



**CENTRAL BANK
OF THE REPUBLIC
OF UZBEKISTAN**

**ANNUAL REPORT
2022**

Tashkent 2023

CONTENTS

INTRODUCTION.....	6
I. DOMESTIC AND EXTERNAL MACROECONOMIC CONDITIONS IN 2022.....	11
1.1. Domestic economic conditions.....	11
1.1.1. Financial flows to the economy	11
1.1.2. Business cycle and labor market.....	14
1.2. External economic conditions	19
1.2.1. Economic trends in Uzbekistan's main trading partners	22
1.2.2. Global commodity markets' outlook	25
1.2.3. Expectations in the global economy	28
1.3. Inflationary processes and expectations	31
1.4. Balance of payments and International investment position	36
II. BANKING SYSTEM AND FINANCIAL STABILITY IN 2022.....	41
2.1. Ensuring financial stability of the banking system.....	41
2.1.1. Assets and liabilities of the banking system and their structural evaluation	45
2.1.2. The loans allocated for business activities.....	49
2.1.3. Financial stability of banks in the conditions of global instability	55
2.1.4. Debt burden of the households	58
2.2. Transformation processes in the banking system	59
2.3. Infrastructure of the banking system	62
2.3.1. Operating credit organizations	62
2.3.2. State register of credit information, Credit bureau and collateral registry activities	63
2.4. Results of the activity of non-bank credit organizations	67
2.5. Regulation and supervision of credit organization activities.....	72
2.5.1. Regulation and supervision of commercial banks	72
2.5.2. Regulation and supervision of non-bank credit organizations.....	75
2.5.3. Risk management related to financial monitoring, economic sanctions and export restrictions.....	76
III. MONETARY, EXCHANGE RATE AND COMMUNICATION POLICY	79
3.1. Ensuring price stability.....	79
3.1.1. Analysis of the monetary conditions and instruments in 2022.....	79
3.1.2. Changes in the operational mechanism of monetary policy	81
3.1.3. Analysis of interbank money market activity and interest rates	82
3.1.4. Analysis of domestic foreign exchange market operations	85
3.1.5. Monetary policy transmission mechanism measures to increase efficiency	88

3.2. Analysis of exchange rate policy and operations	90
3.2.1. Analysis of the flow of funds in foreign trade transactions	91
3.2.2. Currency transactions with individuals.....	93
3.3. International reserves of the Republic of Uzbekistan.....	97
3.3.1. International reserves and its structure	98
3.3.2. Indicators of adequacy of international reserves and their analysis	101
3.4. Improving the efficiency of monetary policy through the Central Bank's communication policy	104
IV. NATIONAL PAYMENT SYSTEM, INFORMATION TECHNOLOGIES IN THE BANKING SYSTEM, DATA PROTECTION AND CYBER SECURITY	108
4.1. Central bank payment system activity.....	108
4.2. Development of retail payment systems based on bank cards	110
4.3. Financial technologies and innovations in the market of payment services.....	112
4.4. Development of fintech companies in the payment services market	114
4.5. Data and cyber security in commercial banks' payment and information systems	116
4.6. Implementation and advancement of information and communication technologies in the Central Bank system.....	117
V. CURRENCY CIRCULATION	119
5.1. Currency circulation and its structural evolution	119
5.2. Currencys in circulation and their structure	121
5.3. Bank card transactions.....	123
VI. FINANCIAL INCLUSION AND CONSUMER RIGHTS PROTECTION.....	125
6.1. Financial inclusion.....	125
6.2. Financial education.....	126
6.3. Consumer rights protection	130
6.4. Assisting with individual and legal entity appeals	132
VII. INTERNATIONAL RELATIONS AND COOPERATION	135
7.1. Cooperation with international financial institutions and foreign central banks.....	135
7.2. Cooperation with international rating companies, foreign investors and other financial institutions	139
VIII. HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT, INTERNAL CONTROL AND RESEARCH ACTIVITIES	141
8.1. Organizational structure	141
8.2. System of working with employees.....	141
8.3. Corporate center of retraining banking professionals.....	143
8.4. Monetary and financial statistics improvement.....	145
8.5. Analysis and research in the Central bank.....	146

8.6. Compliance control and internal audit.....	148
X. APPENDIX	151

INTRODUCTION

The Central Bank's (hereinafter – CBU) activities in 2022 were carried out in the context of the country's inflationary pressures, which arose as a result of the deterioration of the geopolitical situation, a sharp rise in prices for basic food, raw materials, and energy resources on the global market, disruptions in logistics and supply chains, and an increase of the negative financial impact of global economic instability on the banking system and existing credit risks.

The main focus was on reducing the level of influence of monetary factors on inflation, effectively managing banking system liquidity, assessing potential risks in the banking system and minimizing their impact on financial stability, and ensuring macroeconomic and financial stability in the country by considering measures to manage risks related to economic sanctions and export restrictions.

“**The degree of tightness**” of the CBU's monetary policy implemented in 2022 was shaped differently as a result of foreign economic uncertainty.

Starting in March 2022, the policy rate was raised to **17** percent per annum in order to moderate fluctuations in the national currency exchange rate and inflation expectations, and starting in the second quarter, under the stabilization of macroeconomic conditions and the decrease in the probability of certain inflationary risks, the policy rate of the CBU was lowered to **15** percent per annum.

Monetary policy decisions and immediate measures served to lessen the impact of monetary determinants on inflation, boost the attractiveness of assets in the national currency, and favorably change the households' and firms' consumption and investment expectations.

With the growth of the overall liquidity of the banking system, the CBU adopted appropriate changes to monetary operations.

To increase the level of influence on the price of short-term liquidity, the maximum yield limit on CBU bonds was increased to the upper limit of the interest rate corridor.

Deposit auctions started to be held on the basis of the "**fixed-rate full-allotment**" mechanism to provide the possibility of holding deposit auctions for an unlimited amount at the request of banks and at the interest rate of the CBU.

With the objective of giving commercial banks more ease in terms of managing their liquidity, these auctions were converted to 1-week auctions held once a week beginning in July of the reporting year.

The methodology for calculating the money market benchmark interest rate was developed in collaboration with experts from **the European Bank for**

Reconstruction and Development (hereinafter – EBRD), and daily calculation and announcement of the UZONIA (*Uzbek Overnight Index Average*) benchmark interest rate, the UZONIA index, and term UZONIA rates were launched on the basis of this methodology.

The enhancement of these processes enabled the banking sector to successfully draw more liquidity while minimizing the influence of monetary factors on inflation.

To reduce the impact of **non-monetary factors** on the inflation rate, the CBU, based on weekly investigations of prices in consumer markets, continued joint practices with the Government to identify factors affecting price changes and prevent them.

These monetary policies were effective in curbing the high growth rates of inflation, and at the end of 2022, inflation was **12.3** percent.

In 2022, the CBU intervened in the domestic foreign exchange market in the amount of **4.1 billion US dollars** (hereinafter – dollar) in accordance with the "principle of neutrality."

The exchange rate of the dollar to the soum remained reasonably stable according to the proportional development of supply and demand formed under the effect of external and internal forces in the domestic foreign currency market, and the devaluation rate for 12 months was **3.9** percent.

During the reporting year, efforts were made to encourage private investment in funding the economy, increase the efficiency of firms' output, and provide financial assistance for new high-value production projects.

In particular, **203** trillion soums, or 22 percent more loans than in 2021, were allocated for financial support to individuals and legal entities.

43.7 percent of loans were allocated to **industry**, 22 percent to **trade and catering**, 11.6 percent to development of **agriculture**, 5.7 percent to **construction** and 5.2 percent to development of **transport and communication**.

Measures were taken to optimize the growth rate of loans to economy in relation to nominal GDP growth, in 2022 the stock of credits to the economy reached **403.1** trillion soums, and its growth amounted to **21.4** percent.

In 2022, the practice of prolonging the repayment periods of bank loans continued to assist firms experiencing financial difficulties. During the year, the repayment terms of loans totaling 36 trillion soums were prolonged.

At the same time, the **working group** established to offset the negative impact of external risks on bank financial stability was regularly studying the difficulties of firms involved in export-import operations.

The terms of loan repayments totaling **4** trillion soums of firms engaged in international trade, faced financial difficulties, were prolonged.

To mitigate the negative financial effects of the external economic situation on bank stability in 2022, privileges were granted to not charge penalties and fines for loans that were not repaid on time until the end of 2022, and not to form reserves against possible losses.

A monthly **schedule-plan** was prepared in collaboration with commercial banks and the Cabinet of Ministers of the Republic of Karakalpakstan, regions, and Tashkent city municipalities (hokimiyats) in order to minimize the negative effects of credit risks on bank financial stability.

A working group was formed in the state-owned banks to **collect non-performing loans (NPL)**, and individual work was systematically carried out with clients with NPL.

The implementation of these works allowed for a total reduction in NPL of **6.2** trillion soums in the fourth quarter of 2022.

Banks formed 11 trillion soums in additional reserves on assets in 2022, and the level of **coverage of NPL with reserves** climbed by **1.3 times** to 102 percent as of January 1, 2023.

As a result of the measures implemented, the share of NPL was lowered by **1.6** percentage points (p.p.), or up to **3.6** percent (*14 trn soums*), as of January 1, 2023.

In general, by the end of 2022, the banking system's regulatory capital had reached **83** trillion soums, and risk-weighted assets had reached **468** trillion soums, with a **capital adequacy ratio** of **17.8** percent, much over the minimal required (13%).

Because of non-compliance with banking regulation requirements, the licenses of "HI-TECH BANK" and "Turkiston" private joint-stock commercial banks allowing to carry out banking services were withdrawn in 2022, and full reimbursement of bank depositors' funds was ensured.

251 billion soums of depositors' funds of private joint-stock commercial bank "Turkiston" were reimbursed by the Fund of guarantee citizens' deposits in banks.

In addition, relevant work was performed to minimize the risks associated with **economic sanctions** and **export restrictions** and to **improve the compliance control system**.

In particular, sanction risk management **divisions** were established in commercial banks and a **special structural division** was established in the Central Bank to monitor their activities.

Commercial banks are taking appropriate steps to limit foreign trade operations with entities subject to economic sanctions imposed by the United States and the European Union, **to list of restricted goods for export (re-export)**, and to combat sanctions circumvention.

By integrating the "**sanctions screening module**" in the SWIFT system, the processes of comparing the participants of the operation with the list of persons subject to international economic sanctions were automated during bank operations.

Work on transforming state-owned banks was resumed in 2022, as part of the banking sector reform plan.

In particular, the main banks implemented a corporate management system, bank councils were formed by local and international experts, transformation strategies were developed to determine each bank's place and position in the market, and special emphasis was placed in these processes on digitization of banking services, transparent and simple delivery to customers.

During the reporting year, banks focused on the development of "**green financing**" in order to boost their investment attractiveness and attract extra funding from international financial institutions.

Sanoatqurilishbank, in particular, attracted international credit lines aimed at this direction, and developed a procedure for checking the compliance of the projects presented by the bank's clients with the criteria of "green financing," and based on the results, the practice of providing a conclusion within three days was established.

By optimizing commercial bank branches and developing compact banking service centers, **6 banks** have begun to operate on the basis of single bank code (MFO) technology to deliver qualitative banking services to clients through any bank branch.

In 2022, the main focus was to develop favorable conditions for cashless payments, extending the infrastructure of retail payment systems based on bank cards, and making existing infrastructure available.

In particular, the number of self-service devices reached 20.3 thousand units, payment terminals – 434 thousand units, and issued bank cards – 34.2 million units.

The number of **co-badged** bank cards, which provide with the opportunity to make settlements using one card in the infrastructure of the local and foreign payment systems, increased by 2.7 times compared to 2021 and reached 1,737 thousand units.

The number of firms using the services of the Tap-to-phone system (*allows receiving payments like a payment terminal*), which was introduced as part of the development of contactless payment services, increased by **6 times**, exceeded more than **2.3** thousand.

The number of automated deposit machines that allow bank customers to collect cash (encashment), as well as replenish the bank account (card) without visiting the bank, reached to 475.

Because firms can pay for goods and services at any time of day (even on weekends) using the instant payment system, over **90** percent of total payment orders of economic entities were made distantly without visiting the bank.

The Law of the Republic of Uzbekistan "On Non-bank credit organizations and microfinance activities" was adopted during the reporting year in order to systematize the regulatory and legal documents governing the activities of **non-bank credit organizations** (hereinafter – NCO).

In addition, the CBU continues to protect the rights of banking service consumers, raise financial literacy, and improve financial inclusion.

This report includes detailed information on the aforementioned and other changes implemented in the banking sector throughout 2022, as well as the CBU's performance of tasks given to it under existing legislation.

I. DOMESTIC AND EXTERNAL MACROECONOMIC CONDITIONS IN 2022

1.1. Domestic economic conditions

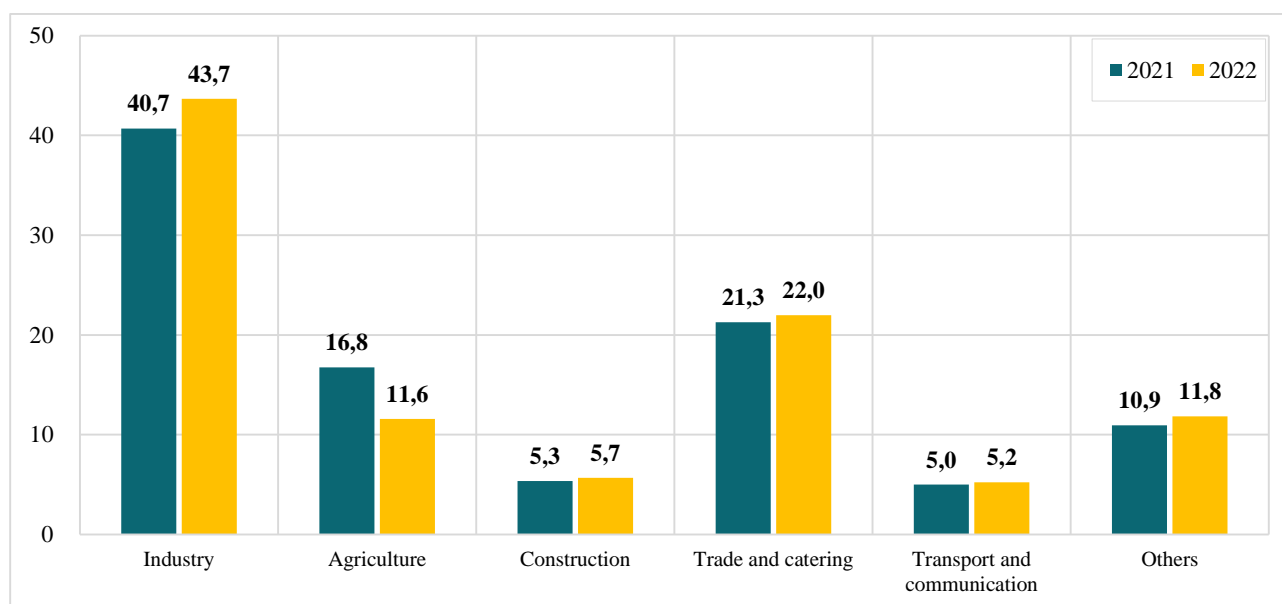
1.1.1. Financial flows to the economy

In 2022, the increase in the amount of bank loans to the economy, government expenditures and private investments were the main financial factors of **economic growth from the demand side**.

In particular, in 2022 banks allocated **203** trillion soums or **22** percent more loans comparing to the same period of 2021, and the stock of loans reached **403** trillion soums.

Figure 1.1.1.1

Bank loans to the economy, by type of activities, share in percent



In terms of activities, 43.7 percent of loans were allocated to **industry**, 22 percent to **trade and catering**, 11.6 percent to development of **agriculture**, 5.7 percent to **construction** and 5.2 percent to development of **transport and communication**.

Loans to the individuals increased by **1.6 times** compared to 2021 and amounted to **65.3** trillion soums. **Microloans** made up 25.6 percent of the total loans to households, **mortgage loans** – 22 percent, **consumer loans** – 33 percent, and **microcredits** – 14 percent.

