tenge, transport and communications – an increase of 326.6 bln tenge, and agriculture – an increase of 313.9 bln tenge. At the same time, spending on education was by 405.2 bln tenge lower than the approved plan, and expenditures classified as "others" were lower by 390.1 bln tenge.

Figure 1.54 State budget spending in the economic classification, % of GDP



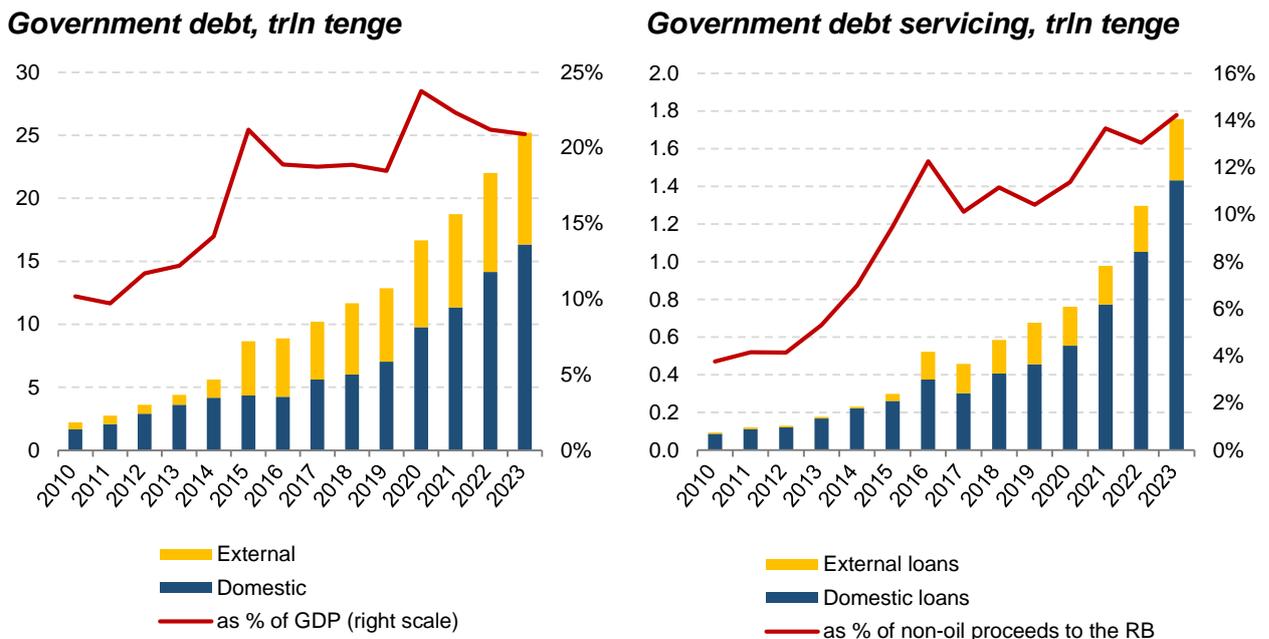
Source: MF RK, BNS RK, National Bank computations

Current expenditure still represents the main share of state budget spending and in 2023 it amounted to 22.1 trln tenge, or 18.6% of GDP. The share of capital expenditure remains insignificant – 4.4 trln tenge, or 3.7% of GDP. The high share of current expenditure, given the high share of social costs in the structure of government spending significantly reduces the flexibility of fiscal policy in the long run in terms of the possibility of adjusting and sequestering expenditure in the event of a crisis. At the same time, current expenditure does not bring long-term returns, but only supports current consumption, without creating prerequisites for a long-term economic growth.

1.4.3 Net Financial Assets

Government debt at the end of 2023 amounted to 24.9 trln tenge, or 20.7% of GDP. The dynamics of government debt remains stable in relation to GDP, but the debt burden on the republican budget is growing. In 2023, expenditures related to government debt servicing amounted to 1.8 trln tenge, an increase of 35.4% compared to 2022. The ratio of expenditures for government debt servicing to non-oil revenues of the republican budget was 14.8%, an increase of 1.8% since 2022.

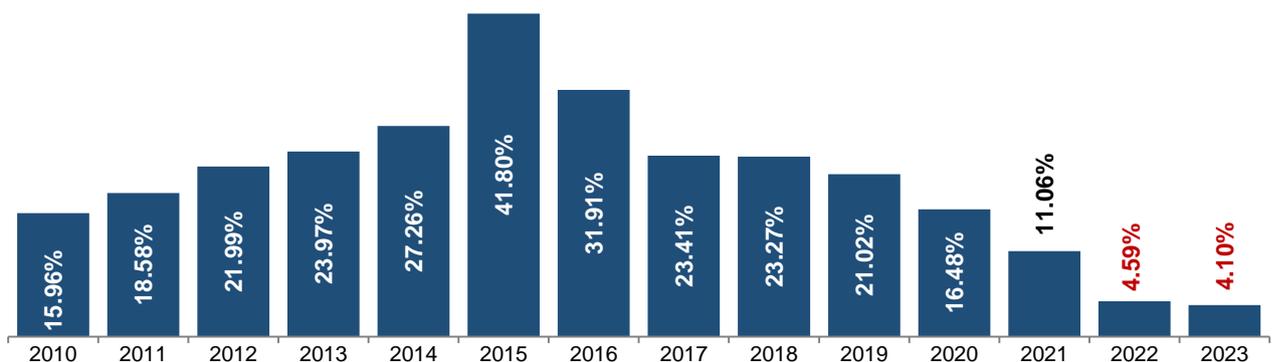
Figure 1.55 Government debt remains at a stable level in relation to GDP, however, debt burden on the budget is growing



Source: MF RK, BNS RK, National Bank computations

According to the results of 2023, the Government net financial assets went down to 4.1% of the GDP. The imbalance in public finances, which is expressed in a high gap between budget expenditures and revenues and is covered by the government net financial assets, leads to a narrowing of the fiscal space.

Figure 1.56 Net financial assets of the Government are reducing



Source: MF RK, BNS RK, National Bank computations

Note: The Government's net financial assets are calculated as NF RK assets minus government debt.

In the long term, the NF RK's saving function is a necessary condition for ensuring macro-fiscal stability. The increase in revenues of the state and republican budget, as well as compliance with fiscal rules in the formation and fine-tuning of the republican budget should remain as main priorities of the fiscal policy.

II Securities Market

In 2023, government securities retained their uneven maturity structure, which in some way already had a high volume of securities to be redeemed at a close date after a large issue of short-term bonds in 2022. The imbalance in maturities was aggravated by short-term redemptions on bonds issued in 2023 and the Eurobonds awaiting large redemptions in the period from 2024 to 2027. The unbalanced maturity schedule has a significant effect on the possible increase in refinancing risk.

By the end of 2023, five bond issues were consolidated to the equivalent of USD 1 bln. According to the 2024 plan for issuing government securities of the MF RK, it is scheduled to consolidate, including through additional placement, at least eight more issues as part of the inclusion of Kazakhstani government securities in the GBI-EM index.

The increase in the share of market investors in 2023 was observed owing to active participation of second-tier banks in the primary and secondary government securities market. Thus, STBs, in terms of the volume of the MF RK bonds purchased, became the largest buyers of the MF RK securities in the primary market, ahead of the UAPF. The increase in the activity of market investors is partly due to the monitoring of the activity of participants in the primary and secondary markets as part of the launch of the institution of primary dealers.

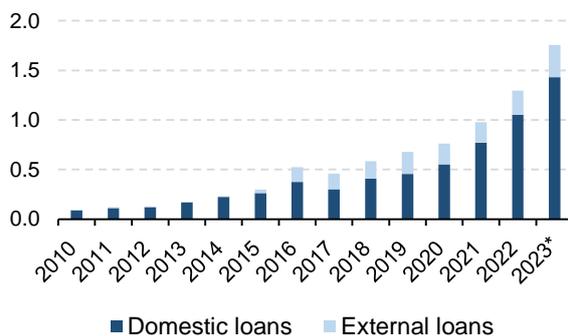
The zero-coupon yield curve remained inverted throughout 2023 amid expectations of the market participants about the decline in interest rates. Long-term government securities yields at auctions were at the level of 11.5–12% in 2023. At the end of 2023, given the lowering of the base rate, the yield curve declined at the short end.

2.1 Public Debt

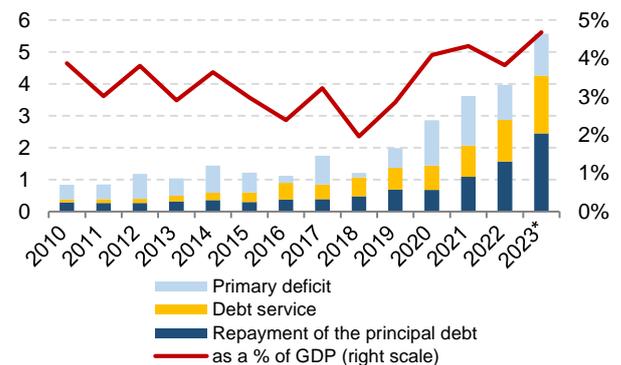
The debt burden on the republican budget increased compared to 2022 by 55.6% (*Figure 2.1*). Due to the growing volume of repayments, the gross need⁵ for debt financing of the republican budget amounted to 5.6 trln tenge, an increase of 40% compared to 2022.

Figure 2.1 The gross need for debt financing is growing, primarily due to the increase in debt repayment volumes

Government debt repayment, trln tenge



Gross need for debt financing, trln tenge



Source: MF RK, BNS RK, NBK computations

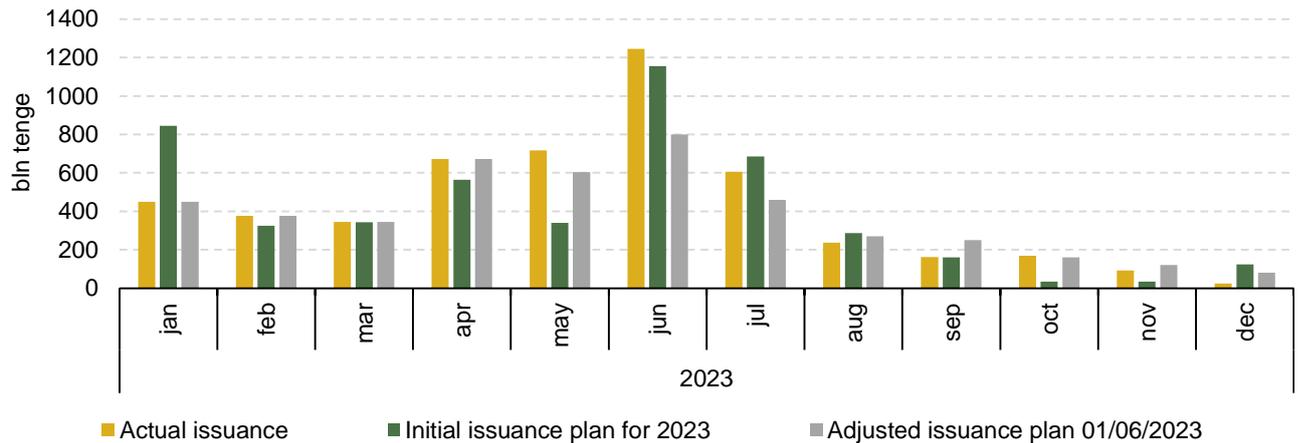
Thus, the gross need for debt financing increased to 4.7% of GDP. Over the past 5 years, the largest factor in the growth of the need for debt financing is the increased volume of repayments (44% of the total share in 2023).

⁵ Includes debt redemption and deficit (primary deficit and debt servicing).

The gross need for financing was mostly met (by 91.5%, or 5,096 bln tenge) by attracting domestic loans in the form of issuing treasury securities and to a lesser extent (by 4.5%, or 252 bln tenge) via foreign borrowings in the form of loans from international financial organizations and foreign states.

At the beginning of 2023, the plan for the placement of treasuries worth 4,898 bln tenge included the issue of bonds in the national currency of 3,959 bln tenge and Eurobonds of 940 mln tenge. However, in June 2023, the MF RK adjusted the plan towards increasing the attraction of domestic borrowing. Thus, in 2023 the MF RK borrowed 5,096 bln tenge in the domestic government securities market (*Figure 2.2*). As at the end of 2023, government bonds denominated in foreign currency were not issued.

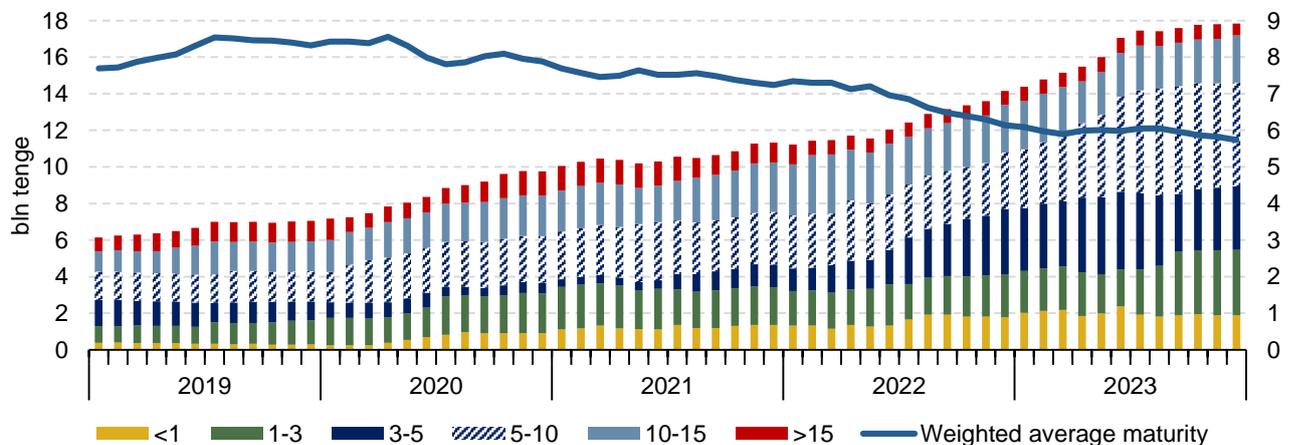
Figure 2.2 Planned and actual issuance of GSs of the MF RK in the tenge during 2023



Source: KASE, MF RK, NBK computations

As at the end of 2023, the volume of the tenge-denominated GSs of the MF RK in circulation equaled 17.6 trln tenge (*Figure 2.3*). The weighted average maturity of securities in circulation decreased from 6.1 years at the end of 2022 to 5.7 years at the end of 2023. The share of securities with a maturity of 5 to 10 years was 31.7% in 2023, while at the end of 2022 the share was 21.9% only. Despite the increase in the share of medium-term securities, the average weighted maturity of securities of the MF RK decreased due to the approaching maturity of securities issued in prior years. Thus, the share of securities in circulation with maturity of up to 5 years decreased from 54.2% in December 2022 to 50.1% in December 2023.

Figure 2.3 The maturity structure of GS of the MF RK and their weighted average maturity

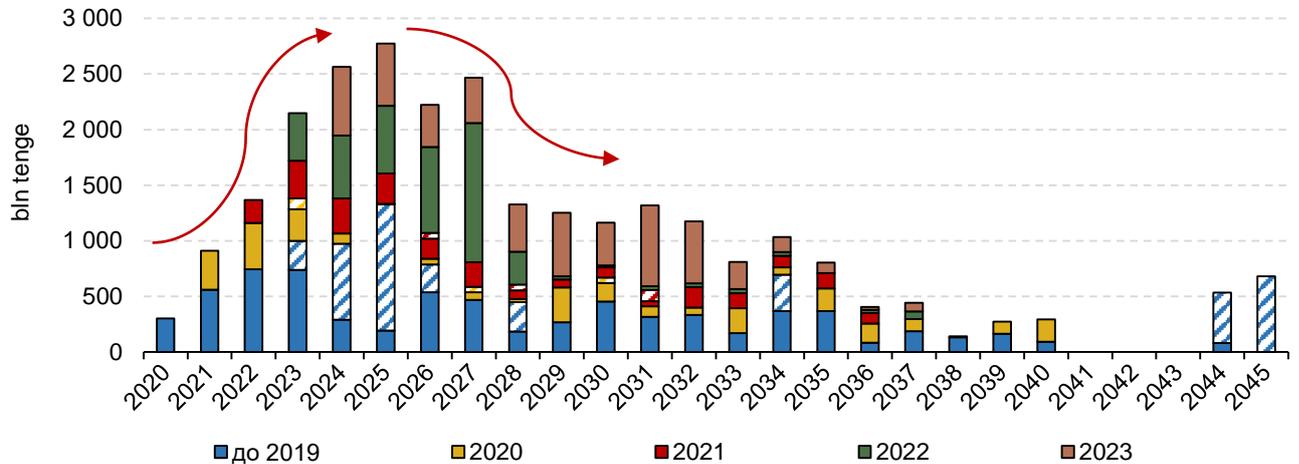


Source: CSD, NBK computations

Note: 1) left scale – the portfolio balance in trln tenge, right scale – weighted average maturity (years) 2) Euro bonds are not shown here.

At the end of 2023, the maturity structure of government securities issued by the MF RK was uneven (in terms of principal repayment, excluding coupon payments). In 2023, the volume of repayments showed a 24% increase (y/y) compared to 2022 (*Figure 2.4*). At the moment, there are low volumes of repayments at long terms and high volumes of repayments at short terms, which creates an imbalance in the repayment schedule.

Figure 2.4 Repayment profile of GSs of the MF RK, by the placement period



Source: CSD, MF RK, NBK computations

Note: solid fill – bonds denominated in tenge, pattern fill – Eurobonds. The value of Eurobonds was calculated at the official exchange rate of the NBK as at January 1, 2024.

Compared to 2022, when the MF RK mainly attracted short-term securities with maturity of up to 5 years, in 2023 the MF RK optimized the maturity structure of redemptions by attracting longer-term securities. In global practice, buyback or switch programs can be used to mitigate peaks of redemptions concentrated in large volumes for the near future.

Box 2.1 Buyback and Switch Programs⁶

Description

Issuers of Treasury securities have the option of acquiring some of their outstanding securities from investors through two different mechanisms, a buyback or a switch. A buyback, by definition, involves the issuer offering to repurchase the outstanding debt from investors at a mutually agreed price. A switch, by contrast, involves the issuer offering investors to exchange existing securities outstanding for newly issued securities at a mutually agreed price. Unlike other auctions, these transactions do not provide additional funding to the government, but they do affect the composition of the debt portfolio and the market liquidity of the selected bonds.

Expected Results

These instruments provide an opportunity to maintain market liquidity, effectively manage cash, improve the accuracy of liability management and reduce debt servicing costs.

International Experience

In 2022, 22 OECD countries used buyback or switch practices to regulate the redemption profile of government treasury securities.

In 2023, the volume of Eurobond redemptions amounted to 358.2 bln tenge (*Figure 2.4*). In 2024 and 2025, large Eurobond redemptions are expected in the amount of 681.8 bln tenge and 1,136.4 bln tenge, respectively. An unbalanced redemption schedule

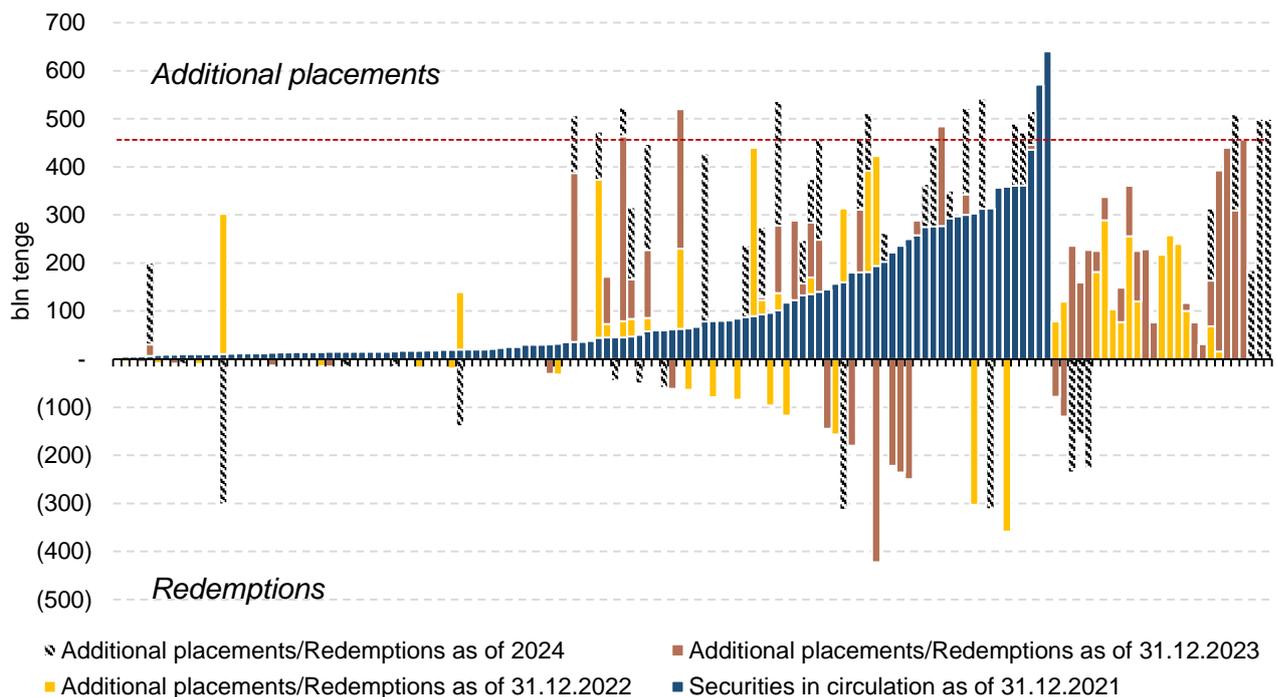
⁶ OECD Sovereign Borrowing Outlook 2023, Buyback and switch programmes: Evidence-based recommendations for sovereign debt managers

increases refinancing risk and currency risk. In other words, the concentration of principal repayment amounts in specific periods may increase the potential cost of new issues.

One of the positive trends in the securities market is the method of additional placements (“consolidation” of issues) (*Figure 2.5*). Thus, thanks to consolidation of securities, by the end of 2023, five issues exceeded the volume of 456 bln tenge (which is equivalent to 1 bln US dollars at the average exchange rate for 2023).

According to the plan published by the MF RK, at least 8 more issues with a volume in circulation of more than the equivalent of 1 bln US dollars are planned to be consolidated in 2024. The consolidation of securities is important for the MF RK’s long-term plan to be included in the GBI-EM⁷ (Government Bond Index – Emerging Markets) JP Morgan. Further reduction in the number of securities and consolidation of issues at certain maturities should contribute to increasing liquidity.

Figure 2.5 Additional placements and redemption of GSs of the MF RK



Source: CSD, the MF RK’s plan of issuance, NBK computations

Note: 1) balances by volume in 2021 were ranked in ascending order; 2) the 2024 plan of the MF RK; 3) each division on the X-axis means 1 unique ISIN code of the MF RK security; 4) USD/KZT rate 456.31 (average rate for 2023); 5) Eurobonds are not shown.

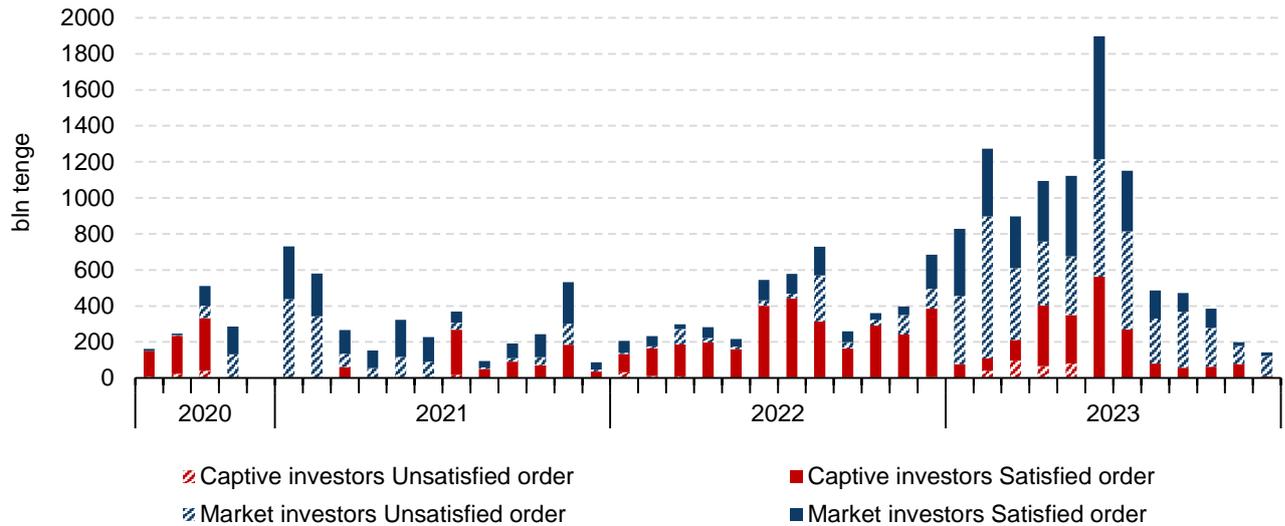
2.2 Microstructure of Government Securities

2.2.1 GS Auctions

Compared to 2022, in 2023 the number of bids from market investors increased (*Figure 2.6*). Market investors showed heightened activity from May to October 2023. However, in a comparative analysis, the number of unsatisfied bids from market investors is higher than that of captive investors. The increase in the number of market investors was mainly driven by the active participation of second-tier banks. In 2023, STBs became the main buyers of government securities in terms of the volume of bonds purchased at auctions by a large margin (*Figure 2.9*).

⁷ Emerging Markets Bond Index Global (GBI-EM) tracks the performance of emerging market bonds in local currency and is provided by investment bank JP Morgan. Emerging market bonds are debt instruments issued by developing countries that typically have higher yields than government or corporate bonds from developed countries.

Figure 2.6 Auction of GSs of the MF RK



Source: KASE, CSD, NBK computations

One of the reasons for the increased activity of market participants may be the monitoring of investor activity in the primary market within the framework of the institution of primary dealers⁸.

Box 2.2 Institution of Primary Dealers

Description

The introduction of the institution of primary dealers implies providing access to the issuer's primary auctions to a limited number of participants in exchange for fulfilling a number of obligations in the primary and secondary markets. The institution of primary dealers is an integral part of modern financial systems and plays a key role in the issuance and placement of government securities. Its presence allows the government to effectively manage the public debt, optimize the loan structure and ensure the stability of the financial market. This is especially important in the context of volatile economic environment.

Objectives

According to research by the International Monetary Fund and the World Bank, the institution of primary dealers is used in various countries to meet two main objectives:

- 1) a stable placement of GSs in primary auctions, thus ensuring an uninterrupted financing of the state budget deficit;
- 2) increasing liquidity of the secondary GS market, which promotes greater confidence of the bidders in the GS market and its performance indicators.

Expected Results

The presence of primary dealers reduces risks for the government and investors. The presence of primary dealers' obligations to maintain liquidity smoothes out price fluctuations and ensures market stability. This reduces the likelihood of financial crises and increases the confidence of investors, both local and foreign, in GSs.

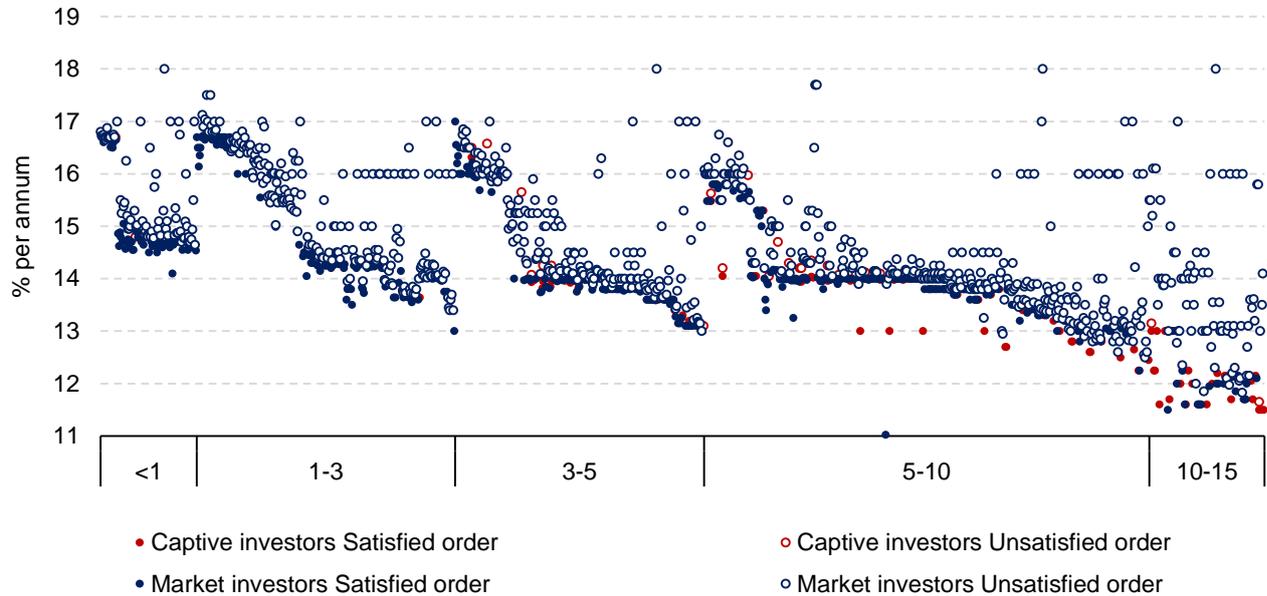
Source: "Institution of Primary Dealers in the Public Debt Market. Specifics of Functioning and Prospects for Implementation in the Government Securities Market of the Republic of Kazakhstan", Ryskeldiyeva A., Monetary Operations Department, NBK.

On average, market participants requested higher yields on medium- and long-term securities at initial offerings compared to captive investors (Figure 2.7). In these cases, bids

⁸ In order to provide equal conditions for joining the IPD for all market participants, a decision was made to conduct a monitoring period of 6 months to assess the activities of market participants in the government securities market. For the transparency of the process, the National Bank, in agreement with the Ministry of Finance of the Republic of Kazakhstan, developed a scoring model for assessing the activities of participants.

submitted with high yields to maturity are rejected at the cutoff price in favor of bids with lower yields to maturity. This is explained by the fact that the MF RK auctions are conducted using the specialized trading method (limited counter-bidding method); whereunder the optimal yield level is selected from the bids submitted, at which the declared volume at the auction is satisfied. Thus, when sorting yields from minimum to maximum, high yields that exceed the selected cutoff price threshold are most often cut off.

Figure 2.7 The yield⁹ of limited bids on specialized trades in GSs of the MF RK, by maturities (years) in 2023



Source: KASE, CSD, NBK computations

Note: 1) on the X-axis, within each maturity category, the yields for unique bids (on the date and issue of the security) are plotted in a vertical row; 2) not including bids for METIKAM

On the figure at the top, within each maturity category, yields to maturity are sorted by the bid date. Thus, yields submitted at the beginning of the year are higher than at the end of the year, as investor expectations for interest rates declined at the end of 2023.

2.2.2 Maturity Structure of GSs

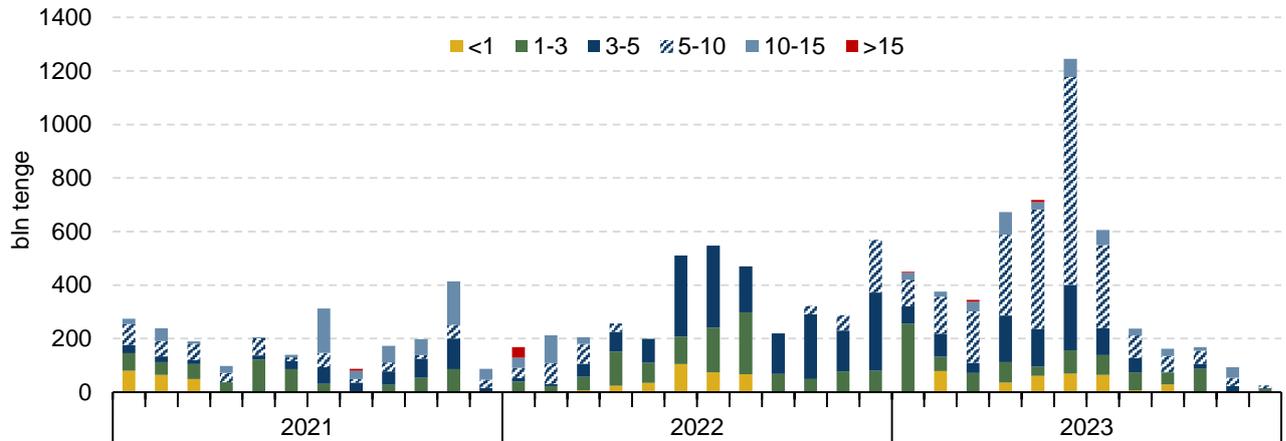
Compared to 2022, when the MF RK issued mainly short-term securities (with maturity of up to 5 years) due to the unstable situation in the country and in the world, in 2023 the MF RK resumed issuing medium-term securities with maturity of 5 to 10 years (*Figure 2.8*). For example, in 2023, 49.1% of all placements in the primary market were such securities (*Figure 2.9*).

High volumes of long-term securities in the primary market, on the one hand, contributed to the normalization of the maturity structure of the MF RK redemptions, and on the other hand, satisfied the demand of market investors to fix high interest rates against expectations of their lowering. An additional incentive for the activity of market investors in the market was the monitoring of investor activity within the framework of the institution of primary dealers.

⁹ The yield to maturity of a bond is understood as the expected yield on a bond for its purchaser upon redemption (end of the circulation period) of the given bond, without taking into account the possibility of reinvestment of the amounts received as interest on the bond; it is expressed as a percentage per annum (Source: KASE - Methodology for calculating the yield on bonds and the amounts of transactions with bonds).

Figure 2.8 After the unstable situation in 2022, in 2023 the MF RK switched over to issuing medium-term securities.

Initial on-exchange offering of securities issued by the MF RK by maturities, bln tenge



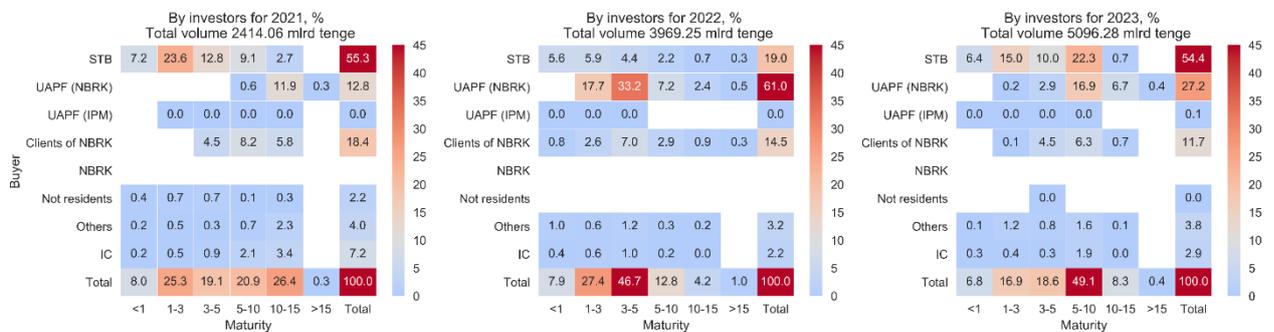
Source: KASE, CSD, NBK computations

2.2.3 Investor Base in the Primary GS Market

As at the end of 2023, the largest buyers of treasuries in the primary bond market of MF RK are STBs, UAPF (NBK) and the NBK clients (*Figure 2.9*). As in 2022, in 2023 there has been a problem of a homogeneous investor base. The share of non-residents in the primary market of the MF RK remains extremely low. Pension funds (managed by IPMs) also maintain a low share of participation in the market of the MF RK treasuries.

Figure 2.9 In 2023, STBs purchased more bonds at the MF RK auction than captive investors

Initial on-exchange offering of securities issued by the MF RK, by buyers and maturities, % of the total transaction volume a year

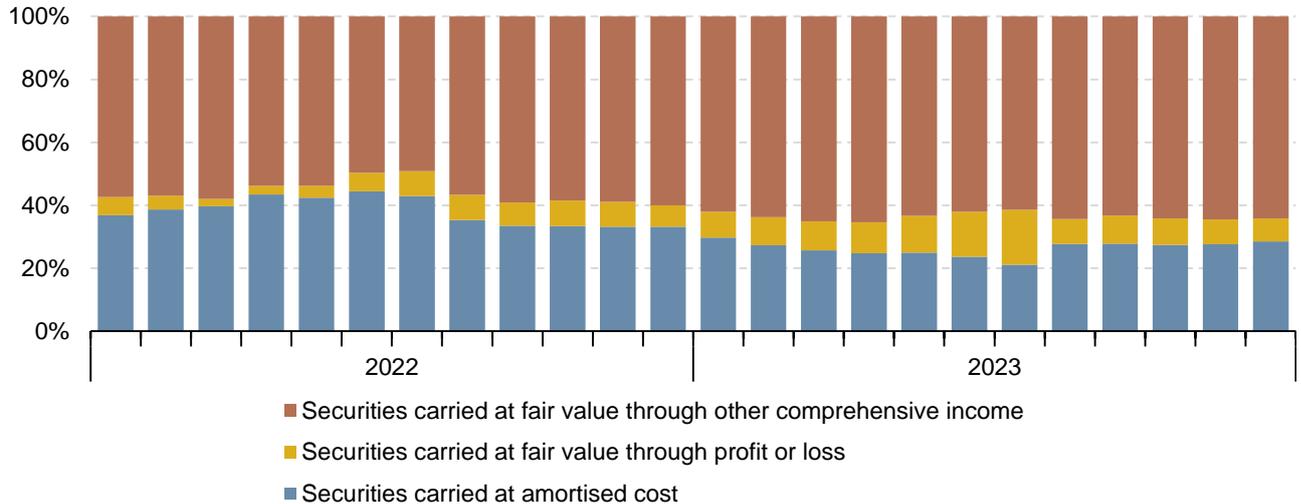


Source: KASE, CSD, NBK computations

At the auctions for the placement of treasuries of the MF RK, second-tier banks purchased 54.4% of all MF RK bonds placed during 2023, the UAPF (NBK) purchased 27.2%, organizations whose assets are managed by the NBK (hereinafter referred to as the NBK clients) – 11.7% of the total volume. Thus, they have been the three largest investors at the primary auction of the MF RK bonds not only in 2023 but also in prior years. At the MF RK auction, the three investors most often purchased short- and medium-term bonds. STBs purchased securities of almost all maturities, with the largest number of securities in the 5-10 year category (22.3% of all securities issued by the MF RK and offered in 2023). The NBK clients, just like STB clients, mostly purchased medium-term securities of maturities from 5 to 10 years (6.3% of all placed securities of the MF RK). The UAPF purchased GSs with maturities from 5 to 10 years (16.9%) and from 10 years (7.1%).

Based on international practice in accounting for securities, STBs, in order to trade in bonds at market prices, report the majority of GSs as other comprehensive income (Figure 2.10). This practice allows STBs to actively participate in transactions in the secondary GS market. In addition, regarding the total GS portfolio, STBs have had about 26% of the MF RK securities in circulation in their own portfolios over the past two years.

Figure 2.10 Structure of the MF RK GS portfolio on bank balance sheets

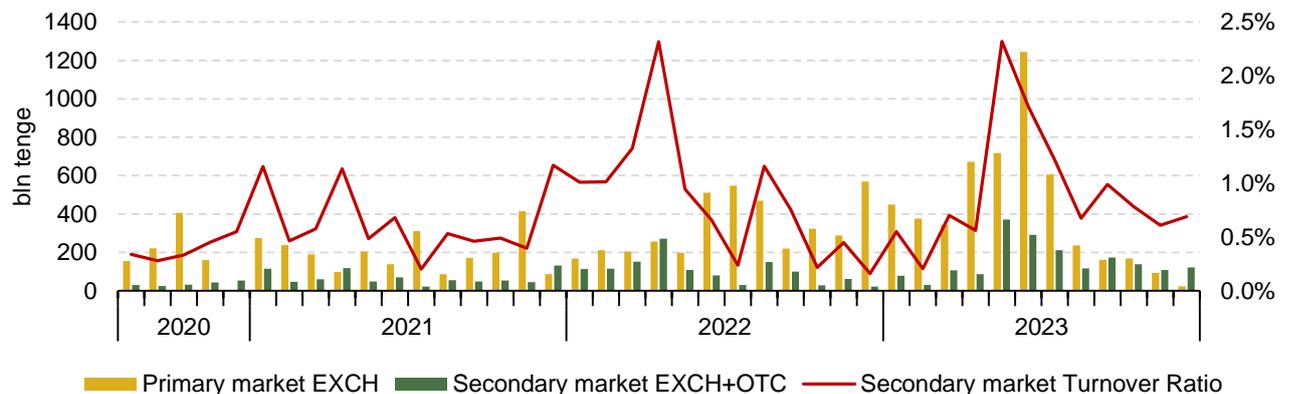


Source: the balance sheet structure of the MF RK securities portfolio held by STBs, NBK computations

2.3 Secondary GS Market

In 2023, namely during May-October, the transaction volume in the secondary market demonstrated performance that significantly exceeded historical volumes (Figure 2.11). The growth in the volume of transactions in the secondary market is partly due to the monitoring period as part of the launch of the institution of primary dealers.

Figure 2.11 Transaction volumes of GSs of the MF RK



Source: KASE, NBK computations

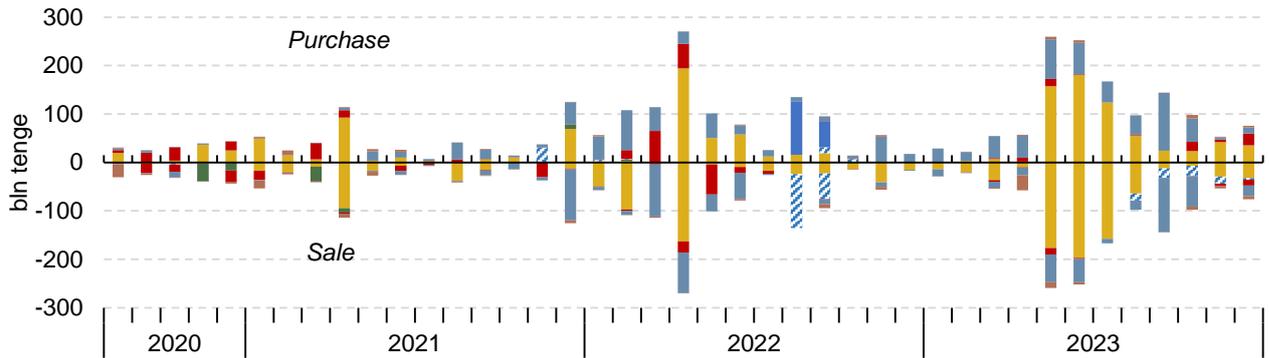
Note: Turnover Ratio (right scale) is calculated as the ratio of the turnover of transactions in the secondary GS market (on-exchange and off-exchange) to their volume in circulation according to the balance sheet (Figure 2.3)

The growth of volume in the secondary market accounted for 49% in 2023 (y/y). Despite the growth in volumes in the secondary market, liquidity of the secondary market remains quite low, with a maximum of 2.3% in May 2023.

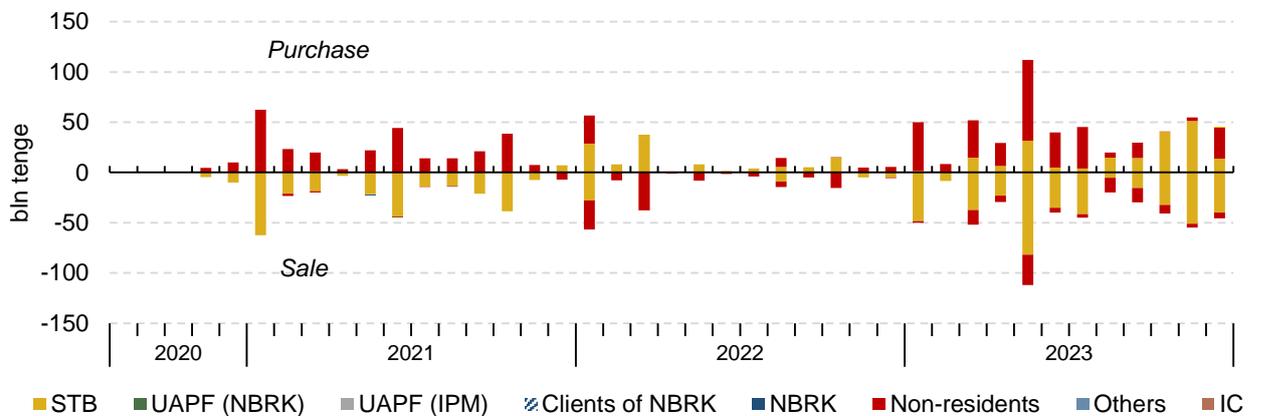
Compared to 2022, the inflow of non-residents has increased in the secondary off-exchange market (Figure 2.12). Thus, in 2023, non-residents bought 62.6% of the total volume on the off-exchange market, while in 2022 their share was only 29.1%. In 2023, banks and non-residents remained as the main buyers of treasury securities in the off-exchange market (37.3% and 62.6%, respectively).

Figure 2.12 Compared to 2022, in 2023 the inflow of non-resident investors in the off-exchange secondary market increased

The transaction volume in the secondary on-exchange market, by buyers and sellers



The transaction volume in the secondary off-exchange market, by buyers and sellers



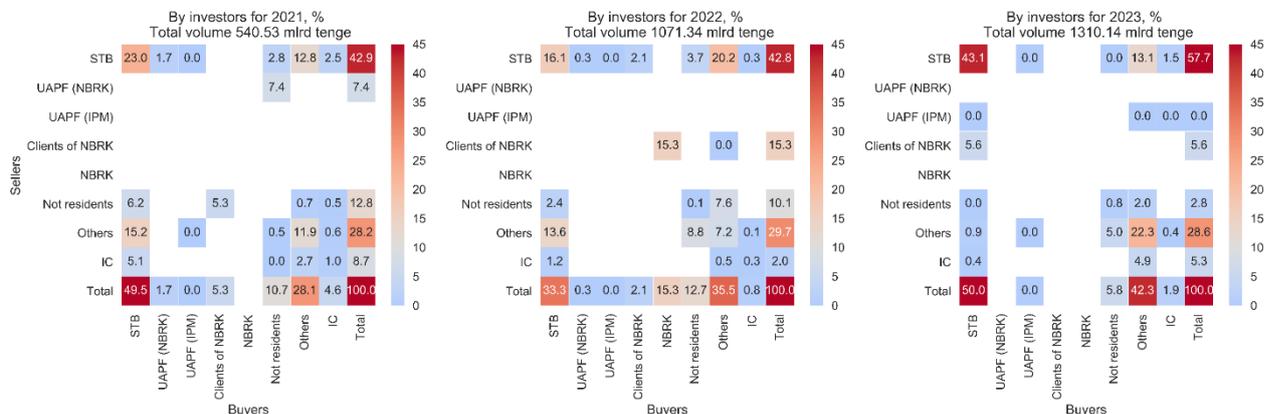
Source: KASE, CSD, NBK computations

Note: Transactions on AIX are not included into off-exchange transactions

The largest participants in the secondary market are STBs, UAPF and NBK clients. Thus, in the secondary market, transactions where STBs participated as the seller accounted for 57.5% of the total volume of transactions in the secondary market in 2023 (Figure 2.13), where trades with other second-tier banks accounted for a large share (namely 43.1% of transactions).

Figure 2.13 Market investors participate in a larger number of transactions in the secondary market than captive investors

The secondary on-exchange market of the MF RK securities, by buyers and sellers, %



Source: KASE, CSD, NBK computations

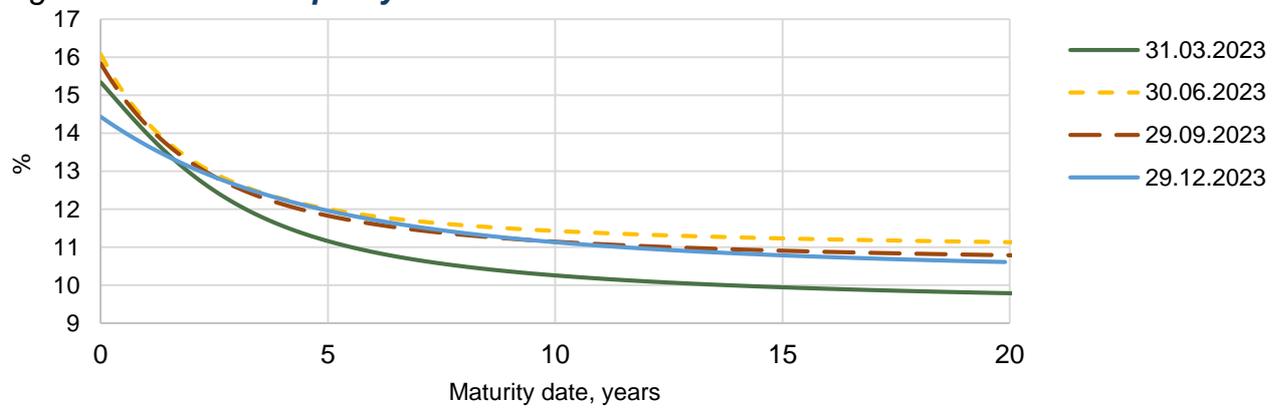
Other major holders of the MF RK securities, such as the UAPF (NBK) and the NBK's clients, have hardly sold any securities in the secondary market. For comparison, non-bank market investors, which have only a 3.8% share in the primary market, are more active in the secondary market than the UAPF and the NBK's clients. For example, non-bank market investors participated in the sale of the MF RK bonds in the secondary market in 2023 in 28.6% of all transactions of the secondary market.

Activity in the secondary market is supported mainly by market investors, who in 2023 make up the most significant share in the initial offering (58.2%) and in the secondary market (86.3%).

2.4 Yield Curve

The yield curve in 2023 remains inverted. The increase in the share of market participants at maturities of 5 to 10 years occurred against the expectations of market participants about the lowering of interest rates in the medium term.

Figure 2.14 *Zero-coupon yield curve*



Source: KASE computations, NBK

In 2023, the only buyer of long-term securities (with maturity of 10 years or more) in the primary market of the MF RK was the UAPF with a share of 7.1% of all treasuries placed on the primary market (Figure 2.9).

Despite the fact that the main buyer at the long end was the UAPF, market investors submitted bids with the required high rates, but according to the limit order method, market investors' bids were not satisfied. Thus, the long end of the yield curve is formed mainly by the activity of captive investors.

On average, market participants requested higher rates. Thus, in the second quarter of 2023, an increase in placement volumes and the accompanying increase in the share of market participants' bids being satisfied contributed to the growth of yields at the long and medium ends of the yield curve. In the fourth quarter of 2023, given the lowering of the base rate, a decrease at the short end of the yield curve was observed.

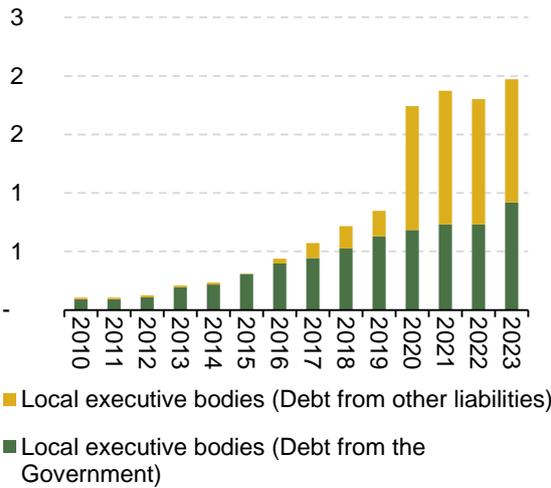
Box 2.3 *Securities of Local Executive Authorities and Corporate Bonds*

Municipal Bonds

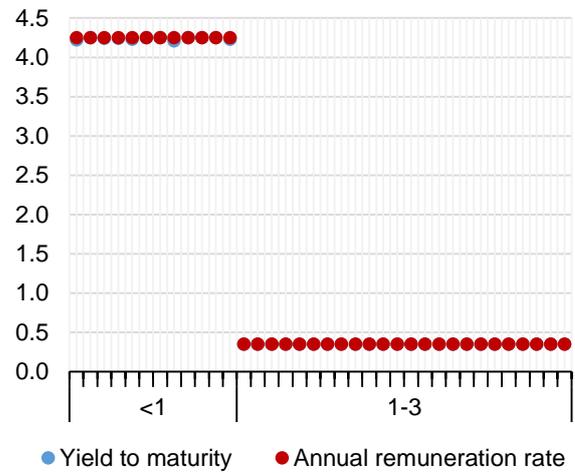
Figure 2.15 shows the debt of local executive bodies (akimats), indicating that debt raised from the government has decreased. Starting in 2016, akimats increased the share of raised debt from "other liabilities," which includes the issue of bonds to finance socially important projects in regions and cities (Figure 2.15). These bonds are issued at a low interest rate, which ensures inexpensive debt servicing for akimats. For securities with maturity of less than one year, the yield to maturity is 4.25% per annum, and for securities with maturity of 1 to 3 years – 0.35% per annum.

Figure 2.15 Akimats moved to a partial own debt financing via bond issuance

Debt of local executive authorities, trln tenge



Yield and coupon rate of bonds issued by LEAs in 2023, by maturities, %

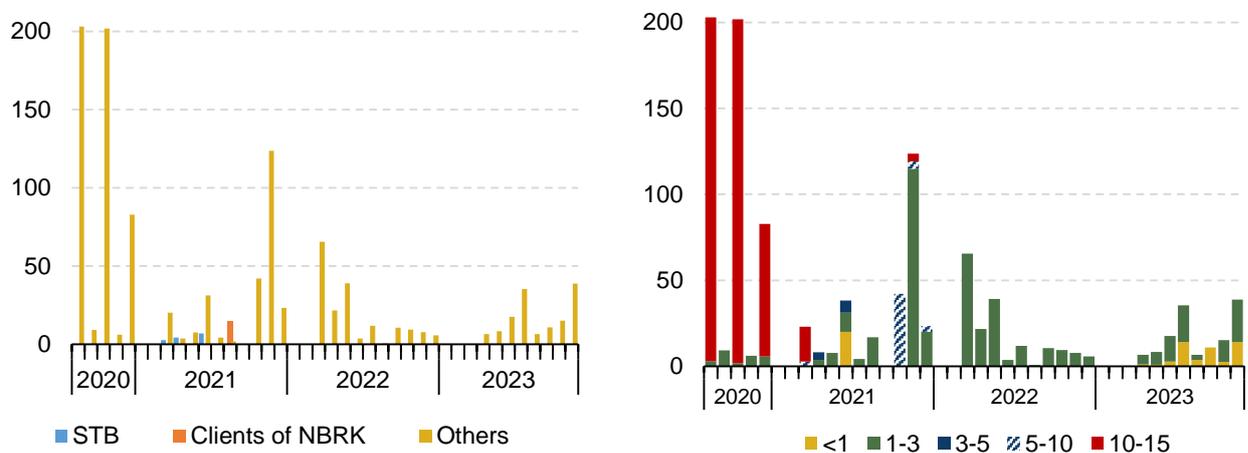


Source: MF RK, KASE

In 2023, the main holder of bonds from akimats is the Baiterek holding company (“other” category) (Figure 2.16). The main purpose of this financing is the construction of credit-linked and rental housing. In 2023, akimats issued only short-term securities with maturities of up to three years. Last time long-term bonds were issued in November 2021.

Figure 2.16 Bonds of LEAs are short-term and are aimed at social project financing

Volume of placements of bonds of LEAs in the primary on-exchange market, by buyers and maturities, bln tenge



Source: KASE, CSD

Corporate Bonds

Yields and placement volume of corporate bonds in the tenge are much higher than of bonds issued in foreign currency

The share of issued bonds in foreign currency (in the US dollars) hit a record in 2022 and amounted to 26.9% of the total volume of placements. In 2023, most of the foreign currency bonds were placed in the first half of the year, and over the year, their share had amounted to 17.7% (Figure 2.17). In 2023, the largest number of foreign

currency corporate bonds were placed by microfinance, leasing organizations, collection agencies and, to a small extent, international financial organizations. Thus, the risk profile of these organizations remains quite high; there is currency risk in servicing bonds denominated in foreign currency.

Figure 2.17 The volume of issued corporate bonds, by issuers and currency of bond issuance (exchange transactions), bln tenge

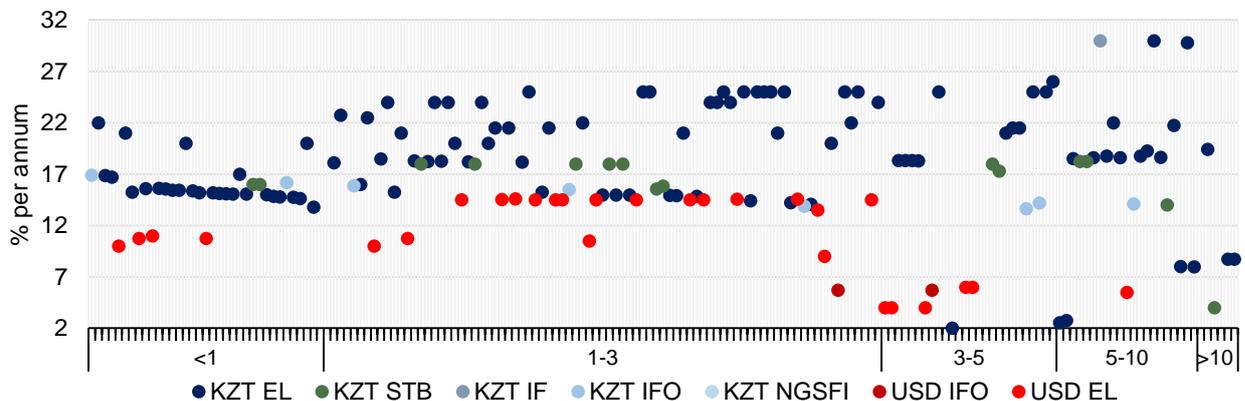


Source: KASE, CSD

Note: 1) each division on the X-axis refers to the month of the issued securities; 2) the share of bonds in foreign currency is calculated as the ratio of the volume of bonds denominated in foreign currency and the total volume of bonds for a given year; 3) LE - legal entities in the Republic of Kazakhstan (except for STBs), STBs - second-tier banks, IF - investment fund, NGSFI - non-government securities of a foreign issuer, IFO - international financial organizations; 4) exchange transactions do not include transactions on the AIX.

When comparing the expected yield to maturity of the tenge and foreign currency corporate bonds, it follows that among the corporate securities issued in 2023, the expected yield to maturity was higher for the tenge bonds (Figure 2.18). The low expected yield to maturity of bonds denominated in foreign currency does not include the currency risk, which also affects the investor and the issuer at the time of redemption of the security.

Figure 2.18 Corporate bond transactions, by issuers and maturities, issued in 2023 (exchange transactions), yield to maturity, % per annum



Source: KASE, CSD

Note: 1) each division by the X-axis refers to the ISIN code of the issued security within a certain maturity category; 2) the expected yield to maturity is calculated by the KASE; 3) LE are legal entities in the Republic of Kazakhstan (except for STBs), STBs are second-tier banks, IFs are investment funds, NGSFE are non-government securities of a foreign issuer, IFOs are international financial organizations; 4) corporate bonds traded in net prices are shown; 5) yield to maturity is for completed transactions (not for bids).

In 2023, among corporate bonds denominated in the national currency, issuers from the categories of legal entities in the Republic of Kazakhstan and second-tier banks have the highest expected yield to maturity at different maturity intervals. From Figure 2.18 it also follows that most of the securities issued in 2023 fall within the maturity range of 1 to 3 years. Bonds denominated in foreign currency were more often of a short- and medium-term nature (up to 5 years).

III Residential Real Estate Market

In 2023, prices in the primary residential real estate market have shown a slight increase since March 2023, while prices in the secondary market have been declining during three quarters of 2023, with a slight recovery in Q4. Despite a significant decrease in the volume of concessional programs, prices in the residential real estate market remained stable, and activity remained at a high level. In 2023, the number of purchase and sale transactions went down by 20.5% compared to 2022, but shows an increase compared to pre-pandemic levels. The number of apartments commissioned in 2023 increased by 20.2% after the reduction in 2022. Given a decrease in the volume of concessional mortgage programs, the volume of marketed mortgage loans increased significantly. Thus, the share of marketed mortgage loans went up from 15.5% in 2022 to 34.6% in 2023. The concurrent growth in weighted average rates in the mortgage market contributed to the growth of the population's debt burden in the primary market and did not have a significant impact on the secondary market. However, the main factor in the growth of the debt burden in recent years is the rise in prices for residential real estate.

LTV at the time of issuance of loans is at sustainable levels, while given the growth in marketed mortgage loans, the share of loans in the less risky LTV category increased from 40% to 50%. Due to a significant share of residential property in the collateral of second-tier banks for secured consumer loans, further growth in residential property prices above sustainable levels potentially poses risks to the collateral of second-tier banks.

3.1 Trends in the Residential Real Estate Market

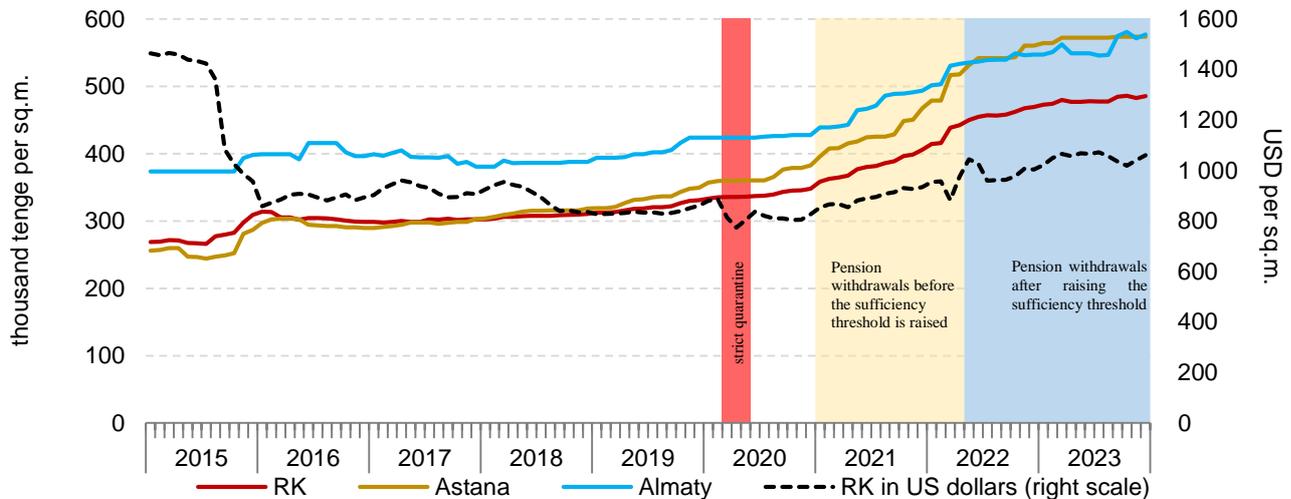
In December 2023, prices for new housing increased by 2.7% compared to December 2022. In nominal terms, the price per 1 sq. m. of primary housing in Kazakhstan was 494.9 thousand tenge, in Almaty – 577.6 thousand tenge, and in the capital – 588.8 thousand tenge.

By the end of 2023, average prices for real estate in Kazakhstan in the secondary market declined by 3.7%. After a significant rise in average monthly prices for residential real estate in 2022, since the beginning of 2023, a reverse correction of average prices in the secondary market has been observed. Moreover, at the end of 2023, price indicators for housing in the primary and secondary markets balanced in absolute terms.

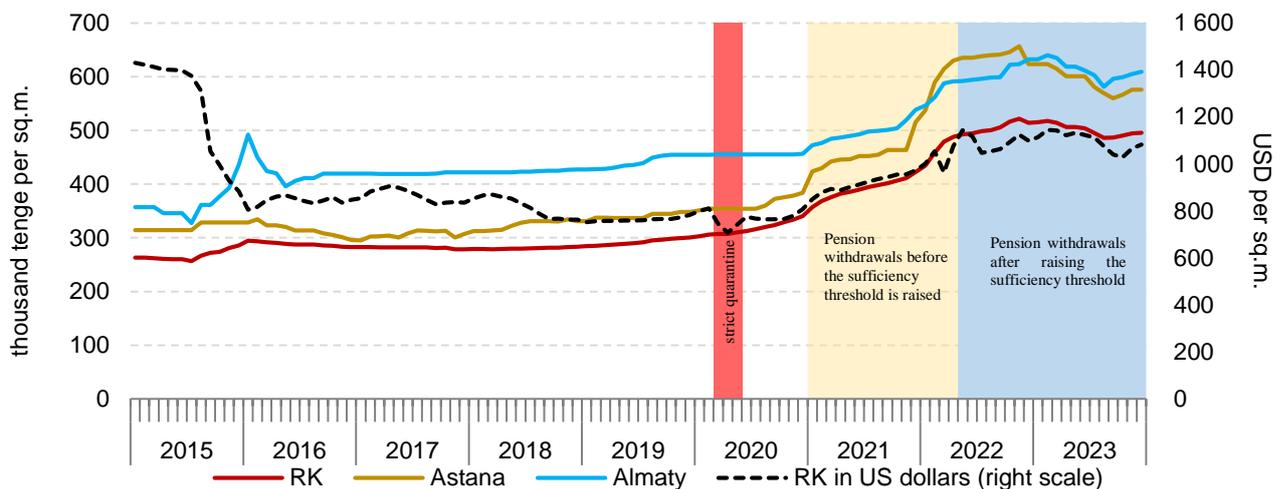
In terms of currency, prices in the primary and secondary residential real estate markets, after a significant drop at the end of 2015, were gradually declining until the end of 2020. After the population was given an opportunity to withdraw pension savings in excess of the sufficiency threshold, prices have increased, but remain significantly lower than the mid-2015 figures.

Figure 3.1 By the end of 2023, average prices in the RK in the primary and secondary real estate market had balances in nominal terms

Prices in the primary market



Prices in the secondary market



Source: BNS ASPR RK, NBK computations

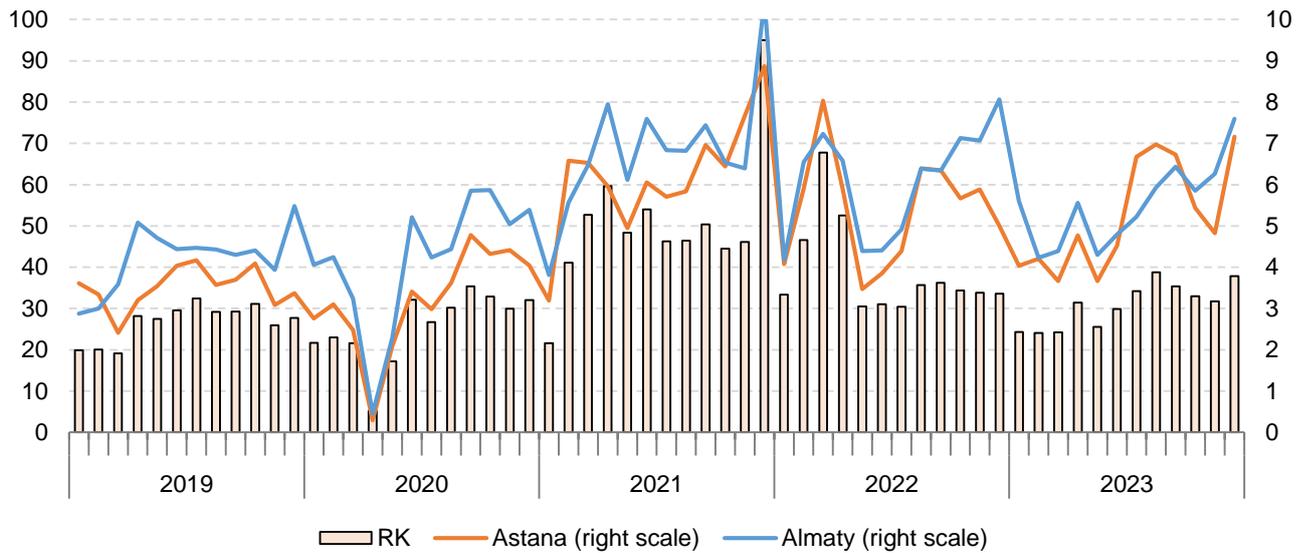
Note: prices were recalculated using the monthly BNS ASPR RK indices. Real estate prices were used as the starting point for the recalculation in 2023.

In the first half of 2023, the volume of transactions in the real estate sector decreased, but later this trend re-adjusted to the level characteristic of the same period in 2022 (Figure 3.2). This phenomenon is the result of seasonality and is associated with an increase in activity in the field of real estate purchase and sale transactions in the second half of the year. Since 2014, an increase in the number of transactions compared to the first half of the year has been regularly observed in the second half of the year, with the exception of 2022.

In 2023, the number of home purchases and sales went down by 20.5% on a year-on-year basis, from 465.8 thousand to 370.6 thousand. It is worth mentioning that in 2023, activity in the residential real estate market declined significantly compared to 2021 and 2022. However, the number of transactions at the end of 2023 was higher than in 2019-2020. The significant reduction in the number of transactions is explained by an increase in the sufficiency threshold for early withdrawal of a part of pension savings in April 2022, as well as the fact that persons who had the opportunity to withdraw monies early took advantage of this opportunity in 2021 and 2022. In addition, since the beginning of 2023, an annual limit of 100 bln tenge has been imposed on the “7-20-25” concessional mortgage program.

Figure 3.2 In 2023, the number of transactions went down by 20.5%

The number of purchase and sale transactions in the real estate market, in thous.



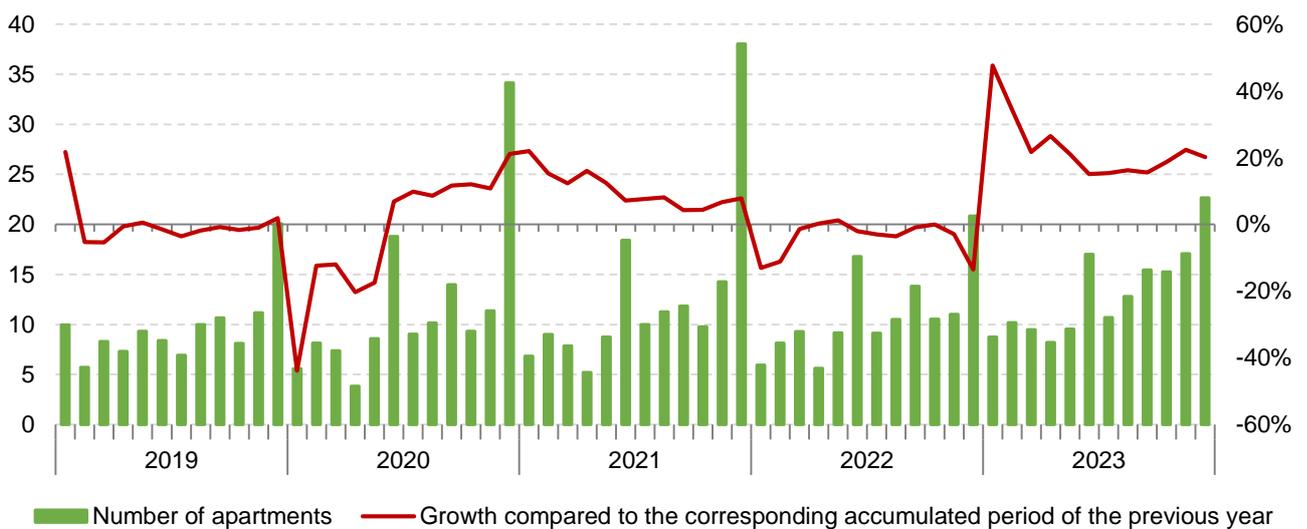
Source: BNS ASPR RK, NBK computations

3.2 Housing Construction

According to the BNS data for 2023, the total volume of financing directed to the construction of residential buildings in Kazakhstan amounted to 3.2 trln tenge approximately, an increase of 36.0% compared to 2022. During the same period, 17.5 mln square meters of total area of residential buildings were commissioned, which is by 11.9% higher than the level of 2022. In addition, 157 thousand apartments were built, which is an increase of 20.2% compared to the same period of the previous year. The average actual cost of construction of 1 square meter of total area of residential buildings in 2023 amounted to 182.6 thousand tenge, which is by 21.5% higher than in 2022.

Figure 3.3 In 2023, activity in the construction sector demonstrated notable upturn

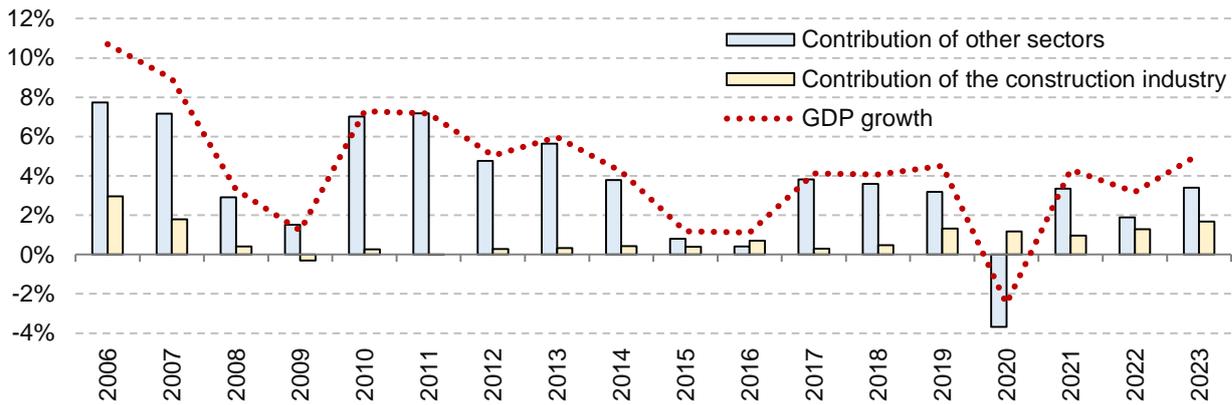
The number of commissioned apartments in residential buildings in the RK, in thous.



Source: BNS ASPR RK, NBK computations

In 2023, almost a half of the apartments commissioned are concentrated in Astana and Almaty (about 46.0 and 26.6 thousand apartments, respectively). Shymkent ranks third with 9.7 thousand apartments commissioned.

Figure 3.4 The contribution by the construction sector to the real GDP growth increased from 1.3% to 1.7%



Source: BNS ASPR RK, NBK computations

The real GDP growth in 2023 was 5.1%, the highest since 2014. Since 2019, the construction sector has made a significant contribution to the real GDP growth, amounting to about 1.7% (Figure 3.4). The contribution of other sectors of the economy also increased from 1.9% in 2022 to 3.2% in 2023. At the same time, the observed contribution of the construction sector has grown significantly since 2008, but does not reach the pre-crisis levels of 2006 and 2007.