Immediate responses aimed at mitigating external shocks through monetary policy instruments of the CBU served to shape **the consumption and investment decisions** of the households and firms in a positive direction.

The uncertainties in the global economy observed in 2022 required, on the one hand, to provide financial support to the economy and, on the other hand, to conduct a **coordinated** monetary and fiscal policy aimed at preventing the additional pressure on inflation.

In particular, consolidated expenditures of central government and extrabudgetary funds increased by **27.2** percent compared to 2021 and amounted to **275.9** trillion soums in the reporting year.

Expenditures on the social sector were 43.1 percent of the total amount, production and infrastructure development programs – 12.9 percent, and support of economy – 10 percent.

Furthermore, **19.5** trillion soums or **1.5 times** more than in 2021, were allocated to the social support programs for the households, in particular, to the financing of benefits, material assistance and compensation payments.

The share of consolidated budget expenditures in GDP increased from 29.5 percent in 2021 to **30.9** percent in 2022, and **total fiscal deficit** to GDP decreased from 5.8 to **4** percent.

Investment policy in the reporting year aimed at gradually reducing the state's burden of financing the economy by introducing alternative instruments of financial support and increasing the role of private investments. In particular, from all sources **269.9** trillion soums were **invested** to the economy.

Since structural changes were observed in the volume of total investments, the share of **decentralized investments** increased from 80.8 percent in 2021 to **84.6** percent in 2022.

The growth of decentralized investments is mainly explained by the **10.6** percent increase (*compared to 2021*) of the investments from the enterprise funds and 10.7 percent of the foreign direct investments.

Centralized investments were 41.4 trillion soums and decreased by **19.6** percent in real terms compared to 2021.

This reduction is explained by the increase in the prices of resources in the international financial market, the tightening of the conditions for attracting foreign debt compared to the requirements of Uzbekistan, and related to the limitation of the volume of investments made at the expense of **budget funds** and **foreign loans under the Government's guarantee**.

Table 1.1.1.1

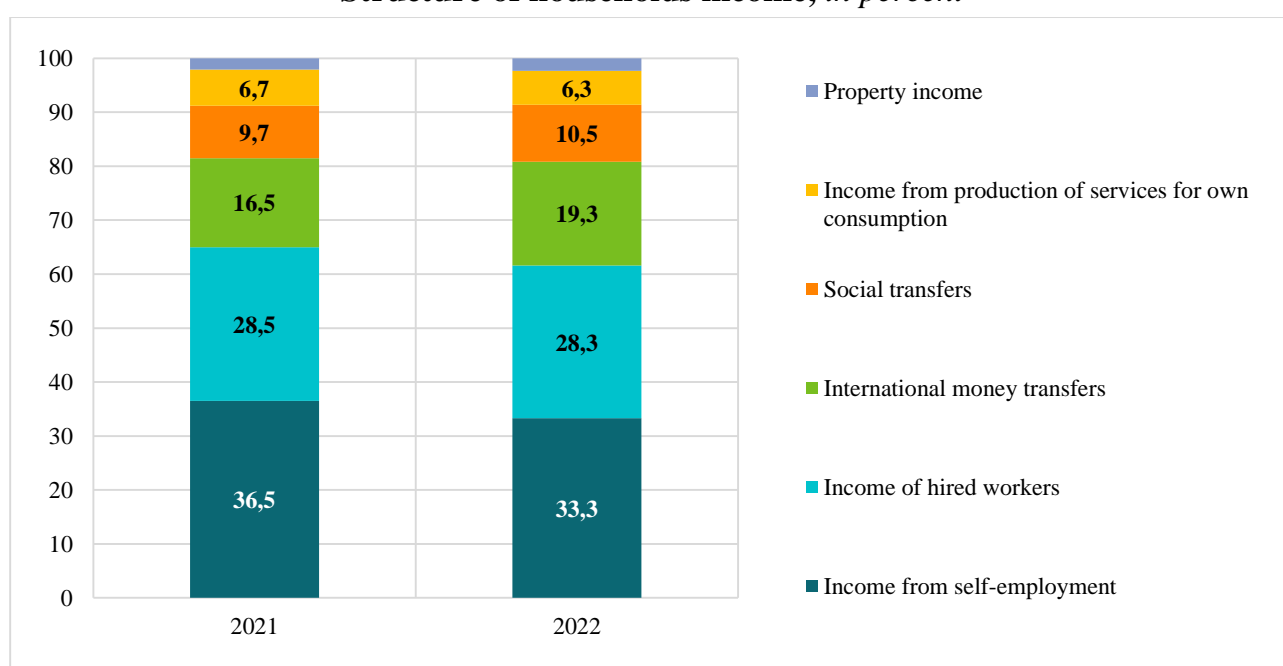
Investments in fixed assets, by sources of financing, in billion soums

Sources	2021	2022	Change, in percent	
			2021	2022
Total investments	239 553	269 858	14,0	12,7
Centralized investments	46 100	41 436	9,8	-10,1
Budget funds	22 172	20 910	54,9	-5,7
Fund for Reconstruction and Development	3 006	2 471	19,5	-17,8
Foreign loans under government guarantee	18 129	15 182	-21,9	-16,3
Decentralized investments	193 452	228 421	15,0	18,1
Enterprise funds	68 360	84 516	2,3	23,6
Foreign direct investment and loans	83 243	97 038	25,1	16,6
<i>including,</i>				
<i>foreign direct investment</i>	<i>29 911</i>	<i>37 006</i>	<i>0,8</i>	<i>23,7</i>
Population funds	22 705	25 738	20,3	13,4
Commercial bank loans	19 145	21 129	20,2	10,4

Source: Statistics Agency

In the reporting year, **the real income of the households** increased by **9.7** percent as a result of the increase of the average real wage in the public sector and economic sectors by 8.6 percent, social transfers – by 1.3 times and international money transfers – by 2.1 times.

Figure 1.1.1.2

Structure of households income, in percent

Source: Statistics Agency

In 2022, the **total income of the households** amounted to **634.8** trillion soums, and the income from employment (*share – 61.6%*) increased by **16.7** percent compared to 2021, transfer income – **1.4** times, income from the production of services for own consumption – by **15.7** percent and property income – by **34.8** percent.

The growth of international remittances accelerated from 37.3 percent in 2021 to 43.6 percent in 2022, and social transfers – from 17 to 34 percent.

Moreover, pensions in social transfers increased from 15.7 percent in 2021 to 22.4 percent in 2022, benefits – from 1.5 to 1.7 times and scholarships – from 13.3 percent to 31.5 percent.

Growth in wages, pensions, and social transfers, as well as a significant increase in the inflow of remittances **supported consumer demand**.

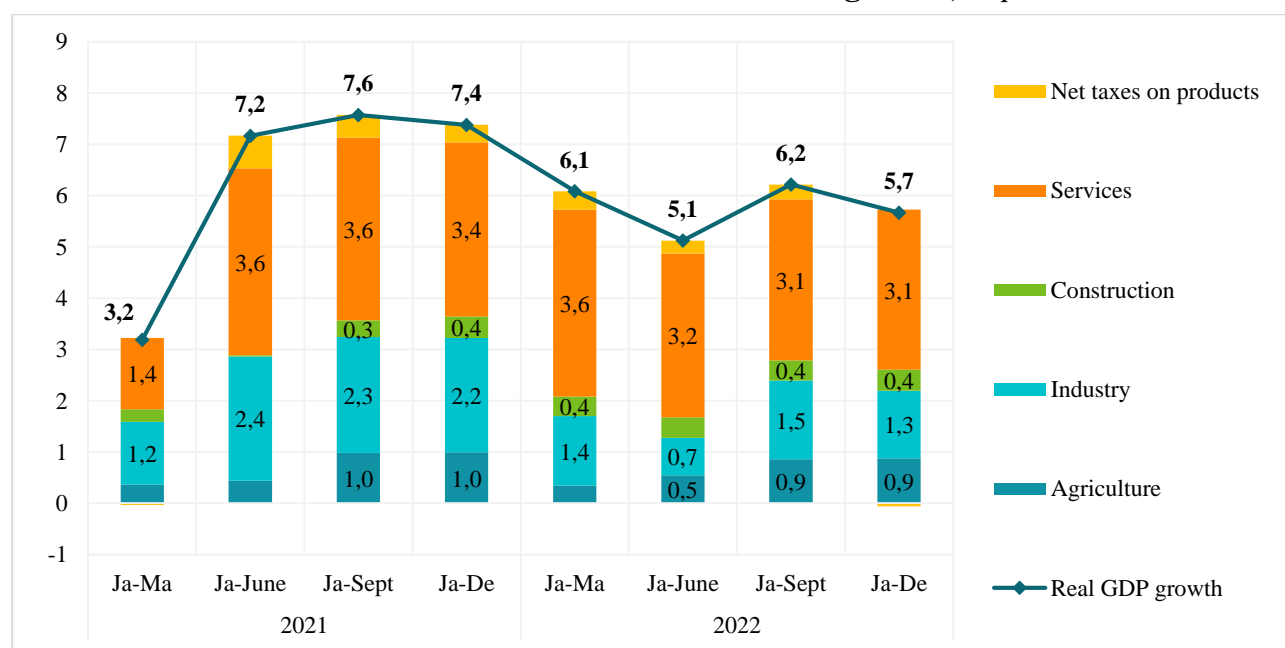
As a result, the final consumer spending of households in 2022 increased by **11.4** percent compared to 2021.

1.1.2. Business cycle and labor market

In 2022, production activity was formed in the conditions of external economic instability, interruptions in the transport-logistics system and the import of some raw materials, and the growth rate of economic sectors was within the general trend before the pandemic.

Figure 1.1.2.1

Contribution of economic activities to GDP growth, in percent



Source: Statistics Agency

In particular, the GDP grew to **888.3** trillion soums in current prices, as a result of the stabilization of production and demand the economic growth slowed down from 7.4 percent in 2021 to **5.7** percent in 2022 and its trend transitioned a stable phase.

This slowdown is explained by the fact that the post-pandemic recovery period in 2021 recorded high growth indicators in all sectors of the economy.

In 2022, the contribution of the **services** to the GDP growth was 3.1 p.p., **industry** – 1.3 p.p., **agriculture** – 0.9 p.p., and **construction** – 0.4 p.p.

In 2022, **industry** grew by **5.2** percent and **services** – by 8.5 percent, serving as the main driver sectors of economic growth. The volume of **construction works** increased by **5.2** percent and the production of **agricultural** goods – by **3.6** percent.

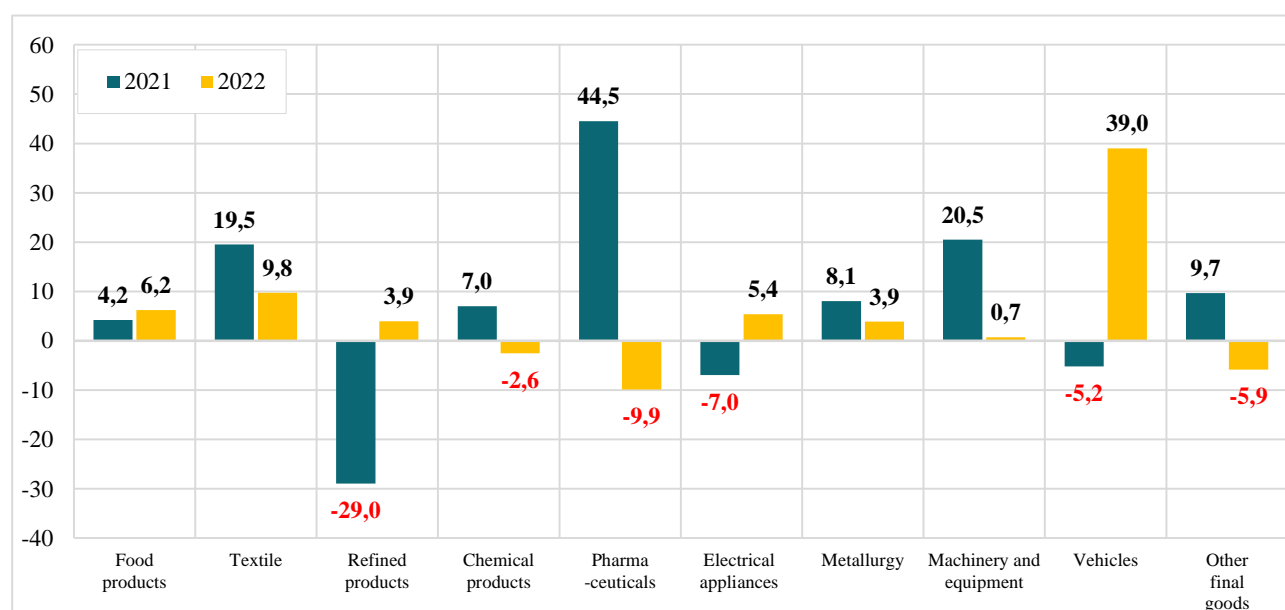
The relatively high rate of growth in **industry** is explained by the increase in the contribution of investments in fixed assets to production in previous years, the establishment of small industrial zones, and the increase in demand for local industrial products in the conditions of geopolitical instability.

In 2022, the share of the manufacturing industry in the structure was 83.2 percent, mining and quarrying – 9.5 percent, and electricity, submission of gas, steam and air conditioning – 6.8 percent.

The manufacturing industry grew by 5.3 percent, which was driven by 6.2 percent increase in **food production** (4.2% in 2021), 5.4 percent – **electrical equipment**, 9.8 percent – **textile products**, 3.9 percent – **metallurgical industry**.

Figure 1.1.2.2

Changes in the volume of production by types of the manufacturing industry, in percent



Source: Statistics Agency

The growth of **financial services** accelerated from 28 percent in 2021 to **29.3** percent in 2022, while high growth rates were maintained in transport (12.4%), trade (9%), and information and communication (25.5%).

In the sharp growth of financial services the measures taken to increase the financial inclusion were important, in particular, making convenience of this services for the consumers by wide using of digital technologies.

The increase in the volume of information and communication services is explained by the rise of highly qualified ICT specialists in the labor market and the increasing demand for the use of information technologies and state programs aimed at the development of digital technologies.

Farming within the production of **agricultural** products slowed down from 4.3 percent to 3.8 percent, livestock from 3.5 percent to 3.4 percent in the reporting period.

Cereal crops in **farming** increased from -1.2 percent in 2021 to **4.7** percent, fruit and berry production increased from 1.4 percent to **4.6** percent while the production of poly crops slowed down from 6.9 percent to **5.9** percent.

In the composition of **livestock**, the volume of production of meat (3.4%), eggs (4.4%) and milk (3.2%) remained stable.

The sustainability of high growth rates in agriculture is explained by the creation of conditions for the formation of prices in this area through market mechanisms, the gradual abolition of the practice of growing products on the basis of state orders, and the increasing share of the private sector in the land use.

In 2022, the volume of **construction work** performed amounted to **130.7** trillion soums, which, in relation to 2021, its growth was equal to **6.6** percent.

When looking at construction works by types of economic activity, the increase in the volume of **buildings and structures** accelerated from 0.8 percent to **4.4** percent, and the growth of **specialized construction works** accelerated from -14.9 percent to **38.2** percent, while construction works of **civil facilities** slowed down from 48.2 percent to **2.7** percent.

The acceleration of the growth in construction of buildings and structures as well as specialized construction works is explained by the introduction of the mechanism of subsidizing mortgage loans to households with low income and in need of improving living conditions, and the increasing share of public-private partnerships in the construction of infrastructure facilities.

Moreover, when looking at the entities performing construction works, the growth in the volume of construction works carried out by **large construction organizations** increased from 7.3 percent in 2021 to **10** percent while **small**

enterprises and micro-firms' construction accelerated from 4.7 percent to 6.3 percent.

In reporting year, 19 percent of the construction of facilities was done by the informal sector, and the growth of this sector slowed down from 11.8 percent in 2021 to 2.9 percent.