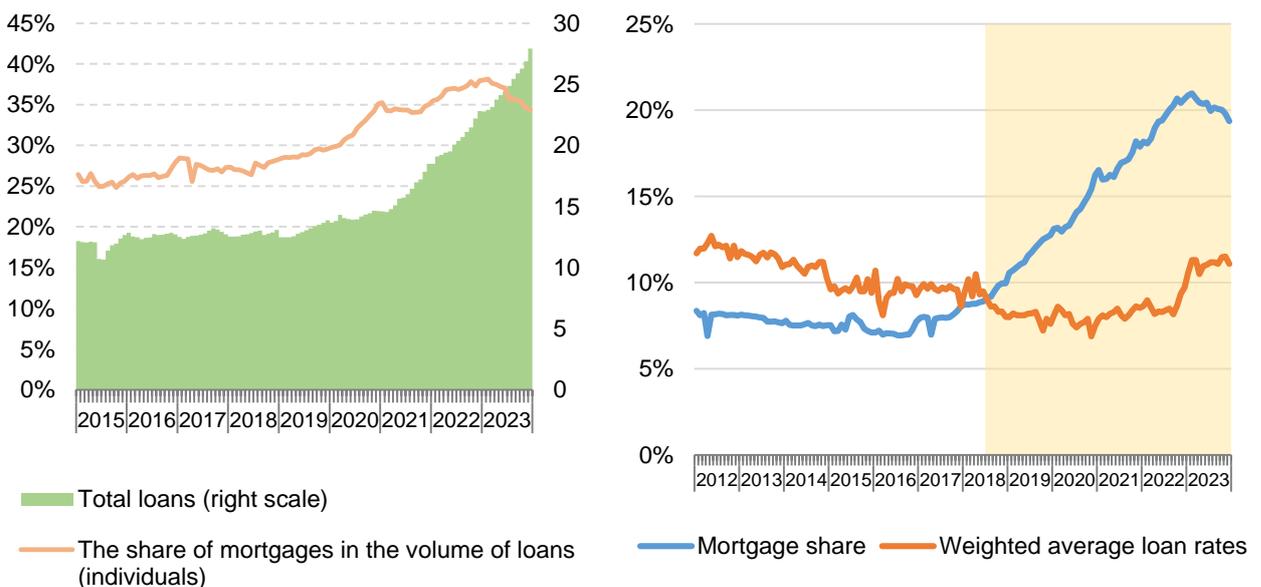
3.3 Mortgage Lending

In February 2023, the share of mortgage lending in the total volume of loans provided by banks to natural persons, including individual entrepreneurs, reached an all-time high and amounted to 38.14%. However, during the year, there was a trend towards reduction in the share of mortgage loans in the total volume of bank lending, accompanied by an increase in weighted average interest rates on mortgage lending (Figure 3.5).

Figure 3.5 In 2023, market-based mortgage lending from STBs showed a sizable ramp-up

Mortgage lending volumes, in terms of STB total lending, trln tenge

Weighted average interest rates on mortgage loans provided

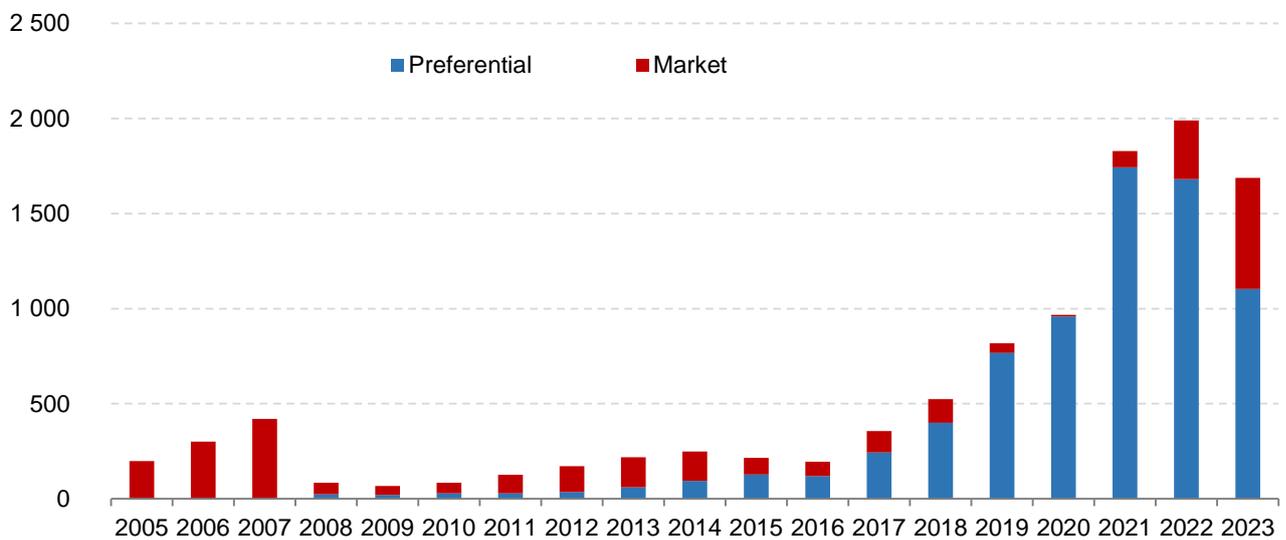


Source: NBK

The share of mortgage loans in total lending decreased from 20.7% in December 2022 to 19.0% in December 2023, against the increase in weighted average interest rates from 9.7% to 11.1%, respectively. The increase in weighted average rates on mortgage loans is stemming from the limitation of funding for the “7-20-25” program to 100 bln tenge per year in 2023, and the absence of other government concessional mortgage programs.

According to STB reports, second-tier banks, including Otbassy Bank, originated mortgage loans to the population in the total amount of 1.69 trln tenge during 2023. The volume of mortgage loans provided by Otbassy Bank was 1 trln tenge, or 59.4% of the total volume of mortgage lending. However, in 2023, the share of the “7-20-25” government concessional mortgage program decreased to 5.9% of the total volume of mortgage lending, while in 2022 this program accounted for 21.2% of the total volume. This is due to limitations on funding in the amount of 100 bln tenge per year, which led to a significant contraction in the share of the “7-20-25” program.

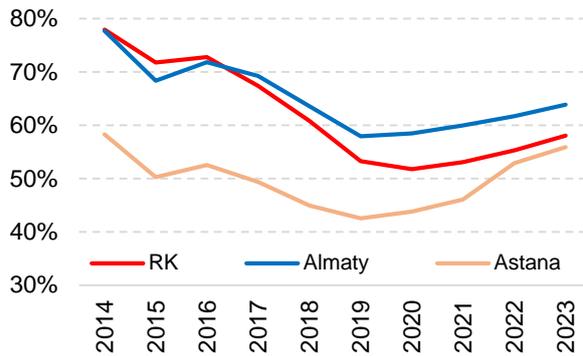
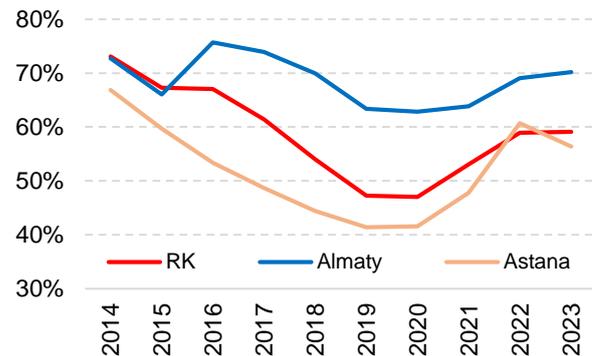
Figure 3.6 *In annual terms, the volume of market-based mortgage lending doubled*
Volumes of mortgage loans provided, bln tenge



Source: NBK computations

In addition, in 2022, the total share of concessional programs, including mortgage lending from Otbassy Bank and the “7-20-25” program, was 84.5%, while in 2023 the share of concessional mortgage lending decreased to 65.4%. In 2023, the volume of mortgage lending went down by 15.2%; however, meantime, market-based mortgage lending increased by 2 times. However, the new government concessional mortgage programs “Otau” and “Nauryz”, which will start on March 1 and May 1, 2024, respectively, may limit further growth of market-based mortgage lending from STBs.

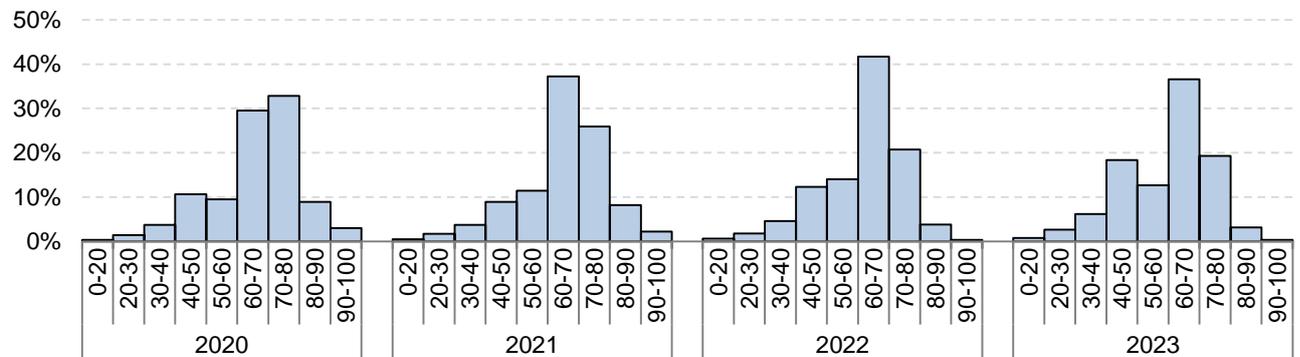
The estimated ratio of mortgage payment to household disposable income has been growing since 2019 in Almaty and Astana and since 2020 – across the Republic of Kazakhstan (Figure 3.7). Taking into account the reduction in weighted average rates on mortgage loans in the period from 2019 to 2022, the main factor in the growth of the population's debt burden on mortgage loans was the rise of prices in the residential real estate market.

Figure 3.7 Payment on a mortgage to household disposable income continues to grow
Primary housing

Secondary housing


Source: STB reports, BNS ASPR RK, NBK computations

Note: Mortgage payment was calculated as average housing prices of 54 sq.m., down payment of 30%, average STB rates, for a term of 20 years. Disposable income is calculated as nominal money income of households minus taxes, payments and other payments, current transfers to households

LTV indicators at the time of loan origination in 2023 were at stable levels. LTV is the ratio of the loan amount to the value of the property transferred as collateral to the credit institution. Thus, the largest number of loans fall in the range of 60-70%, which is due to the high volumes of Otbassy Bank's interim loans. (Figure 3.8). Given the tightening of requirements for Otbassy Bank's bridge loans and the growth in the share of market mortgage products, there has been an increase in the share of loans in the LTV category from 40% to 50% with a concurrent reduction in the share of loans in the LTV category from 50% to 60% and from 60% to 70%.

Figure 3.8 LTV at the time of loan origination


Source: Credit Register

Residential real estate occupies a significant share in the structure of collateral for consumer lending to individuals, accounting for 37.1% of secured consumer loans. Thus, the growth of residential real estate prices above sustainable levels may pose risks to the collateral of second-tier banks.

Table 3.1 Types of loans provided to individuals, by loan collateral, as at the end of 2023

	Car	Residential premises	Lands	Commercial premises	Other	Devices	Financial instruments
RML	0,1%	80,1%	0,1%	3,7%	1,2%	0,1%	14,8%
Secured consumer loans	1,8%	37,1%	0,6%	16,5%	0,9%	0,2%	42,9%

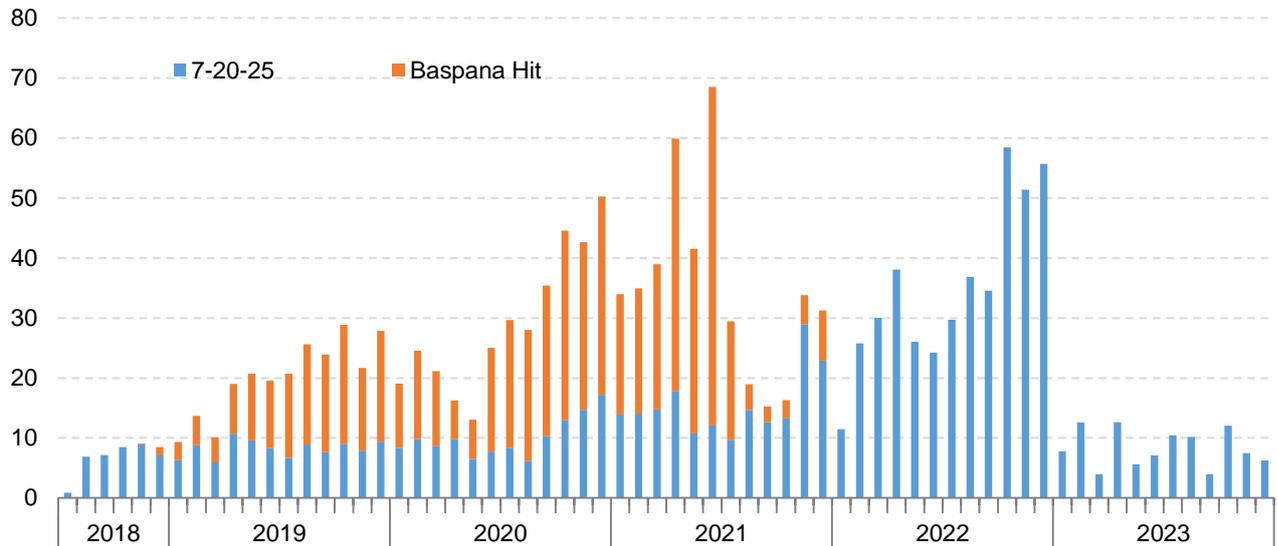
Source: Credit Register

3.4 Government Programs

There is a consistently high demand for concessional mortgage programs, which have been replaced by each other over time. Thus, at the first stages, the most popular concessional mortgage program was “Baspana Hit”, but after its completion in 2022, demand “flowed” into the “7-20-25” program (*Figure 3.9*).

Figure 3.9 Volumes of the “7-20-25” mortgage program demonstrate a sizable reduction

Dynamics of a disbursed amount under the “Baspana Hit” and “7-20-25” programs, bln tenge



Source: STB reports, NBK computations

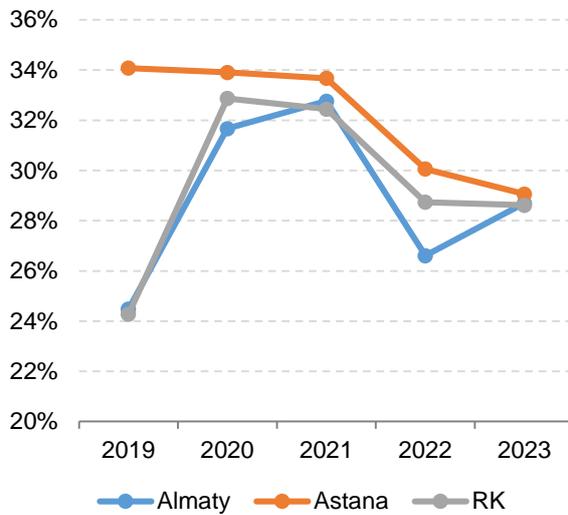
In 2022, the number of applications submitted for participation in the “7-20-25” concessional lending program exceeded the figures for 2021 by more than 5 times. However, in 2023, the number of applications submitted decreased almost three-fold compared to 2022. At the same time, the volume of loans provided under the “7-20-25” program went down from 422.2 bln tenge in 2022 to 100 bln tenge in 2023 due to the new limitations imposed, which is a 4.2 time reduction compared to the previous period. In addition, in 2023, the conditions for bridge loans in Otbassy Bank were tightened. According to the bank, 79.9 thousand loans were provided in 2022, of which 68.0% were bridge loans. Most of these loans were issued with a valuation indicator equal to zero, which shows that the clients had no savings at the time of receiving the loan and were not part of the Otbassy Bank system. Now consumers have to wait from three months to one year before they can apply for a mortgage, despite having 50% of the cost of the housing at their disposal. As a result, in 2023, Otbassy Bank originated 64.8 thousand loans, which is 19.0% less than the previous year; in the loan structure, 61.6% were interim loans.

From 2019 to 2023, the ratio of monthly mortgage payments to income of households participating in the “7-20-25” program increased from 24.3% to 28.6% at the national level, while maintaining the level observed in 2022 (*Figure 3.10*). Compared to 2019, the cost of housing purchased in 2023 increased by 24.4%, reaching 18.1 mln tenge. Such significant rise in the cost of housing affected monthly mortgage payments under the “7-20-25” program, leading to an increase of 20.2%.

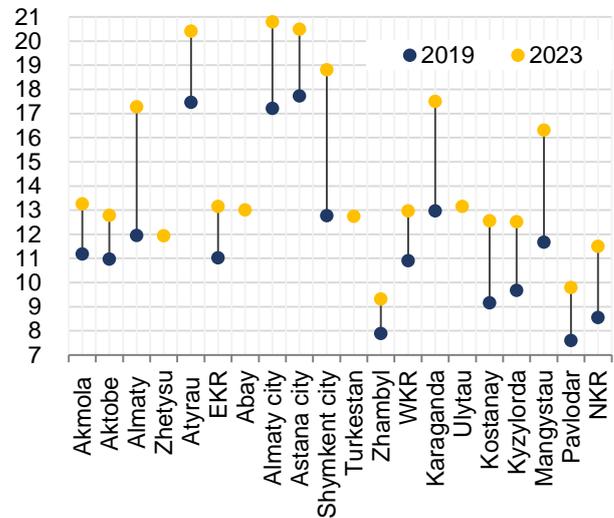
The highest prices for housing under the “7-20-25” program were observed in the Atyrau region, as well as in Almaty and Astana. Meantime, the lowest prices were in the Pavlodar, Zhambyl, North Kazakhstan and Zhetysu regions.

Figure 3.10 The ratio of monthly mortgage payment under the “7-20-25” program to average household income

The ratio of monthly mortgage payments and household income



Average cost of housing under the “7-20-25” program, mln tenge



Source: KSF's reports, NBK computations

The average amount of a mortgage loan has increased by 21.0% since 2019 and to 2023, but the maximum allowable housing cost has remained the same since the launch of the program. In this regard, each year as the cost of housing increases, it becomes increasingly difficult to purchase suitable real estate under this program. In addition, a significant share of concessional mortgage loans hinders the development of market-based mortgage programs.

Box 3.1 New Government Mortgage Programs

In accordance with the terms of the new concessional mortgage program "Otau", or "9-20-19", the launch of which is scheduled for March 1, 2024, the maximum loan amount is up to 30 mln tenge in Almaty and Astana and up to 18 mln tenge in other regions. Under this program, the down payment is at least 20%; the loan tenor is up to 19 years. Within the framework of this program, the purchase of housing is limited to the primary market only in Almaty, Astana, Shymkent and regional centers, including cost-sharing transactions with a guarantee from the Kazakhstan Housing Company. In other populated areas, it is possible to purchase any type of housing. The "Otau" program is aimed at providing housing for working young people, young families and depositors of Otbassy Bank. The main focus of the program is to provide affordable mortgage loans to citizens of Kazakhstan under 35 years of age. Every year, it is planned to allocate more than half of the loans to this category of borrowers with a total financing volume of 150 bln tenge. The program is financed by Otbassy Bank and borrowed funds on the Kazakh financial market. It is expected that the "Otau" program will operate for 7 years.

In addition, a new concessional mortgage program entitled "Nauryz" will be launched on April 25, 2024, with Otbassy Bank acting as the program operator. 300 bln tenge will be allocated under this program during 2024. The difference between this program and the "Otau" concessional mortgage program is the absence of requirements to maintain a deposit for 18 months in Otbassy Bank and an increase in the maximum loan amount in Almaty and Astana to 36 mln tenge. In addition, under the "Nauryz" program, individuals from socially vulnerable groups of the population can take out a mortgage at 7%.

IV Risks of the Banking and Microfinance Sector

4.1 Bank Corporate Portfolio¹⁰

The quality of the corporate loan portfolio of banks in 2023 improved due to reduction in both doubtful and non-performing loans. The share of problem loans in the corporate portfolio decreased across all business entities, while the quality of the SME portfolio remained the lowest. At the same time, the provisioning ratio of problem loans in the corporate portfolio of the banking system increased slightly.

Banks continue to provide large loans to a narrow circle of borrowers with the possibility of deferring payments on the principal and interest at a later date. The concentration of debt among a limited number of corporate borrowers is gradually decreasing, but still remains high (41%). So, the bulk of doubtful loans in the corporate portfolio (71%) is concentrated among the largest 25 bank borrowers at the end of 2023.

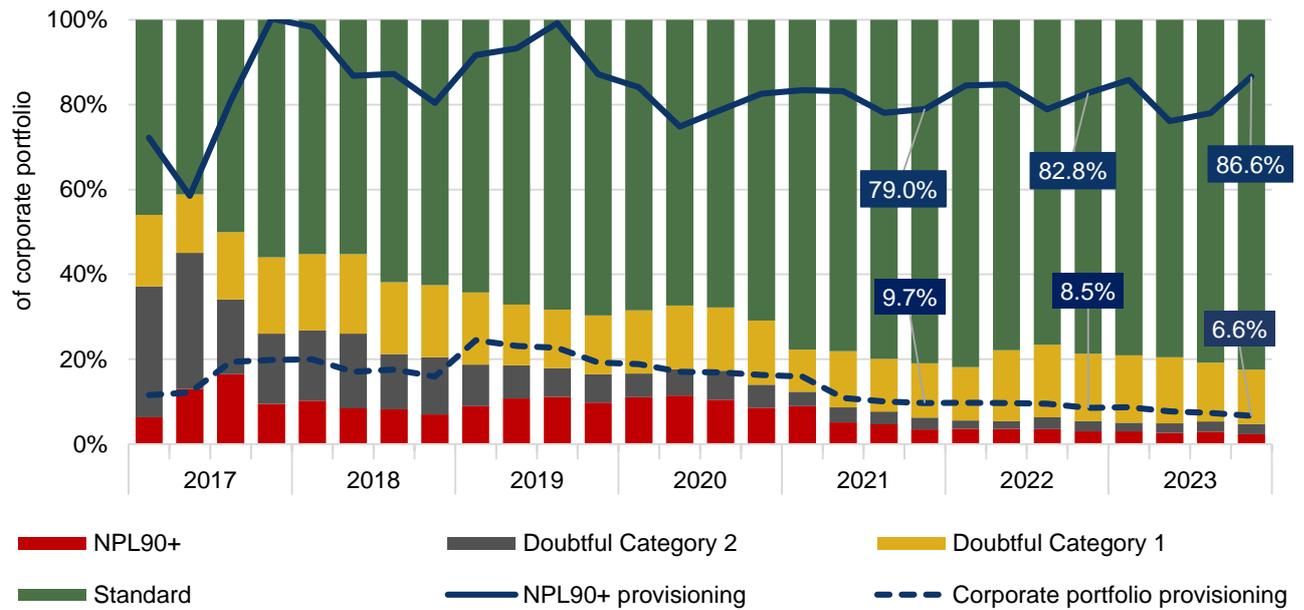
In terms of industry, banks continue to lend mainly to the non-tradable sector of the economy, where the bulk of problem loans are concentrated. Thus, the quality of loans in the service sector, manufacturing, trade, construction and real estate is the lowest. In addition, the bulk of bankrupt enterprises (62%) are concentrated in the construction and real estate sectors, trade and in the manufacturing industry.

In 2023, the volume of problem loans in the corporate portfolio of the banking sector¹¹, including non-performing loans (NPL90+) and doubtful loans, notably decreased. The share of non-performing loans, according to bank reports, went down from 3.0% to 2.3% (*Figure 4.1*), having reached its minimum over the recent 7 years. The reduction in the share of NPL90+ during the year was caused both by the growth of the loan portfolio and the decrease in the absolute amount of NPL90+. The amount of NPL90+ dropped by 10% over the year to 289 bln tenge.

Along with NPL90+, the amount of doubtful loans decreased, according to the estimate of National Bank. Given the growth of the loan portfolio and the concurrent reduction in the portfolio of doubtful loans (-3%), their share in the loan portfolio decreased from 18.3% to 15.1%. The bulk of doubtful loans (73%) at the end of 2023 is concentrated in 3 large banks that continue to issue loans with non-standard repayment schedules, including with a deferral of principal payments for a later period, both with and without payment of interest.

¹⁰ The corporate portfolio includes loans to legal entities and individual entrepreneurs.

¹¹ For the purposes of credit risk analysis, similarly to previous Financial Stability Reports, loan quality indicators (excluding repo transactions and loans provided to other banks) calculated by the National Bank based on the Credit Register data at the level of an individual loan were used. Thus, the following notations are in place: NPL90+ - loans according to bank reports with overdue debt over 90 days; doubtful loans (categories 1, 2) – loans according to the National Bank's evaluation with signs of non-repayment, for which there are no cash flows on the principal debt and there is a high accumulated accrued interest; doubtful loans of category 2 have signs of lower quality; problem loans – the total volume of NPL90+ and doubtful loans; standard loans – loans not classified as listed.

Figure 4.1 *In 2023, the quality of corporate portfolio improved*

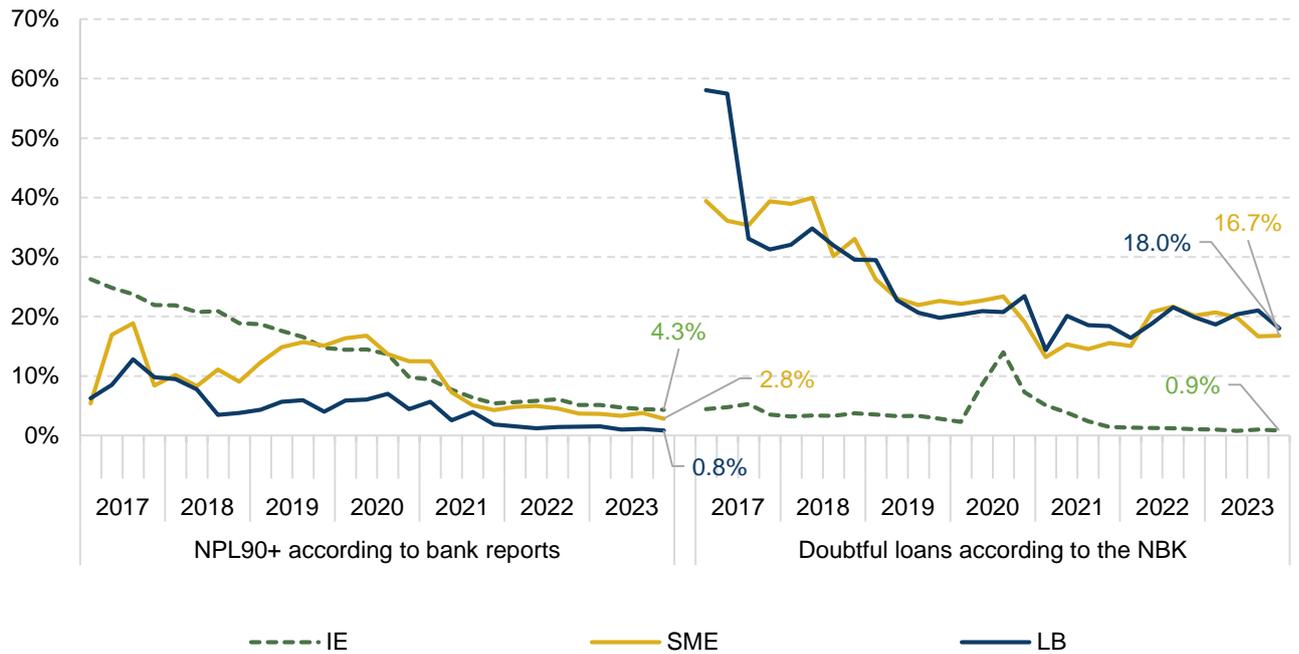
Source: bank reports, Credit Register, NBK's evaluation

Note: the corporate portfolio includes loans to legal entities and individual entrepreneurs. NPL90+ – non-performing loans according to bank reports, doubtful loans – loans with signs of low repayment according to the NBK evaluation, excluding NPL90+

Determining the size of reserves for potential loan losses by banks plays an important role in credit risk management. In 2023, provision coverage (reserves) of non-performing loans increased by 4 percentage points to 86.6%, while the overall level of provision coverage of the corporate portfolio decreased from 8.5% to 6.6% (Figure 4.1). Provision coverage ratio for doubtful loans also grew during the year by 1 pp, amounting to 13.1%, due to the increase in loan loss reserves for doubtful loans of category 2¹². Along with a slight increase in the share of coverage for non-performing and doubtful loans with provisions, there is an increase in the share of unsecured loans among problem loans in the corporate portfolio from 13% to 18%. Banks should prudently manage credit risk to reduce the likelihood of non-repayment of loans on time, bring down the volume of non-performing and doubtful loans, which, in turn, will reduce the amount of required reserves and increase profitability.

The major reduction in the volume of non-performing loans was in the SME portfolio (-12%), which concentrates two-thirds of the NPL90+ amount of the corporate portfolio. At the same time, given the growth of the loan portfolio of individual entrepreneurs by 59%, the volume of their non-performing loans increased by a third, amounting to 23% of the total NPL90+ amount of the corporate portfolio by the end of the year. The smallest volume of NPL90+ is in the portfolio of large businesses: the indicator decreased by 39% mainly due to write-offs of non-performing loans in certain banks and reached 13% of the total amount of problem loans in the corporate portfolio by the end of 2023. During the year, a decrease in the share of NPL90+ was observed across all business entities (Figure 4.2).

¹² The level of provision coverage for doubtful loans of category 1 decreased from 7.2% to 5.6% in 2023, while provision coverage for doubtful loans of category 2 increased from 45.8% to 53.2%.

Figure 4.2 The quality of loans is improving across all business entities

Source: bank reports, Credit Register, NBK evaluation

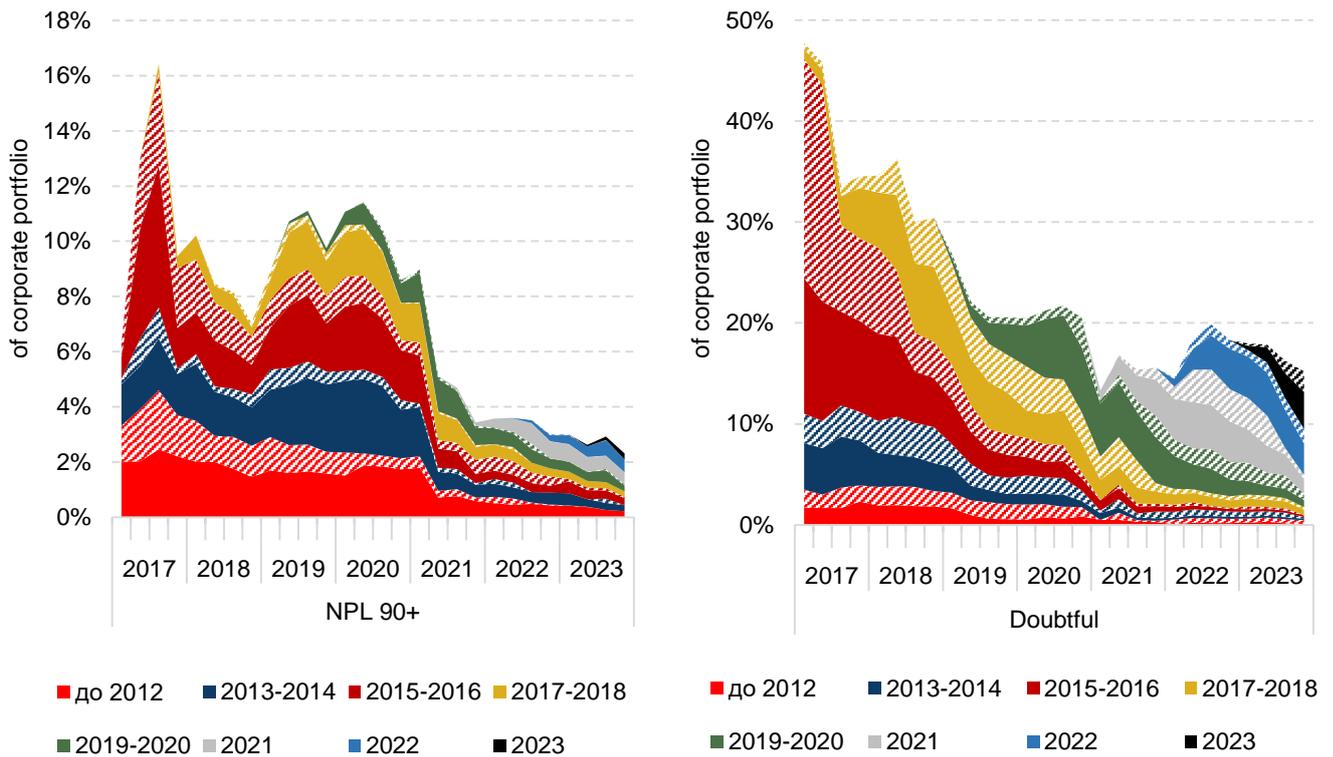
Note: The Graph shows the shares in the corresponding segments of the corporate loan portfolio. NPL90+ are non-performing loans according to bank reports; problem loans are loans with signs of low repayment including NPL90+

Alongside with non-performing loans, the share of doubtful loans also went down across all business entities (Figure 4.2). The quality of the SME portfolio continues to be the lowest. Thus, at the end of 2023, small and medium-sized businesses account for 57% of the amount of doubtful loans, 42% large businesses – for 42% and individual entrepreneurs – 1% only. Banks do not receive cash flow from the issued funds for a long time and accumulate risks of non-repayment of doubtful loans. At the same time, the SME segment is mainly concentrated in enterprises with an unstable financial position¹³, and origination of deferred payment loans to such entities may be an indirect indicator of growing risks.

Within the structure of NPL90+ of the corporate portfolio at the end of 2023, a half of loans were provided during 2021-2023, primarily in the national currency (Figure 4.3). The major reduction in the volume of non-performing loans during 2023 was due to disbursements before 2016, banks continue to actively collect or write off debt on these loans. In addition, given an increase in the supply of blank credit products for microbusinesses in the NPL90+ portfolio due to loan originations of the last 3 years, the share of unsecured non-performing loans increased from 12% to 17% (by debt amount). On the contrary, half of the volume of secured loans among non-performing loans was provided before 2018.

¹³ According to the Financial Stability Report for 2022, in section 4.3 “Corporate Portfolio”, enterprises with up to 100 employees are the least solvent, and the quality of loans for such borrowers is the lowest.

Figure 4.3 In 2023, the share of doubtful loans was decreasing mainly due to disbursements of 2021



Source: Credit Register, NBK evaluation

Note: a pattern fill corresponds to foreign currency loans

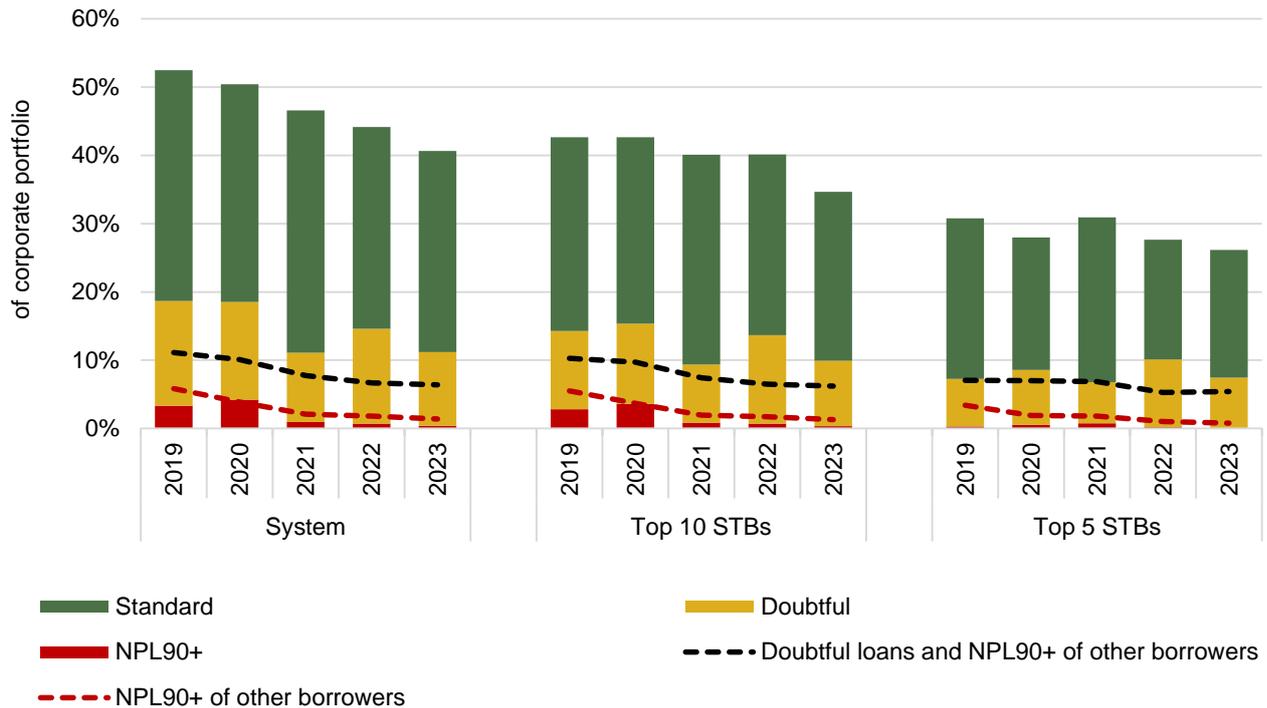
In terms of the year of origination, two thirds of doubtful loans in the corporate portfolio at the end of 2023 were concentrated among loans issued no more than 2 years ago (*Figure 4.3*). Reduction in the bulk of doubtful loans in 2023 was among loans disbursed in 2021 during the period of regulatory easing¹⁴. The volume of blank loans in the doubtful loan portfolio is also growing¹⁵, with 76% of such loans being provided during the last two years, as of end-2023. So, in some banks, the share of unsecured doubtful loans issued in foreign currency back in 2008 continues to make up a third of the corresponding volume of doubtful loans, or 6% of the corporate portfolio at the end of 2023. This fact confirms that loans with non-standard repayment schedules, in contrast to loans with monthly repayment of the debt, carry a greater risk of default.

The concentration of debt among the largest corporate borrowers is gradually decreasing across all groups of banks, but remains high (*Figure 4.4*). Thus, the top 25 largest corporate borrowers of each bank together account for 40.7% of the banks' corporate portfolio as of year-end 2023.

¹⁴ Certain regulatory easing opportunities were extended until the end of 2021. In particular, measures to reduce the values of risk-weighting coefficients for loans and guarantees issued to SMEs and syndicated loans, as well as to expand the list of "hard" collateral, were retained.

¹⁵ During 2023, they increased from 13% to 18%.

Figure 4.4 The quality of the 25 largest corporate borrowers improved as of year-end 2023. However, the bulk of doubtful loans are still held by the 25 largest bank borrowers



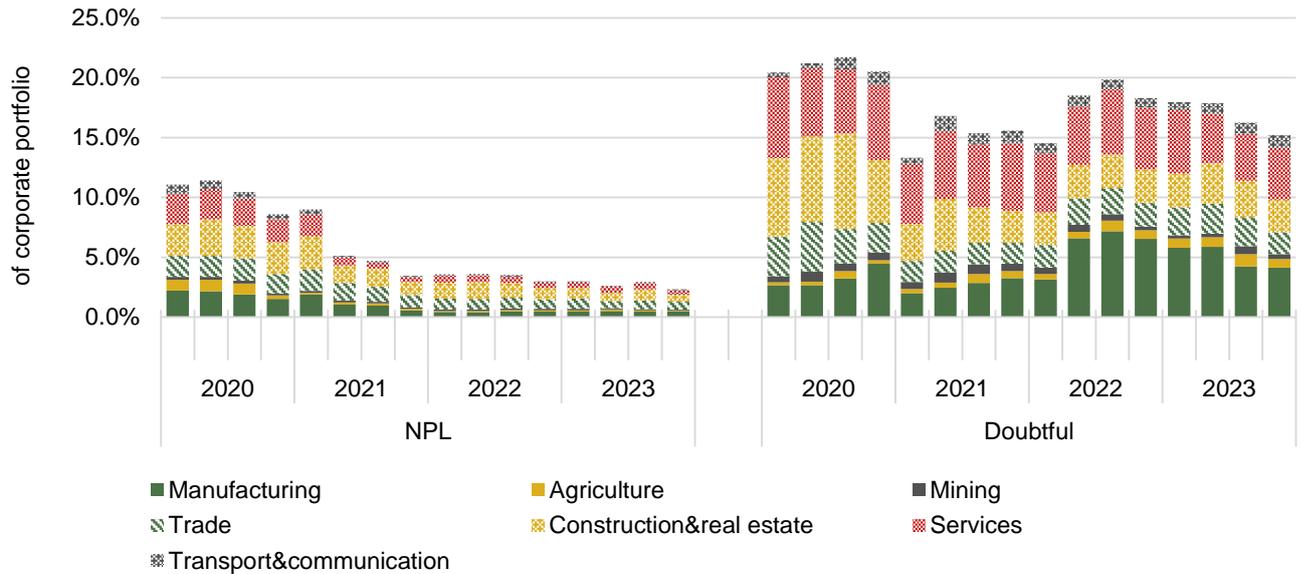
Source: Credit Register, NBK evaluation

Note: total debt of the 25 largest borrowers of the corporate portfolio of each bank of the respective groups. Top 10 and Top 5 are the respective groups of banks on the reporting date. Other borrowers are borrowers that are not in the top 25 of the respective group of banks.

The loan quality of largest borrowers improved as of year-end 2023 across all groups of banks (Figure 4.4). However, such borrowers continue to account for the majority of doubtful loans from the total volume of corporate debt (71%). Large loans are often provided on special terms with the possibility of deferring the repayment of the principal debt to later periods. The issuance of large scale loans based on individual terms is more often carried in the top 5 banks, where the amount of doubtful loans from the 25 largest borrowers accounts for almost half (49%) of doubtful loans from the corporate portfolio of the banking system at the end of 2023. In some cases, large scale loans that are not serviced for a long time may be an indirect sign of related party loans.

In terms of industry, banks continue to lend primarily to the non-tradable sector of the economy, where the bulk of problem loans are concentrated (Figure 4.5). In 2023, the growth of the loan portfolio of non-tradable industries exceeded the growth of tradable ones, though the main contribution to reduction in the share of problem loans in the corporate loan portfolio was due to the traded sector of the economy. So, the share of problem loans in the traded sector decreased from 28% to 21%, in the industries of the non-tradable sector – from 19% to 16%. The decrease of doubtful loans in 2023 was due to the manufacturing and services industries. The main contribution to reduction in NPL90+ in the corporate loan portfolio was made by the construction sector and real estate, mining, and services industries, while the quality of their loans continued to be the poorest.

Figure 4.5 **Doubtful loans and NPL90+ are concentrated in non-tradable sectors**



Source: Credit Register, NBK evaluation

Note: pattern fill corresponds to loans in non-tradable sectors of the economy, and solid fill corresponds to loans in tradable sectors.

Box 4.1 Assessing Financial Soundness of Enterprises using Altman Z-score

In the study by Altman (1968)¹⁶, for the first time the financial model (formula) called the Altman Z-score was presented that was developed to assess the probability of bankruptcy of an enterprise and is still widely used in research. In his study, Altman (2005)¹⁷ proposed another Z-model for assessing enterprises in emerging markets (EM Z-score). EM Z-score is adapted to the specifics of developing countries, including their less liquid markets. For example, the market value of capital used in the model was replaced by the book value. It is the EM Z-score that is used in our assessment of the solvency of enterprises as the most suitable. The model looks as follows:

$$EM\ Z - score = 6,56 * X_1 + 3,26 * X_2 + 6,72 * X_3 + 1,05 * X_4 + 3,25 \quad 18$$

Enterprises with low EM Z-score figures are considered less sound and more vulnerable to shocks. According to the distribution of scoring results in Altman (2005), figures above 5.85 are in the green (safe) zone, figures between 3.75 and 5.85 are in the grey (vulnerable) zone, and figures below 3.75 are in the red, or default, zone.

The calculation of the EM Z-score uses enterprise data from the report¹⁹ collected by the BNS ASPR RK, as well as the data from the State Revenue Committee of the MF RK on debtors who have been or are still undergoing bankruptcy procedures. Using the data from the State Revenue Committee of the MF RK, it was possible to identify a group of bankrupt enterprises among the BNS ASPR RK respondents.

The Altman Z-score calculation uses data from small, medium and large enterprises obtained from the sources of the BNS ASPR RK databases at the firm level. The Altman Z-score components are calculated based on balance sheet and income statement indicators

¹⁶ Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The Journal of Finance 23 (4), 589–609.

¹⁷ Altman, E. I. (2005). An emerging market credit scoring system for corporate bonds. Emerging Markets Review 6 (4), 311–323.

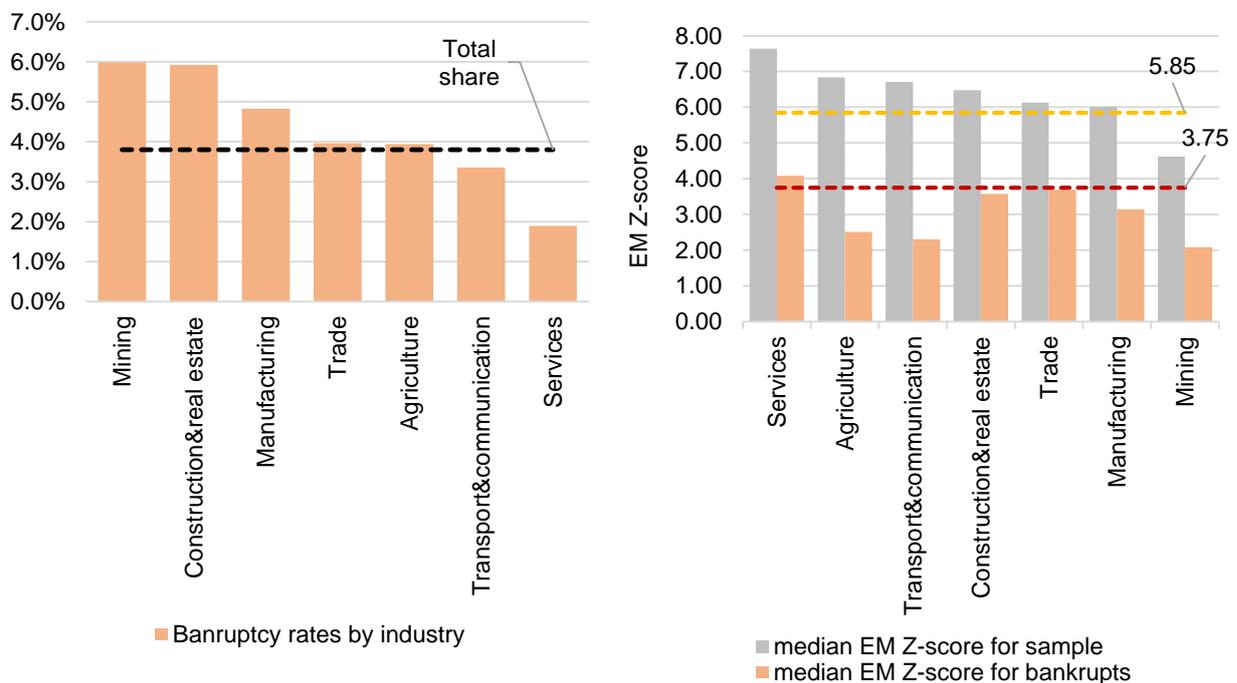
¹⁸ Details on the components of the EM Z-Score can be found in Altman's research papers.

¹⁹ 1-PF Index – report of an enterprise's financial and economic performance, 2-MP Index – report of a small enterprise's performance.

from 2010 to 2022 (annually). Data collection for small enterprises is carried out on a selective basis.

The data excludes respondents with 100% government participation. When calculating the Z-score, only those respondents were included in the sample that had data in both the denominator and numerator for each of its components on the reporting date. Extreme values for the Z-score were excluded²⁰. Thus, the sample for the Z-score coefficient consists of 246,605 observations (respondent-year) and includes 84,599 unique respondent enterprises. The majority of respondents are represented in the services, construction/real estate, and trade industries, and the smallest share is represented by enterprises of the mining industry. It was possible to determine that in total, bankruptcy procedures were applied or are still being applied in relation to 2,999 small, medium, and large enterprises - respondents in the sample.

Graph 1. Enterprises in the mining industry are least financially sound, while the share of bankruptcy among these enterprises is the largest



Source: BNS ASPR RK, SRC MF RK

Note: bankruptcy rates and median EM Z-score values are calculated for all respondents and for all periods.

The average EM Z-score for all observations in the sample was 9.65, and the median was 6.63, which is in the safe zone. The most vulnerable category according to Altman's EM Z-score included mining companies (*Graph 1*). On the contrary, the EM Z-score for actually bankrupt companies is on average in the red zone (3.65), and the median value for the entire sample was 3.39. The bulk of bankrupt companies (62%) are concentrated in the construction/real estate, trade and manufacturing industries. The medians of EM Z-score among bankrupt companies in these industries averaged 3.58, 3.69 and 3.14, respectively, which is in the default zone.

Another significant observation is that more solvent enterprises are less likely to finance their activities with bank debt. Thus, the average EM Z-score values are 5.15 and 10.55 for enterprises with and without bank debt, respectively, and the median values are 4.90 and 7.27, respectively.

²⁰ The sample was truncated, removing the lowest 5% and highest 5% of Z-score values across all respondents for all periods.

Graph 2. The EM Z-score tends to zero as the fact of bankruptcy approaches

Source: BNS ASPR RK, SRC MF RK

Note: The arithmetic mean of the EM Z-score values for the corresponding number of years before bankruptcy or rehabilitation for all relevant respondents was used

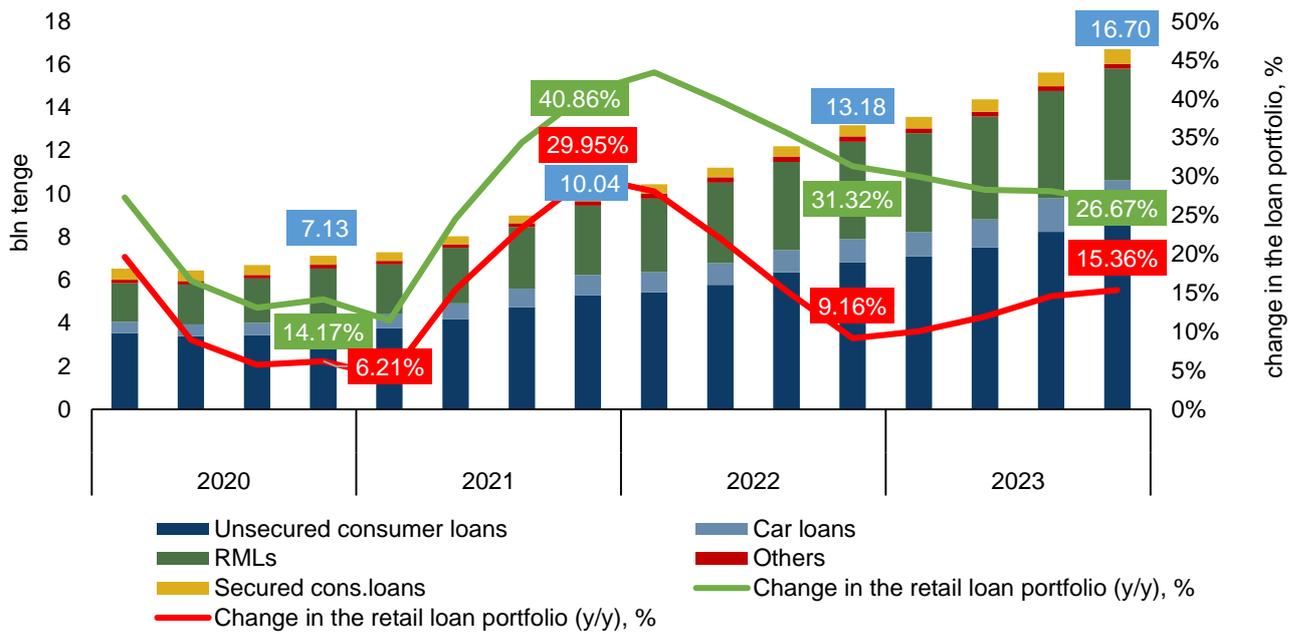
The average EM Z-score values of the group of enterprises that became insolvent as a result of their operations were already in the vulnerable zone 10 years before the fact of bankruptcy or rehabilitation (*Graph 2*). At the same time, on average, according to the EM Z-score, the group of failed enterprises moved to the red zone 5 years before the fact of their bankruptcy, and the group of enterprises undergoing rehabilitation procedures moved to the red zone 2 years before the start of rehabilitation. So, in the bankrupt group, 56% of respondents were in the red and 18% in the vulnerable zone according to the EM Z-score 5 years before the fact of bankruptcy. For comparison, in the group of rehabilitated enterprises, 55% of respondents were in the red and 21% in the vulnerable zone according to the EM Z-score indicator 2 years before the start of the rehabilitation procedure.

4.2 Retail Portfolio of Banks

Despite some deceleration, the absolute growth of unsecured consumer loans continues. In addition, the growth of mortgage loan segment, which is the second most important in the retail portfolio, has slowed down, reducing its share in the retail loan portfolio. The quality of the retail loan portfolio remains high, but an increase in the volume of problem loans is observed.

At the end of 2023, the volume of the retail portfolio continued to increase, but its growth rate slowed down. Thus, the growth of the retail portfolio in 2023 amounted to 26.7% (in absolute terms, the growth amounted to 3.1 trln), while in 2022, the portfolio growth was at the level of 31.3% (in absolute terms – 3.5 trln) (*Figure 4.6*). However, in 2023, the growth rate of the retail loan portfolio adjusted for inflation increased slightly from 9.2% (y/y) to 15.4% (y/y). The nominal growth rate of retail lending has been moderately declining since the first quarter of 2022, which is due to a decrease in the growth rate of the residential mortgage loan portfolio.

Figure 4.6 In 2023, the growth rate of the inflation-adjusted retail loan portfolio showed a minor increase, while the nominal growth rate was decreasing



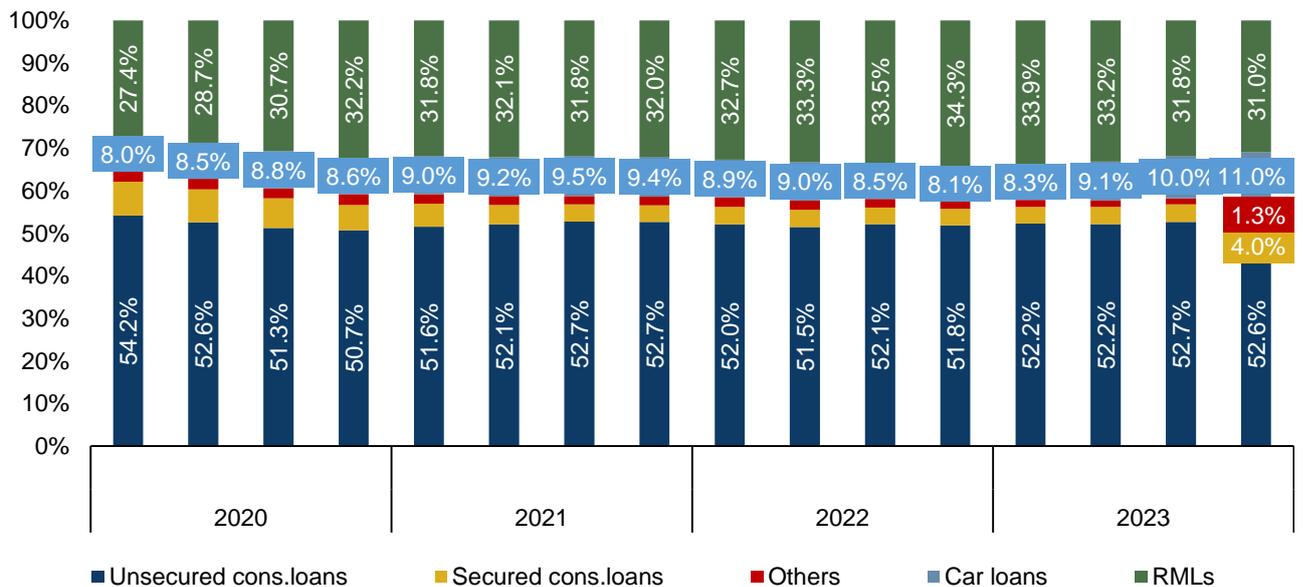
Source: Credit Register

Note: inflation-adjusted growth is calculated using the formula:

$$\text{inflation-adjusted growth} = \frac{1 + \text{nominal increase}}{1 + \text{level of inflation}} - 1$$

In 2023, in the structure of the retail portfolio, unsecured consumer and residential mortgage loans prevailed, amounting to 52.6% and 31%, respectively (0). At the end of 2023, the share of the car loan portfolio reached its all-time high and amounted to 11%, exceeding the previous year's figure by 2.95 percentage points. At the same time, secured consumer loans and other loans account for the smallest share in the structure of the retail loan portfolio – 4% and 1.3%, respectively.

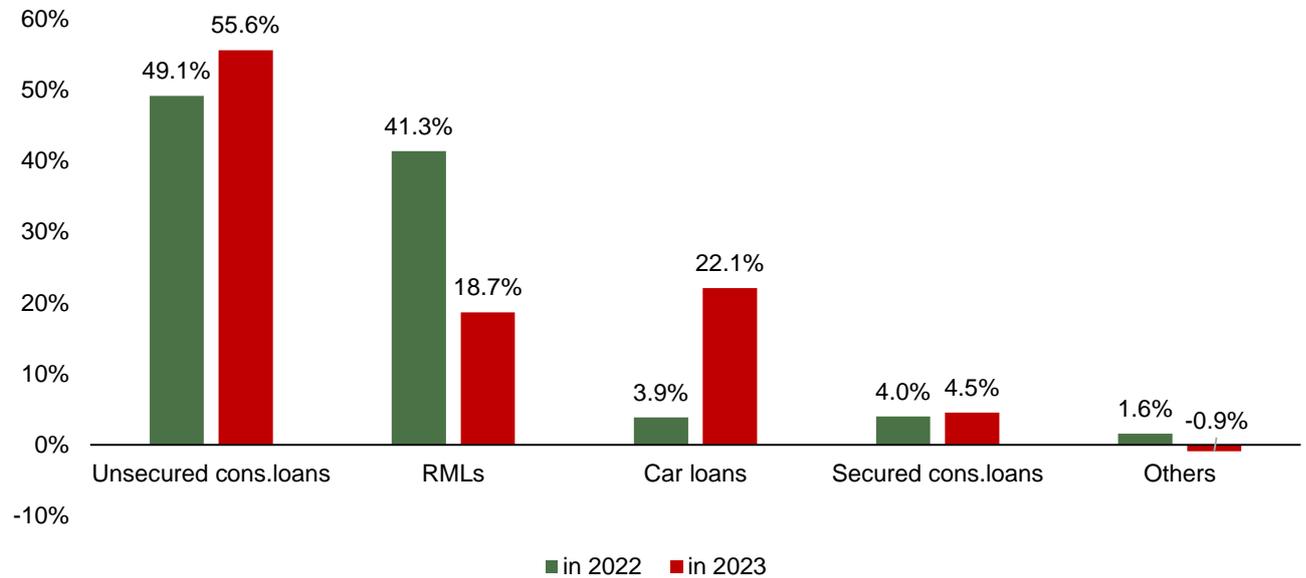
Figure 4.7 In 2023, the share of mortgage loans went down while the share of car loans and unsecured consumer loans demonstrated growth



Source: Credit Register

The main contribution to the growth of the retail portfolio was made by unsecured consumer loans and car loans, which accounted for 55.6% and 22.1% of the portfolio increase, respectively. In 2023, the contribution of mortgage loans to the growth of the retail loan portfolio was 18.7%, while in 2022 the contribution was 41.3% (*Figure 4.8*).

Figure 4.8 The main contribution to the growth in retail loan portfolio is made by unsecured consumer loans. In 2023, a sizable growth in the car loan portfolio is observed compared to 2022



Source: Credit Register

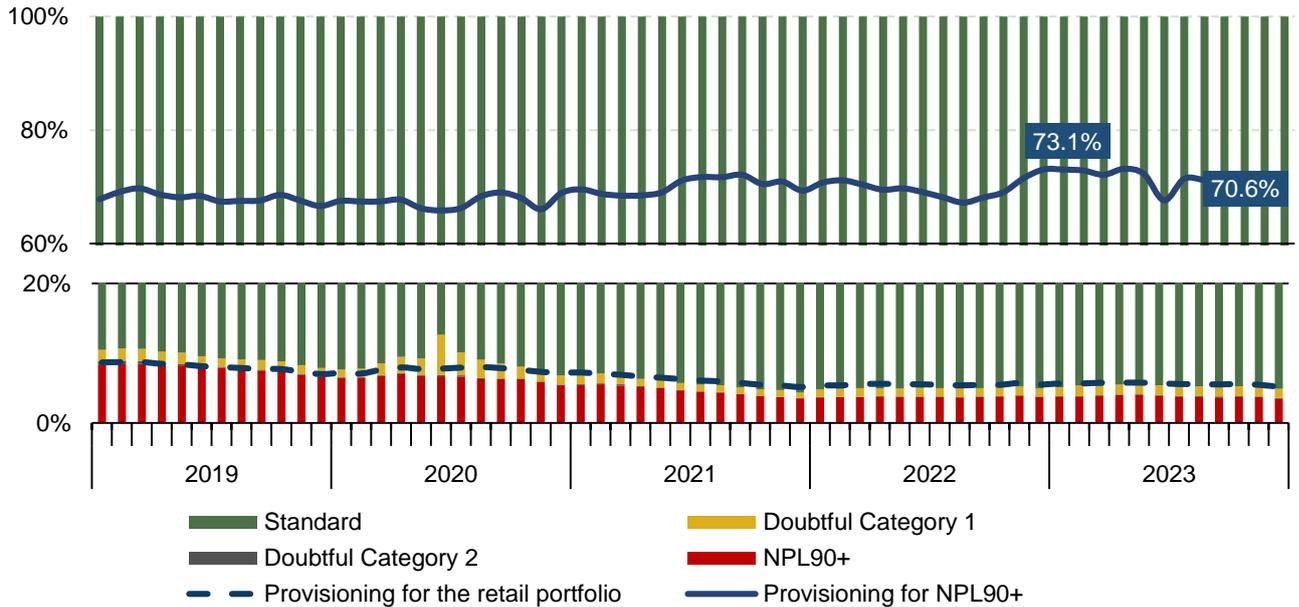
Note: (1) RMLs include mortgage loans and home loans

(2) "Others" include loans provided for the purposes of construction, co-financing of housing construction, refinancing of a home loan, etc.

The quality of the retail loan portfolio remained high at the end of 2023. In particular, the share of NPL90+ in the portfolio of loans to natural persons amounted to 3.4%. At the same time, despite the growth of provisions created for NPL90+ loans (12.6%), the level of their provisioning decreased and reached 70.6% (73.1% - at the end of 2022). This was caused by an increase in the volume of NPL90+ by 16.4%, or by 81.1 bln tenge (*Figure 4.9*). Thus, high growth of the loan portfolio limits the growth of the share of NPL90+.

During the year, problem loans, according to the National Bank's assessment, increased by 25.1% (y/y), while their share in the retail portfolio reached 4.9%. In particular, the share of doubtful loans of category 1 in the total loan portfolio increased from 1.1% to 1.3%, and doubtful loans of category 2 remained at the same level, around 0.1% (*Figure 4.9*).

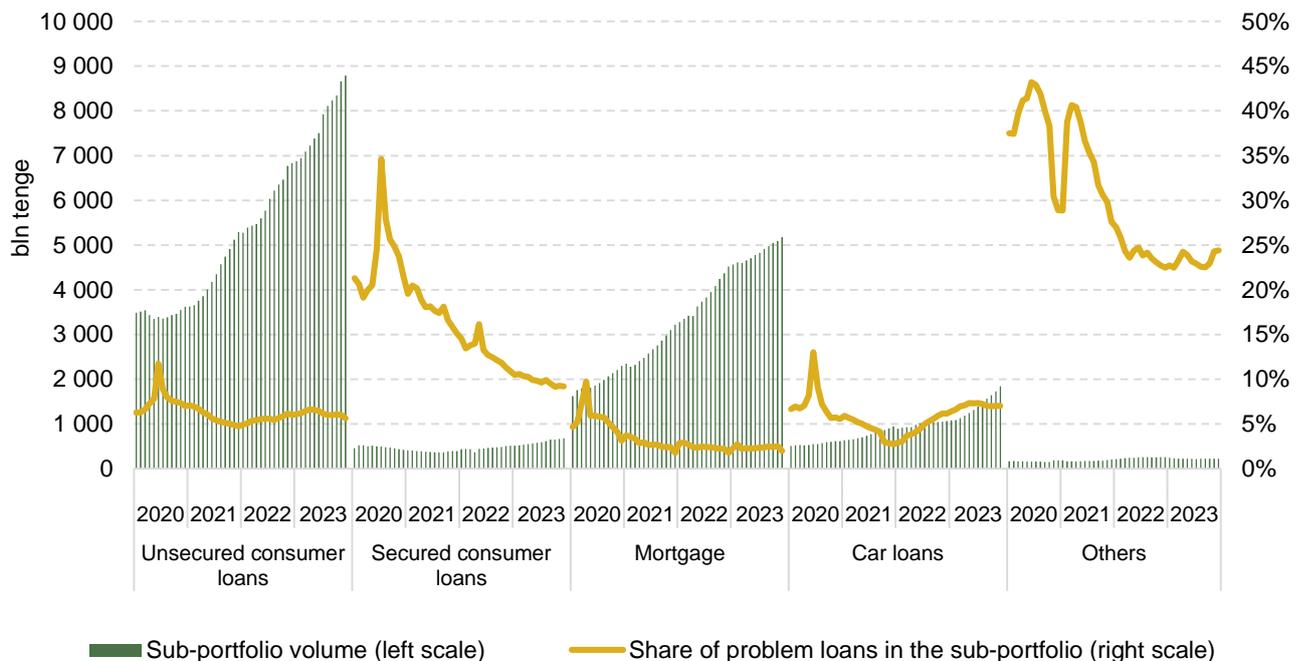
Figure 4.9 *The share of NPL90+ in the retail portfolio continues to be not high mainly owing to the intensive growth of the portfolio itself. As the same time, the number of doubtful loans of category 1 is increasing*



Source: Credit Register, NBK’s evaluation

Note: 1) for mortgage loans, doubtful loans were calculated based on the number of days overdue: if the loan is less than 30 days overdue, it is classified as "doubtful category 1", if the loan is 30 to 60 days overdue, it is classified as "doubtful category 2"; 2) NPL90+ are non-performing loans according to bank reports; doubtful loans are loans with signs of low repayment according to the National Bank's assessment, excluding NPL90+

Figure 4.10 *The share of problem loans in retail lending decreased in the segment of secured consumer loans whereas the share of problem loans in other segments somewhat increased*



Source: Credit Register, NBK evaluation

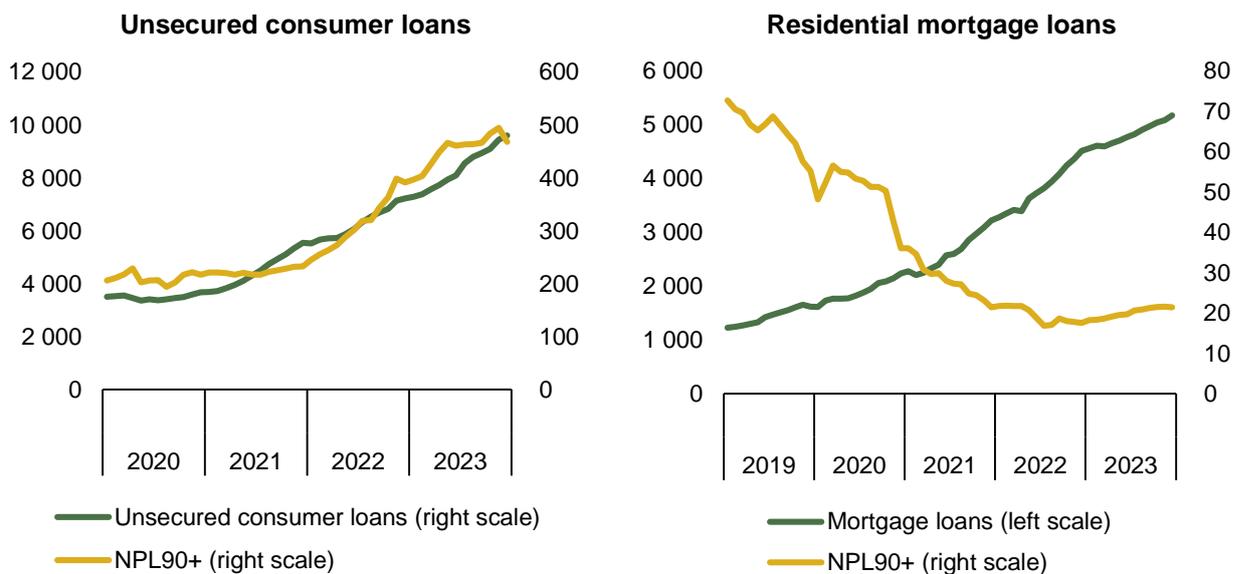
Note: 1) excluding loans not classified into a specific group by purpose of lending; 2) for mortgage loans, problem loans were calculated based on the number of days overdue: if loans are overdue by up to 90 days, they are considered problem loans.

Credit Risks of Consumer Loans

At the end of 2023, the growth of the loan portfolio of unsecured consumer loans slowed slightly to 28.6% (y/y) and amounted to 2 trln tenge (compared to 29.2% (y/y) in 2022) (Figure 4.10). At the same time, despite the increase in the number of received loan applications for unsecured loans, the share of approved applications remained stable²¹. It is important to note that the quality of this segment has improved compared to 2022. At the end of 2023, the share of problem loans in unsecured consumer lending, according to the National Bank, went down to 5.6% (compared to 6% in 2022). The decline in the share of NPL90+ loans is particularly noticeable, amounting to 4.8% at the end of 2023 (compared to 5.4% in 2022). Thus, the increase in absolute values of NPL90+ is masked by the rapid growth of unsecured consumer loans, thus the share of NPL90+ remains low (Figure 4.11).

At the end of 2023, the volume of the secured consumer loan portfolio went up by 31% (y/y) and reached 674.8 bln tenge. Thus, due to the growth in the volume of secured consumer loans, their share remained at the 2022 level, amounting to 4% of the total retail loan portfolio. The quality of secured consumer loans improved at the end of 2023, in particular, the share of NPL90+ loans decreased from 8.5% to 6%, and the share of problem loans – from 10.5% to 8.8%.

Figure 4.11 Reduction in the share of NPL90+ was driven by the growth in unsecured loans



Source: Credit Register, NBK evaluation

Credit Risks of Residential Mortgage Loans

The growth rate of the residential mortgage loan (RML) portfolio has significantly decelerated compared to 2022 and amounted to 14.6% (y/y) (at the end of 2022, the growth was 40% (y/y)), which led to reduction in their share in retail lending to 30.9% by the end of 2023 (compared to 34.3% at the end of 2022). According to the Bank lending survey, along with reduction in received loan applications for RMLs, the share of approval of such applications increased to 32% by the end of the year (at the end of 2022 – 29.7%). The quality of the sub-portfolio continues to be high, and at the end of 2023, the share of non-performing loans (NPL90+) amounted to 0.4%.

Reduction in the share of mortgage loans is caused by the tightening of terms and conditions for mortgage lending and the imposition of a limit for 2023 in the amount of 100

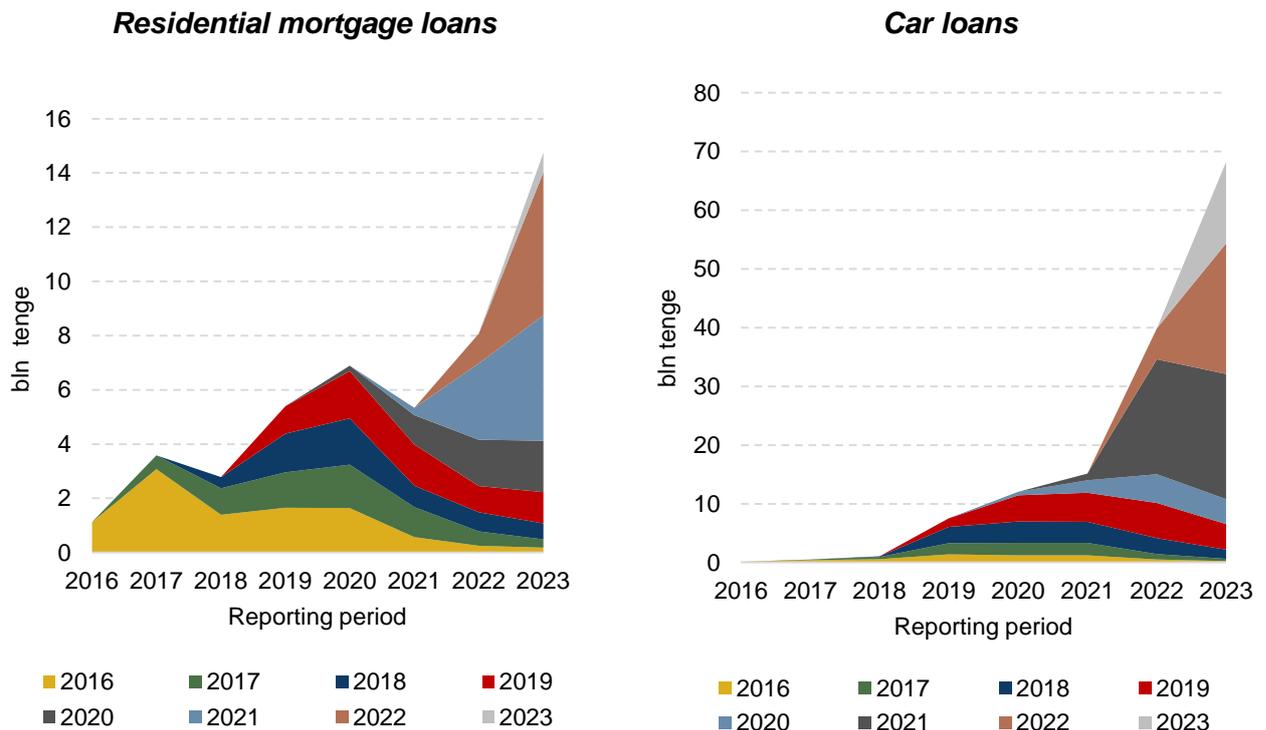
²¹ According to the Bank Lending Survey (published on the official website of the NBK)

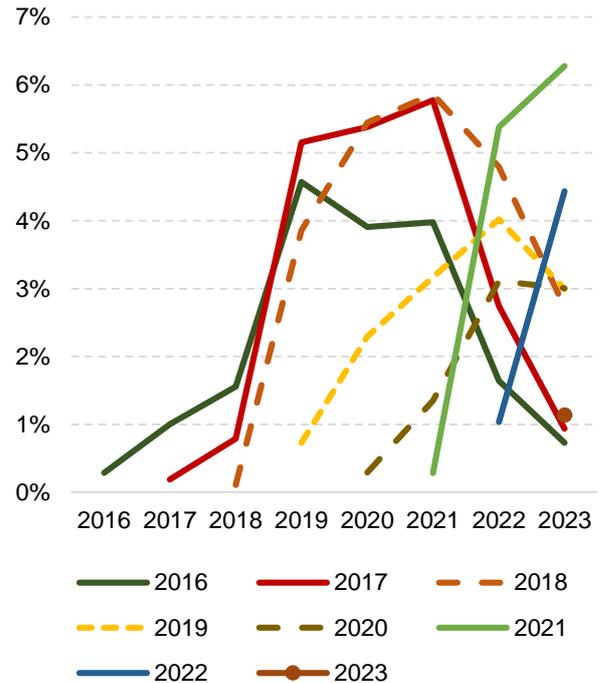
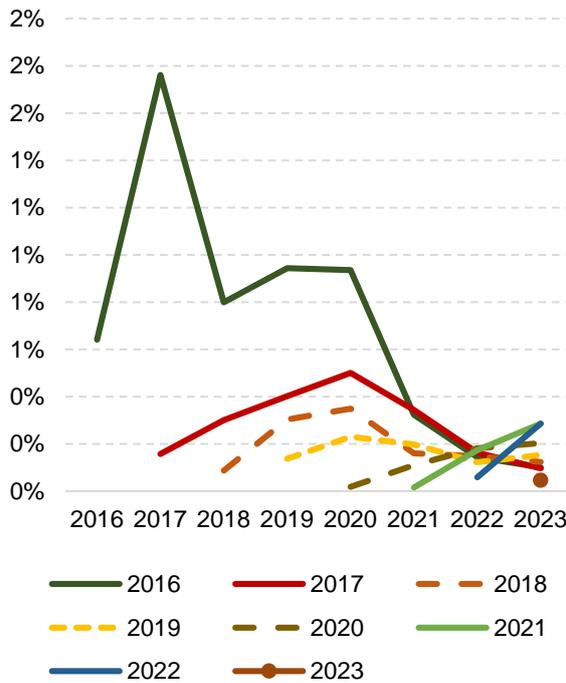
bln tenge under the “7-20-25” concessional mortgage program, which limited the volume of new loans. According to the Bank lending survey, in the fourth quarter of 2023, the demand for mortgage loans decreased as a result of the suspension of marketing promotion of mortgage products, as well as the end of some promotional offers and the tightening of some terms and conditions for mortgage lending. Thus, the number of applications in the fourth quarter went down by 15% (q/q), while the growth of the mortgage loan portfolio decreased to 4% (q/q).