Figure 1.1.2.3

Increase of construction work by type of developers, in percent

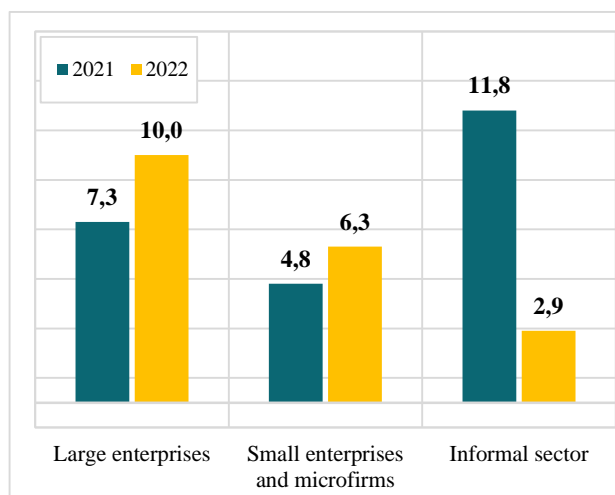
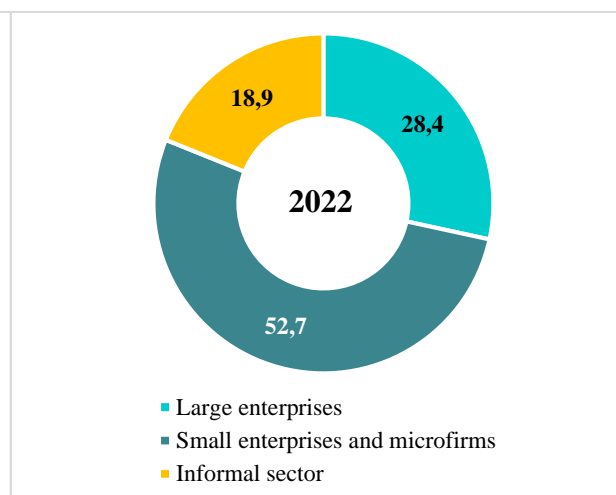


Figure 1.1.2.4

Share of construction work by type of developers, in percent

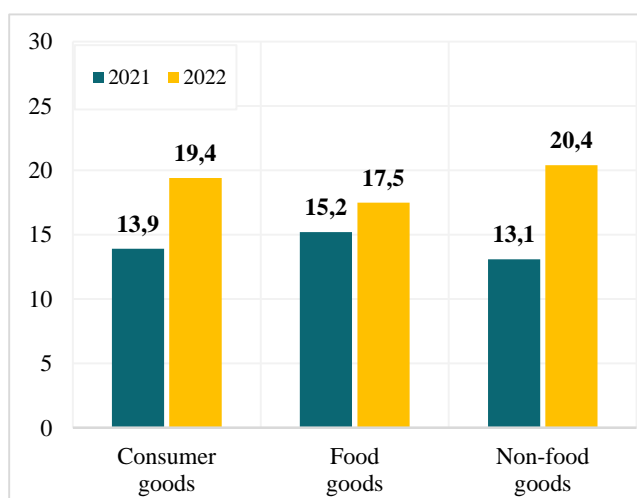


Source: Statistics Agency

The increase in aggregate demand and the acceleration of economic activity were also reflected in the increase in the volume of production of **consumption goods**.

Figure 1.1.2.5

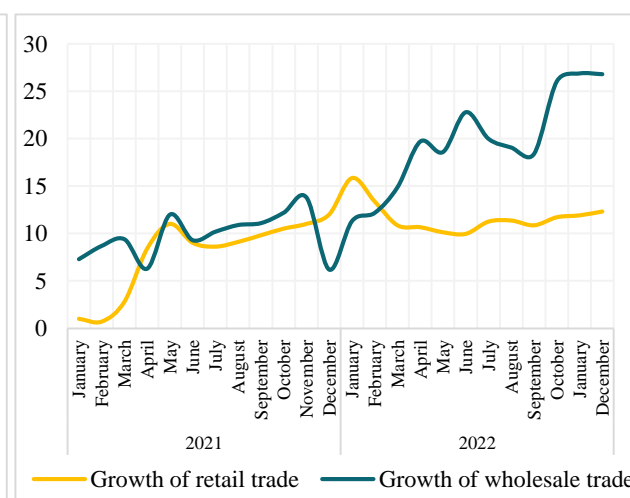
Increase in production of consumption goods, in percent



Source: Statistics Agency

Figure 1.1.2.6

Growth of retail and wholesale trade, corresponding period of previous year, in percent



In 2022, the increase in the production of consumption goods accelerated from 13.9 percent in 2021 to 19.4 percent. In this case, the increase in production of **food** products was **17.5** percent while the increase in production of **non-food** products reached **20.4** percent.

The increase in economic activity was also reflected in the growth of **retail and wholesale** trade. In particular, the volume of **retail trade** increased by 12.3 percent, while the growth of wholesale trade accelerated from 17.5 percent in 2021 to 26.8 percent.

The situation in the **labor market** is characterized by an increasing demand for highly skilled workers, in contrast to the demand for traditional labor.

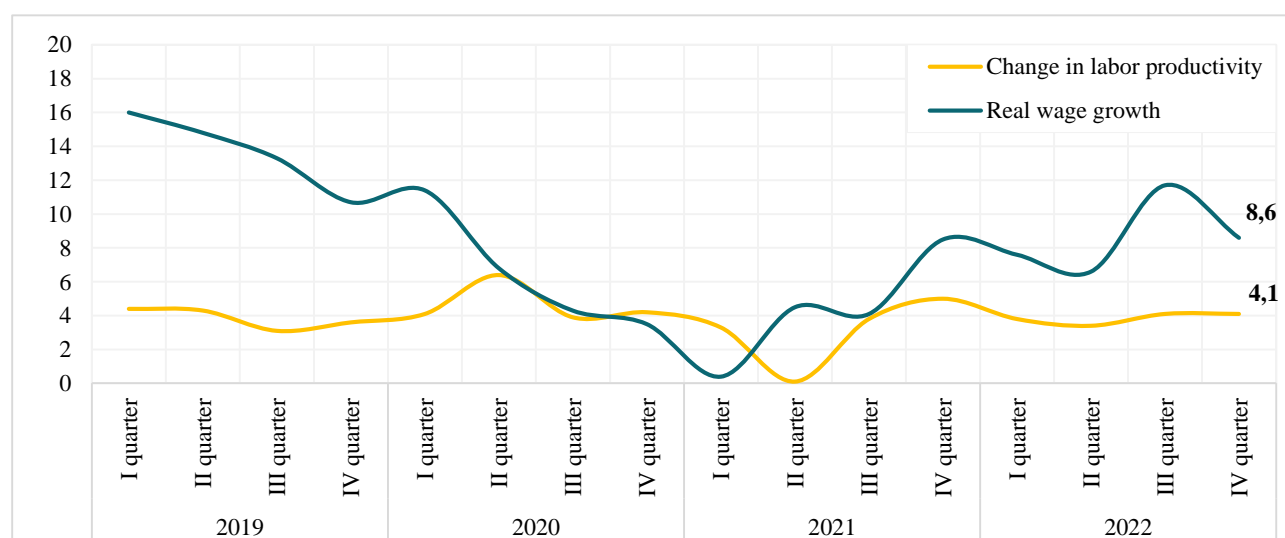
In particular, the **unemployment rate** in 2022 was **8.9** percent (*9.6% in 2021*), and **the number of employed people** in the economy reached **13.7** million people. It was observed that the level of **economic activity of the population** decreased from 74.1 percent in 2021 to **73.9** percent.

The share of employed people by type of activities show that 25 percent of total employed people were in **agriculture**, 13.3 percent – in **industry**, 11.2 percent – in **trade**, 9.7 percent – in **construction work**, 9.1 percent – in **education**, and 4 percent – in **health care**.

In 2022, as a result of the adjustment of **wages** in response to the level of inflation and the increase in the demand for highly qualified labor, wages in economic sectors were formed differently compared to the average wages in the labor market.

Figure 1.1.2.7

Change in labor productivity and real wage growth, in percent



Source: Statistics Agency, Central bank staff calculations

In particular, the average monthly wage in the labor market was **3.9** million soums, in spheres as financial and insurance (10.8 mln), information and communication (7.6 mln), transportation and storage (5.1 mln), industry (4.9 mln) and construction (4.7 mln) were observed high levels, at the same time, in health and social (2.6 mln), education (2.7 mln), accommodation and food (3.1 mln) spheres recorded lower level than average.

In 2022, the **real increase in wages** was **8.6** percent, and in **labor productivity** – **4.1** percent. In other words, the real growth of wages was almost **2 times** higher than the growth of labor productivity.

While the increase in the amount of wages in economy, on the one hand, serves to support consumer demand, on the other hand, the fact that labor productivity does not change in proportion to the increase of wages can create inflationary pressure and decrease the competitiveness of domestic producers in the domestic and foreign markets.

1.2. External economic conditions

In 2022, the global economy passed to the period of permacrisis, i.e there was a transition from the economic crisis caused by the Covid-19 pandemic to a period of crisis caused by new geopolitical conflicts without complete recovery.

In this case, factors such as the increase of inflationary pressure and the tightening of monetary policy in countries, the introduction of cross-border and trade restrictions, significant price fluctuations in world raw materials markets, changes in the geography of production chains, and the occurrence of additional pressure on the logistics had a negative impact on global economic growth.

According to the latest estimates of the **International Monetary Fund** (hereinafter – IMF), the global economic growth in 2022 was **3.4** percent (6.2 percent in 2021).

At the same time, **economic growth** in developed countries slowed down from 5.4 percent in 2021 to **2.7** percent in 2022, and in developing economies from 6.7 to **4** percent.

According to the IMF, the global inflation rate ranged from 4.7 percent in 2021 to 8.7 percent in 2022, in advanced economies – from 3.1 to **7.3** percent and in developing economies – from 5.9 to **9.8** percent.

The main factors of **high global inflation** in 2022:

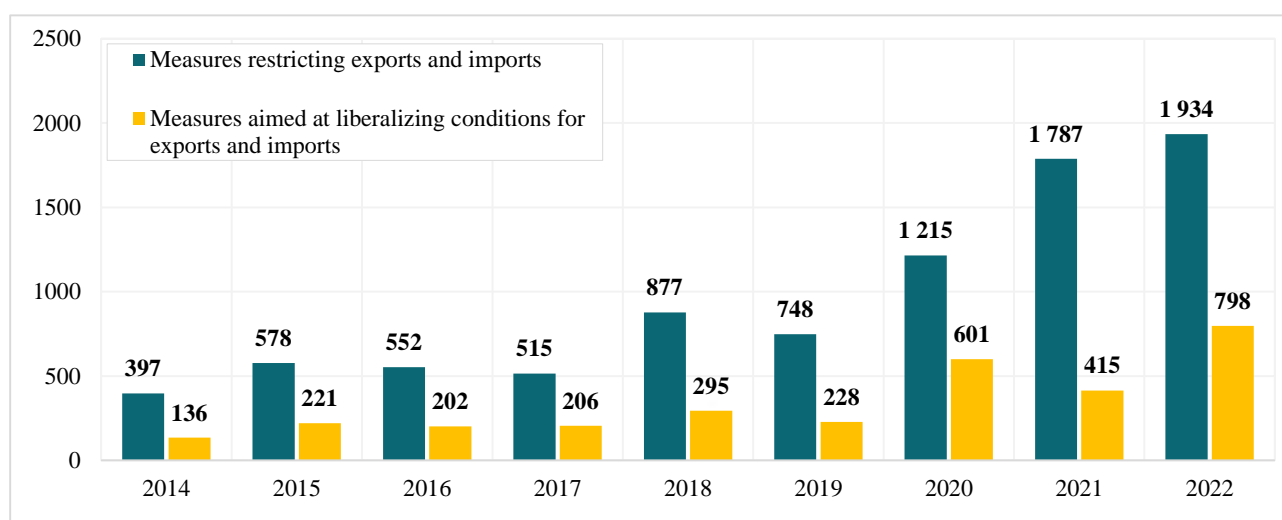
– in the pre-pandemic period, as a result of the decrease in the price of goods under the influence of globalization processes and the competitive environment, there was a decrease in investment in production capacity;

- inadequate formation of production capacity in accordance with the demand as a result of the fiscal supports during the Covid-19 and the accumulated consumer demand of the households;
- disruptions in logistics chains and sharp increases in delivery prices, shortages of raw materials and components.

Moreover, in 2022, under escalation of geopolitical conflicts the number of measures restricting global trade recorded a historical maximum.

Figure 1.2.1

Measures restricting global trade



Source: Global Trade Alert

In particular, if during the pandemic, the number of **trade restriction** measures amounted to 1.2 thousand, in 2022 it reached almost **2** thousand.

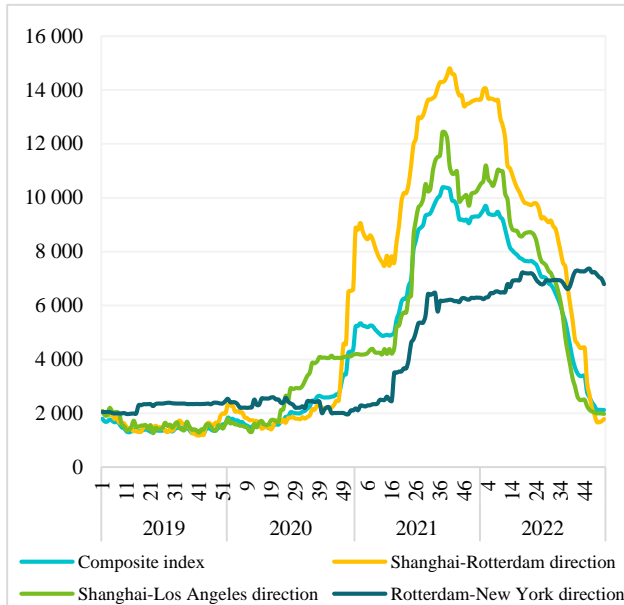
Measures aimed at restricting trade, as a result of economic sanctions closing of transport corridors and actions taken by countries to circumvent these restrictions, as well as temporary export restrictions introduced in some countries suppliers of main raw materials, created additional pressure on the logistics sector.

At the same time, reduction of global trade led to a decrease in the demand for transport and logistics services and returnig of cost within the trend of the pre-pandemic period.

The freight cost of a 40-foot container was 9.3 thousand dollars at the end of 2021, and at the end of 2022 the cost decreased to **2.1** thousand dollars (*by 4.4 times*).

Moreover, the Global supply chain pressure index decreased from 4.3 in 2021 to **1.2** in the reporting year (*at the end of the year*).