Over the past few years, the quality of mortgage loans has improved, the share of NPL90+ has decreased to 0.4% (as of 1 January 2019, NPL90+ was 6.1%), and the volume of mortgage loans has been going up for several years in a row. At the same time, the growth in the volume of NPL90+ is noteworthy. Loans provided in 2019-2022 make up a significant share of the total amount of NPL90+ in mortgage loans (Figure 4.12). However, the share of NPL90+ among mortgage loans provided during these years ranges between 0.3% and 0.4%. Thus, the quality of credit decisions in these years has not deteriorated, and the growth of NPL90+ volumes is driven by the volumes of originations in the mortgage loan portfolio. The volumes of non-performing loans provided in 2020 and 2021 increased significantly in 2022 and 2023. The share of NPL90+ in the RML portfolio has significantly decreased over the past 5 years. In 2023, the NPL90+ volumes slightly increased, which did not lead to an increase in the share of NPL90+ due to faster growth in the loan portfolio (Figure 4.11).

Figure 4.12 **Mortgage loans provided in 2016 have the highest NPL90+ figures**

Volume of NPL90+ at the end of the reporting year





Source: Credit Register

Note: excluding loans provided before 2015

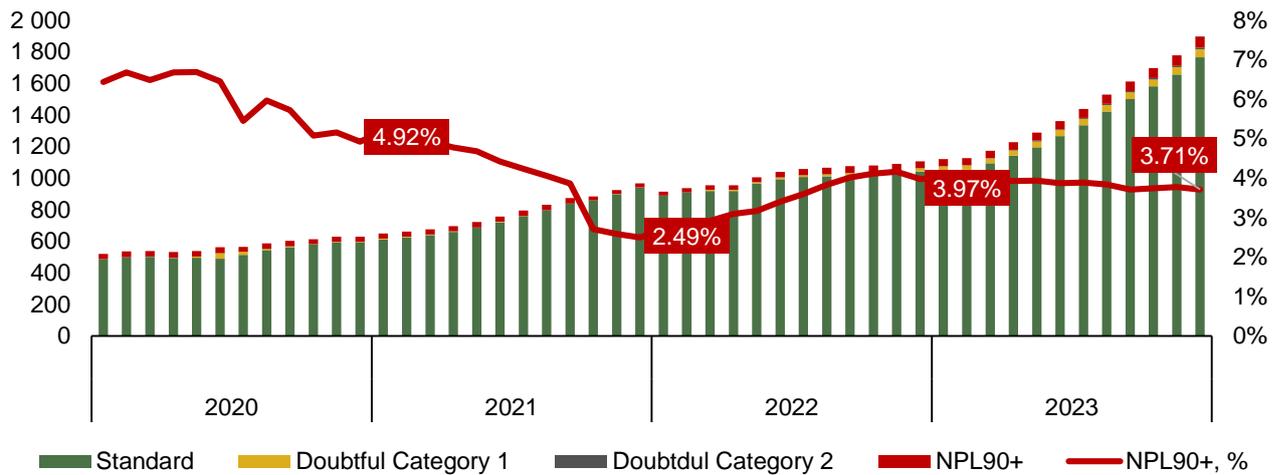
Credit Risks of Car Loans

In 2023, the growth rate of the car loan portfolio increased by 5.6 times, amounting to 73% (y/y) against 13% (y/y) in 2022. The growth in the number of received applications for car loans in 2023 was 85%. At the same time, with an increase in the number of received loan applications during the year, the share of their approvals went up due to the growing number of banks participating in this segment. In 2023, the quality of the car loan portfolio deteriorated, namely, the share of problem loans increased to 7.2% (by the end of 2022 – 6.2%). In particular, in 2023, the volume of doubtful loans of category 1 increased from 20.7 bln tenge to 49 bln tenge, and doubtful loans of category 2 – from 1.6 bln tenge to 10.3 bln tenge.

The results of the Bank lending survey indicate a steady increase in demand for car loans. This growth is supported by programs offered by car dealerships with the financial support of their partners, including loans with non-standard repayment graphs. According to the NBK credit assessment methodology, such loans are considered risky and fall under the category of doubtful loans.

As at the end of 2023, a major portion of NPL90+ in car loans was among loans provided during 2021–2023 (Figure 4.12). Thus, in 2023, NPL90+ on car loans reached its all-time high. As at the end of 2023, loans issued in the same year show a share of NPL90+ at the level of 1.1%, while the volume of NPL90+ for these loans is 13.8 bln (20.3% of all non-performing car loans). As of the end of 2023, the share of NPL provided in 2021 and 2022 demonstrates the highest figure compared to loans provided in other years. The quality of loans originated in 2019-2020 is better than the quality of loans that were provided earlier. Thus, despite the coverage with collateral, the quality of credit decisions in the car loan portfolio has slightly decreased compared to prior years. At the same time, the share of NPL90+ in the car loan portfolio decreased to 3.7% (as at the end of 2022 – 4%) (Figure 4.13). Therefore, the growth of absolute values of NPL90+ is hidden under the rapid growth of car loans and limits the growth of NPL90+.

Figure 4.13 At year-end 2023, the share of NPL90+ on car loans demonstrated a minor decline from 4% to 3.7%



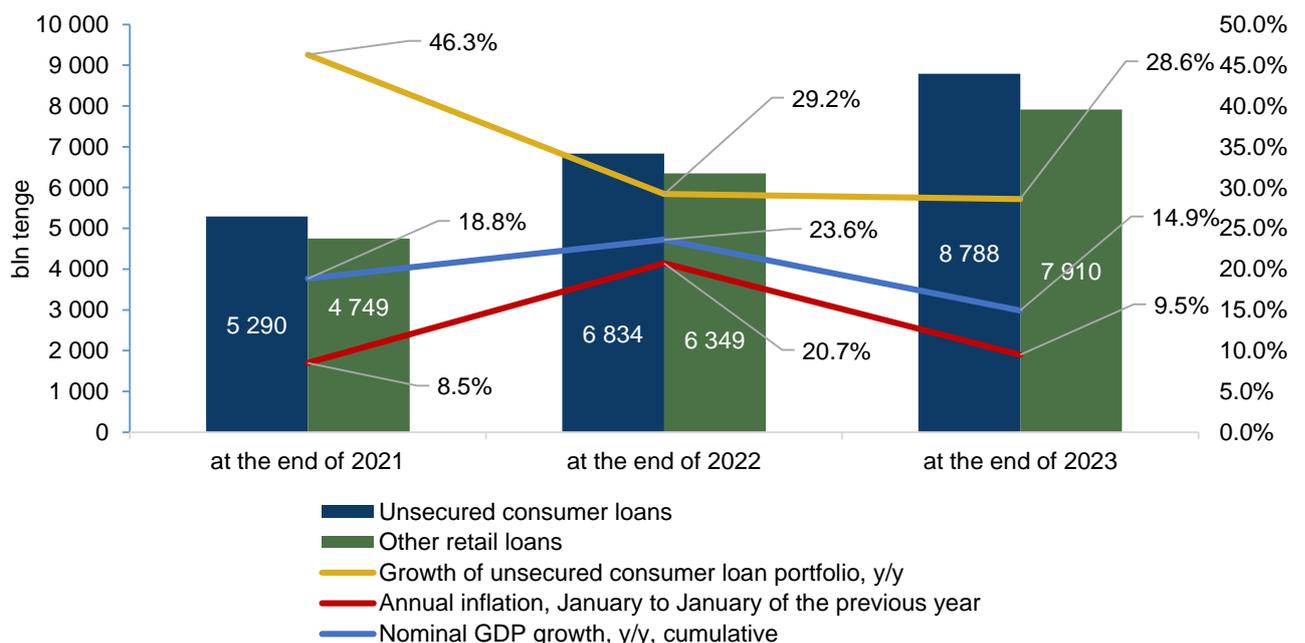
4.3 Unsecured Consumer Lending

The unsecured consumer loan portfolio continues to grow at a high rate. Borrowers with a high level of total debt served as the main contributor to such growth, with their number continuing to go up, thus increasing the portfolio concentration. The level of credit risk is at an acceptable level, but remains highly sensitive to changes in household income.

In 2023, unsecured consumer loans (“UCLs”) retained their high growth rates, which exceeded the annual growth of nominal GDP. At year-end, the UCL portfolio amounted to 8.79 trln tenge against the annual inflation of 9.5% and a 14.9% annual growth of nominal GDP (Figure 4.14). This trend indicates a persistently heightened demand for UCLs on the part of the population.

Figure 4.14 Growth rates of the UCL portfolio are outpacing inflation figures over the recent three years

Structure of the retail loan portfolio and inflation

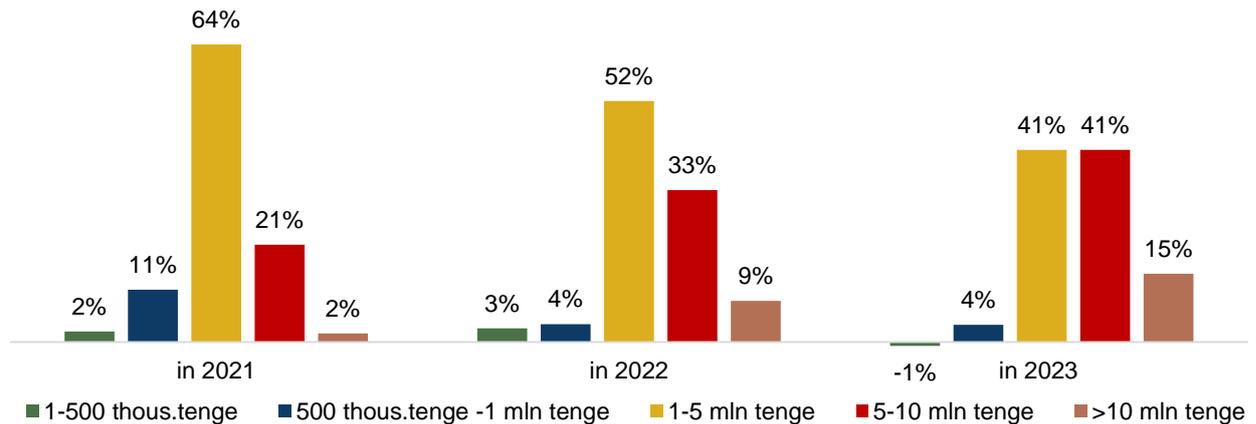


Source: Credit Register, BNS ASPR RK, National Bank computations

At the same time, the growth of UCL portfolio is divergent in terms of the total debt of borrowers²². In 2023, the UCL portfolio was growing mainly due to the increase in loan portfolios to borrowers with a total debt of 1 to 5 mln tenge and more than 5 mln tenge (41% and 56% of the 1.95 trln tenge growth, respectively), while the volume of the segment of borrowers with debt below 500 thousand tenge decreased by 1%. The contribution of the segment of borrowers with a debt of 5 to 10 mln tenge almost doubled from 21% in 2021 to 41% in 2023 (Figure 4.15).

Figure 4.15 The UCL portfolio is growing mainly due to the segments where the total debt of borrowers exceeds 1 mln tenge

Contribution to the growth in the retail loan portfolio, by debt groups

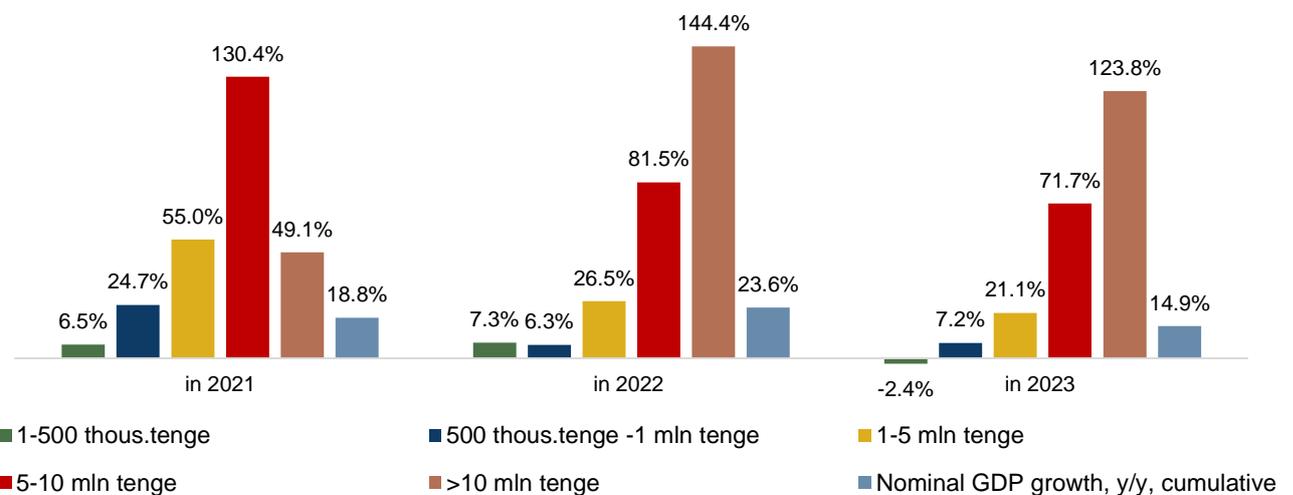


Source: Credit Register, NBK's evaluation

A comparison of growth rates of the retail portfolio segments and the growth rates of nominal GDP shows that in 2022 and 2023, debt growth exceeds nominal GDP growth only for borrowers whose total debt is over 1 mln tenge. Thus, the portfolio of retail loans of individuals with the largest debt (more than 10 mln tenge) grew in 2023 by 123.8%, and the portfolio of loans from 5 to 10 mln tenge went up by 71.7% (Figure 4.16).

Figure 4.16 At year-end, the portfolio growth for borrowers with a total debt less than 1 mln tenge appeared to be below the growth rates of nominal GDP

The annual growth in the segments of retail portfolio, by debt groups

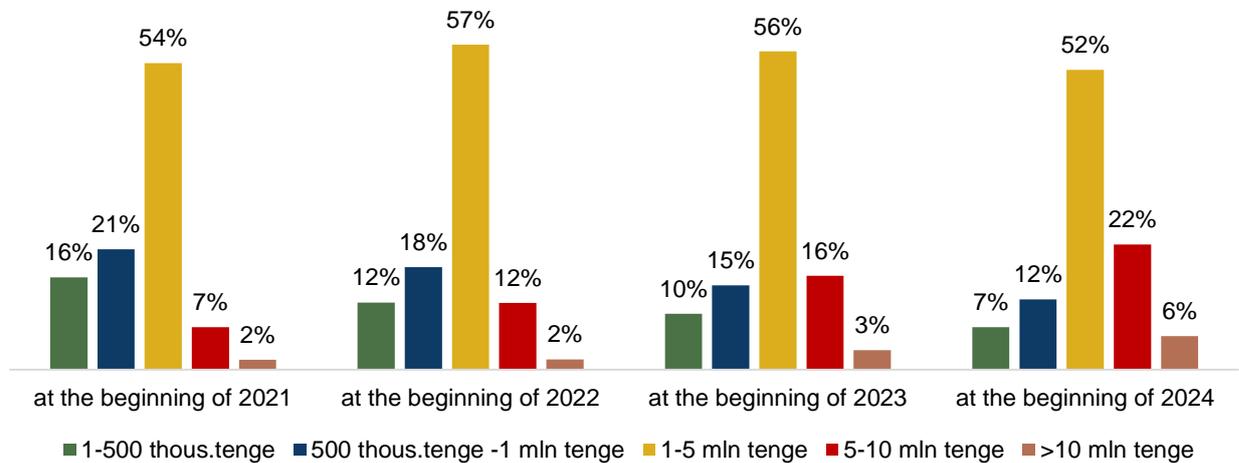


Source: Credit Register, NBK's evaluation

²² When calculating the total debt of a borrower, the sum of the principal balances on all loans of a given borrower was used.

Along with the high growth rates of the portfolio of borrowers with a high level of debt, their share of the total UCL portfolio of individuals is also growing. As of January 1, 2024, loans from borrowers with a debt of more than 5 mln tenge account for 28% of the total UCL portfolio, and together with the segment from 1 to 5 mln, the share of the portfolio exceeds 80% (Figure 4.17).

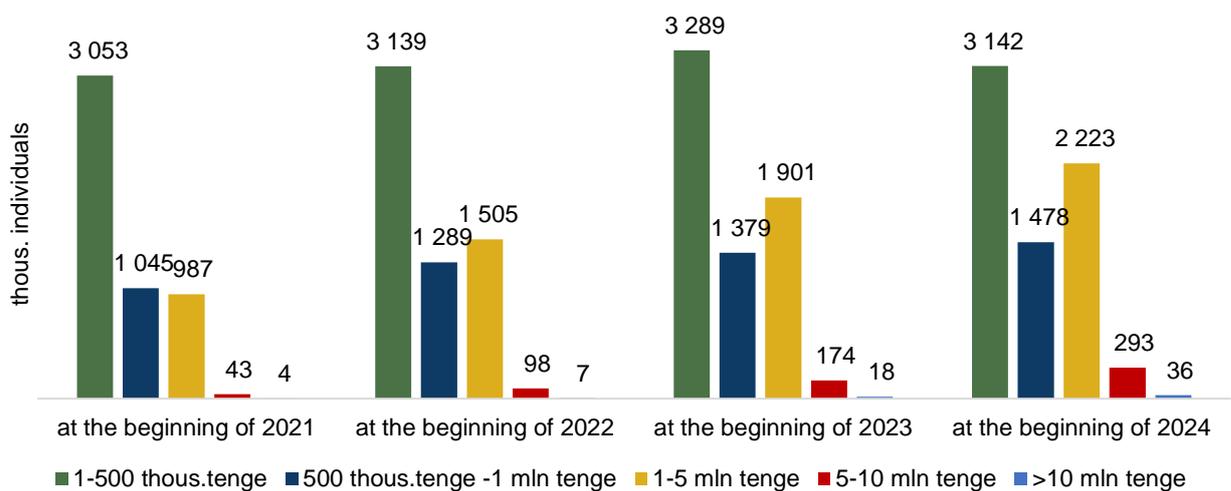
Figure 4.17 The share of the segment over 5 mln tenge has more than tripled over the recent three years



Source: Credit Register, National Bank computations

In 2023, the number of individuals with UCLs increased. At year-end, the number of unique borrowers reached 7.17 mln people (in 2022 – 6.76 mln). The number of people with debt below 500 thousand tenge has remained stable at 3.1 mln people since the beginning of 2021, while the number of borrowers with a debt of 1 to 5 mln tenge and over 5 mln tenge had increased by 2 times and 7 times, reaching 2.22 mln people and 329 thousand people, respectively (Figure 4.18).

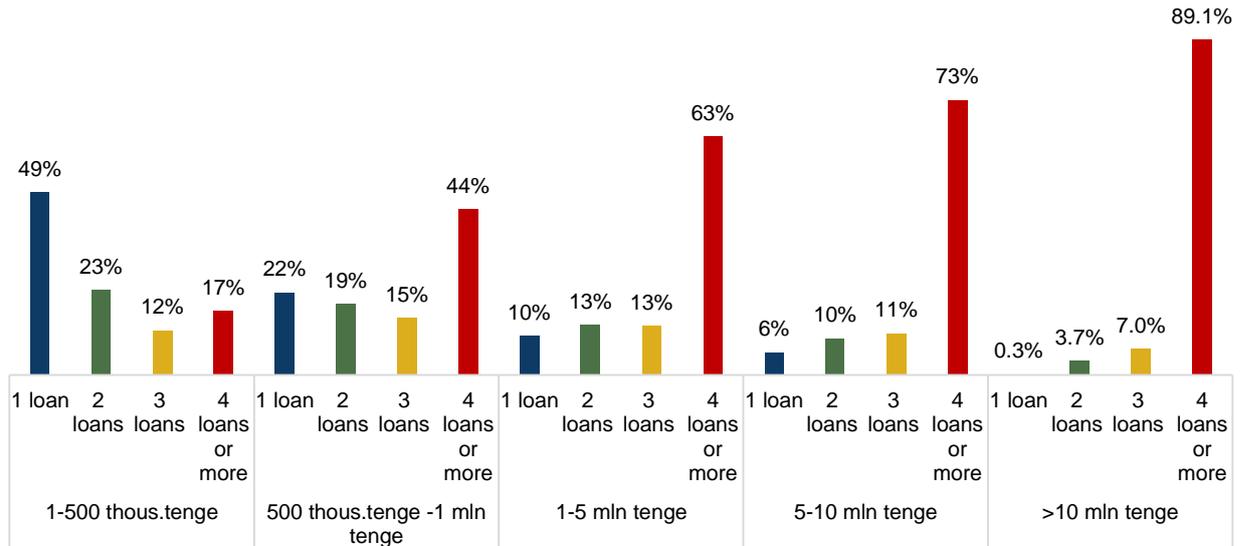
Figure 4.18 The number of borrowers in the segments of UCL portfolio



Source: Credit Register, NBK computations, BNS ASPR RK

One of the reasons for the increase in the number of borrowers with large total debt may be the existence of a large number of loans. As of January 1, 2024, 63%, 73% and 89% of the total number of borrowers with debt from 1 to 5 mln tenge, from 5 to 10 mln tenge and over 10 mln tenge, respectively, have four or more loans. In the group with debt below 500 thousand tenge, the share of borrowers with four or more loans is 17% (Figure 4.19).

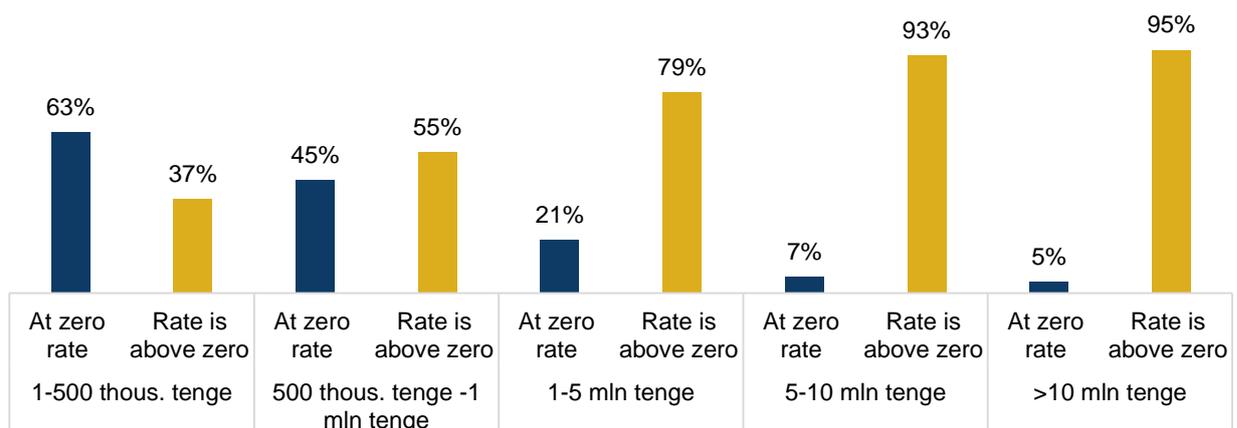
Figure 4.19 The number of loans per borrower in the UCL portfolio



Source: Credit Register, NBK's evaluation

It can be assumed that the reason for the large number of loans in segments with a large total debt (over 5 mln tenge) is the increased popularity of banking services for making purchases in installments at a near-zero interest rate, but the results of the analysis indicate the opposite trend. Thus, as of January 1, 2024, the shares of loans provided at a non-zero interest rate in segments with a debt of 5 to 10 mln tenge and over 10 mln tenge amount to 93% and 95% of the volumes of these portfolios (Figure 4.20). Among borrowers in the segment from 1 to 500 thousand tenge, zero-rate loans account for 63% of the total debt. Given that the main driver of growth in the UCL portfolio of individuals is the portfolio of borrowers with a total debt of more than 1 mln tenge, and the share of loans with a zero rate for these borrowers is significantly lower, it can be assumed that interest-free loans are not the reason for the growth of the retail UCL portfolio.

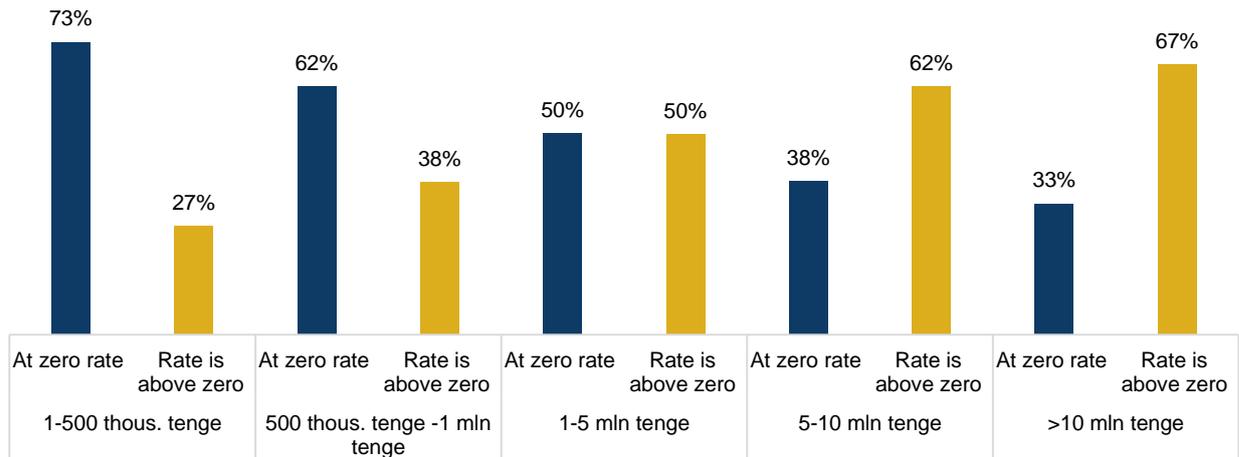
Figure 4.20 Share of loans (in terms of the debt volume) provided at zero interest rate is lower in the segments with a large total debt



Source: Credit Register, NBK's evaluation

In terms of the number of loans, in the segments from 1 to 500 thousand tenge and from 500 thousand to 1 million tenge, the majority of loans were provided at zero rate, 73% and 62%, respectively (Figure 4.21). In the segment with the largest total debt of borrowers (over 10 mln tenge), interest-free loans account for approximately one third of the number of loans.

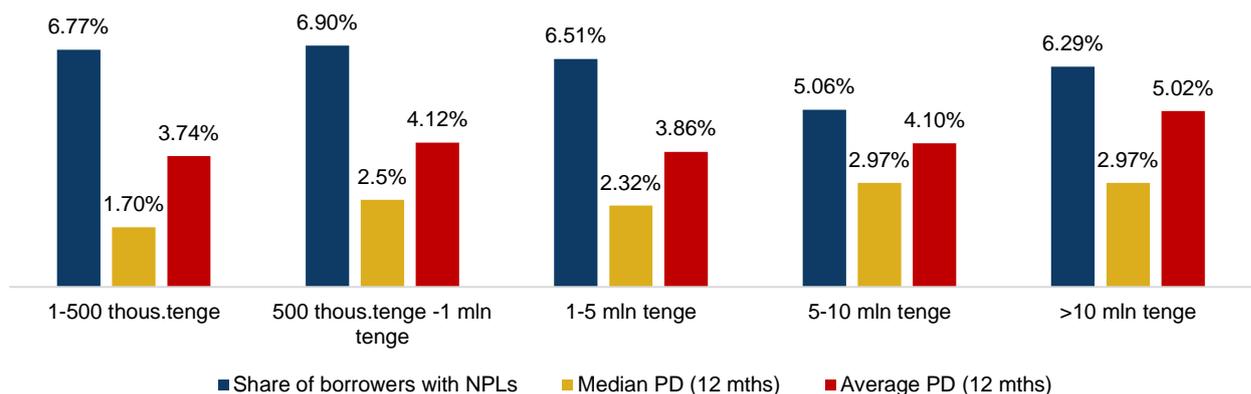
Figure 4.21 Percentages of loans (in terms of their number) provided at zero interest rate are significantly higher in the segments with a small total debt



Source: Credit Register, NBK's evaluation

High amounts of debt and a significant concentration of the unsecured loan portfolio in the segment over 1 mln tenge indicate that banks need to conduct a high-quality analysis of the financial condition of borrowers with large debts both before issuing a loan and in the process of regular monitoring. According to STB estimates, the level of credit risk in the UCL segment currently remains moderate. Thus, as of January 1, 2024, the highest levels of average PD over a 12-month horizon are observed in the segments with the largest total debt (over 10 mln tenge), but median PDs do not exceed 3%, and in the segment of less than 500 thousand tenge, the probability of default does not exceed 1.7%. At the same time, in all segments there is a high proportion of borrowers with at least one loan 90 +days past due (Figure 4.22).

Figure 4.22 Percentages of borrowers with non-performing loans in the UCL segments exceed the probabilities of default, according to STB assessments



Source: Credit Register, NBK's evaluation, bank computations

Note: NPL90+ loans were not taken into account when calculating average and median probabilities of default

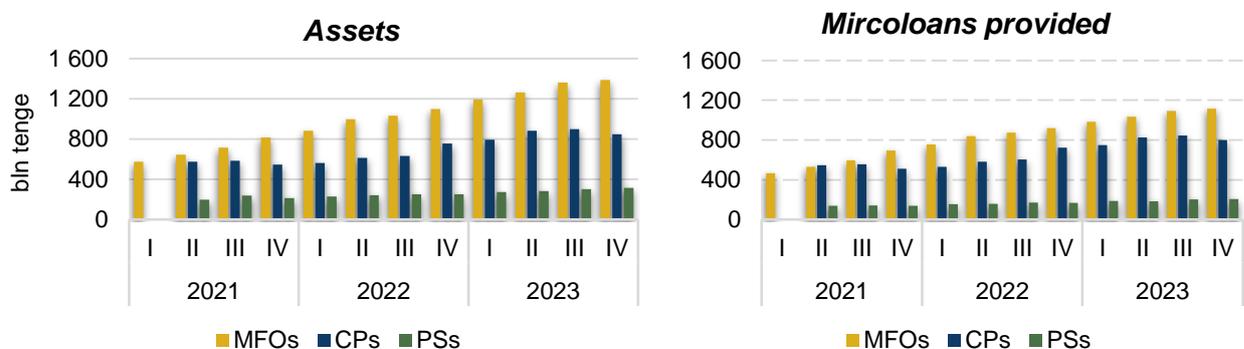
In the segment with a total debt of more than 5 mln tenge and 10 mln tenge, the shares of borrowers with at least one non-performing loan reach 5.1% and 6.3%, respectively, which is slightly lower than in other segments of the UCL portfolio, but given the high level of debt, this may pose a higher credit risk for STBs. At the same time, in the segments with a high level of debt, most borrowers have more than 4 loans, which increases the concentration of the portfolio and the sensitivity of this group to macroeconomic shocks affecting household income.

4.4 Microfinance Organizations

In 2023, a rapid growth of assets of organizations engaged in microfinance activities (OEMFA), driven by microloans for consumer purposes, continued. However, the total number of borrowers and loans of OEMFA remained virtually unchanged. At the same time, there was a slight deterioration in the quality of the microloan portfolio during the year, mainly due to an increase in the share of loans past due from 31 to 60 days.

In 2023, the assets of microfinance organizations (MFOs) grew by 26.3%, while the assets of credit partnerships (CPs) and pawnshops (PSs) increased by 11.9% and 25.1%, respectively (Figure 4.23). This increase, as in prior periods, is caused by further growth in the volume of microloans provided. During the period under review, the microloan portfolio grew by 17.3% and amounted to 2,120 bln tenge: the MFO portfolio expanded by 21.3% (to 1,114.6 bln tenge), that of CPs – by 10.8% (to 799.3 bln tenge), and of PSs – by 23.9% (to 203.2 bln tenge).

Figure 4.23 *Total volume of assets and provided microloans²³ of microfinance organizations kept growing in 2023*



Source: National Bank

Note: book value at the end of the corresponding quarter

An active growth of the microloan portfolio, on the one hand, indicates a further deepening of financial intermediation. On the other hand, it may be driven by the demand from the population, which finds it more difficult to access bank lending due to the stricter requirements of second-tier banks. Thus, simplified requirements and loan origination procedures, active promotion of online microloans, as well as insufficient purchasing power supported the demand for microloans.

At the same time, the AFR introduced a number of regulatory and legislative changes aimed at further tightening the regulation of OEMFA activities. In particular, the maximum²⁴ interest rate under an agreement to provide an unsecured microloan for a term of up to 45 calendar days (including for loans up to 30 MCIs – less than 1 percent per day, but no more than 20 percent of the amount of the microloan originated, for loans from 30 MCI to 50 MCI – less than 1 percent per day, but no more than 15 percent of the amount of the microloan originated) was lowered. In addition, to stimulate MFOs to settle problem debts, similar to STBs, tax breaks were provided for MFO's income from the release of previously created provisions for microloans to individuals as a result of the settlement of problem debts of borrowers.

On average, as of January 1, 2024, there were two loans per borrower for each type of OEMFA: MFOs – 2.2; CPs – 1.9; PSs – 2.3. At the same time, the number of OEMFA

²³ Minus impairment reserves

²⁴ Resolution of the Board of the National Bank of the Republic of Kazakhstan dated November 26, 2019 No. 209 "On establishing the maximum interest rate under a microloan agreement"

borrowers and loans in total slightly decreased during 2023. A minor reduction in the number of PSs loans and borrowers offset a small increase in MFOs and PSs.

Table 4.1 *The number of borrowers and loans of all types of OEMFA had not virtually changed during 2023*

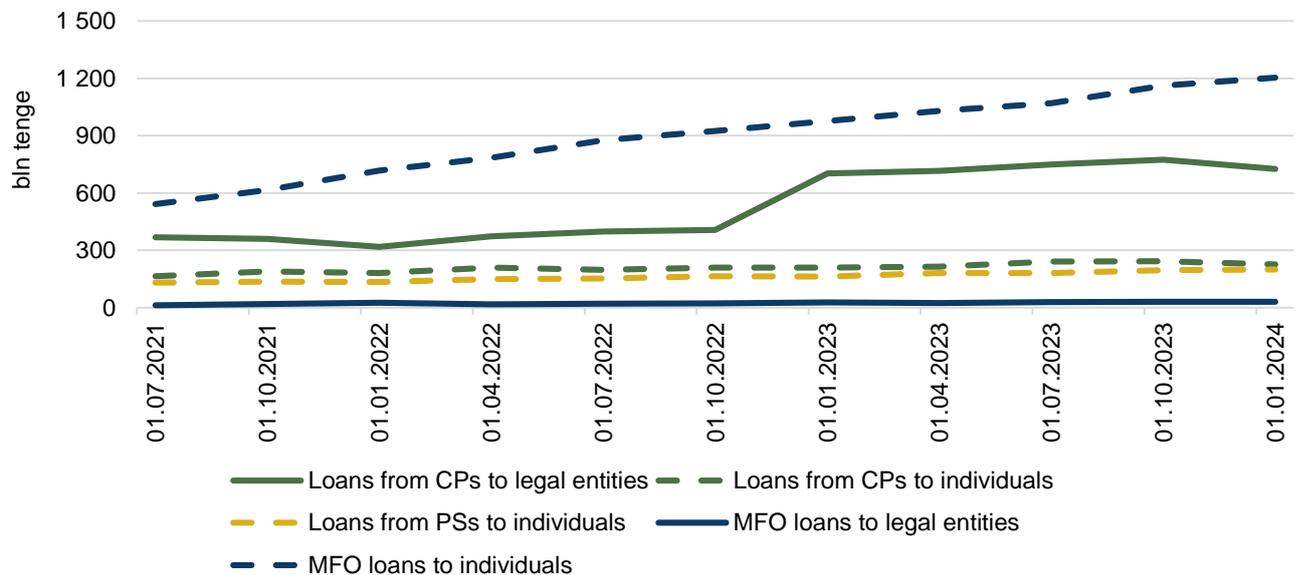
OEMFA Type	Change in quantity	
	of borrowers	loans
Microfinance organizations	4%	8%
Credit partnerships	12%	7%
Pawnshops	-10%	-16%
Total, cumulative decrease	-2%	-3%

Source: SCB

Note: NBK's evaluation

At the same time, an increase in the number of MFO borrowers who have more than one microloan may point to the problems with debt servicing.