Figure 1.2.2
The freight costs of 40-foot container through major routes, weekly data, in dollars



Source: Drewry.co.uk

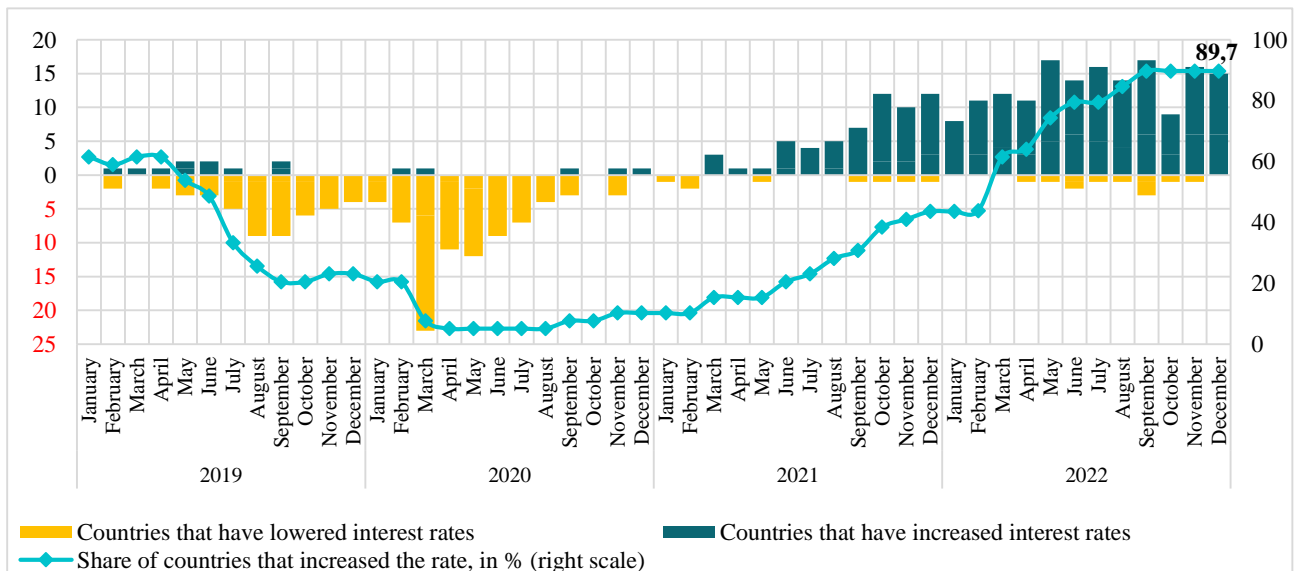
Figure 1.2.3
Global supply chain pressure index



Source: Federal Reserve Bank of New York

Inflationary pressure amplified the processes of synchronously tightening of monetary policy by central banks of the world. During 2022, **89.7** percent of central banks moved to the phase of hiking their policy rates.

Figure 1.2.4
Implementation tendency of monetary policy by the central banks of the world

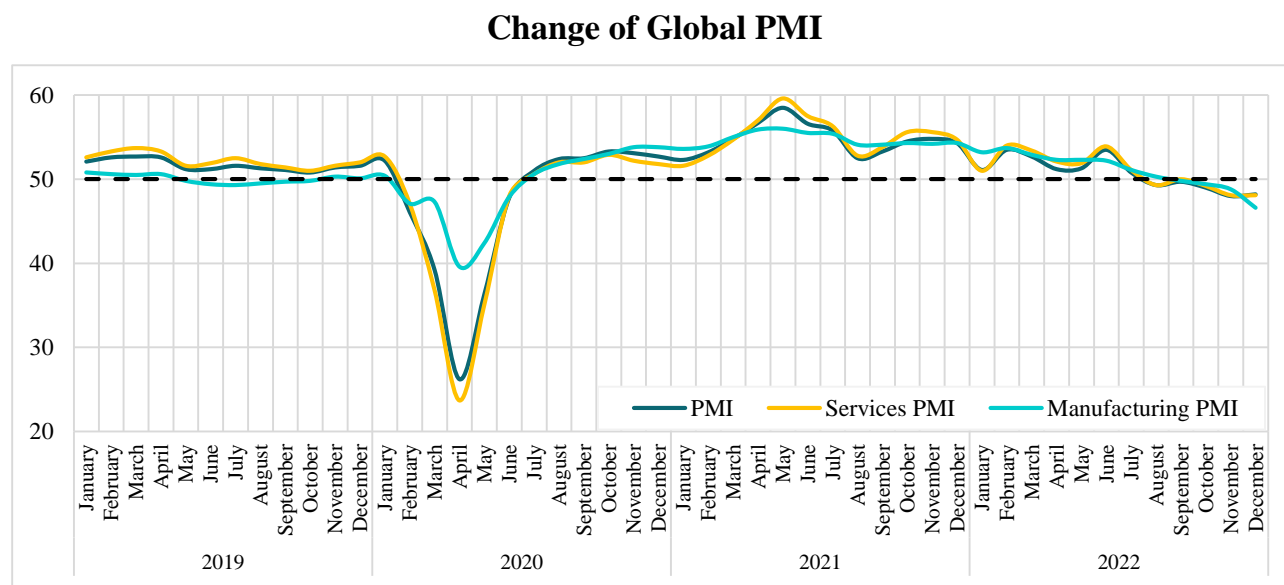


Source: IMF

At the same time, the PMI index, which reflects the economic activity in the manufacturing and services in the global economy, after improving rapidly in 2021,

has a downward trend in 2022 under the influence of instabilities, being in a negative level (*below 50*) by the end of the year.

Figure 1.2.5



Манба: IHS Markit, *Global Purchasing managers' index report*

In particular, in December 2022, the composite PMI index was **48.2**, in the service – **48.1**, and in manufacturing – **46.6**, in December 2021 these indices were 54.3, 54.7 and 54.3 respectively.

1.2.1. Economic trends in Uzbekistan's main trading partners

In 2022, the economic conditions of Uzbekistan's main trade partner countries (hereinafter – partner countries) was shaped by external shocks, including fluctuations in commodities prices, global inflationary pressures, trade restrictions and changes in demand.

In particular, GDP growth in **Russia** decreased from 4.7 percent in 2021 to **-2.1** percent in 2022, while in **China** it slowed down from 8.4 to **3** percent, in **Kazakhstan** from 4.1 to **3.2** percent and in **Türkiye** from 11.4 to **5.6** percent.

In **China** under strict quarantine restrictions slowing economic growth was observed, especially retail sales declined by -0.2 percent and real estate sales – by -10 percent, while industrial manufacturing slowed from 9.6 percent in 2021 to 3.4 percent in 2022.

In **Russia** imposed economic sanctions led to **sharp decline in economic activness**, reducing GDP growth to -2.1 percent in 2022.

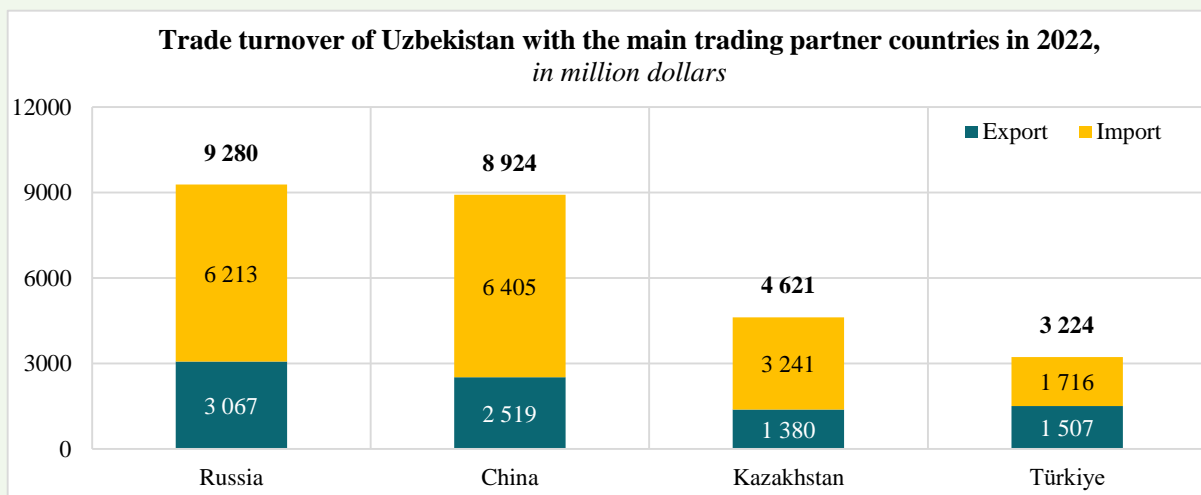
In order to preserve the purchasing power of the population in the conditions of high inflation and exchange rate fluctuations in **Türkiye**, the increase of **wages** almost 3 times during the year and the revival of the **tourism** balanced the economic activness.

Box 1

Main trade partner countries of Uzbekistan

Export of goods and services increased from 16.6 billion dollars in 2021 to 19.3 billion dollars in 2022 (**15.9** percent), and import raised from 25.5 to 30.7 billion dollars (**20.4** percent), respectively.

Russia (**18.6%**), China (**17.8%**), Kazakhstan (**9.2%**) and Türkiye (**6.4%**) were the most traded countries with, and their share in total turnover was 52.1 percent.

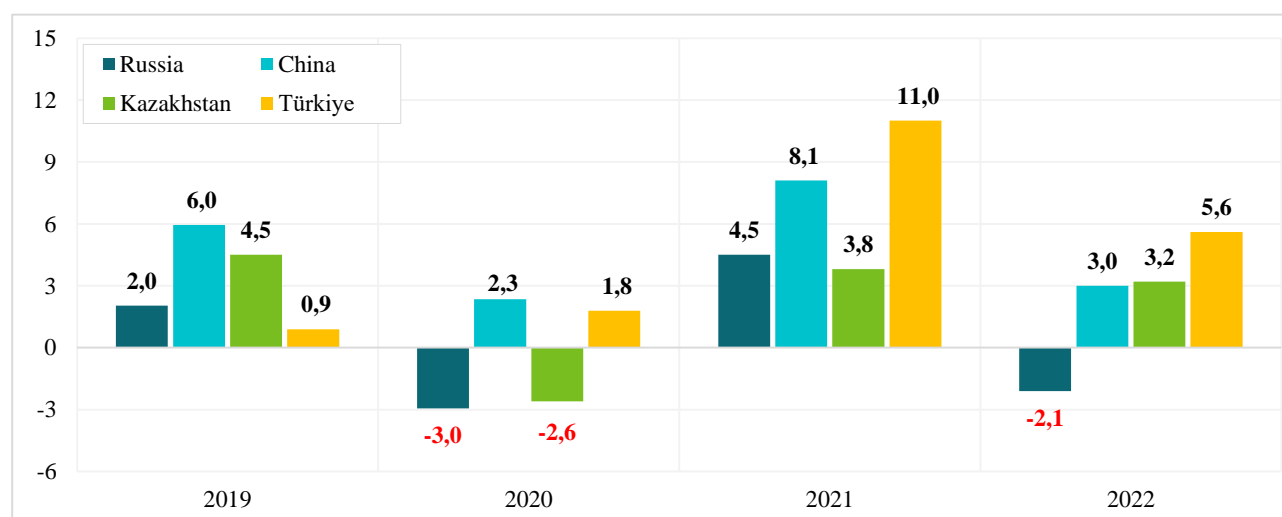


Source: Statistics Agency

In Kazakhstan economic growth boosted by increase in high value-added sectors, including **machinery** – 9.4 percent, **automobile industry** – 19.1 percent, **electrical equipment** – 22.2 percent. In addition, production in **agriculture** surged by 9.1 percent, in **construction** – by 9.4 percent.

Figure 1.2.1.1

Economic growth in Uzbekistan's main trade partner countries, in percent



Source: IMF

Under external shocks, inflation in **Russia** increased from 8.4 percent in 2021 to **11.9** percent in 2022, in **China** – from 1.5 to **1.8** percent, in **Kazakhstan** – from 8.4 to **20.3** percent.

The continued "cheap money" policy in Türkiye was the main factor in the hike of inflation from 36.1 percent in 2021 to 64.3 percent in 2022.

In order to mitigate external shocks and curb inflation the central banks of the partner countries have been tightening monetary conditions.

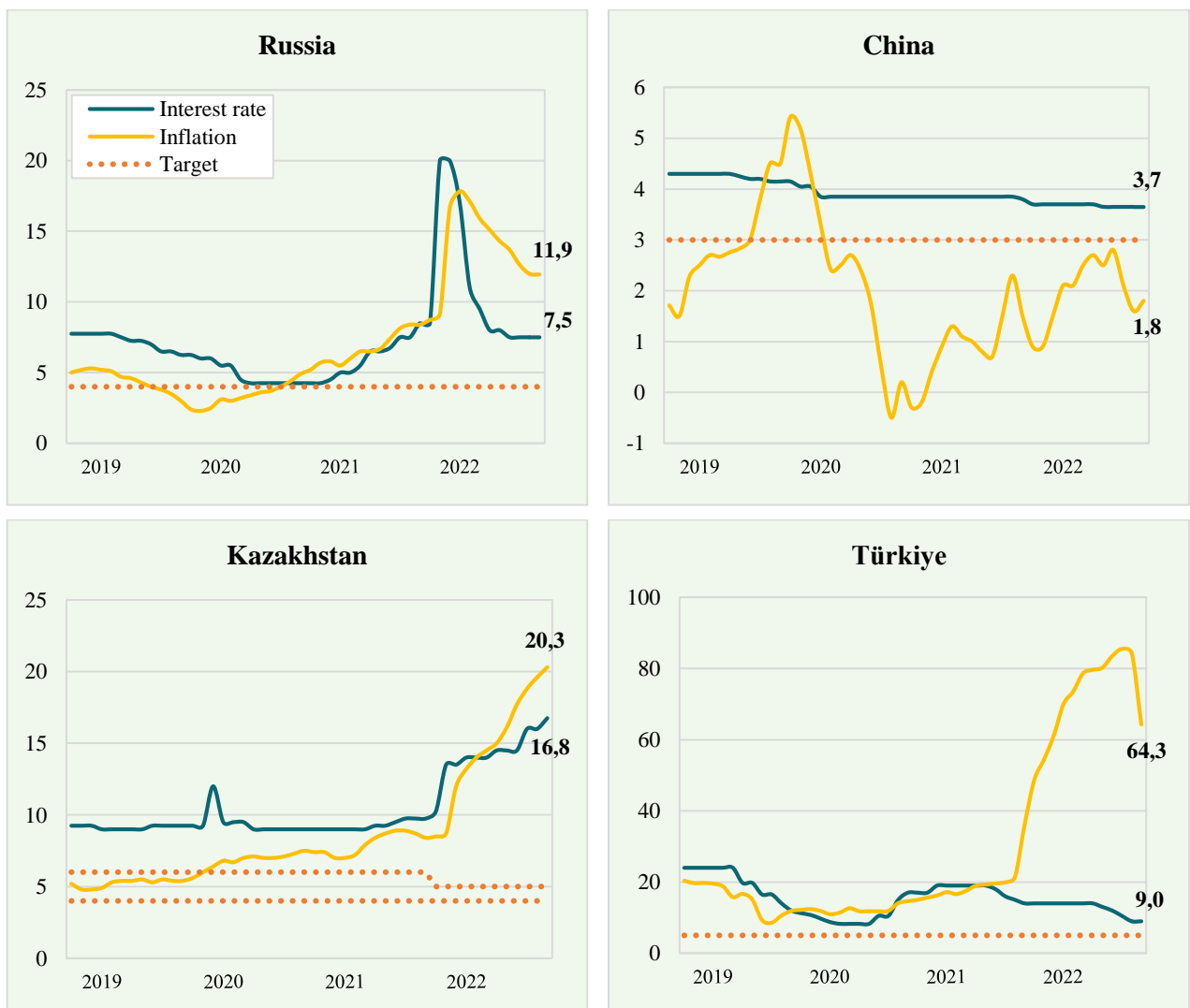
In particular, until the end of 2022, the Bank of Russia revised the policy rate 6 times and set it at **7.5** percent per annum.

In response to the high inflation, the National Bank of Kazakhstan tightened monetary policy throughout the year and hiked the policy rate from 9.75 percent at the beginning of 2022 to **16.75** percent per annum at the end of the year.

Despite the high inflation and 5 percent target the Central Bank of Türkiye eased the monetary policy, in particular, the policy rate was cut 4 times during 2022 – from 14 to **9** percent per annum.

Figure 1.2.1.2

The interest rate and annual inflation in partner countries,
in percent



Source: Central banks of partner countries

While the relatively low inflation rate in China, to stimulate demand the policy rate was cut from 3.80 to **3.65** percent (by 0.15 p.p.) in 2022.