Figure 4.24 *In 2023, the OEMFA microloan portfolio continued to grow due to originations of loans to natural persons*

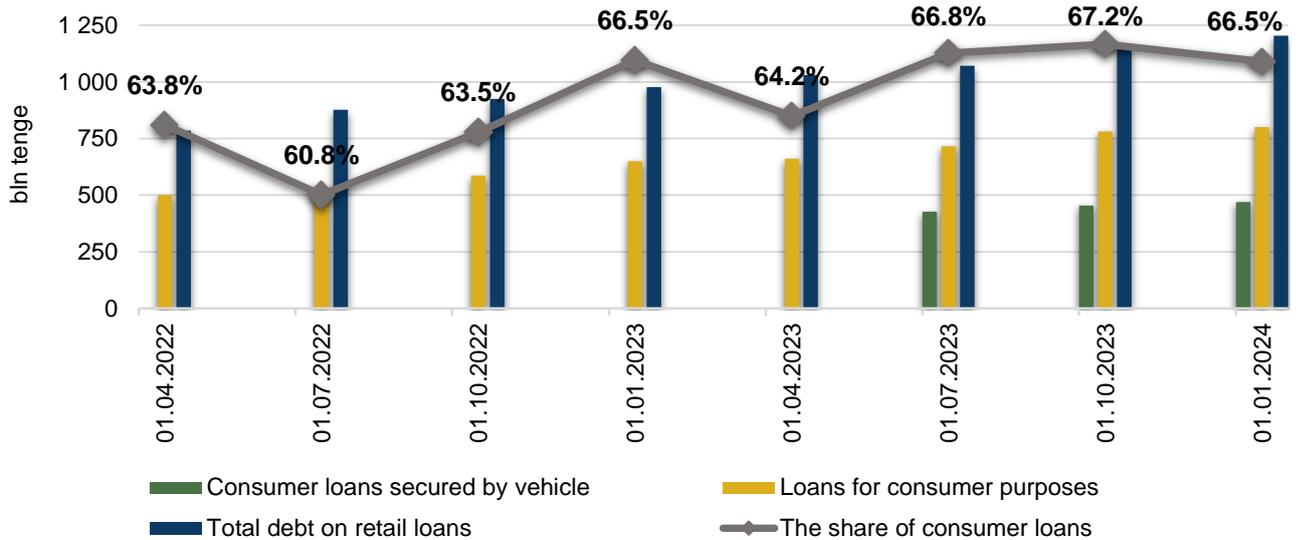


Source: National Bank

Individuals service the overwhelming share of the OEMFA microloan portfolio. Thus, during 2023, the share of loans to individuals in the OEMFA portfolio increased by 3.5% and amounted to 68.3% of the total volume of their portfolio (Figure 4.24). Such increase is largely the result of a long-term growth in MFO lending to individuals, while the volume of microloans to legal entities remained virtually unchanged. As of January 1, 2024, the majority of OEMFA borrowers – individuals received microloans through MFOs (73.8% of the total volume of retail microloans), while 96% of the total volume of microloans to legal entities were provided through CPs. It is worth mentioning that microloans to individuals also include loans to individual entrepreneurs for entrepreneurial purposes, which account for 12.1% of the total volume of loans to individuals from MFOs as of the reporting date.

Despite a slight decline at the beginning of the year, the share of consumer microloans at the end of the reporting period remained at 66.5% (Figure 4.25). More than half of the volume of such microloans are consumer loans secured by cars. In turn, another part of individuals received microloans for carrying out entrepreneurial activities, including without official registration. Such borrowers are classified by MFOs as self-employed.

Figure 4.25 At the end of 2023, on average about 2/3 of the MFO microloans were provided for consumer purposes



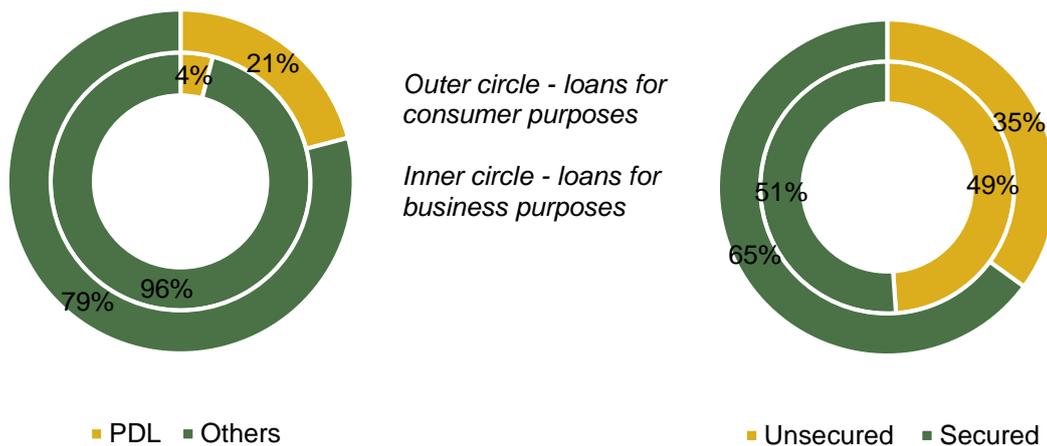
Source: National Bank

Note: in accordance with amendments to the Resolution of the Board of the National Bank dated November 28, 2019 No. 222, from July 1, 2023, the requirements for the MFO reporting in terms of the structure of provided microloans were expanded (including the addition of a criterion for the type of collateral)

As of January 1, 2024, 65% of the consumer microloan portfolio was secured by collateral, while this figure was only half of the business microloan portfolio (Figure 4.26). The relatively high level of collateral in the consumer microloan portfolio is the result of the significant share of car loans, which account for about 90% of the total volume of secured consumer microloans.

Figure 4.26 Loans with a tenor of 45+ days and secured with collateral account for the bulk of loans in the structure of MFO microloans to natural persons,

As of 01.01.2024

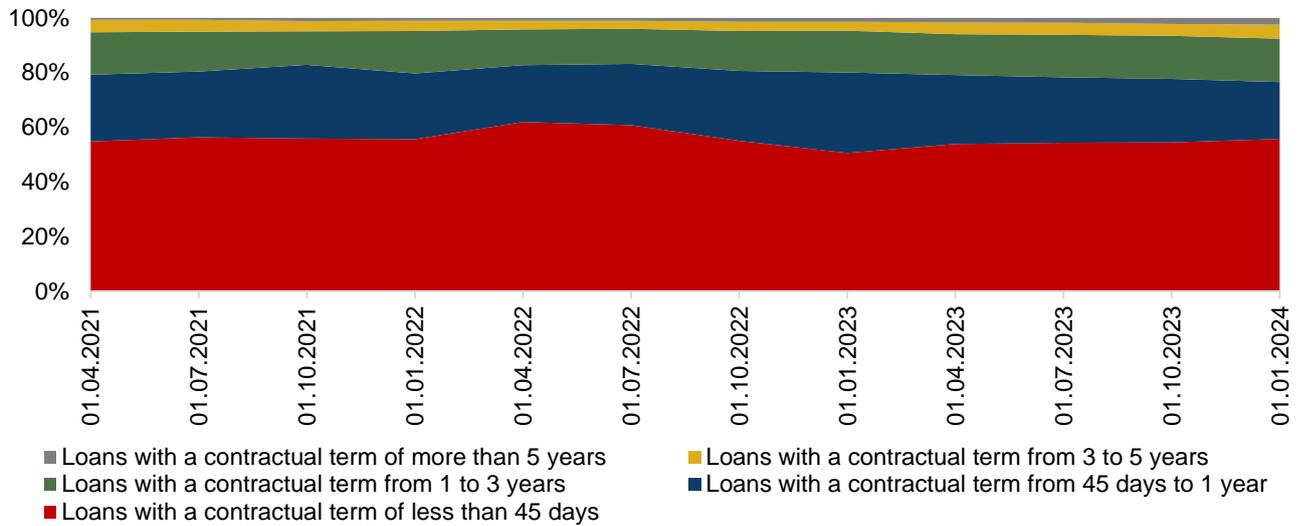


Source: National Bank

In turn, 18% of the total volume of MFO microloans were PDL loans, the main part of which were for consumer purposes. With this insignificant share of PDL loans in the portfolio of microloans to individuals, more than half of the concluded microloan agreements of MFOs actually fall on this type of loans (Figure 4.27), which therefore points to the heightened demand for small short-term loans.

Figure 4.27 There is still a significant share of loan agreements with a tenor of less than 45 days (PDL loans), which account for about 55% of total agreements concluded

In terms of the number of contracts



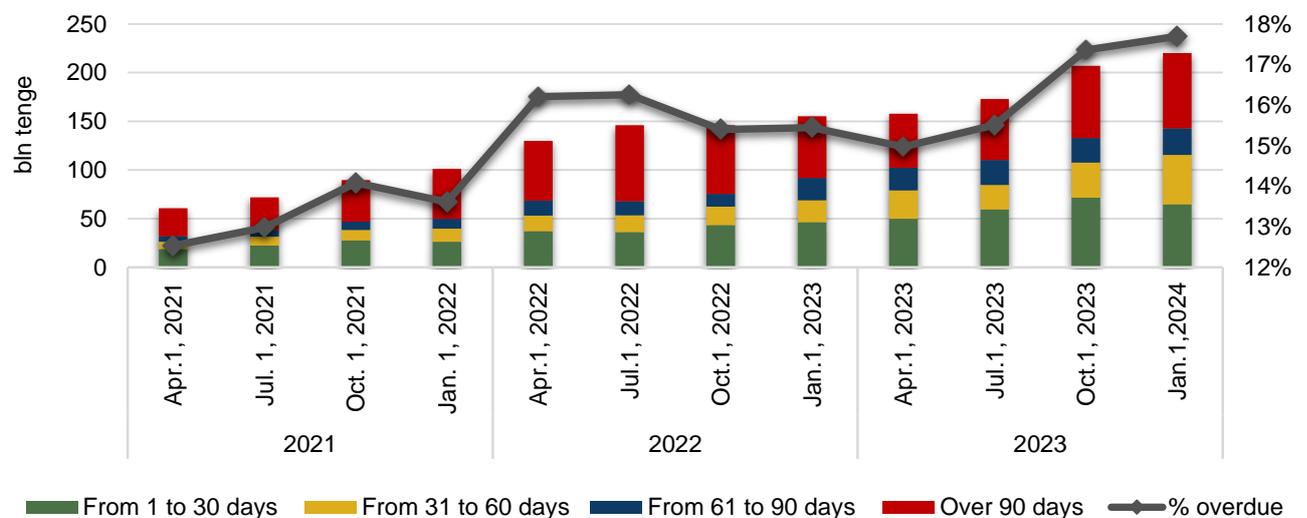
Source: SCB

Note: NBK's evaluation

The average term of loans provided by microfinance organizations as of January 1, 2024 was 8 months, compared to 7 months as of January 1, 2023. In addition, the weighted average maturity of the portfolio during the specified period slightly increased – from 22 to 24 months. This extension of the term is the result of a minor increase in the share of loans with a contract term of 3 to 5 years. Car loans constitute a significant portion of such loans.

The quality of the OEMFA loan portfolio has somewhat deteriorated, largely because of the MFO portfolio. Thus, despite some recovery in the quality of the MFO loan portfolio at the beginning of 2023, the share of overdue loans subsequently increased and reached 17.7% (Figure 4.28).

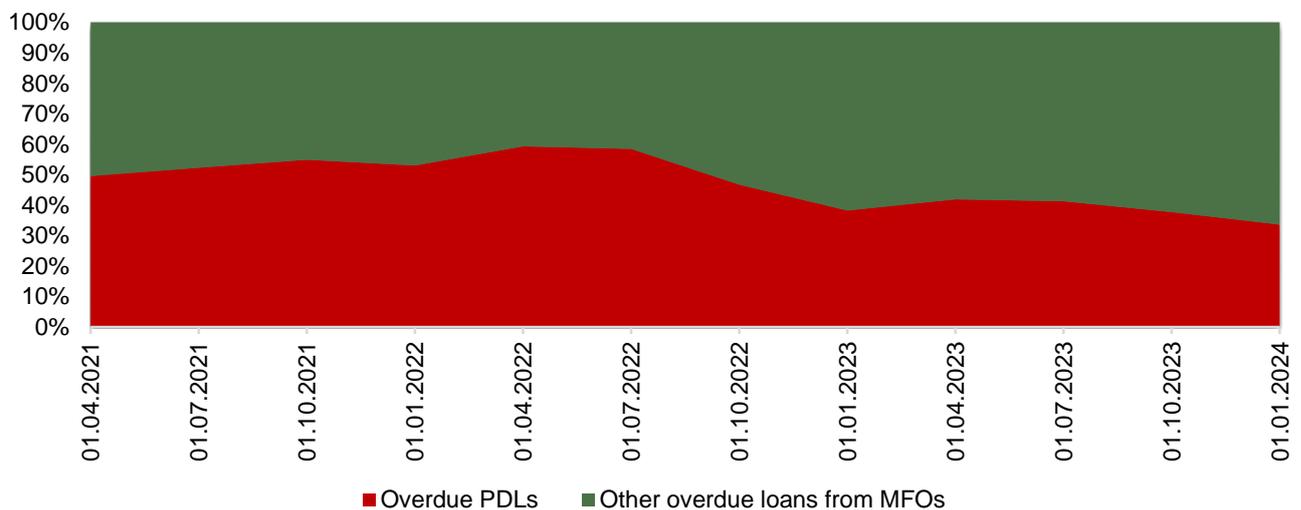
Figure 4.28 The share of overdue loans in total loans provided by MFOs increased during 2023



Source: National Bank

In particular, such increase was caused by the growth of loans past due from 31 to 60 days, which was caused by a number of factors, such as the launch of new products with a high risk of becoming overdue by individual MFOs and the “maturation” of the portfolio for such products; a revision of the approach to handling problem loans due to the cancellation of their transfer to collection agencies and the proposal of their own solutions for settlement; an insufficient level of financial literacy; low purchasing power and solvency. In addition, there is an indirect impact of the restoration of logistics supply chains for cars, which lowered prices in the secondary market relative to prices in the primary market. As part of the loan survey²⁵, some large MFOs specializing in car loans noted that borrowers began to experience a scarcity of resources to repay debt due to deteriorating solvency. The restoration of supply chains and the active promotion of Chinese-made cars significantly increased the supply on the market, thereby ensuring some decline in car prices. Thus, some clients were unable to sell cars at the purchase price and settle their liabilities to MFOs. At the same time, the share of NPL90+ remained at the level of the beginning of 2023 at 6.2%, which probably indicates active loan resolution, including through restructuring.

Figure 4.29 *The share of loans past due less than 45 days in to the total volume of overdue debt on microloans somewhat decreased in 2023*



Source: SCB

Note: NBK's evaluation

In the structure of overdue microloans of MFOs as of January 1, 2024, one third were PDL loans (Figure 4.29). It is worth mentioning that the share of overdue PDL loans in the total volume of overdue loans continued to gradually go down during 2023 due to a number of AFR regulatory measures initiated by the AFR at the end of 2022, where under arrangements were made to restructure problem debt, which also included debt forgiveness for individual borrowers. Thus, the share of overdue debt on such loans as of January 1, 2024 was 43.3%, while the NPL90+ level decreased to 10%, and the number of MFOs specializing in PDL loans decreased from 83 to 65. However, it is worth mentioning that various methods of problem debt resolution do not solve the problem of debt at the systemic level, but only temporarily smooth out credit risks and can distort the real risks of the microfinance market. Given the continued growth dynamics of the number of active MFO microloans per borrower, an increase in the amount of microloans and low real income of

²⁵ Taking into account the active development of the microloan segment within the framework of the quarterly bank lending surveys based on the results of the second quarter of 2023 (<https://nationalbank.kz/ru/news/predydushchie-publikacii-opros/rubrics/2088>), online meetings were held with individual large MFOs, whose assets make up more than 70% of the assets of all MFOs.

the population, there is a high probability of further growth in overdue debt, including that restructured microloans could go overdue again.

The share of overdue loans for CPs did not undergo significant changes and remained at the level of 2%, while for PSs this figure was 29.6% at the end of 2023.

During 2023, most MFOs complied with the prudential ratios set by the AFR. However, as of January 1, 2024, 19 MFOs out of 229 did not comply with the prudential ratios (including 8 MFOs did not comply with the minimum amounts of statutory capital and owners' equity, 18 MFOs – with the capital adequacy requirement). It is worth mentioning that violation of the capital adequacy requirement (k1) results from violation of the additional capital requirement (20% of the limit²⁶ for the share of NPL90+ in the total loan portfolio) imposed from the beginning of 2023. The introduction of such requirement, in turn, is also a factor in maintaining a low share of NPL90+ loans (especially for PDL loans). *However, as the experience of the banking sector in 2015 showed, setting a limit on the share of NPL90+ entails active "greening" of the loan portfolio by professional market participants, masking the real quality of the portfolio by restructuring the debt in order to comply with the prudential ratio. As a result, the debt is reported as standard but is not stable²⁷.*

On the funding side, loans from third parties continue to account for the major share in financing of operations (more than 70% of liabilities of all MFOs). At the same time, the share of debt securities increased from 7.5% to 15.5% during 2023. Meantime, the share of subordinated debt increased slightly. Issuance of debt securities provide MFOs with a longer-term and more stable source of funding. In addition, the projected reduction in the cost of credit resources will also potentially have a positive impact on the cost of funding.

Despite the long-term active development of the microfinance sector, high concentration among participants remains. Thus, as of January 1, 2024, the top 5 MFOs accounted for 63.3% of the total microloan portfolio of MFOs, while for CPs and PSs, these figures were 52.8% and 48.4%, respectively.

In turn, in order to further increase the transparency of activities and reduce risk in the MFO segment, an effort to strengthen regulatory and supervisory measures is underway. Thus, according to the AFR, in 2024, in order to ensure financial soundness and stability of the financial market, it is planned to gradually introduce a risk-based supervision system for MFOs:

- requirements to risk management and internal control systems will be developed, providing for the establishment of proper corporate governance practices, including an adequate system for managing credit, operational and compliance risks;
- it is planned to construct a model for determining the risk profile of microfinance organizations similar to SREP (Supervisory Review and Evaluation Process); its results will determine the intensity and depth of supervisory measures in relation to the supervised entities based on quantitative and qualitative indicators;
- the introduction of the institution of self-regulatory organizations is being considered, which will allow for the effective distribution of the AFR supervisory resources and focus the regulator's attention on systemically important organizations, as well as on the activities of self-regulatory organizations.

²⁶ Resolution of the Board of the National Bank of the Republic of Kazakhstan dated November 14, 2019 No. 192 "On approval of prudential ratios and other mandatory requirements and limits for an organization engaged in microfinance business, and methods for their calculation"

²⁷ Akylbekov, A. (2024). "Analyzing non-bank household financing in Kazakhstan", Working Papers №2024-1, National Bank of Kazakhstan.

V Risks of Liquidity, Funding, Dollarization, Foreign Exchange and Interest Rate Risks

At the end of 2023, the volume of highly-liquid assets slightly increased, and banks liquidity ratios remained at levels exceeding the regulatory ones. The main approach to the distribution of liquidity surplus by banks was to place largely in GSs and on accounts at the NBK. The level of liquidity risks for most banks continued to remain moderate due to a significant stock of highly-liquid assets, which constituted approximately a third of the banks' total assets.

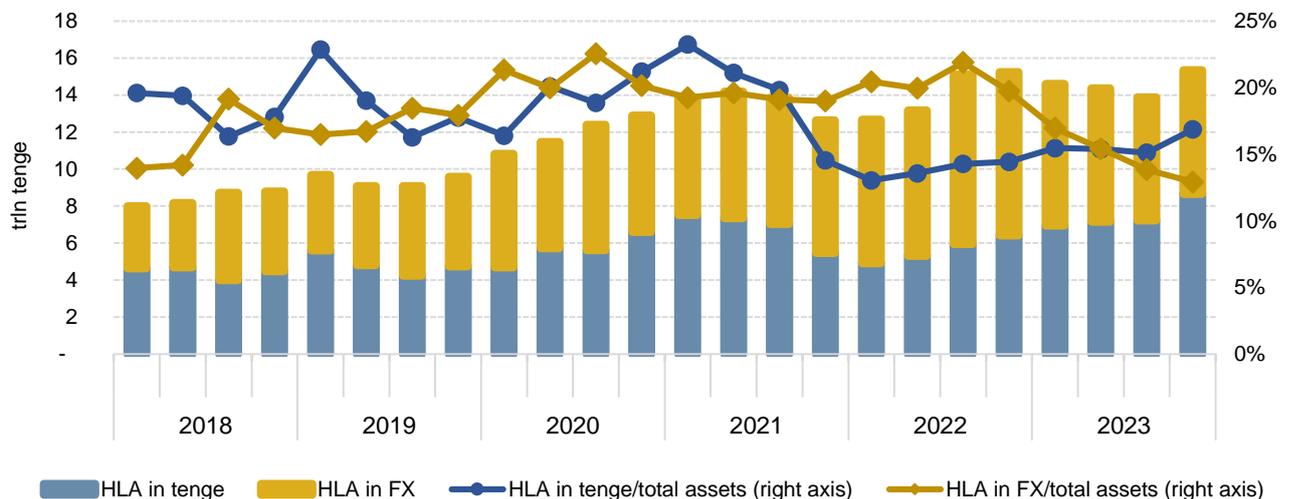
There were no significant changes on the bank funding side. After dynamic growth in 2022, the share of non-residents in deposits of individuals and legal entities stabilized in 2023. At the same time, the diversification of the funding base continued due to reduction in the share of QPS.

The degree of dollarization has reached an all-time low over the course of the past sixteen years, with a marked decline in the proportion of foreign currency deposits evident in both the consumer and corporate sectors. The net foreign exchange position of the banking system has not been subject to significant fluctuations and has remained within acceptable limits.

5.1 Liquidity Risks

In 2023, the banking sector maintained a high level of liquidity. At the end of the year, highly-liquid assets (HLA) amounted to 15.3 trln tenge, which corresponds to 29.8% of the total assets of the sector. HLA in the national currency exceeded HLA in foreign currency (8.7 trln and 6.6 trln tenge, respectively). At the same time, HLA in tenge increased by 34.9% compared to the previous year, while HLA with a foreign currency component decreased by 24.4% mainly due to the moderate level of interest rates on foreign currency deposits (Figure 5.1).

Figure 5.1 Volumes of HLA showed growth at the end of 2023

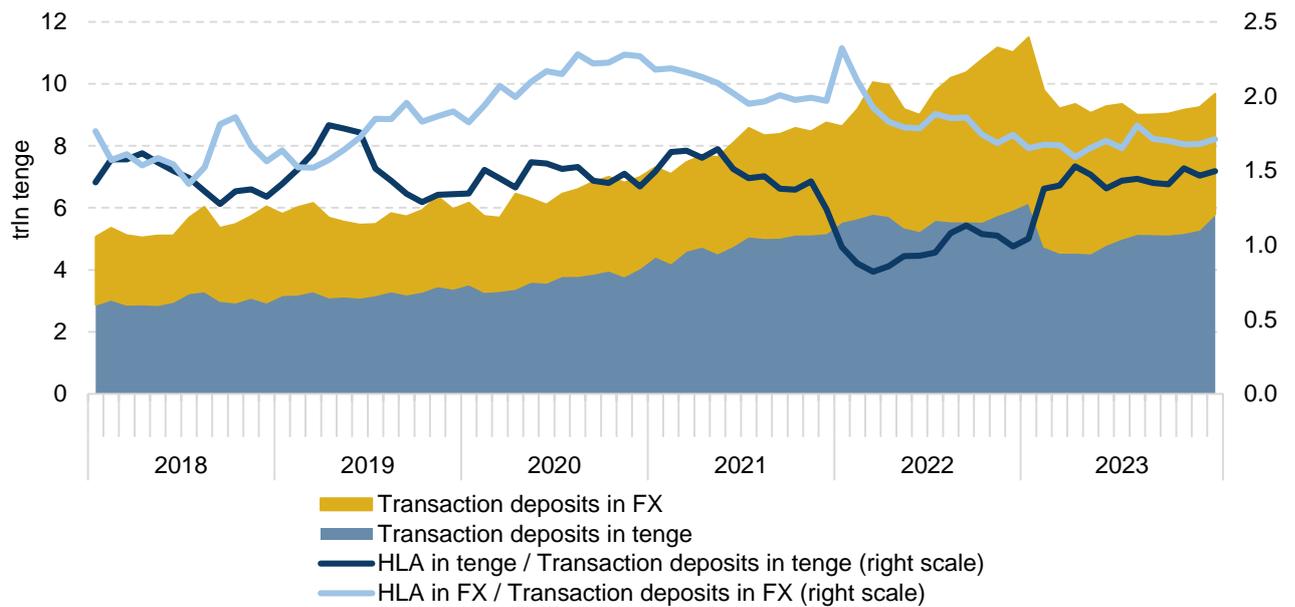


Source: STB reports

Note: HLA include cash, precious metals, correspondent accounts, interbank deposits and GSs (excluding encumbered). Data as of the end of the quarter

As of January 1, 2024, total HLA of the banking sector exceeded total liabilities on transaction accounts of individuals and legal entities by 1.6 times, which proves the ability of banks to cover potential outflows of funds when they occur. The excess of HLA over transaction accounts was observed both in the national currency (by 1.5 times) and in foreign currency (by 1.7 times) (Figure 5.2).

Figure 5.2 The existing level of bank HLA covers transaction accounts with a safety margin

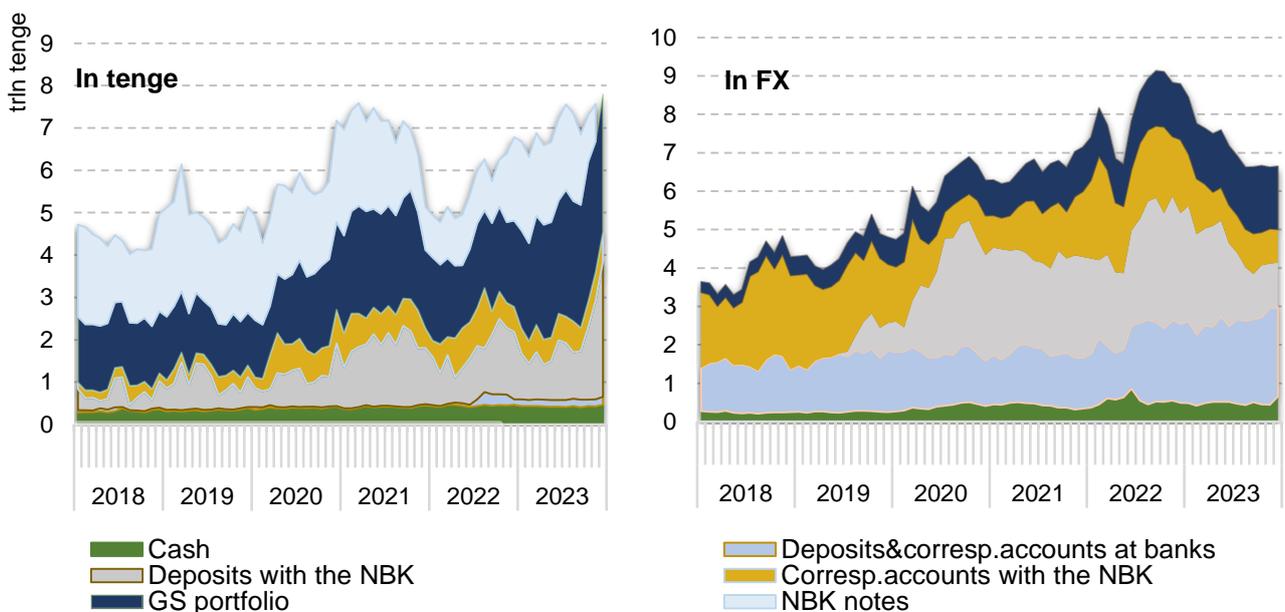


Source: STB reports

Note: transaction accounts include current accounts and demand deposits of individuals and legal entities, including interbank correspondent accounts

Throughout the year, there were divergent dynamics of HLA in the banking sector. During 2023, the National Bank continued to absorb excess liquidity through the standing facilities operations. Banks placed the tenge liquidity mainly in GSs, amounting to 37.4%, and in accounts with the National Bank, where the share of notes and deposits reached 10.2% and 36.8%, respectively (Figure 5.3).

Figure 5.3 Claims on the NBK in the tenge and foreign currency component of HLA prevail insignificantly



Source: STB regulatory reports

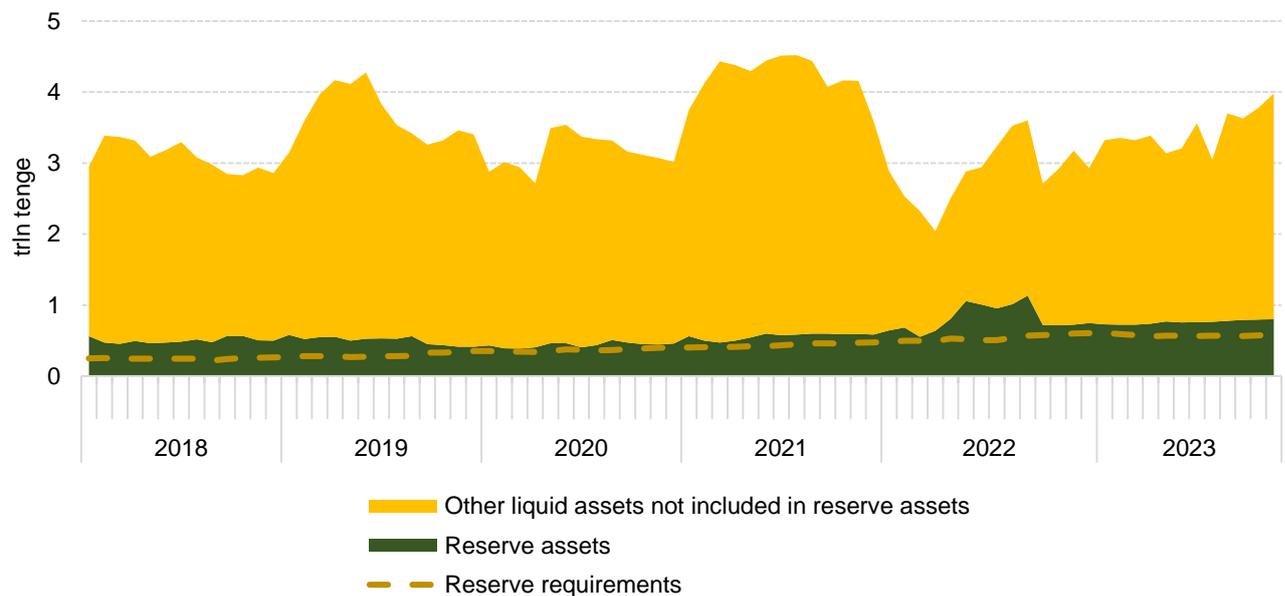
Note: HLA include cash, precious metals, correspondent accounts, interbank deposits and GSs (excluding encumbered). Data as of the end of the quarter

Liquidity in foreign currency was placed on deposits (17.3%) and correspondent accounts (13.1%) with the National Bank and second-tier banks (35.1%), as well as in GSs (24.7%). It is worth mentioning the change in the currency structure of HLA in conjunction with de-dollarization, as well as the exchange rate revaluation of deposits due to the strengthening of the national currency throughout 2023.

In 2023, liquidity surplus was growing (*Figure 5.4*). Banks continued to comply with minimum reserve requirements with significant safety margin.

By the end of 2023, the volumes of cash on hand and funds in the national currency in correspondent accounts with the NBK significantly exceeded (2 times) reserve requirements, amounting to 1,171 bln tenge against the required level of 598 bln tenge. At the same time, the tenge liquidity placed in the NBK deposits and notes exceeded reserve requirements by 6.8 times.

Figure 5.4 Banks continued to comply with minimum reserve requirements with a significant safety margin



Source: STB data

Note: reserve assets are average balances of funds in the national currency on bank correspondent accounts with the NBK and cash (cash on hand, money in transit, ATMs, terminals) within 50% of the minimum reserve requirements for the evaluation period. Reserve requirements – the minimum amount of funds that banks are required to maintain on a correspondent account in the national currency with the NBK. Data on the minimum reserve requirements, reserve assets and claims on the NBK are shown as monthly average

At the end of the year, an increase in domestic assets and liabilities of banks by 14.9% and 11.3%, respectively, was observed, reaching figures of 43.4 trln and 37.6 trln tenge.

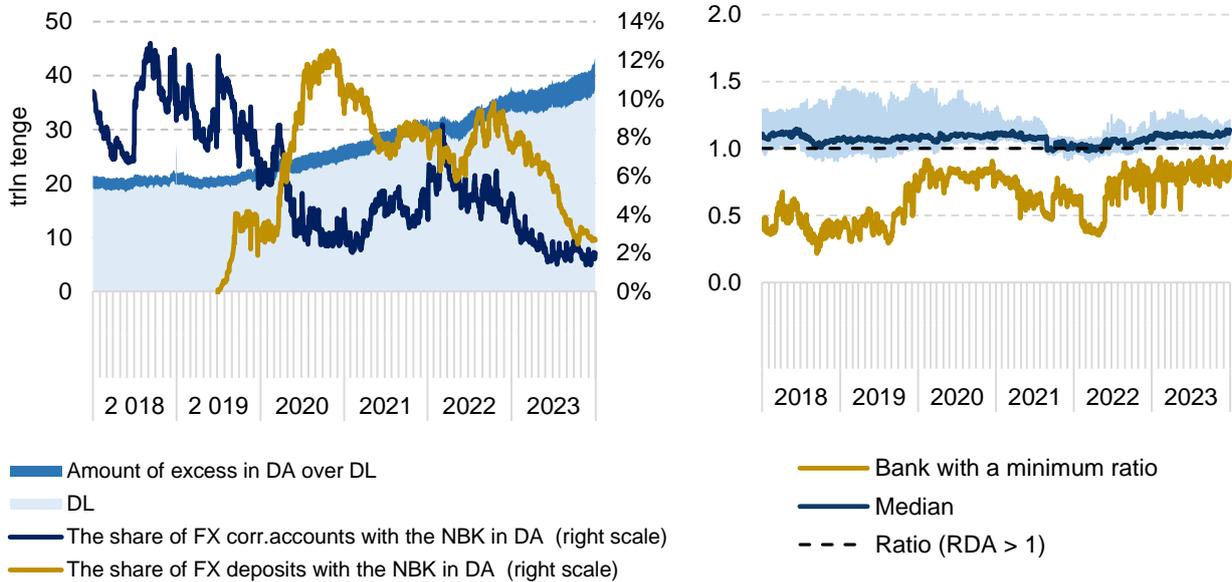
During the year, the share of foreign currency correspondent accounts and foreign currency deposits in the NBK in the structure of domestic assets decreased to 2% and 2.7%, respectively (*Figure 5.5A*). Banks responded promptly to changes in the market situation, adjusting the level of foreign currency liquidity based on their expectations. In 2023, the share of foreign currency deposits was replaced by the GS portfolio and foreign cash.

Most banks continued to comply with the prudential ratio for placing a part of the funds in domestic assets (DAR) even without including the funds in the National Bank's foreign currency accounts. Preference was given to placing capital within the country, which is reflected in the expansion of the interquartile range for the fulfillment of DAR by banks (*Figure 5.5B*).

Figure 5.5

A. Shares of correspondent accounts in foreign currency and bank deposits with the NBK decreased insignificantly

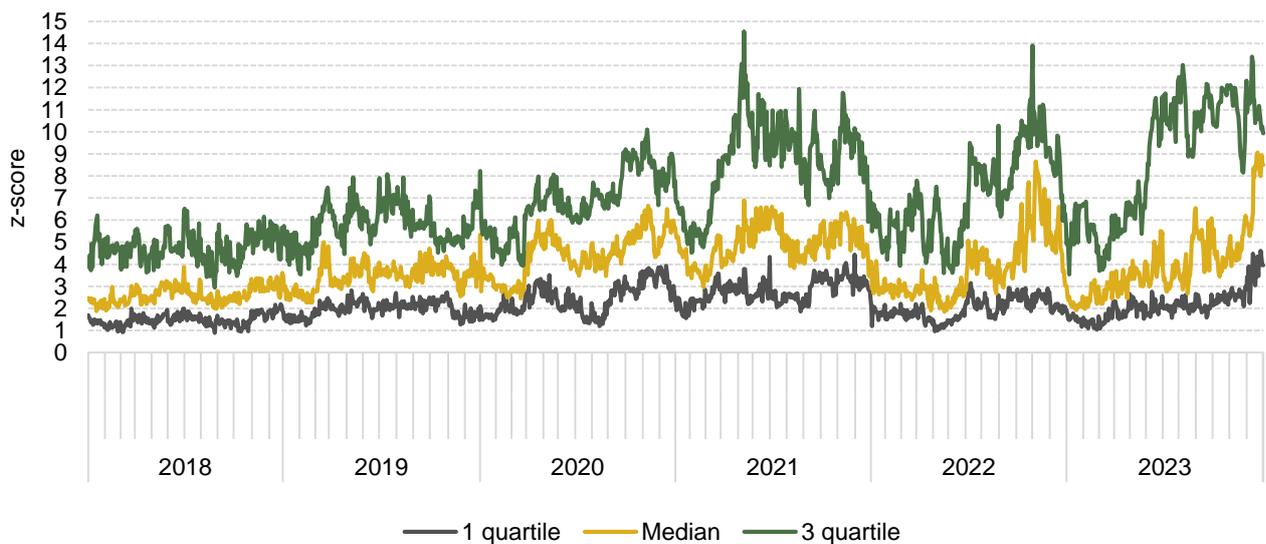
B. Most banks comply with the DAR even without taking account of FX correspondent accounts with the NBK



Note: DA – domestic asset, DL – domestic liabilities, which are calculated as the sum of average monthly amounts of subordinated debt, issued bonds, excluding Eurobonds, domestic liabilities to residents of Kazakhstan and a part of equity. DAR – domestic assets investment ratio (≥ 1). Interquartile range – banks included in the 2nd and 3rd quartiles

During 2023, banks were in a structural liquidity surplus. Analysis of the tenge liquidity indicator on the daily data showed that banks had a sufficient level of correspondent accounts in the tenge and deposits with the National Bank, necessary to cover one-day standard deviation in the volume of bank deposits (Figure 5.6).