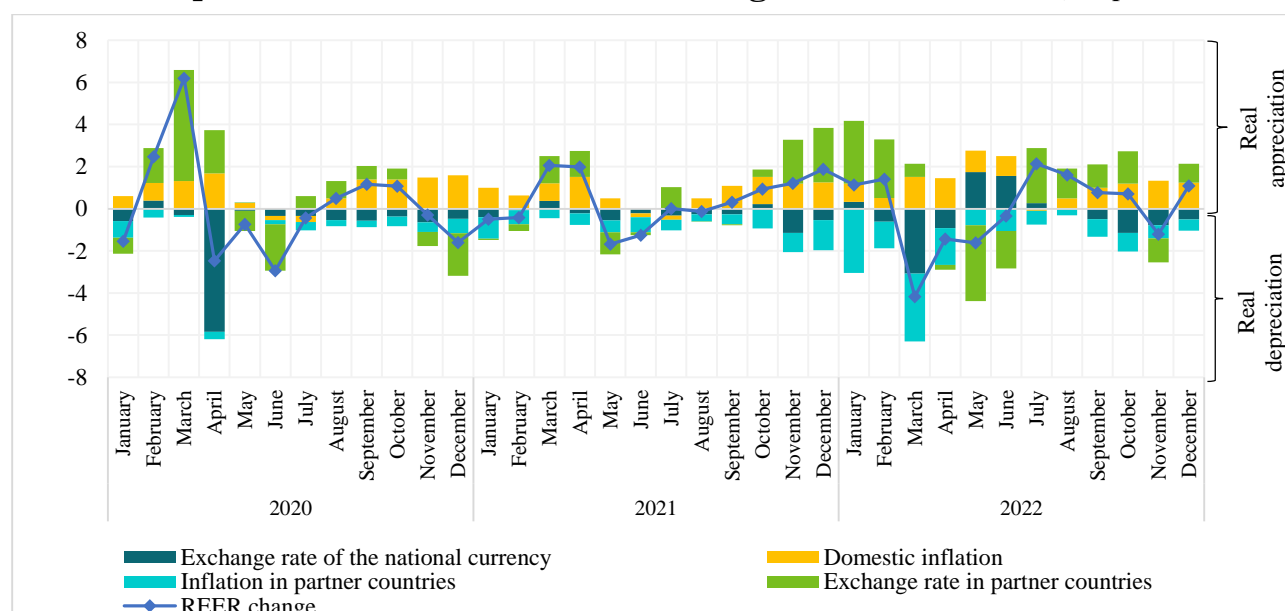
During the reporting year, there were observed high volatility in national currency exchange rates of the partner countries. Namely, depreciation of the Turkish lira compared to the dollar was 53 percent (76.9% in 2021), and the Kazakh tenge depreciated by 7.2 percent (2.6% in 2021).

After appreciation by 2.3 percent in 2021, the Chinese yuan depreciated by **9.2** percent in 2022. The Russian ruble revaluated by **5.2** percent under the restrictions imposed by the Bank of Russia on operations with foreign currency.

Furthermore, in conditions of depreciation of the partner countries' national currencies and higher inflation level in Uzbekistan than in the partners, the appreciation of the real effective exchange rate of the soum was observed in 2022.

Figure 1.2.1.3

Decomposition of the real effective exchange rate of the soum, in percent



Source: Central bank staff calculations

1.2.2. Global commodity markets' outlook

In 2022, the conjuncture of the global commodity market was formed, on the one hand, within the negative impact of trade restrictions and speculative expectations, and on the other hand, slowdown in global economic growth and world trade.

In particular, after a 78.2 percent raise in 2021 the energy price index increased by **57.3** percent in 2022 (*mainly with the increase in oil prices*).

As a result of restrictions imposed by European countries on the import of Russian natural gas, the average price of the commodity increased by almost **2.5 times** compared to 2021, with stabilizing from the IV quarter.

Moreover, under the influence of the restrictive measures introduced against Russian oil by some countries and speculative expectations, the **price** of one barrel of **oil** in 2022 was about 97.1 dollars on average and increased by **40.6** percent compared to 2021. Coal prices also recorded high growth, from an average of 129 dollars per metric ton in 2021 to **330.5** dollars in 2022 (by 2.6 times increase).

Figure 1.2.2.1

Energy and natural gas price indices,
2010=100, in percent

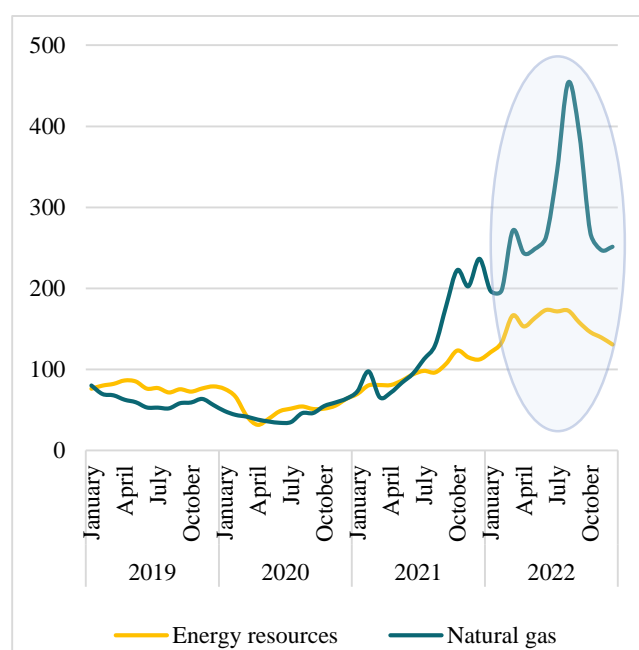
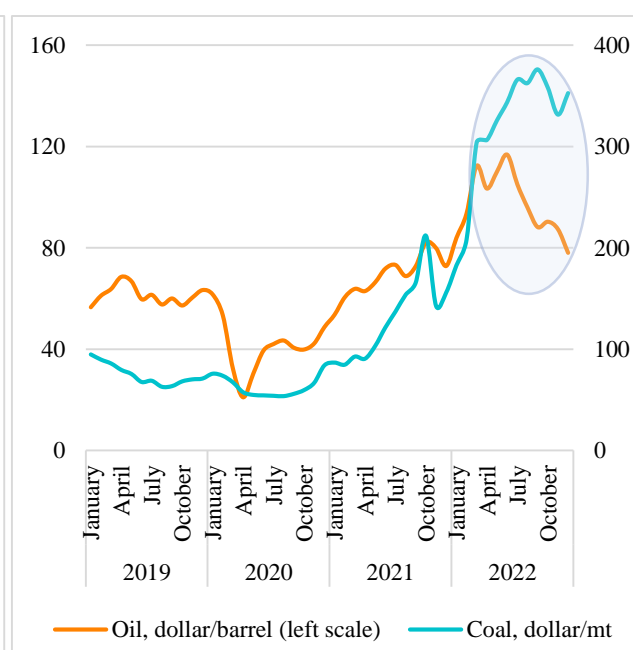


Figure 1.2.2.2

Crude oil and coal prices



Source: World Bank

There was a sharp increase in the base metals' price index in the first quarter of 2022, but by the end of the year, there was observed a decline under the decrease in the demand for metals from China – the main consumer, and the price of these commodities increased on an average by 4 percent in 2022.

High rates of growth were noted only in the price of nickel included in this group of commodities. The average annual price of 1 metric ton of nickel increased from 18.5 thousand dollars in 2021 to **25.8** thousand dollars in 2022 (a **39.9%** increase).

While positive expectations such as the easing of the policy rate by the US Federal Reserve System (FRS) and the depreciation of the dollar, until March 2022, the price of gold increased on the global market.

However, with the tightening of the monetary policy by the FRS and the growth of the dollar index, a decrease in the price of gold was observed starting from March 2022.

As a result, the average annual price of **gold** compared to 2021 (1,799.6 dollars per 1 troy oz) remained almost unchanged – in the reporting year was **1,800.6** dollars, and the average annual price of 1 troy ounce of silver decreased by 13.4 percent, constituting **21.8** dollars.

Figure 1.2.2.3

Base and precious metals’ price indices, 2010=100, in percent

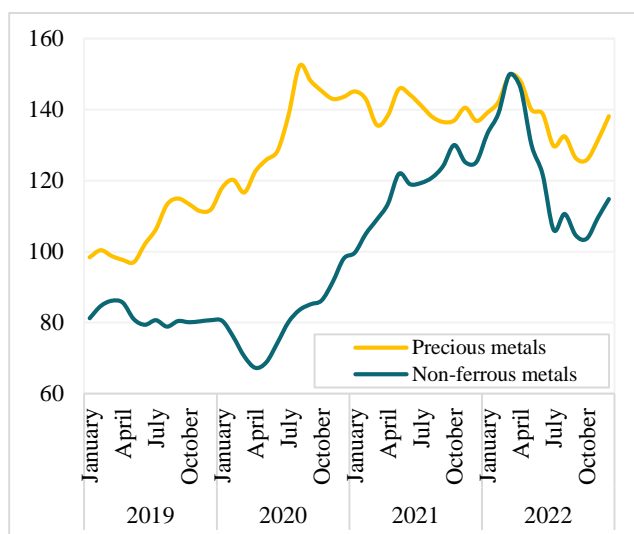
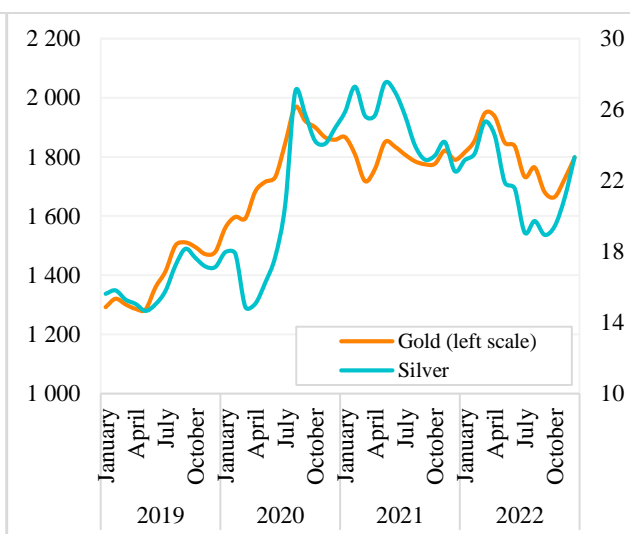


Figure 1.2.2.4

Gold and silver prices, dollar/troy oz

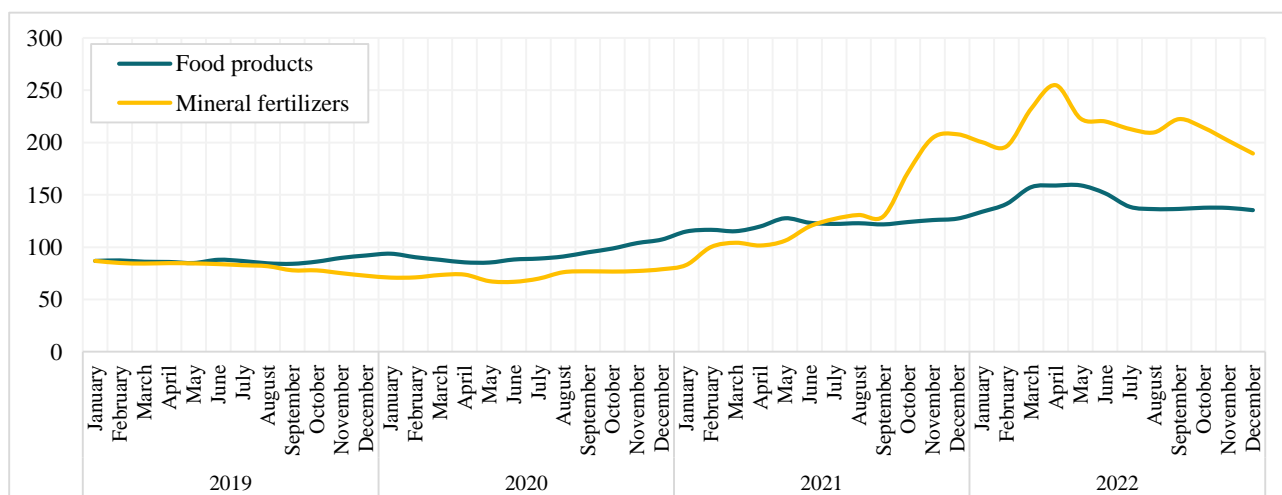


Source: World Bank

Starting from 2021, the **prices of mineral fertilizers** have an upward trend and reached their historical maximum in April 2022. In particular, the price of these goods increased by **62.6** percent in 2022, after an 80.5 percent increase in 2021.

Figure 1.2.2.5

Price indices of food and mineral fertilizers, 2010=100, in percent



Source: World bank

The increase in the price of mineral fertilizers is explained by high price of natural gas, as well as the allocation of subsidies for fertilizers in developing countries and the hike in export tariffs of fertilizers in developed countries.

Compared to 2021, the price index of **food products** increased by **17.9** percent, oil – by **14.2** percent, cereals – by **21.4** percent. As a result of disruptions in the main wheat supplying countries, the price of the commodity increased by **36** percent in the reporting year.

At the same time, the average annual price of cotton in the global market rised by **28.3** percent compared to 2021, and reached **2.9** dollars for 1 kg.

1.2.3. Expectations in the global economy

Global economic growth is expected to slow down in the medium term amid ongoing geopolitical tensions, trade restrictions, and increased concentration of capital flow.

In the "World Economic Outlook" report published by the IMF in April 2023, world economy is expected to grow by **2.8** percent in 2023 and by **3** percent in 2024.

Figure 1.2.3.1

Global recession probability index¹ (2008-2022), in percent



Source: MacroMicro

Moreover, the **global recession probability index** shows that in 2023, the probability of the occurrence of negative expectations related to the entering of the global economy to a **period of recession** is decreasing.

¹ The index based on various world economic indicators, including consumption, employment, manufacturing, finance and raw materials. The possibility of further deterioration of the economy in the month, with 50 percent as the line of prosperity and decline, when the probability of recession is significantly greater than 50 percent, the global economy is likely to enter a recession.

This index had an upward trend in 2022 and reached 48.7 and it is observed to decrease to 46.7 on March 2023.

The global inflation is anticipated to slow down to 7 percent in 2023 and 4.9 percent in 2024.

World trade is expected to slow to 2.4 percent in 2023 under reducing global demand, after a 5.1 percent increase in 2022.

According to the investigation of the Bank of International Settlements, the commodity prices (*oil, gas, copper*) go hand-in-hand with a strengthening dollar, i.e. while the dollar is being appreciated compared to other currencies commodity prices are rising as well. This tendency leads to up to inflationary pressure in commodity importing countries because of a double change in import prices.

Since the pandemic, insufficient coverage of accumulated demand by supply, derived from financial support to households and steadily rising wages, has continued to influence the duration of the inflationary processes. This indicates that central banks may tighten the monetary policy.

In addition, persistent geopolitical tensions lead to a slowdown in globalization processes, the formation of regional blocs and changes in the geography of global value chains. This process manifests itself through various channels, notably trade, capital and migration flows.

In terms of foreign direct investment destinations, the geographical concentration increased in 2020-2022, compared to 2015-2019. In particular, according to IMF staff calculations, the volume of investment, from China to the US (-22.1%), advanced Europe (-17.8%), emerging Europe (-31.3%) and Asia (-44, 3%) is reducing significantly.

Table 1.2.3.1

Foreign Direct Investment Reallocation across Regions,
percentage point deviation from aggregate change

Source regions	Rest of the world	26,4	7,1	5,3	11,4	-3,7	-24,7	18,6
	China	-22,1	-6,9	-17,8	-31,1	-44,3		-31,9
	Asia excl. China	-3,2	-8,7	-11,7	-2,4	-23,7	-49,2	-4,4
	Emerging Europe	27,6	2,9	9,9	18,1	-22,3	13,9	-11,5
	Advanced Europe	7,5	-11,7	9,3	-0,9	-9,8	-19,7	8,6
	Americas excl. US	18,6	27,3	14,9	34	5,9	-13,3	27,6
	United States		9,2	0,6	19,4	2,3	-40,6	21,6
	United States	Americas excl. US	Advanced Europe	Emerging Europe	Asia excl. China	China	Rest of the world	
	Destination regions							

Source: IMF WEO

Moreover, developed countries in Europe, having reduced FDI in Asia (-9.8%), China (-19.7%) and emerging Europe (-0.9%), began to direct investments towards the US (7.5%) and advanced Europe (9,3%).