Figure 5.6 The level of the tenge resources of STBs is sufficient to cover one-day standard deviation on deposits in most banks



Source: STB reports

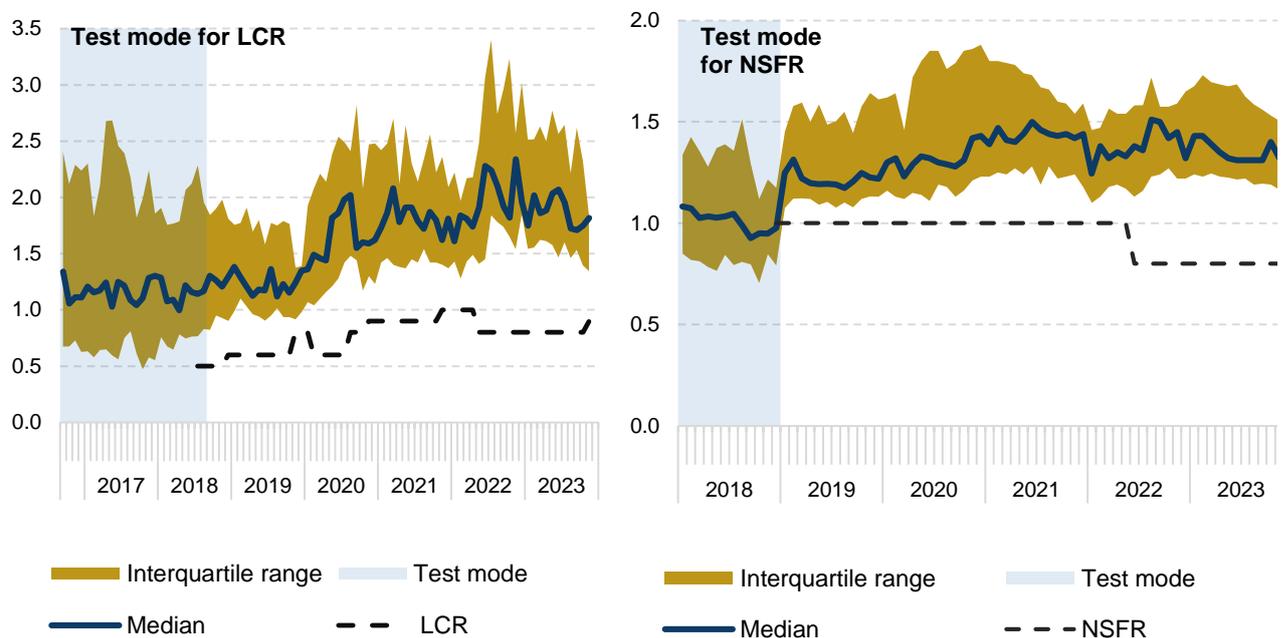
Note: the adequacy of core liquid assets is calculated as the ratio of core liquid assets of banks (cash on hand, precious metals, funds in correspondent accounts and deposits with the NBK/STBs) and the standard deviation of deposits in the national currency for 3 months calculated per day (Z-score). The data has a daily frequency

In certain periods of demand for the tenge liquidity, the dynamics of the indicator in different quartiles had a multidirectional nature. Thus, firstly, the outflow of the tenge liquidity was not systemic, and, secondly, all banks had a sufficient level of liquid assets to meet the need for the tenge liquidity. Thus, the first quartile of banks had tenge balances in the National Bank sufficient to cover a one-day standard deviation in the deposit base.

In general, the increase in the level of liquidity adequacy ratio for banks in all quartiles is related to the growth dynamics of liquid assets of banks²⁸ in the tenge amid the global weakening of the US dollar, the level of the base rate, as well as the high differential in rates between the tenge and foreign currency deposits.

The analysis shows a downward shift in the interquartile range, as well as in the median figures of banks for liquidity coverage ratios (LCR) and net stable funding ratios (NSFR). During 2023, second-tier banks met the minimum requirements for LCR and NSFR. In the course of the monitoring, no drop in the ratios below the established values was recorded. (Figure 5.7).

Figure 5.7 **Banks have been complying the LCR and NSFR requirements**



Source: STB reports

In 2023, regulatory requirements to the standard values of LCR and NSFR were at the level of 0.8. At the same time, the subsequent return of the level of LCR and NSFR ratios to those recommended by the BCBS is envisaged from January 1, 2024 to the level of 0.9 (for LCR), from July 1, 2024 – 1.0 (for NSFR).

²⁸ Cash on hand, funds in correspondent accounts and deposits in the NBK/STBs, government securities portfolio

5.2 Funding Risks

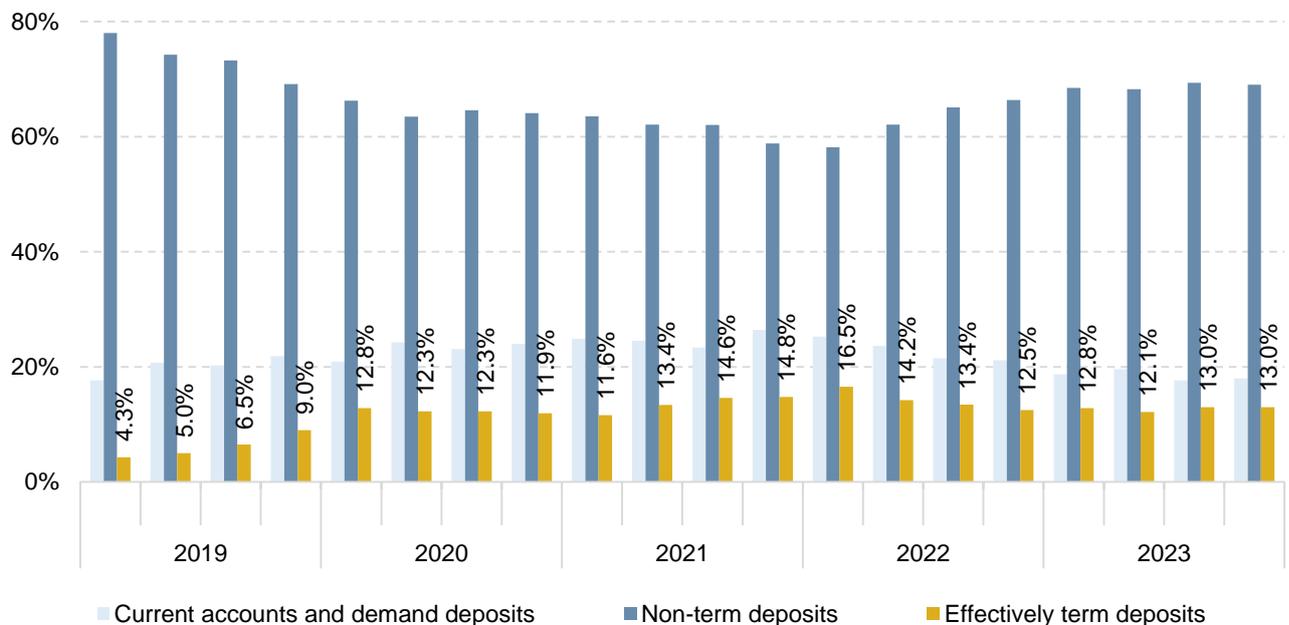
The main risks in the funding structure associated with a low share of truly term sources of funding have persisted. The level of concentration of the largest funding sources in the liabilities of the banking sector has not changed compared to the previous year. Dependence on the public sector continues to decrease. In 2023, the growth rate of the share of non-residents in bank accounts decelerated.

Sustainability of Funding

At the end of 2023, the share of deposits amounted to about 79% of bank liabilities, while their stability is at a low level, both in terms of retention periods and in terms of the low share of sustainable long-term deposits.

In 2023, sustainability of funding was at the same level as in 2022 due to the persisting dynamics of all types of deposits: non-term deposits, term and savings deposits. Over the year, the share of truly term deposits increased by 0.5 pp (to 13% at the end of the year). At the same time, the share of non-term deposits also increased by 2.7 pp (69% at the end of the year). The share of current accounts and demand deposits at the end of the year amounted to 18%, decreasing by 3.1 pp over the year (Figure 5.8).

Figure 5.8 In 2023, sustainability of funding was at the same level as in 2022



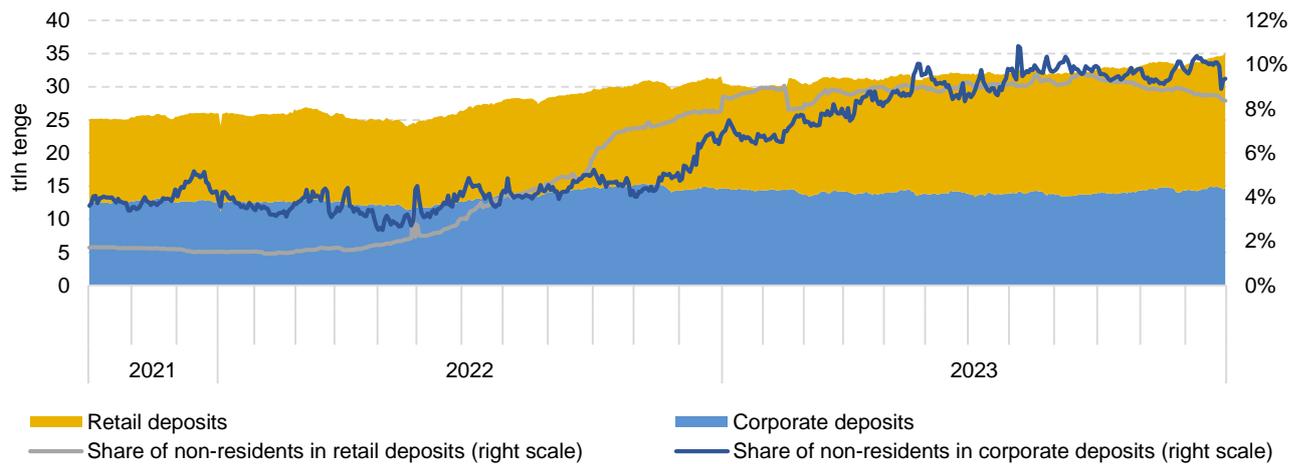
Source: KDIF

Since the beginning of 2022, the growth of non-term funding has been accompanied by a significant increase in the share of non-residents in deposits of the banking sector. The main increase in the share of non-resident deposits occurred in 2022 (from 2.9% to 7.4%).

In 2023, the situation had stabilized: the total share of non-residents in deposits increased by 1.4 pp (from 7.4% at the end of 2022 to 8.8% at the end of 2023) (Figure 5.9).

This indicator is significantly lower than that of neighboring countries. Thus, according to the UN report entitled “The World Economic Situation and Prospects for 2024”, the share of non-resident deposits in Georgia went up to 18.1% in June 2023 compared to 14.5% in May 2022; in Armenia, it reached a peak of 29.5% in October 2022 compared to 20.7% in March 2022; in Uzbekistan, non-resident deposits increased by 17.5% of the total deposit growth in 2022.

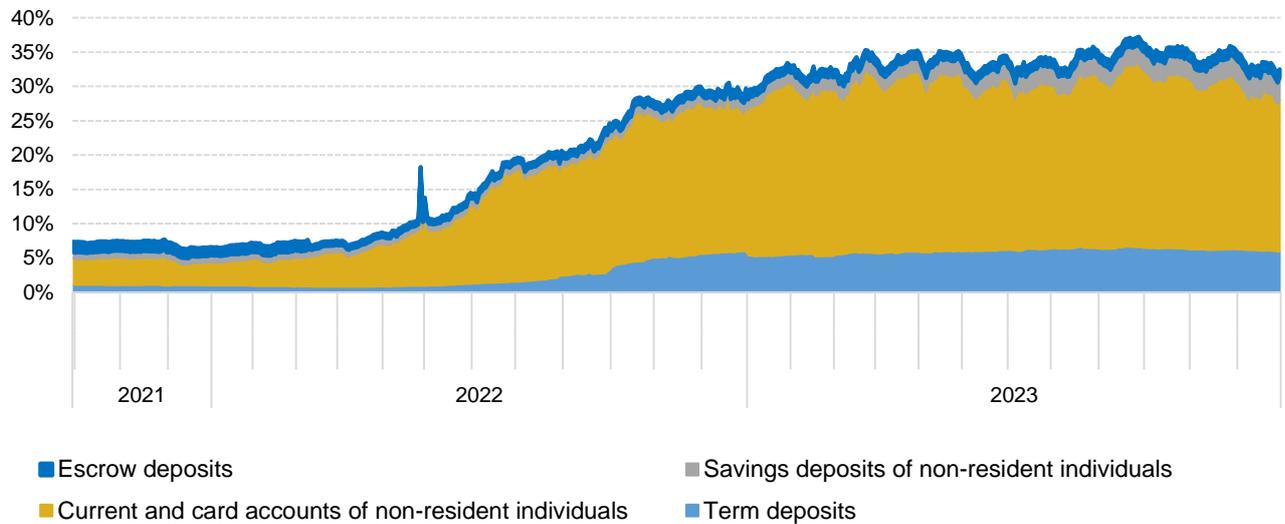
Figure 5.9 In 2023, the growth in the share of funds of non-residents in bank accounts slowed down



Source: STB reports

As a rule, funds of non-residents are concentrated in the most unstable forms of deposits, which reduces the stability of the funding base (Figure 5.10). In this regard, regulators in the abovementioned countries took additional measures to stabilize the funding base.

Figure 5.10 Non-residents were placing funds mainly on current accounts and term deposits



Source: STB reports

In Kazakhstan, the relatively low share of non-resident deposits and a significant stock of highly liquid assets do not pose significant risks for the banking system associated with a massive outflow of non-resident deposits. In this regard, no additional regulatory measures have been taken to reduce the risks associated with an increase in the share of non-residents.

At the same time, the level of increase of liabilities to non-residents is regulated by a prudential standard – the ratio between capitalization of banks and liabilities to non-residents. This ratio implies the transfer of potential risks to the bank’s shareholders through obligations to inject capital with an increase in external funding.

Box 5.1 Kazakhstan's Financial Sector Assessment Program (FSAP)

Throughout 2023, the IMF and the World Bank conducted an assessment of Kazakhstan's financial sector, which is a comprehensive and in-depth analysis of the country's financial sector, in ten areas, including: financial safety net and crisis management, compliance with the BCBS Core Principles for Effective Banking Supervision, macroprudential policy, climate risk analysis, stock market development, etc.

Based on the FSAP results, the IMF and the World Bank provided specific recommendations to address the revealed shortcomings and further develop the financial sector. In particular, the need to align the practice of insolvent bank resolutions, including using the public (budgetary) resources, with international recommendations and principles was pointed out. Thus, it was recommended to update the mechanisms and tighten the conditions for such support. Its provision should be considered only after the distribution of losses between shareholders and related parties. It is also necessary to clarify the roles of all participants in the financial safety net, including the role of the Agency, the Government and the National Bank, in the event of a need to provide government support. In particular, the IMF considers it necessary to strengthen the Government's participation in the resolution process.

The IMF also recommended clarifying the role and responsibility of the National Bank and the Agency with respect to macroprudential policy. In Kazakhstan, there is no explicit list of macroprudential instruments established at the legislative level, despite the fact that such instruments are already used in practice. The absence of a formal list of macroprudential policy instruments and assignment of responsibility for them to the National Bank increases uncertainty in the event of a need to respond to systemic risks. Taking into account the recommendations of the FSAP, the National Bank has begun developing a document "On Macroprudential Policy" containing a vision and approaches to the formation, implementation and communication of macroprudential policy. In the future, a list of macroprudential policy instruments that will be included in the competence of the National Bank will be determined at the legislative level. A specific list of instruments will be formed in view of the discussions with the Agency on the principles of necessity and sufficiency.

Based on the results of the work carried out, a Roadmap for the implementation of FSAP recommendations elaborated by the AFR and agreed upon with the National Bank and other government stakeholders was approved in December 2023.

The roadmap provides a list of measures aimed at improving the financial sector of Kazakhstan. These recommendations cover the following areas:

1) bank resolution within national legislation*1.1. in terms of compliance with international BCBS standards:*

- imposing a supervisory add-on to the minimum capital adequacy;
- increasing the conservation buffer for non-systemic banks from 2% to 2.5%;
- introducing a leverage ratio of at least 3% as a new prudential standard;
- transition to the calculation of the ratio of maximum risk exposure per borrower (k-3) from Tier 1 capital;
- phased exit from temporary prudential forbearance (LCR, NSFR and risk-weighting);

1.2. in terms of interagency cooperation with regards to resolution of insolvent bank:

- submission to the meeting of the Council on Economic Policies (CEP) of a mechanism for resolving insolvent banks and government participation, taking into account the roles of the Government, the AFR and the National Bank;
- development of necessary legislative amendments in case of approval of approaches to the government participation;
- legislative establishment of an algorithm for application of insolvent bank resolution framework for systemically important banks and the role of the KDIF in replenishing the

difference to the stabilization bank in the event that the amount of liabilities on the transferred insured deposits exceeds the amount of property of the insolvent bank;

- legislative exclusion of the right of the National Bank to provide loans without collateral by a special decision of the Board of the National Bank;

2) Loans of Last Resort (LORs) framework and crisis management

- development of an internal guide (playbook) for the provision of LORs by the National Bank;

- introduction of a mandatory procedure for preposition of non-market assets by second-tier banks in the event of a LOR;

- a limitation for the provision of LOR to banks that have unfairly provided loans to related parties, and tightened supervision of banks that have received LOR;

- consideration of various options for providing liquidity in foreign currency, subject to conditions that minimize risks to gold and foreign exchange reserves;

- revision of requirements and expansion of the list of bank assets accepted as collateral for LOR;

- monitoring of non-market assets by the AFR;

- development of methodology for establishing discounts to non-market assets;

- ensuring a common architecture of intra- and interagency anti-crisis plans within the framework of the Council for Financial Stability;

- development of crisis scenarios and application of possible insolvent bank resolutions tools, as well as conducting regular simulation of intra- and interagency anti-crisis management;

- conclusion of an Agreement on financial stability between the National Bank, AFR and the Government;

3) separation of microprudential and macroprudential policies

- clarification of the functions and responsibilities of the National Bank and the AFR in the field of macroprudential policy at the legislative level;

- extension of regulatory requirements for calculating the DTI ratio for all secured and unsecured retail loans;

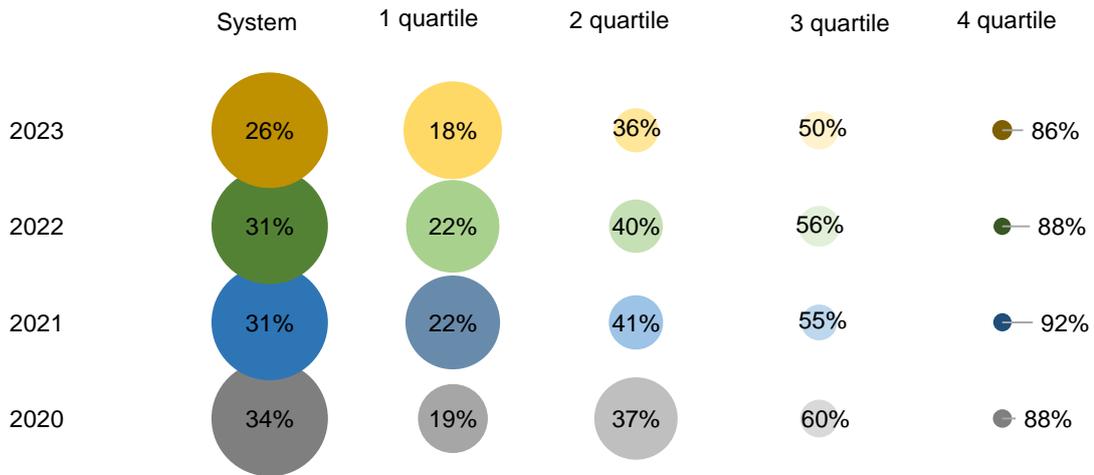
4) analysis of systemic and climate risks

- development of a model for assessing systemic liquidity taking into account assumptions regarding the relationships between the external sector, the public sector, non-financial corporations, and households.

Concentration of Funding

The level of concentration of the largest sources of financing in the liabilities of the banking sector has not changed compared to last year. In the meantime, there is a further reduction in the share of funding from the public sector and an increase in other liabilities, including liabilities to other entities that are not QPS or the largest creditors.

The share of the largest creditors in the total volume of liabilities of the banking sector has gone down to 26% (*Figure 5.11*). In large banks, the share of liabilities to the largest creditors decreased by 4 percentage points, amounting to 18%. Small banks remain the most exposed to concentration risk. For this group, the share of the largest creditors in liabilities averages 86%.

Figure 5.11 The share of largest bank creditors in total liabilities
High concentration levels have been observed in some medium-sized banks


Source: STB reports

Note: ranking and distribution by quartiles is carried out according to the share of the 25 largest creditors for a given bank in the bank's liabilities: 1 quartile includes banks with the smallest share of the largest creditors, 4 quartile – banks with the largest share. The area of the circle is proportional to the share of liabilities of the banks in that quartile in the sector's liabilities. The average share of the largest creditors for the quartile is shown inside the circle

More than a half of the banks are sensitive to the risks of outflows of the largest depositors, with partial (from 60%) or complete depletion of liquidity, and the withdrawal of foreign currency deposits by the largest depositors will require from 30% to 60% of foreign currency liquidity. The maximum figures are observed in small banks, which points to a high exposure to concentration risks from large depositors. About 1/3 of banks are sensitive to liquidity risk due to the high concentration of particularly large depositors (*Table 5.1*).

Table 5.1 Risk of deposit concentration

The ratio between deposits and the amount of cash, correspondent accounts with the NBK and the GS portfolio

Deposit withdrawal	Min.	25 th percentile	Weighted average	Median	75 th percentile	Max.
TOP-5	0.1	0.3	0.4	0.6	1.4	20.5
TOP-10	0.1	0.4	0.6	0.9	1.8	21.0
TOP-20	0.2	0.6	0.7	1.0	2.3	21.2
TOP-30	0.2	0.7	0.8	1.1	2.6	22.2
Deposit withdrawal, including:						
<i>In tenge:</i>						
TOP-5	0.1	0.2	0.3	0.3	0.8	20.4
TOP-10	0.1	0.2	0.4	0.4	1.0	20.6
TOP-20	0.1	0.4	0.4	0.5	1.2	20.7
TOP-30	0.1	0.4	0.5	0.5	1.2	20.7
<i>in FX:</i>						
TOP-5	0.0	0.2	0.2	0.3	0.6	3.1
TOP-10	0.0	0.3	0.3	0.5	0.8	4.8
TOP-20	0.0	0.3	0.4	0.6	1.0	6.6
TOP-30	0.0	0.3	0.4	0.6	1.1	7.0

Source: STB reports

Note: if the ratio between deposits of large depositors and the total amount of cash, correspondent accounts with the NBK and the GS portfolio exceeds 1, it implies insufficiency of bank's resources in the event of deposits withdrawals by large borrowers

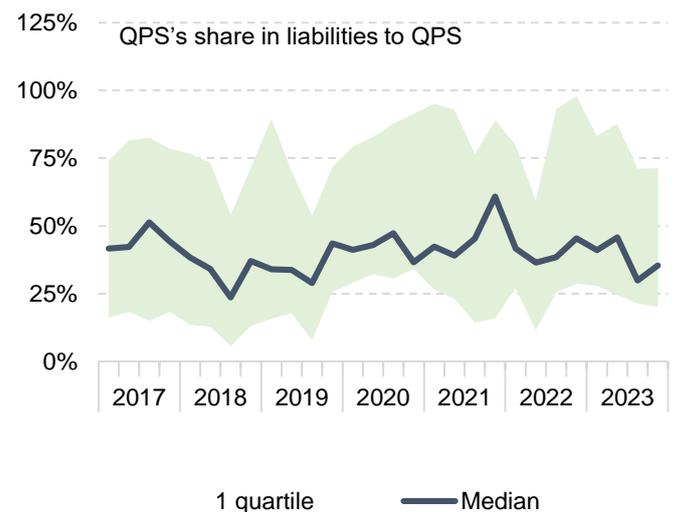
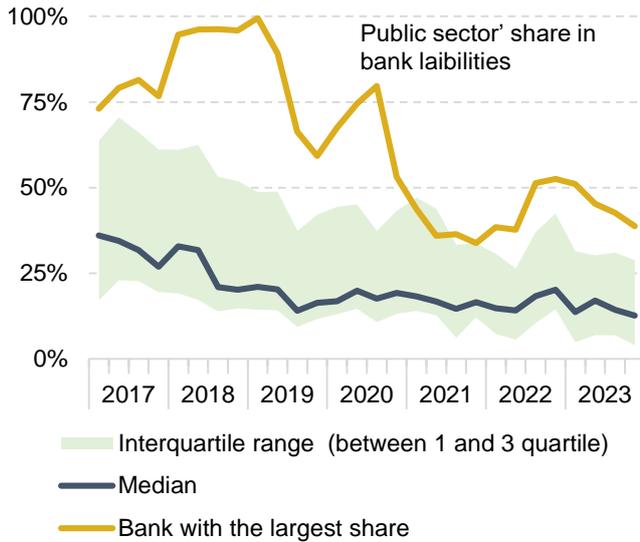
During 2023, the banking sector's reliance on funding from state-owned companies continues to decline, but funding risks associated with the concentration of the public sector in some banks remain.

In terms of banks, the share of the public sector in liabilities (Figure 5.12A) in a separate bank amounted to 39%. Deposits remain to be the main approach of placing the liabilities of government and quasi-public sectors (Figure 5.B).

Figure 5.12

A. At the bank level, funding from the public sector decreased

B. Funds are attracted mainly in the form of non-term deposits



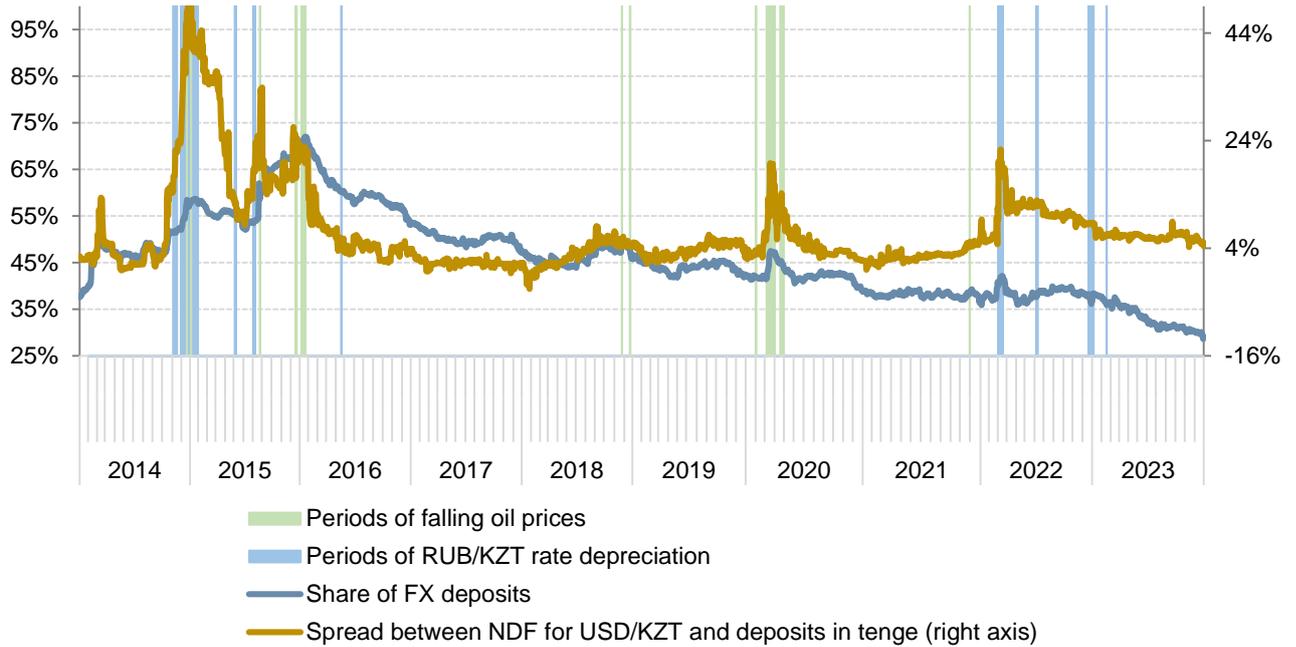
Source: STB reports, UAPF

5.3 Risks of Dollarization

The level of dollarization in banks continued to decline, reaching its all-time low. This process was mainly driven by the outflow of large foreign currency deposits, the growing attractiveness of the tenge deposits and exchange rate revaluation.

The trend towards de-dollarization in 2023 is confirmed by the reduction in the spread between the non-deliverable currency forward (NDF) for the USD/KZT pair and the weighted average interest rates on deposits in the tenge, which reflects the declining expectations in relation to the national currency exchange rate. Over 2023, this indicator has almost halved – from 8.7% to 4.4% (Figure 5. 13).

Figure 5.13 In 2023, dollarization continued to decline

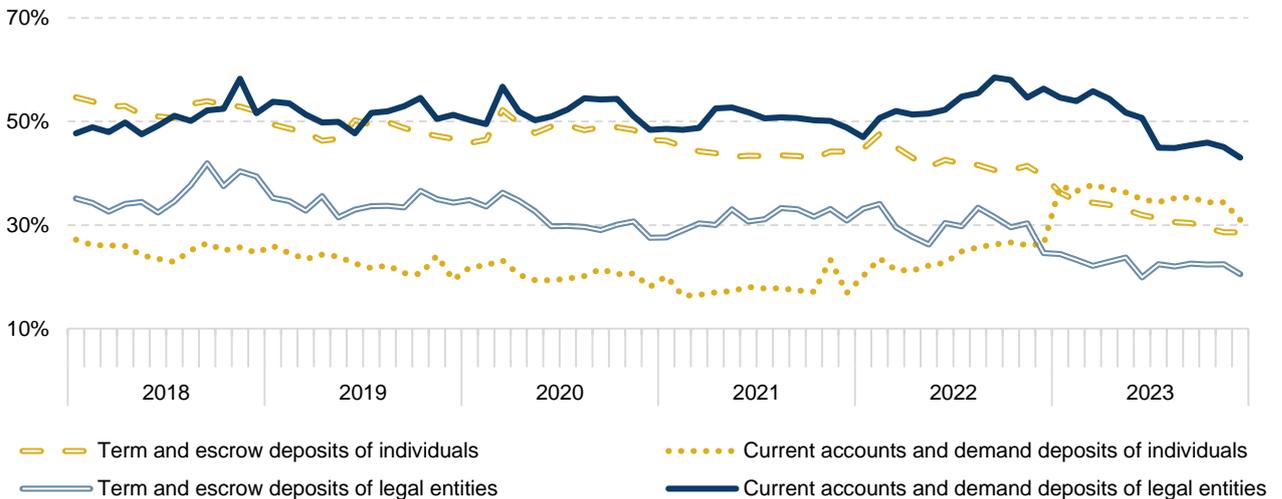


Source: STB reports

Note: periods of the RUB/KZT exchange rate weakening are the periods when the ruble depreciated against tenge significantly

According to the results of 2023, the largest share of the foreign currency component is observed in current accounts and demand deposits of both corporate (43%) and retail sectors (31%). This is due to the fact that this type of account is the most liquid and reflects the preferences of depositors to keep money in short-term foreign currency deposits.

Figure 5.14 In 2023, dollarization levels have been declining virtually across all types of accounts of individuals and legal entities



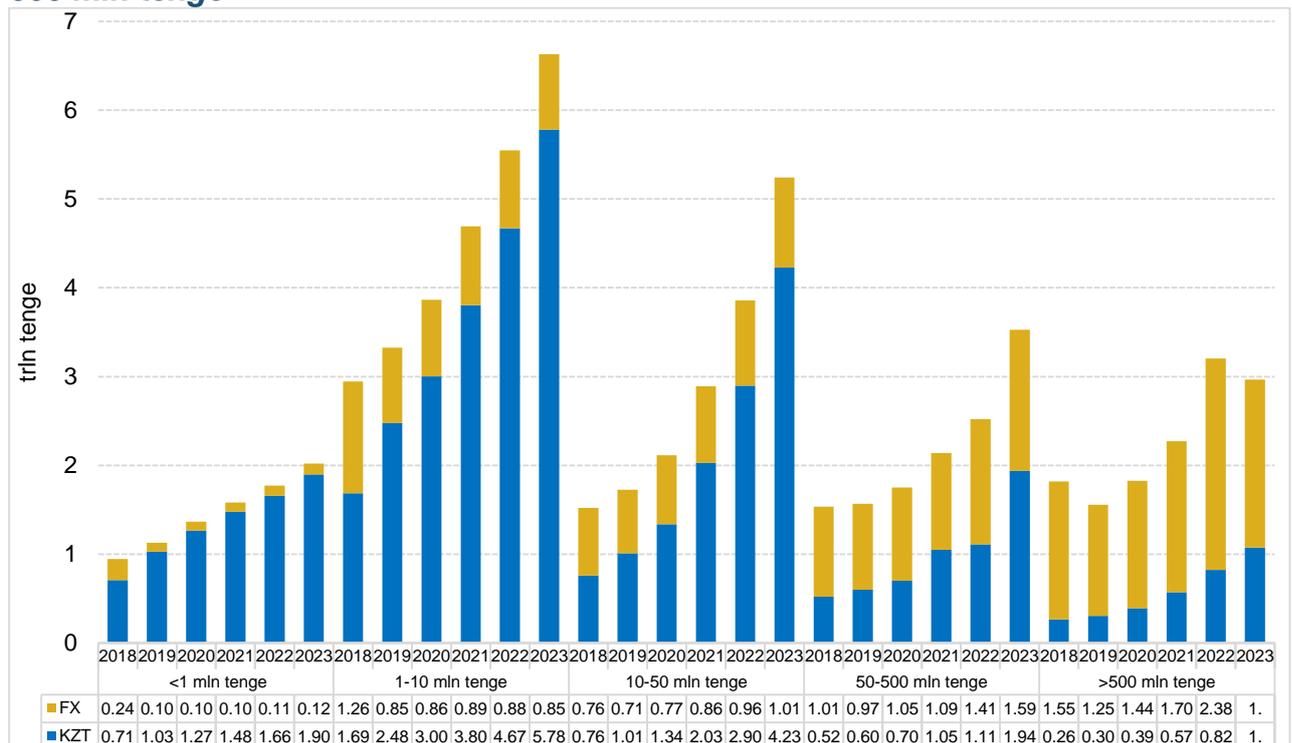
Source: STB reports

The process of dedollarization manifested itself more intensely in the corporate sector as opposed to the retail market: for legal entities, the largest decline in the share of foreign currency deposits (by 13.3 pp to 43.1%) was in current accounts and demand deposits, and in the retail segment – because of term and conditional deposits (by 10.9 pp to 28.6%). However, an increase in the level of dollarization is observed in current accounts and demand deposits of individuals (Figure 5.14).

In 2023, a positive correlation between the level of dollarization and the size of the deposit continued to be observed: the larger the amount on the deposit, the higher the level of dollarization (Figure 5.15). The spread of dollarization depending on the account size varied from 63.8% for accounts over 500 mln tenge to 5.9% for accounts up to 1 mln tenge.

The year 2023 is characterized by a decline in dollarization across all deposit groups reviewed. The largest decline was shown by large deposit groups: for deposits from 50 to 500 mln tenge (a 10.8 pp reduction in the share of foreign currency deposits) and for deposits over 500 mln tenge (a 10.5 pp reduction in the share of foreign currency deposits). However, despite the decline, the share of foreign currency accounts in these groups is still high.

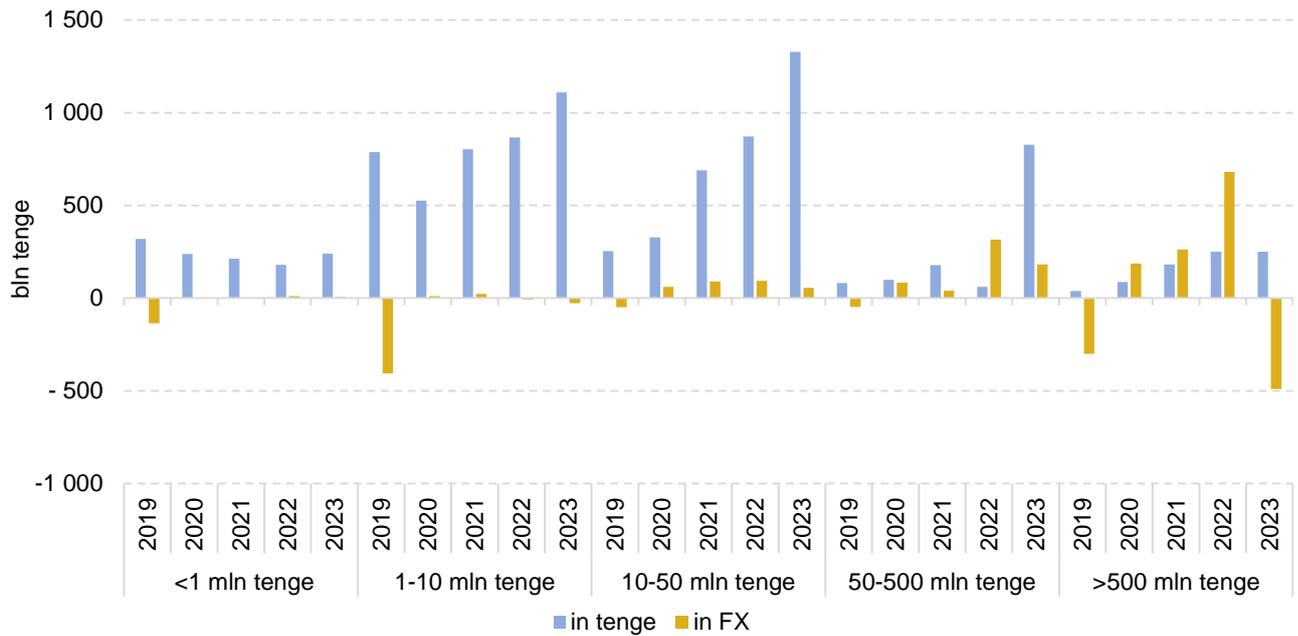
Figure 5.15 The level of dollarization was declining across all groups of deposits by their size; nevertheless, the share of foreign currency remains high on accounts over 500 mln tenge



Source: KDIF

In 2023, the net inflow of funds into retail deposits increased by 4.8%, or 160 bln tenge. The inflow of deposits of individuals in tenge went up by 68.5% to 3,758.4 bln tenge, with an increase in inflows observed across all types of deposits. The main contribution to their growth was made by the inflow of deposits in amounts from 10 to 50 mln tenge (+52.5%, y / y) and from 50 to 500 mln tenge (an increase of 13.4 times). For foreign currency deposits, there was a 0.25 times foreign currency outflow, or -273.9 bln tenge. The largest contribution to the decline was made by the largest deposits (a reduction of 0.72 times) (Figure 5.16)

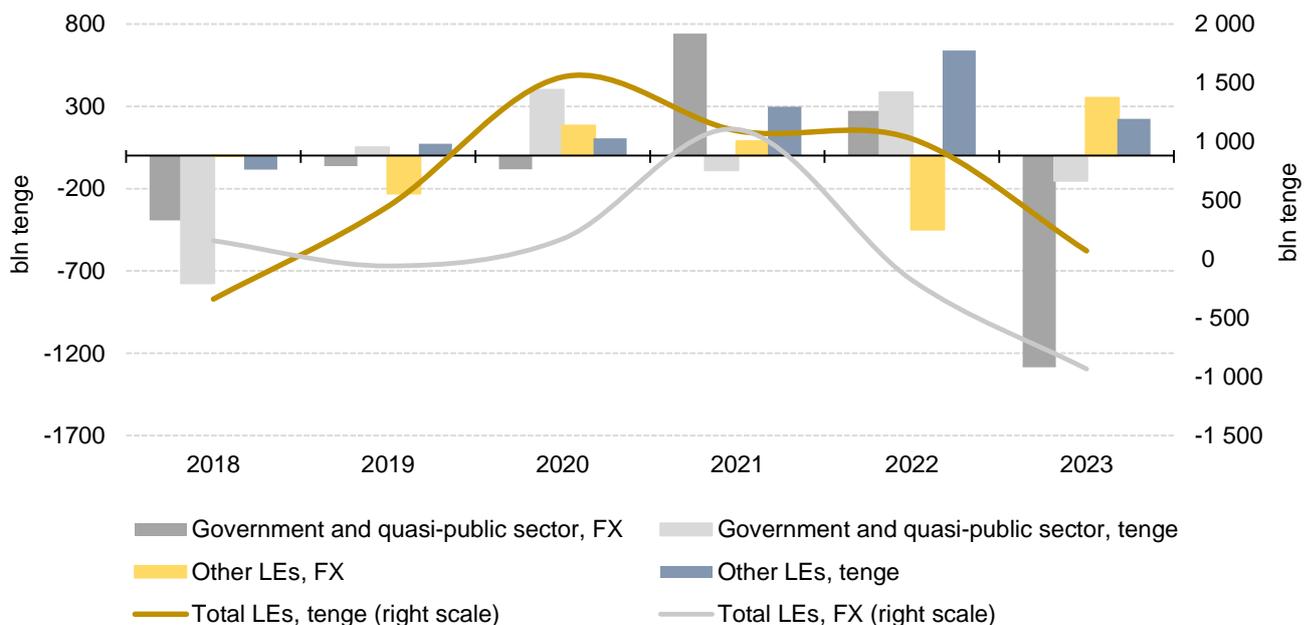
Figure 5.16 *The major inflow of retail deposits in tenge occurred owing to deposits from 1 to 10 mln tenge and from 10 to 50 mln tenge*



Source: KDIF

The banking system's dependence on the quasi-public sector continues to decline. Based on the data of the top 25 creditors, in 2023 (y/y), there was an outflow of money from deposits in the corporate sector, mainly due to the outflow of both foreign currency and the tenge deposits of the quasi-public sector (1,284.2 and 152.5 bln tenge, respectively). Deposits of other legal entities, on the contrary, increased by 224 bln tenge in the national currency and 351.2 bln tenge in foreign currency (Figure 5.17).

Figure 5.17 *In 2023, the corporate sector observed an outflow of the quasi-public sector deposits and an inflow of deposits of other legal entities*



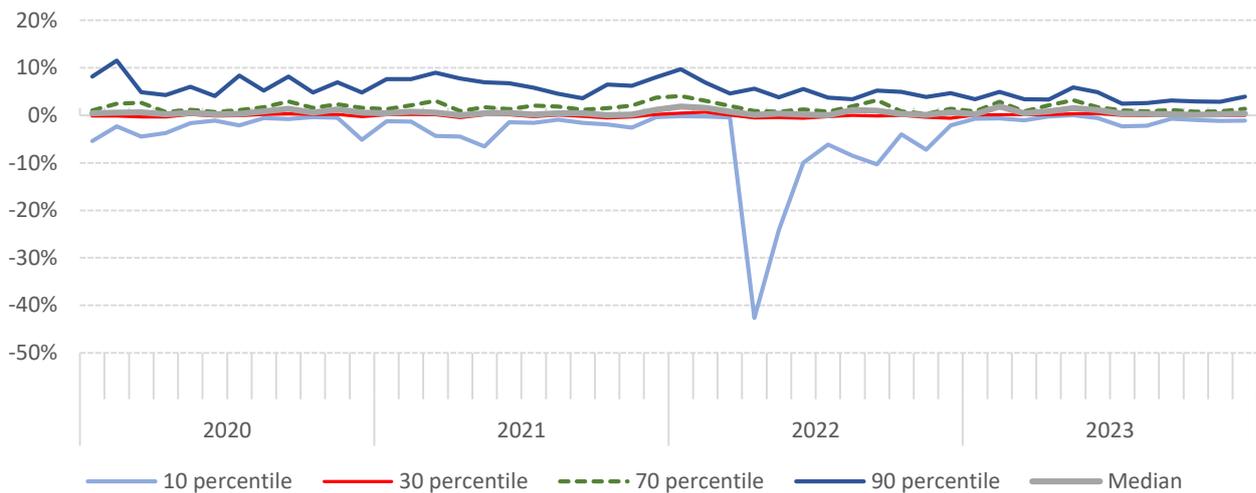
Source: STB reports

Note: NBK evaluation based on the data of top-25 creditors

5.4 Foreign Exchange Risk

At the end of 2023, direct foreign exchange risk of banks was at an acceptable level due to hedging positions using financial derivatives denominated in foreign currency (FXFDs). The net foreign currency position in the system was neutral in most periods, and all banks complied with prudential ratios on open foreign currency position limits (Figure 5.18).

Figure 5.18 Net open foreign currency position of the banking sector was not exposed to strong volatility in 2023



Source: STB regulatory reports

Box 5.2 Liquidity Coverage Ratio in Foreign Currency (FX LCR)

Following the global crisis in 2008, the attention of regulators around the world was drawn to the importance of liquidity risk management. In response, the BCBS developed the Principles for Effective Liquidity Risk Management and Supervision²⁹, which highlight the importance for banks to establish a robust liquidity risk management framework as the foundation of their liquidity management system.

One of the instruments of such a system is the Liquidity Coverage Ratio (LCR), designed by the BCBS³⁰ to increase the resilience of banks to short-term liquidity shocks by ensuring that they have a sufficient amount of liquidity to be able to repay their short-term liabilities in the nearest 30 days in case of a stress scenario.

In Kazakhstan, the LCR was introduced in September 2018 for all banks except Islamic banks, with a minimum requirement of 0.5, which is lower than the international standard of 1. This decision was made as part of support for the banking sector and reflects the regulator's readiness to adapt to the changing environment.

In international practice, in addition to the standard LCR, there is also a foreign currency LCR indicator (FX LCR), designed to monitor liquidity in foreign currency. At the moment, there are no prudential requirements for it in Kazakhstan.

FX LCR is a certain derivative of the standard one. According to the BCBS definition, FX LCR is calculated by using the following formula:

²⁹ The Principles for Sound Liquidity Risk Management and Supervision. www.bis.org/publ/bcbs144.htm

³⁰ Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools. January 2013. <https://www.bis.org/publ/bcbs238.pdf>

$$FX\ LCR = \frac{HLA, \text{ in terms of a significant currency}}{\text{Total cash outflow during 30 days, in terms of a significant currency}}$$

In the context of accelerated growth of digitalization of banking services, updating the regulation of liquidity risks is becoming especially important. This is driven by the increase in the volume of instant financial transactions and, as a result, the growing need for effective liquidity management. The cases of bankruptcy of American banks in early 2023 became a vivid reminder of the need to adapt regulatory mechanisms to changing market conditions and challenges.

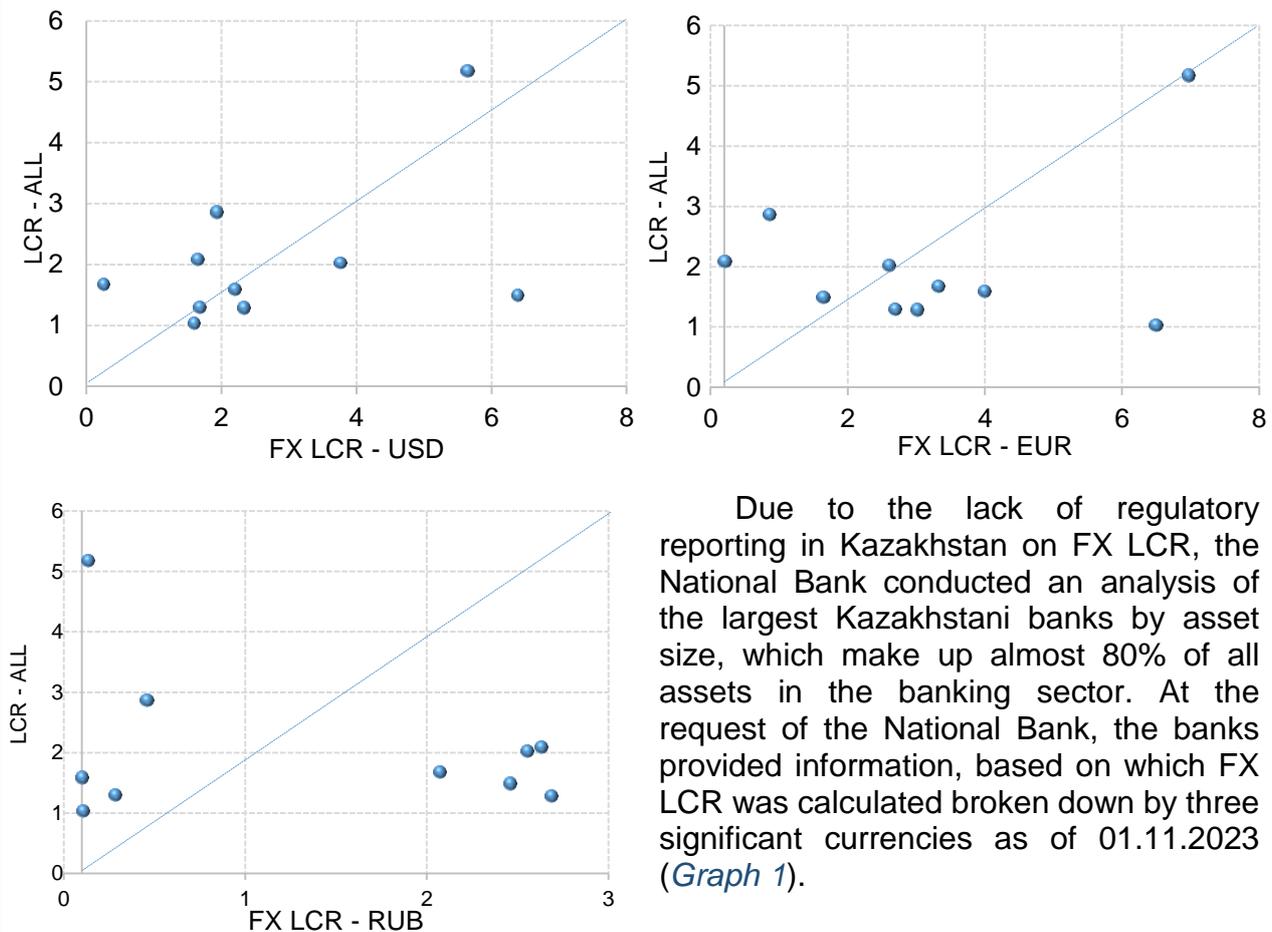
For reference: in March 2023, 3 mid-sized American banks went bankrupt. Thus, since the global financial crisis of 2008, the bankruptcy of Silicon Valley Bank (SVB) became the largest, ranking second bankruptcy in American history (the bankruptcy of Washington Mutual in 2008 ranked first).

At SVB, approximately 90% of deposits were not insured. The bank's main clients were venture-backed companies in the IT (startups) and medical sectors, which went public in 2022. When depositors began to withdraw their funds, the bank had to sell highly liquid assets to cover the suddenly withdrawn funds.

In normal times, banks can easily exchange currencies and raise funds in foreign exchange markets. However, in stressful conditions, the ability to exchange currencies may be limited, as was the case during the financial crisis, which highlights the need for further improvement of the regulatory framework in this area.

In addition, analysis of the overall mismatch in maturity and liquidity coverage between assets and liabilities by currency will help identify and assess potential significant outflow risks in a particular currency. Thus, reporting LCR by significant currencies will help monitor currency risk.

Graph 1. Regulatory LCR and calculated FX LCR



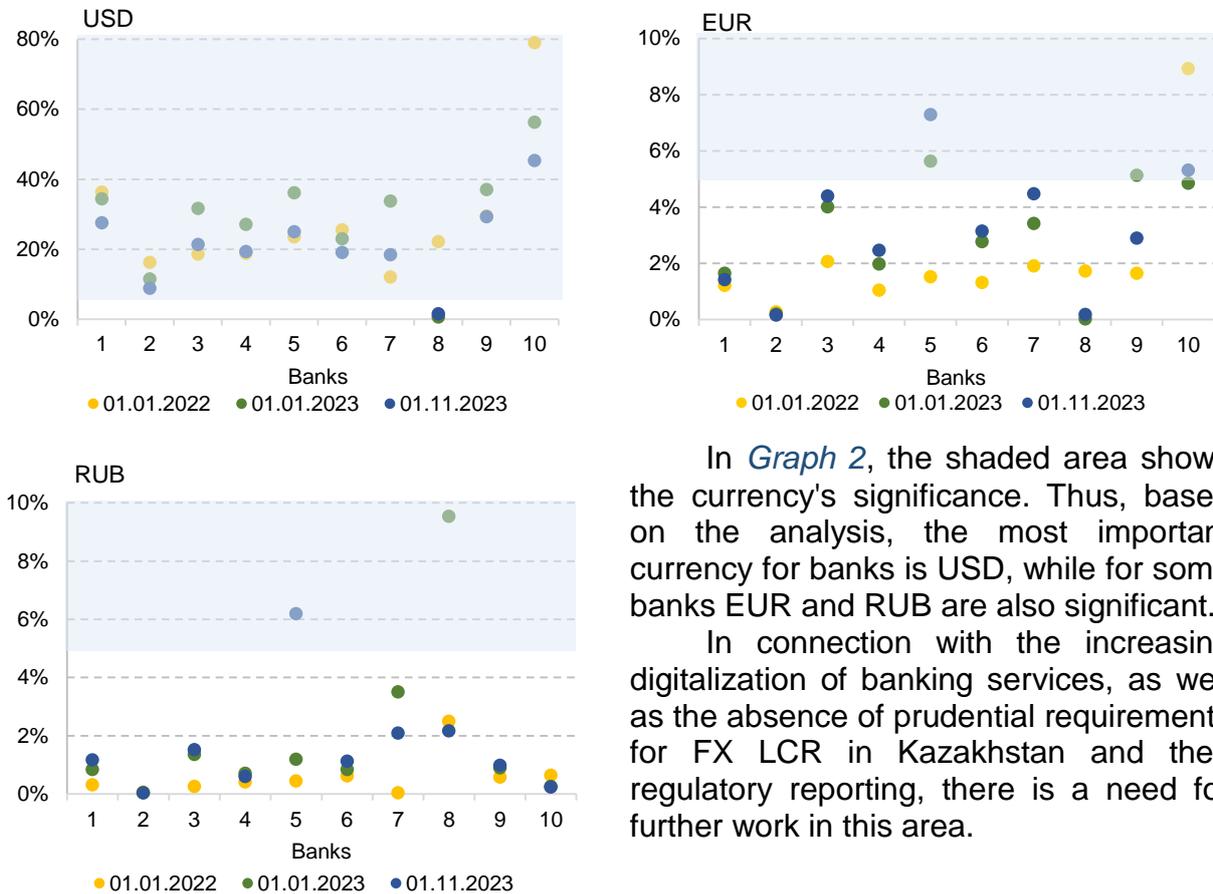
Due to the lack of regulatory reporting in Kazakhstan on FX LCR, the National Bank conducted an analysis of the largest Kazakhstani banks by asset size, which make up almost 80% of all assets in the banking sector. At the request of the National Bank, the banks provided information, based on which FX LCR was calculated broken down by three significant currencies as of 01.11.2023 (Graph 1).

Graph 1 shows a comparison between 10 banks by LCR levels in all currencies (LCR - ALL) and FX LCR levels in USD, EUR and RUB. Thus, for five banks, the FX LCR by individual foreign currencies is higher than the overall LCR. This means that half of the banks

are likely to have a higher short-term liquidity reserve in significant foreign currencies than in the national currency.

Moreover, according to the BCBS definition, a currency is considered “significant” if total liabilities denominated in this currency constitute 5% or more of the total amount of the bank’s liabilities. (*Graph 2*).

Graph 2. Assessing significance of currency with a break-down by banks



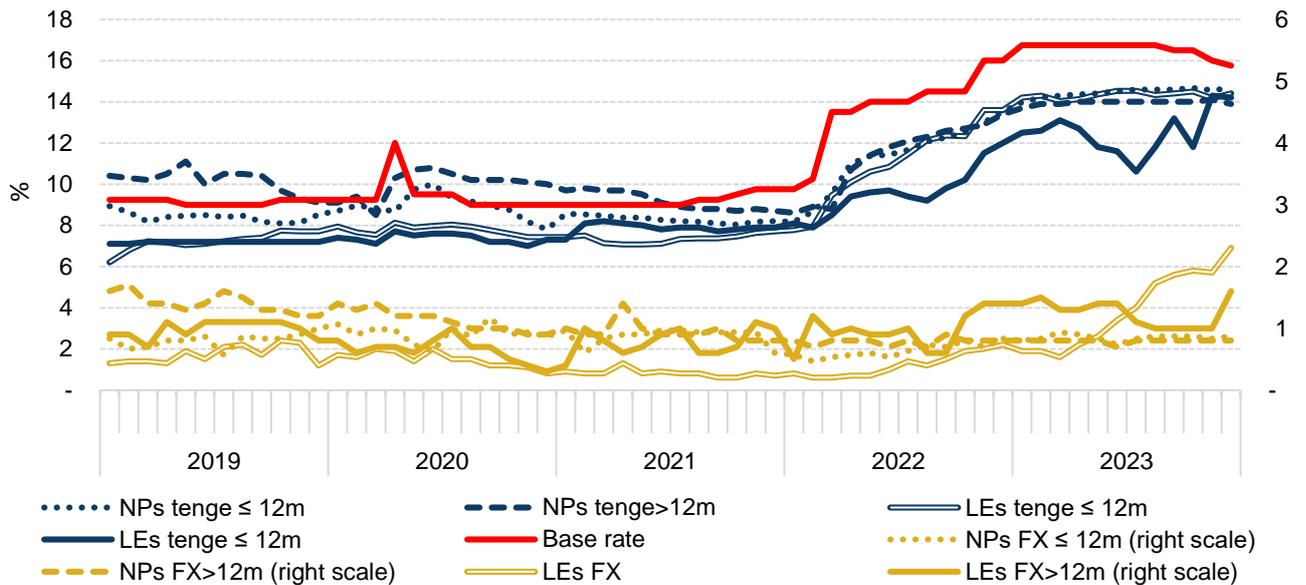
In *Graph 2*, the shaded area shows the currency's significance. Thus, based on the analysis, the most important currency for banks is USD, while for some banks EUR and RUB are also significant.

In connection with the increasing digitalization of banking services, as well as the absence of prudential requirements for FX LCR in Kazakhstan and their regulatory reporting, there is a need for further work in this area.

5.5 Interest Rate Risk

During the first three quarters of 2023, the National Bank implemented a tight monetary policy, starting gradual steps to ease it from the end of August 2023. However, the easing conditions had virtually no effect on the reduction of rates on deposits in the national currency, and during the period the cost of funding in the national currency remained high. The cost of foreign currency funding remains at the same levels due to the maintenance of the level of interest rates on foreign currency deposits as recommended by the KDIF. In the second half of the year, there were fluctuations in rates on corporate sector deposits with a term of more than 1 year. These reductions in the abovementioned periods are likely caused by changes in the individual terms of corporate clients' contracts (*Figure 5.19*).

Figure 5.19 *The cost of attracting deposits from individuals in tenge continued to grow in 2023*



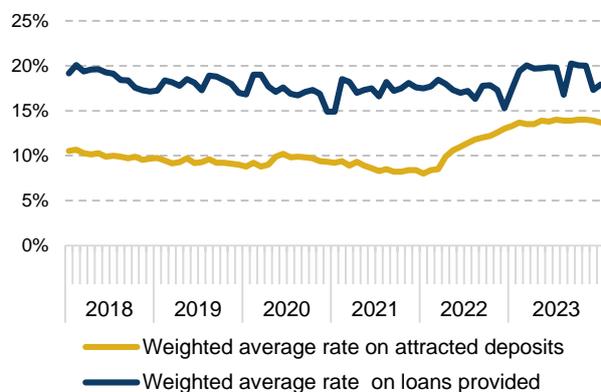
Source: STB reports

In 2023, among the deposits under consideration, the maximum growth in interest rates was shown by deposits of legal entities with maturity of less than one year – by 0.2 pp to 14.6% in December, and deposits of individuals with maturity of less than one year – by 0.4 pp to 13.7%. Bank interest rates on deposits of individuals with maturity of less than one year and deposits of legal entities in the tenge for less than a year increased by 0.3 pp and 1.6 pp, or to 14% and 14.1%, respectively.

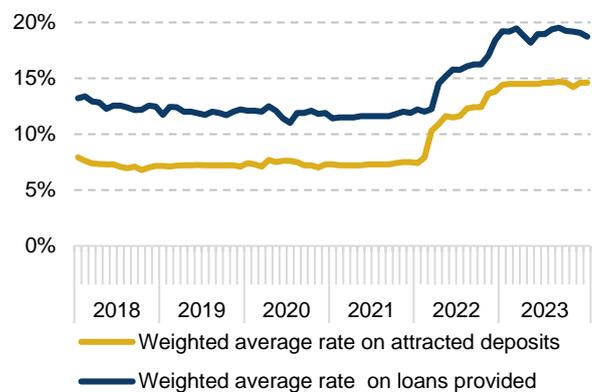
At the end of 2023, the weighted average interest rates on the tenge loans issued in the corporate segment did not change significantly: there was a decrease of 0.5 pp to 18.7%, which may be caused by the easing of monetary policy conditions. There were also no significant changes in the retail segment: an increase of 0.5 pp to 17.9% was observed. In August and December 2023, interest rates on loans to the retail sector decreased, which can be explained by interest-free lending from banks (Figure 5.20A).

Figure 5.20 *In 2023, interest rates on deposits and loans in the national currency went up compared to the previous year*

A. Retail rates



B. Corporate rates

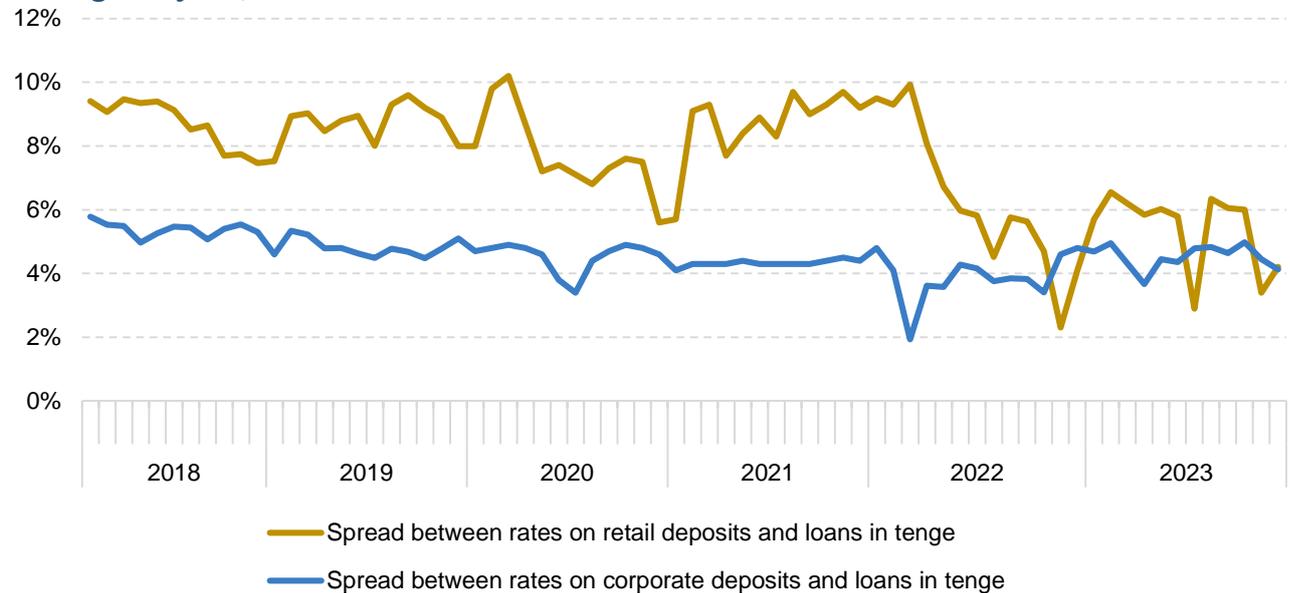


Source: STB reports

Note: attraction rates are weighted average rates on deposits attracted during the reporting period (new deposits and replenishments of previously opened deposits). Placement rates – weighted average rates on new bank loan agreements concluded during the reporting period. Retail segment – deposits and loans of individuals, corporate segment – deposits and loans of legal entities. Reporting period – a month

Bank interest rates on deposits attracted in the tenge grew in both the corporate and retail segments. The average weighted cost of attracting deposits from legal entities increased by 0.2 pp to 14.6%, from individuals – by 0.4 pp to 13.7% (*Figure 5.20B*). Factors for the growth of interest rates include the level of the National Bank’s base rate throughout 2023, as well as the revision of the maximum deposit rates recommended by the KDIF.

Figure 5.21 Spread in the corporate segment was not subject to dramatic changes during the year, and the retail sector showed minor fluctuations



Source: STB reports

At the end of 2023, the spread of rates on provided loans and attracted deposits of legal entities did not exceed 5%. In the retail sector, the spread was subject to small declines, mainly due to larger changes in the growth of interest rates on loans provided, resulting in a higher spread on average than in the corporate segment, but it decreased to 4.21% at the end of the period (*Figure 5.21*).

VI Activities of the Council for Financial Stability of the Republic of Kazakhstan

During 2023, the Council for Financial Stability of the Republic of Kazakhstan (hereinafter referred to as the Council) on a quarterly basis addressed the matters aimed at promoting the financial system stability, reducing systemic risks and developing the sustainability of the financial sector.

In 2023, 6 meetings of the Council were held, where current problems pertinent to the financial sector sustainability, ways to solve them and prospective areas of development were discussed.

In particular, the following issues were addressed by the Council members:

- **implementation of the Head of State's instructions in the financial sector.** At the Council meetings, the National Action Plan for the implementation of the Address of the Head of State to the people of Kazakhstan dated September 1, 2023 was discussed in terms of instructions related to the financial sector;

- **implementation of the Head of State's instructions to expand lending to the economy.** Council considered providing a long-term funding base for banks for lending to the economy, digitalization and integration of banks and credit bureaus with state information services, development of syndicated lending, expansion of lending mechanisms in the agricultural sector and development of lease financing;

- **macroprudential policy of the National Bank.** The Council approved a conceptual document regarding the macroprudential policy of the National Bank;

- **Asset Quality Review (AQR) and Supervisory Stress Testing.** The Council approved the list of banks for the Asset Quality Review (AQR) and Supervisory Stress Testing in 2023, as well as information on the implementation of individual corrective action plans by banks based on the results of the AQR;

- **regulation of digital assets.** The Council presented the results of the development of approaches to the introduction of effective regulation;

- **preliminary findings of the Financial Stability Report for 2023.** The meeting reviewed the preliminary findings of the Financial Stability Report for 2023, which contains a comprehensive analysis of the financial sector, households, government securities and real estate markets, and other areas;

- **conducting the Financial Sector Assessment Program (FSAP) jointly with the IMF and the World Bank.** As part of the FSAP mission, the Council considered the findings and recommendations on financial safety nets and crisis management and compliance with the BCBS Core Principles for Effective Banking Supervision;

- **countercyclical capital buffer (CCB).** The Council reviewed the results of the monitoring of the CCB and proposals for the introduction of a sectoral CCB;

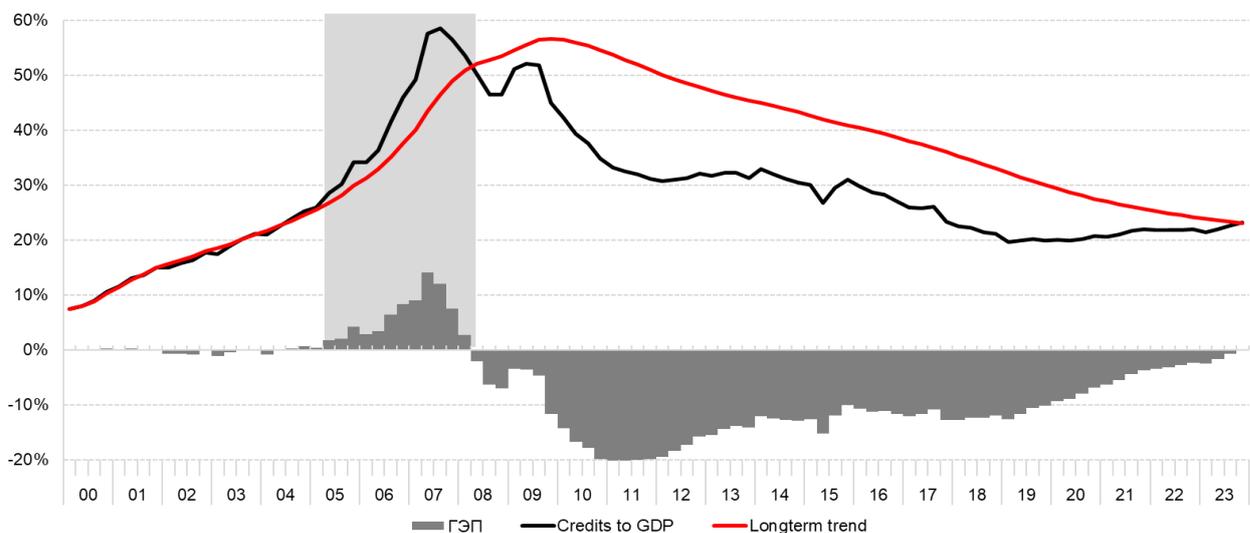
- **interaction of the National Bank with the Government of the Republic of Kazakhstan.** The Council reviewed the results of events to strengthen the interaction of the National Bank with the Government of the Republic of Kazakhstan; initiatives were announced, including those aimed at increasing the efficiency of information exchange, strengthening cooperation in the research field, sharing experience and forecasting and modeling techniques, as well as unifying digital services and introducing a unified approach to creating an infrastructure for interaction between government agencies and the financial market.

Box 5.3 The Use of Countercyclical Capital Buffer (CCB) and its Modifications

As part of the macroprudential policy, the National Bank has elaborated the introduction of a sectoral CCB based on the methodological recommendations of the BCBS and the experience of other regulators. The sectoral CCB is aimed at reducing risks in separate lending segments when there is no overheating of lending as a whole.

In accordance with the BCBS guidelines, the National Bank calculated the main indicator of “loans-to-GDP gap” and additional indicators³¹. According to the results of the 4th quarter of 2023 (preliminary data)³², no signals indicating the need to activate the CCB were identified. Thus, the gap of loans to GDP is 0.03% (Figure 1). Additional indicators analyzed for the decision-making on the CCB also do not signal that activating this capital buffer is advisable.

Figure 1. Loans to GDP ratio and its deviation from a long-term trend



In the last few years, Kazakhstan has seen an increase in lending to individuals. The share of loans to individuals dominates in the loan portfolio and amounts to 65.3% at the end of Q4 2023. At the same time, consumer lending, which is the largest component of lending to individuals, also grew, mainly due to the recovery of domestic demand after the end of the pandemic, the growing digitalization of financial services and measures taken by the government to reduce the debt burden on the households (Figure 2).

In this regard, as a proactive measure to manage risks associated with lending to individuals, the National Bank has developed approaches to the application of sectoral CCB in the segment of retail lending. This tool is aimed at reducing risks in individual lending segments, when a rapid growth in risks of general lending is not observed, and allows banks to accumulate additional capital during periods of economic recovery and lending growth in order to have sufficient reserves for possible losses during periods of economic downturn.

Due to the lack of a unified methodology for activating the sectoral CCB, its calibration and recommended values, the decision on the use of this tool is made by regulators. The

³¹ Additional indicators were previously presented in the Kazakhstan Financial Stability Report 2014, Box 9 “Implementation of a countercyclical capital buffer in Kazakhstan”

³² Preliminary data of the BNS ASPR RK according to GDP by the production method for the 4th quarter of 2023

National Bank's discussion paper³³ presents 7 of the BCBS guiding principles³⁴ for the operationalization of a sectoral countercyclical capital buffer, wherein many elements of the standard CCB provided for by the Basel III standards can be used for the sectoral CCB.

The discussion paper also presents the experience of applying the sectoral CCB by the central banks of Switzerland and Spain.

Thus, until now the sectoral CCB was used only in Switzerland, which first activated the instrument in 2013 in the residential real estate and retail mortgage lending segment. Since 2013, the Swiss Federal Council, at the suggestion of the Swiss National Bank (SNB), activated the sectoral CCB at 1% of risk-weighted residential mortgage loans.

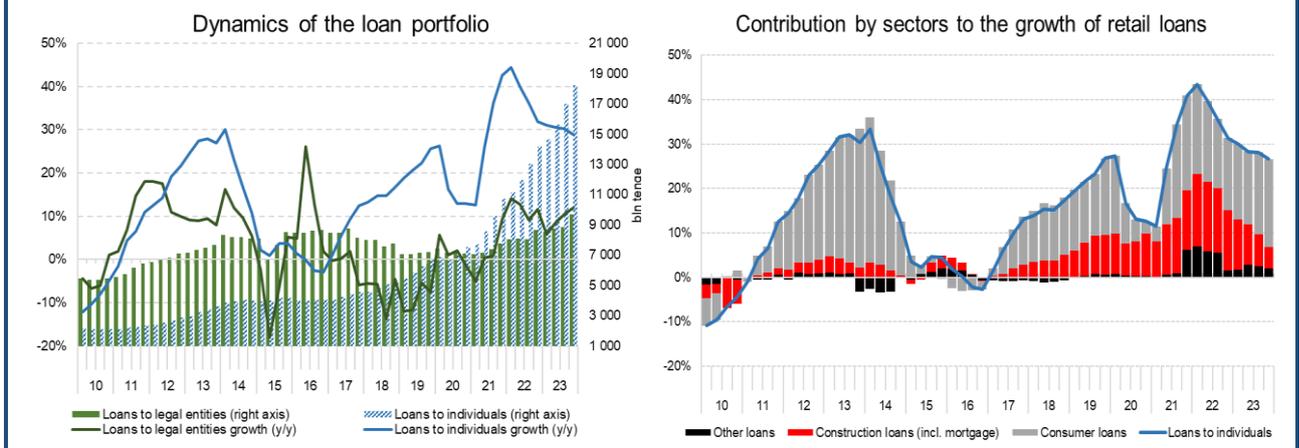
In 2021, the Bank of Spain developed the legal framework for the introduction of a sectoral CCB but the instrument itself has not yet been activated.

When determining the sectoral figures for the "credit gap to GDP" ratio (the main indicator), the National Bank applied an approach similar to the approach for the standard CCB, taking into account the normalization of the corresponding standard deviations. Thus, the normalized value of the "retail credit gap to GDP" ratio for the 4th quarter of 2023 amounted to 5.8%, which corresponds to the establishment of a sectoral CBC at the level of 3% of the amount of sectoral risk-weighted assets and contingent liabilities.

At the same time, the normalized value of "corporate credit gap to GDP" ratio was -4.2%, which indicates that there is no need to include a sectoral CCB for the corporate portfolio.

Along with the main indicator, additional indicators are also monitored to make decisions on the advisability of activating the sectoral CCB.

Figure 2. Additional indicators of a sectoral CCB



³³ The discussion paper "On some aspects of application of the countercyclical capital buffer and its modifications", posted on the official Internet resource of the National Bank (hereinafter referred to as the discussion paper) <https://nationalbank.kz/ru/news/analitika-metodologiya/rubrics/2095>

³⁴ BCBS. Guiding principles for the operationalization of a sectoral countercyclical capital buffer. November 2019