This leads to increased competition in attracting foreign investments among developing countries, and with improving the traditional investment and business environment – basic condition for attracting foreign investments, also requires the development of modern business areas (*information technologies, financial and logistic services, ecotourism*).

In 2023, economic growth is predicted to slow down in the trading partners caused on the one hand, by global inflationary pressure, and on the other hand, lower domestic demand and fluctuating commodity prices.

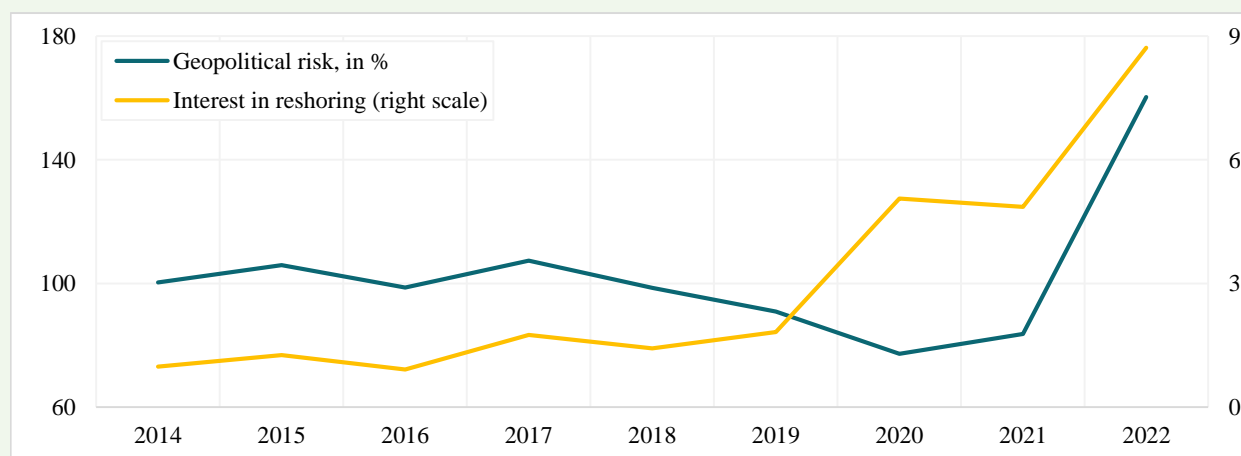
Box 2

Friendshoring¹ and its impact on the global economy

In recent years, global value chains have been exposed by a number of factors, including cyber threats, trade wars, pandemics, climate challenges, and geopolitical conflicts. It poses issues related to the sustainability of global supply chains and their renegotiation.

In this regard, countries are considering developing value and trade chains and rated on a "friendshoring" basis with other countries sharing similar political views and minimal risk of conflict.

According to the EBRD's calculations, the practice of friendshoring will not expand economies and will lead to losses equal to **4.6 percent of global GDP** or about **4.6 trillion dollars**.



Source: IMF WEO

¹Friendshoring is strengthening cooperation with countries considered politically safe for the development of supply and production chains.

Changes in the structure of aggregate demand in **Russia**, including recovery of consumer demand in 2023, growth of final consumer spending around 0.5-2.5 percent, as well as increased public investment will have a positive impact for economic growth, the Bank of Russia forecasts a GDP growth rate in the range of -1-1 percent.

In 2023, **China's** complete removal of lockdowns and the easing of fiscal and monetary conditions will have a positive impact on consumer demand, leading to a recovery of the country's economy under pre-pandemic trends; China's economy is projected to grow by 5.2 percent in 2023 and 4.5 percent in 2024.

While natural disasters in **Türkiye** will slow economic activity in the short term, in the medium term the channeling of investment into reconstruction is expected to have a positive impact on the country's economic growth. According to updated IMF forecasts, Türkiye's GDP growth is estimated at **2.7** and **3.6** percent in 2023 and 2024, respectively.

Kazakhstan's construction sector is expected to grow by 7.5 percent in 2023, transport and storage services by 5.7 percent owing to the emergence of alternative logistics chains in the region, retail and wholesale trade by 4 percent owing to the increase in migration flows, and economic growth of 4.3 percent is expected by the end of 2023.

1.3. Inflationary processes and expectations

In 2022, external shocks such as sharp fluctuations in goods and commodity prices in the world, disruptions in logistics and supply chain (*through a reduction in aggregate supply*), as well as internal factors – rising monthly incomes, competitive market conditions, interruptions in supply and remittance growth (*consumer demand factor*) have put upward pressure on inflation in our country.

Inflation, calculated on the basis of the annual **consumer price index** (hereinafter – CPI), trended upwards compared to 2021 and stood at **12.3** percent at the end of 2022. At the same time, the GDP deflator rose to **13.8** percent (*13.5% in 2021*) and the producer price index (hereinafter – PPI) to **16.9** percent (*12.9% in 2021*).

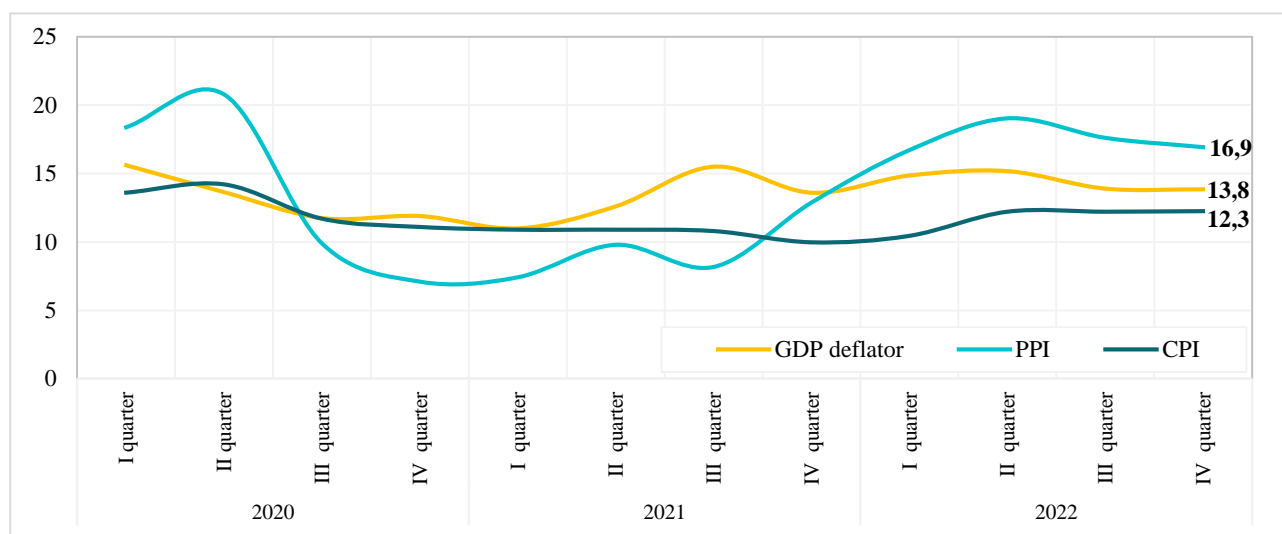
The shaping of the GDP deflator and the producer price index above general inflation is mainly driven by significant increases in the prices of energy and raw material prices globally, as well as a rise in the cost of production of goods and services compared to previous periods on the back of supply disruptions.

Since March, there have been disruptions in the supply of consumer goods and raw materials caused by the deteriorating of the geopolitical situation in the region, as well as periodic lockdowns in China.

Restrictions on Russian oil and gas in the world market led to a reduction in the supply of fuel. This caused a significant increase in fuel prices on the global market, resulting in a rise in production and transportation costs for local entrepreneurs.

Figure 1.3.1

Inflation indicators,
compared to the corresponding month of the previous year, in percent

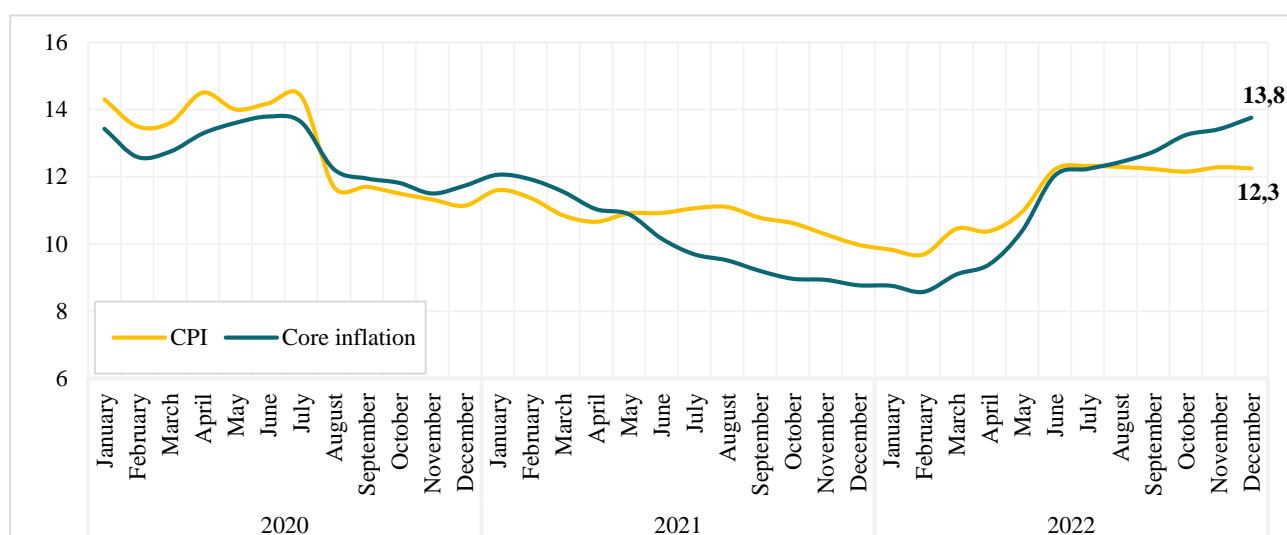


Source: Statistics Agency

In the first half of 2022, souring of the inflation indicator is mainly explained by the increasing impact of import prices and insufficient provision of supply while instability of the external conditions.

Figure 1.3.2

CPI and core inflation,
compared to the corresponding month of the previous year, in percent



Source: Statistics Agency

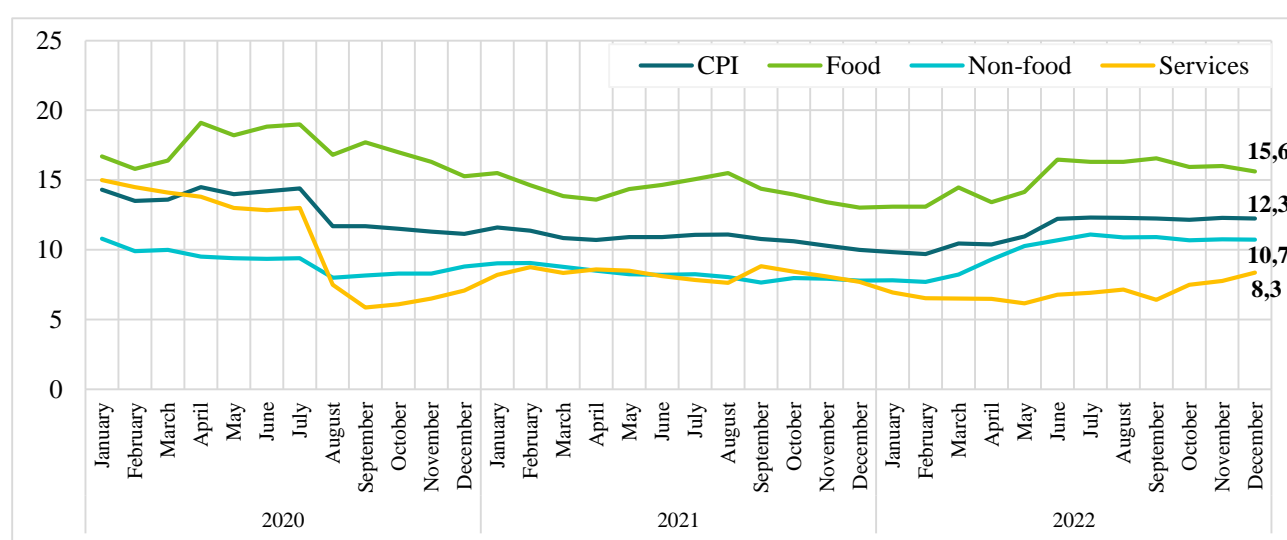
The second half of 2022 can be explained by the increasing effects of demand factors, namely the insufficient provision of supply components in the context of consumer demand activation. One of the key reasons boosting consumption demand was the strong growth of the households' real income.

Food price increase exceeded the overall inflation rate in 2022, reaching **15.6** percent by the end of the year, with the growing effect contributing to headline inflation in the **6.6** percent range.

It should be noted that the high inflation during the reporting period was primarily caused by a significant increase in the prices of grains, cereals, and products made from them (*wheat flour, bread, rice, and so on*), as well as onions, carrots, sugar, and eggs, while a slowdown in the price growth of fruits (*apples, lemons, grapes, and pears*) was one of the factors that reduced it.

Figure 1.3.3

Components of the CPI inflation,
compared to the corresponding month of the previous year, in percent



Source: Statistics Agency

Food prices grew in 2022, with grain goods, onions, and sugar costs increasing at a faster rate than in 2021. Food prices climbed by **15.6** percent on an annual basis, while food prices excluding fruits and vegetables increased by **18.5** percent (*2.9 p.p. higher*) on average.

With rising droughts in the region's countries, there was a drop in the availability of rice and onion in 2022, resulting in an increase in the pricing of these products.

Tariffs and limits on the export of sugar, maize, and vegetable oil in partner countries further sustained pressure on these goods' prices throughout the year.

The increase in global demand for confectionery products, as well as the rise in oil prices and sharp fluctuations (*increase in price*) in the prices of vegetable oils, as well as interruptions in the supply of raw materials, had a negative (*boosting*) effect on the price of sugar at the beginning of 2022.

The drop in fodder stocks and supply (*barley, wheat, bran, etc.*) and the fast increase in their costs put upward pressure on the pricing of meat and dairy products in the domestic market.

Prices for non-food products rose on a rising trend in 2022, accelerating by 3 p.p. compared to the same period in 2021 (7.8%) and totaling **10.7** percent yearly.

Clothes and shoes increased by 9.4 percent, pharmaceuticals by 19.1 percent, household management goods (*detergents and other*) by 20.6 percent, personal items by 15.1 percent, and domestic equipment prices increased by 9.9 percent.

These and other items, as well as the fact that the majority of raw materials were delivered through Russian territory, and as a result of the disruption of this system in March, the adaptation of supply chains and import geography to other directions resulted in an increase in the price of goods in this category.

Inflation in the service sector of the CPI basket was **8.3** percent in the reporting year (*7.8% in 2021*), and price dynamics were nearly unchanged in the first quarter of 2022.

However, changes in gasoline prices beginning in the second quarter of 2022, as well as a reduction in the working hours of gas stations in November and December, resulted in a large increase in the prices of transport services and logistics.

If the price rise of household services was strong throughout the year, the price of communication services fell in the fourth quarter. In addition, the cost of healthcare services rose by 16.7 percent.

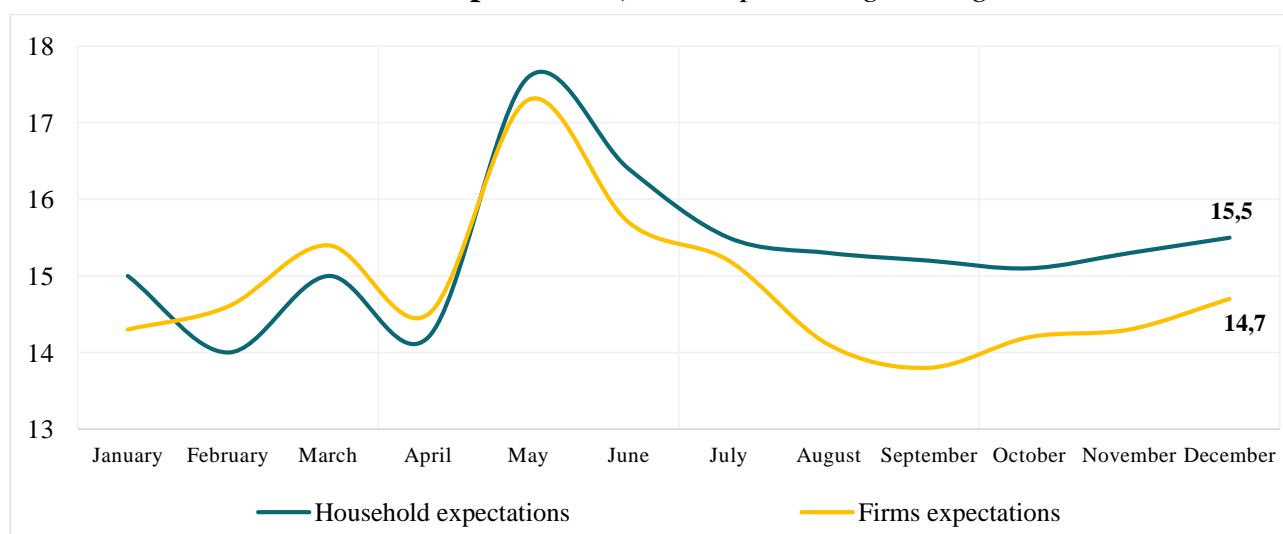
Inflationary expectations. During 2022, the households' and firms' inflationary expectations exhibited divergent patterns. The decrease in the inflation rate during the first quarter of 2022 had a positive effect on the households' and firms' confidence in price stability, and the fact that external increasing shocks began to affect domestic prices with a slight delay beginning in the second quarter of 2022 was also reflected in inflationary expectations.

In particular, inflationary expectations of households and entrepreneurs climbed to 17-18 percent in June, a discrepancy of 5-6 percent from the overall inflation rate.

Inflation expectations remained quite high due to higher consumer price rise, assumptions for natural gas and electricity price increases in May, and higher wages and benefits.

The acceleration of forecasts during the fourth quarter of the fiscal year is mostly due to increases in the prices of fuel and energy, exchange rate fluctuations, and the price of imported raw materials and components.

Figure 1.3.4

Inflation expectations, annual percentage change

The response dispersion of respondents widened slightly in this period compared to the previous quarter, indicating increased uncertainty in the population's and entrepreneurs' views about the appearance of inflationary processes in the future.

In general, the households' inflation expectations at the end of 2022 were **15.5** percent (15.7% in 2021), a **0.2** p.p. decrease from the previous year, while firms' inflation expectations were **14.7** percent, a **0.2** p.p. decrease from the previous year.

Table 1.3.1

Factors of inflation expectations, percentage of respondents

Factors	January	February	March	April	May	June	July	August	September	October	November	December
Households												
Exchange rate	37	49	54	43	26	25	33	35	42	44	51	49
Increase in fuel and energy prices	25	20	18	23	27	27	36	34	27	30	38	40
Manipulated price rises	35	30	37	34	37	41	43	37	31	34	35	36
Increase in wages and benefits	31	28	23	22	39	34	29	31	28	27	28	35
Rising prices for basic food	41	43	49	53	55	56	55	48	42	49	37	27
Rising in housing and rent	15	14	11	14	11	11	12	15	18	22	22	20
Significant difference in prices in supermarkets and open markets (bazaars)	10	11	11	14	14	14	14	11	11	11	11	11

Factors	January	February	March	April	May	June	July	August	September	October	November	December
Firms												
Exchange rate	37	43	51	41	24	19	34	33	39	44	48	49
Increase in fuel and energy prices	42	36	36	37	25	27	31	29	35	39	50	35
Increase in wages and benefits	26	21	17	21	30	29	23	26	23	22	24	30
Disruptions in logistics	16	16	22	22	21	22	23	21	19	16	20	19
Deteriorating competitiveness in the economy	16	13	14	14	16	32	33	16	14	13	15	18
Rising in importing commodity prices	20	18	22	14	14	24	28	22	21	21	32	15
Rising in rent	13	11	10	9	9	10	12	13	11	11	14	13

Source: Central bank staff calculations

According to the results of a December survey, respondents noted that changes in the level of inflation in the coming periods would be caused by the depreciation of the national currency, increases in fuel and transportation costs, basic food products, importing raw materials, and manipulated price rises.

1.4. Balance of payments and International investment position

The formation of the balance of payments in 2022 was influenced by the expansion of regional government programs and the volume of financial support to the economy, the upkeep of intricate logistics and transportation systems, the acceleration of the world's inflationary processes, and geopolitical conflicts seen in trading partners.

In particular, an increase in the volume of import of goods and services and repatriation of investment income was balanced out by an increase in the volume of export of goods and services and a significant increase in the volume of international money transfers to the country, which had a positive impact on the current account and was the main factor in reducing the negative balance compared to prior years.

The transfer of capital from developing to developed economies and the rise in the cost of attracting foreign debt funds ensured that the liabilities of residents in foreign currency remained at the level of prior years as a result of the tightening of monetary policy conditions by a number of countries.

Export of goods and services. In part to the rise in the price of basic raw materials and food products on the global market, as well as the rise in transportation

costs and the acceleration of the use of travel-related services, the volume of exports² increased by **33** percent in 2022 compared to 2021 and reached **21.9** billion dollars. Exports climbed by **44** percent and totaled **17.8** billion dollars (*including gold*).

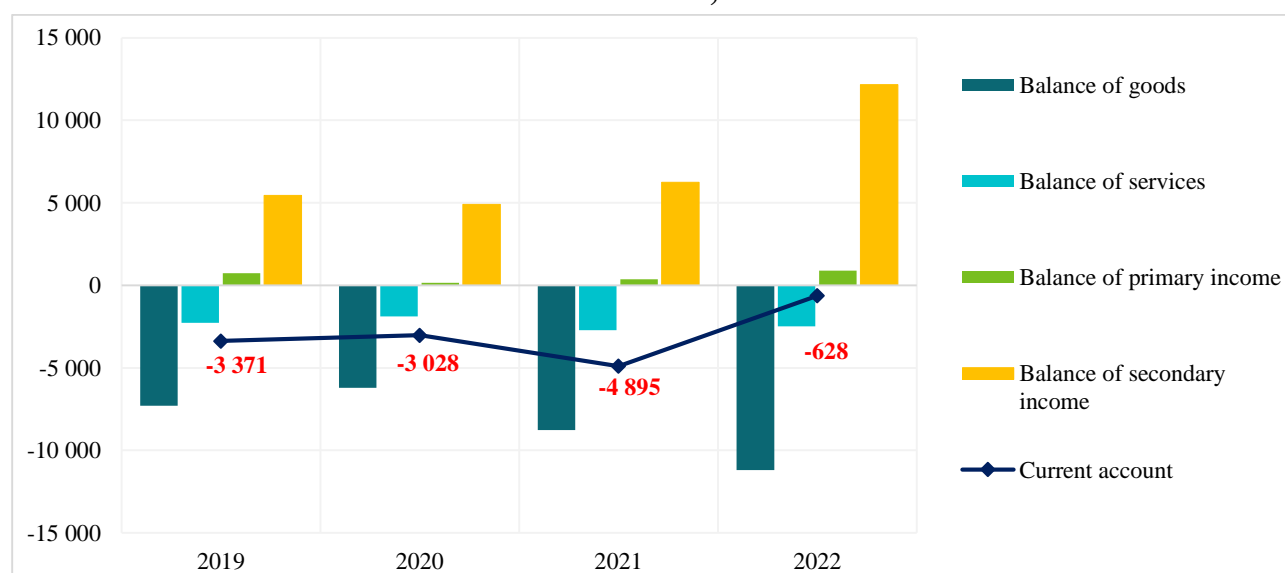
In instance, compared to 2021, the export of goods (*excluding gold*) increased by 30 percent and totaled 13 billion dollars (*10 bn dollars in 2021*).

The demand for travel and tourist services increased in 2022 as a result of the inflow of temporary foreign residents who migrated to Uzbekistan and the rise in travel. Specifically, the export of services climbed over 2.1 times in comparison to 2021 and reached 4.8 billion dollars. The scale of this export followed pre-pandemic tendencies.

Import of goods and services. The import of goods and services increased by 27 percent from 2021 to 35.6 billion dollars in the reporting year as an outcome of maintaining a high level of consumer demand, increasing the amount of domestic production, and implementing investment projects for the socio-economic development of the regions.

Goods imports scaled by 24 percent to 28.3 billion dollars, while services imports rose by 45 percent to 7.3 billion dollars.

Figure 1.4.1

Current account balance, in million dollars

The greater rise of imports compared to exports widened the gap, and the trade deficit climbed from 11.4 billion dollars in 2021 to 13.7 billion dollars.

The negative trade balance was somewhat offset by the positive primary and secondary income balance, which rose at a faster rate than in 2021.

² In accordance with the “Balance of Payment and International Investment Position Manual” (BMP6, IMF, 2009)

As a consequence, the **current account** negative balance of payments improved in 2022 compared to 2021, reaching 628.3 million dollars (*4.9 bn in 2021*), or 0.8 percent of GDP.

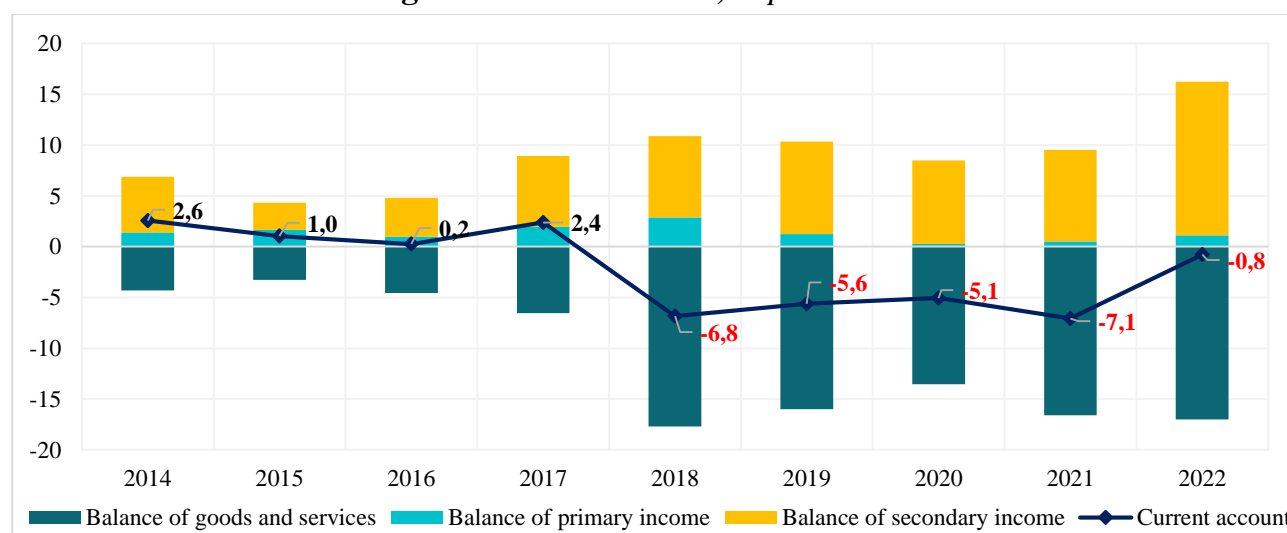
Primary and secondary income. The significant growth of cross-border remittances, which are the primary and secondary source of income, has been a current account balancing element.

According to the activation of interstate labor migration and the increase in demand for short-term labor migrants in the partner countries, the primary income of Uzbek residents increased by 65 percent to 4.2 billion dollars in comparison to non-residents in 2021, while non-residents' primary income increased by 51 percent to 3.3 billion dollars. As a result, the primary income positive balance was 896.7 million dollars.

The income of Uzbek citizens who went abroad to work for a short length of time is the biggest source of primary income (*approximately 92%*), and it has increased by 55 percent since 2021. The increase in expenses under "Primary income" is primarily attributable to non-residents' investments in Uzbekistan, as well as revenue and interest paid on foreign debts.

Figure 1.4.2

Change of current account, in percent to GDP



The secondary income balance increased from 6.2 billion dollars in 2021 to 12.2 billion dollars in the reporting year. At the same period, non-resident revenue surged by 1.9 times compared to 2021, totaling 13 billion dollars, while payments increased by 31 percent to 854.3 million dollars.

Remittances sent to Uzbekistan ensure the positive balance of secondary income; the increase in transfers by 2.1 times from 2021 to 2022 was caused to the rise in the income of Uzbek migrant workers abroad; the enactment of remittance restrictions on the major remittance-sending countries as a consequence of the

geopolitical situation; and concurrently, the transfer of funds from the informal sector to the formal sector is explained by the transition and sending of export earnings by small (*seasonal*) exporters through money transfer systems.

Changes to international investment position and financial accounting. According to the "Balance of Payments and International Investment Position Manual" (BPG-6), the net volume of foreign direct investments increased by 11 percent to 2.5 billion dollars.

As of January 1, 2023, the total external debt climbed by 11 percent during the reporting year to 43.6 billion dollars.

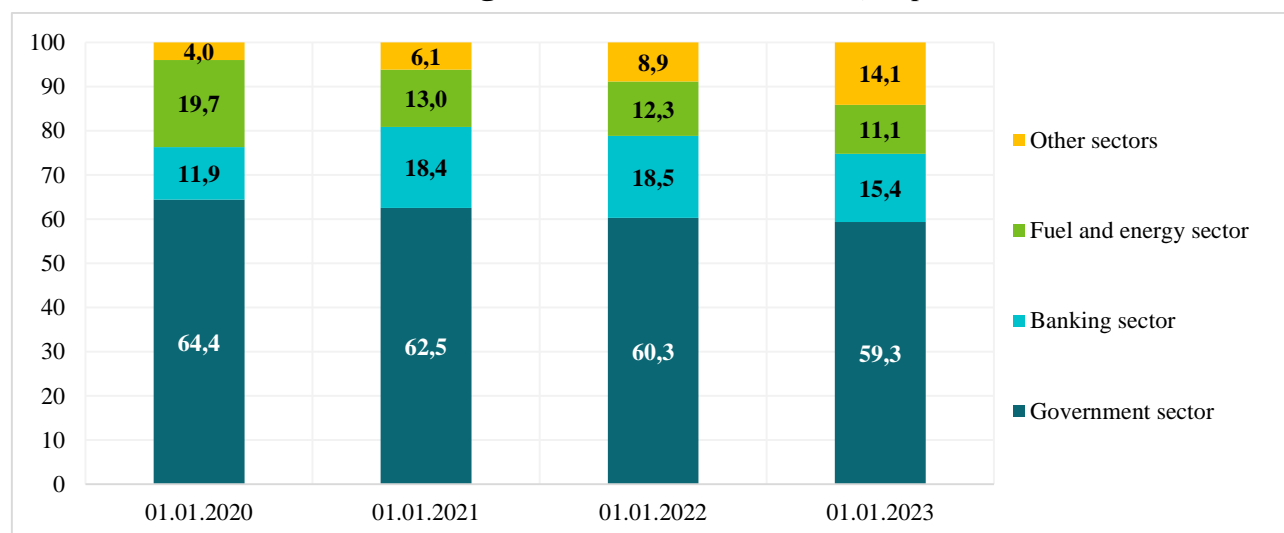
The increase in total external debt liabilities decreased from 5.2 billion dollars in 2021 to 4.2 billion dollars as a result of the steps the government took to ensure the stability of the external debt, the increase in the cost of attracting new debt funds in 2022, and the increase in the volume of payments on prior debts.

In this instance, the rise in the external debt liabilities of the public and private (*business*) sectors came to 2.1 billion dollars each.

The balance of public debt obligations as a percentage of the total foreign debt decreased by 9 percent to 25.8 billion dollars, decreased by 8 percent in the banking industry to 6.7 billion dollars, decreased by 0.1 percent in the fuel and energy industry to \$4.8 billion, and increased by 1.8 times in other industries to 6.2 billion dollars.

Figure 1.4.3

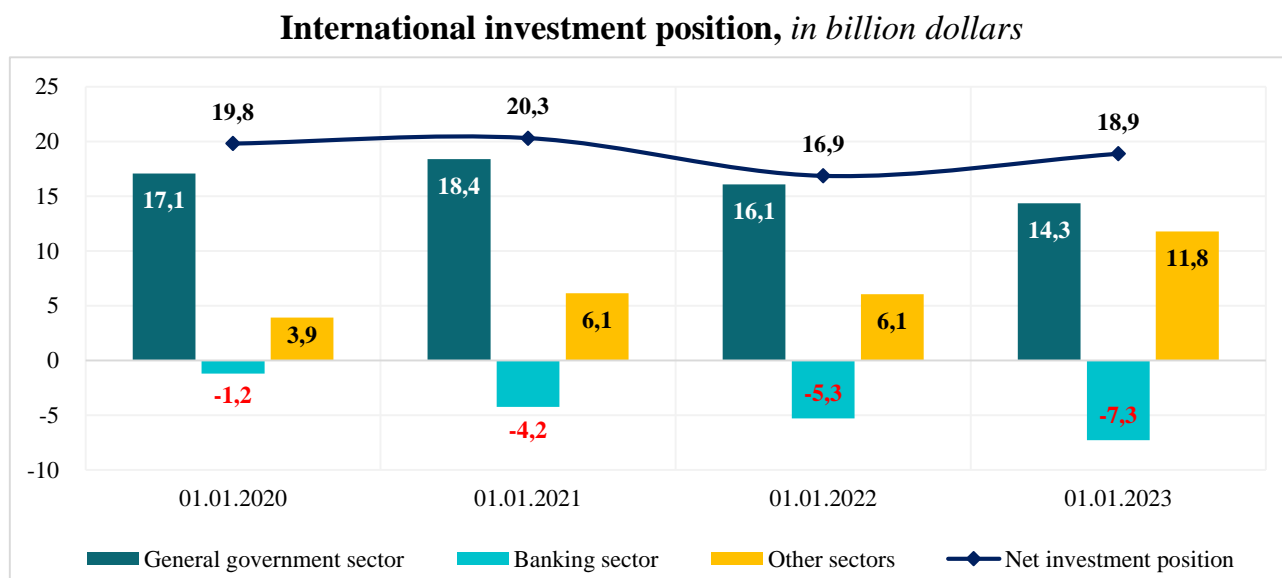
Structure of government external debt, in percent



In this case, the share of public debt to total foreign debt decreased from 60.3 to 59.3 percent, the share of the banking sector to total foreign debt decreased from 18.5 to 15.4 percent, the share of other sectors increased from 8.9 to 14.1 percent, and the share of the fuel and energy sector to total foreign debt remained in the range of 11 to 12 percent.

The quick rise in foreign loans obtained by businesses in the mining, metallurgy, textile, automobile manufacturing, and construction sectors was the primary cause of the debt obligations in other sectors' debt obligations.

Figure 1.4.4



As of January 1, 2023, the positive balance of the international investment position was 18.9 billion dollars, up 2 billion dollars from 2021. Residents' foreign currency assets totaled 82.2 billion dollars in this instance, while their foreign liabilities totaled 63.3 billion dollars.

The indicators of external obligations are compiled based on the principles of the World Bank's quarterly external debt statistics and are being placed in the World Bank's data distribution systems in order to ensure that information on the external debt of Uzbekistan is published in the forms generally accepted by international financial institutions and in the sources used by international investors.

II. BANKING SYSTEM AND FINANCIAL STABILITY IN 2022

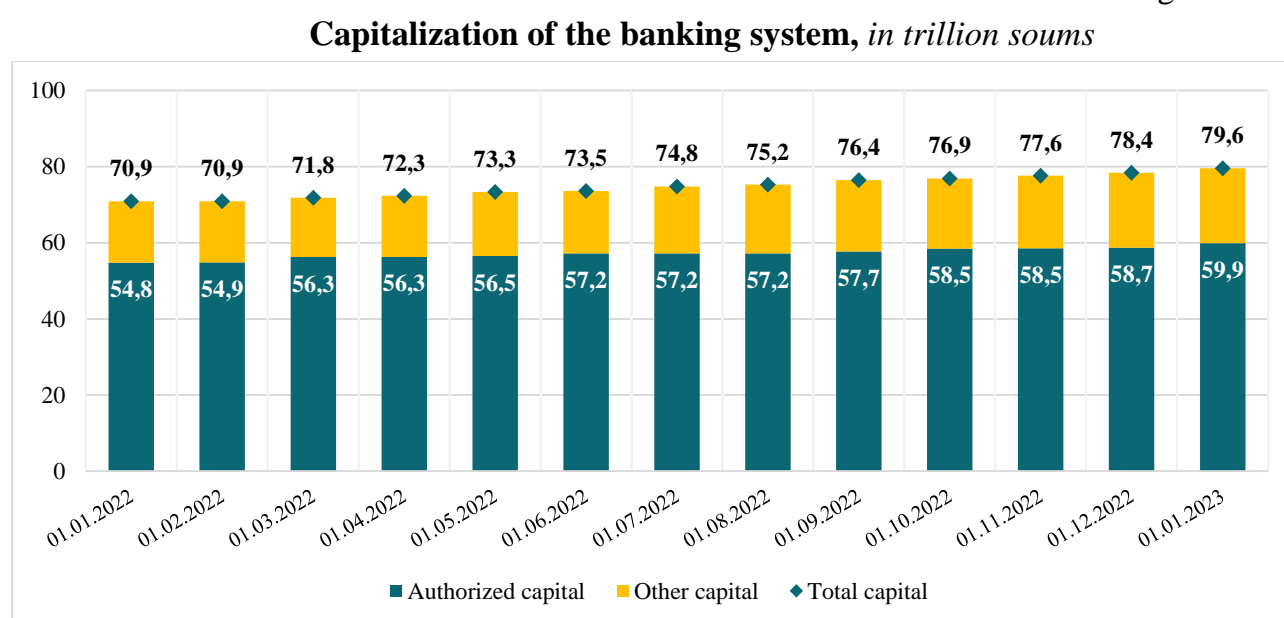
2.1. Ensuring financial stability of the banking system

In 2022, the CBU focused on ensuring that the banking system's financial stability indicators are at an appropriate level, minimizing the negative effects of external economic shocks, and ensuring bank resilience.

Stress tests were undertaken in various scenarios to avert potential hazards in commercial bank activities, and prudential measures were implemented to minimize potential negative consequences on their capital and liquidity.

As a result, the capitalization of banks increased by 12 percent to about 80 trillion soums in 2022 and the amount of authorized capital increased by 9 percent to 60 trillion soums.

Figure 2.1.1

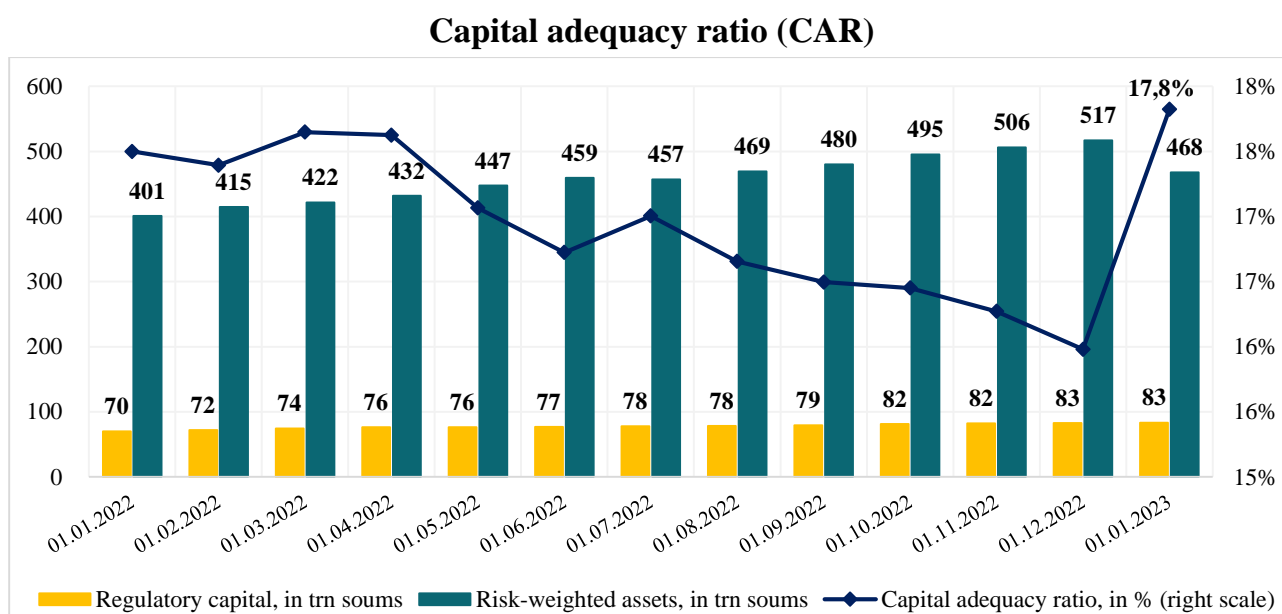


By the end of 2022, the amount of regulatory capital in the banking system reached **83** trillion soums and risk-weighted assets reached **468** trillion soums, the **capital adequacy ratio (CAR)** was **17.8** percent (*minimum requirement 13%*) and increased by **0.3** p.p. compared to the indicator in 2021.

The high preservation of CAR is explained by the revised requirements for determining the **risk level of assets** in banks in accordance with the standards of the Basel committee on banking supervision.

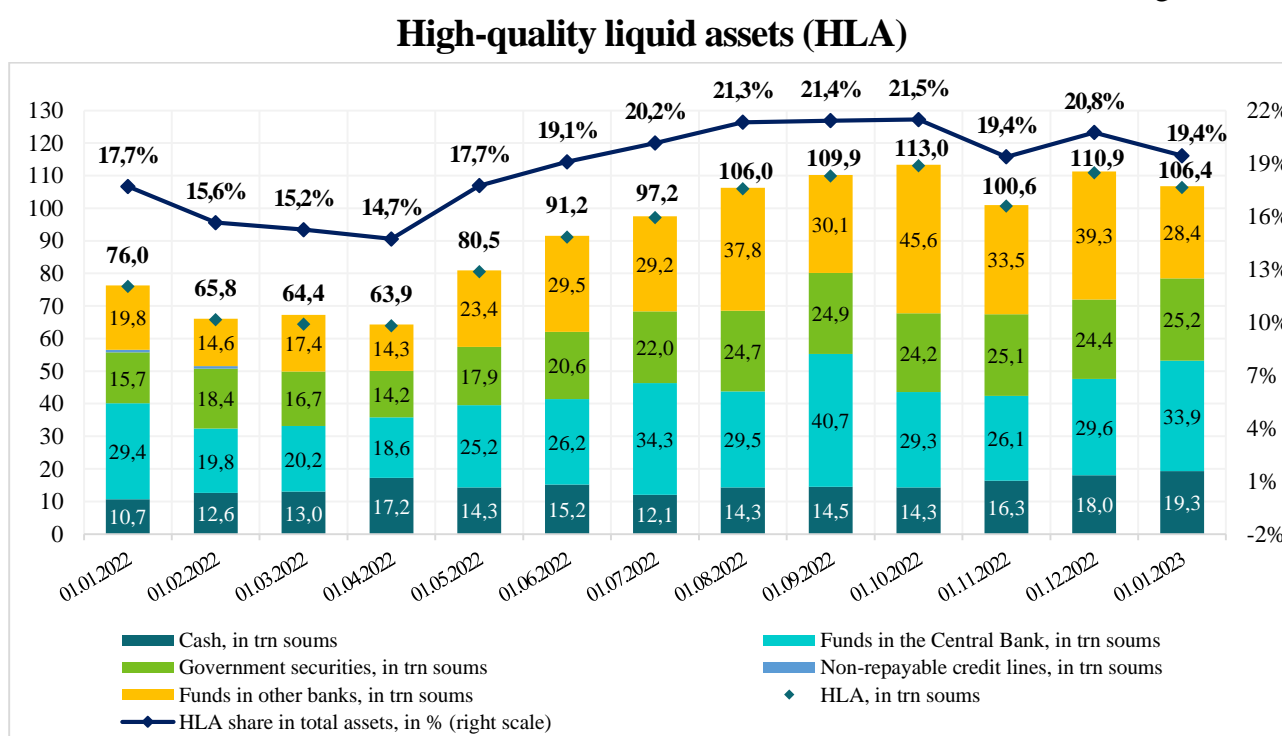
Furthermore, as a result of the measures taken to create a reliable liquidity reserve that allows the repayment of liabilities to customers in the specified terms, the amount of **high-quality liquid assets (HLA)** reached **104** trillion soums in 2022, which increased by **1.4** times compared to 2021.

Figure 2.1.2



In this regard, assets in national currency increased by nearly **12** trillion soums, amounted to **51** trillion soums and assets in foreign currency accumulated by **15** trillion soums, totaled to **53** trillion soums, respectively.

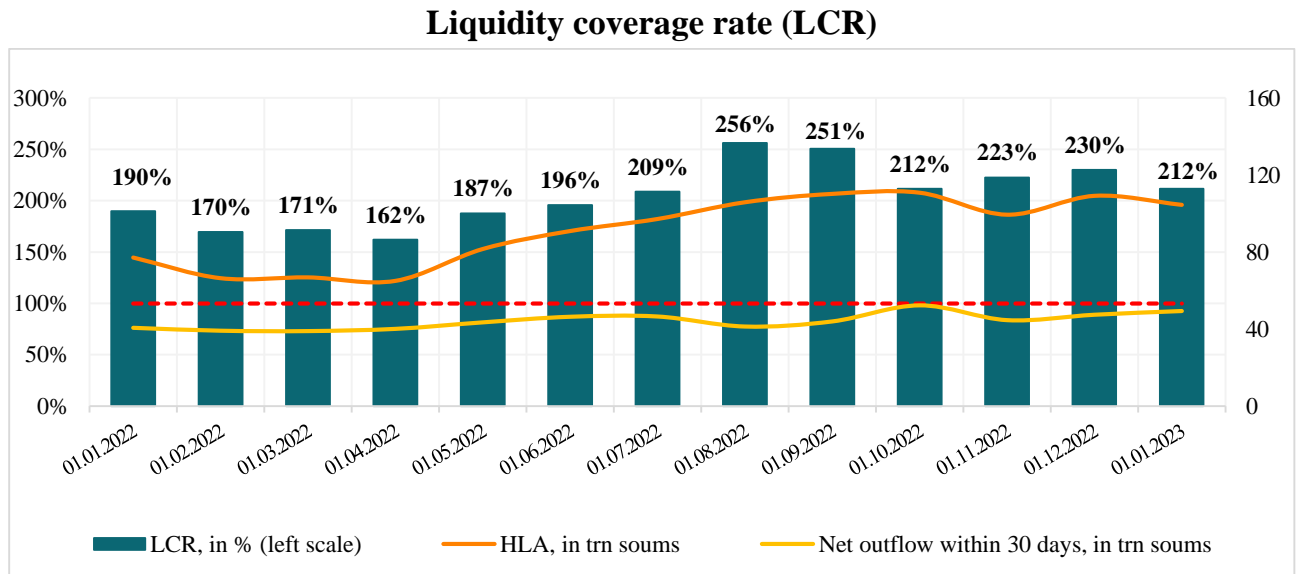
Figure 2.1.3



The increase in the volume of the HLA was formed due to the increase of funds in other banks by **1.4 times**, government securities by **1.6 times**, and cash in cashiers by **1.8 times**.

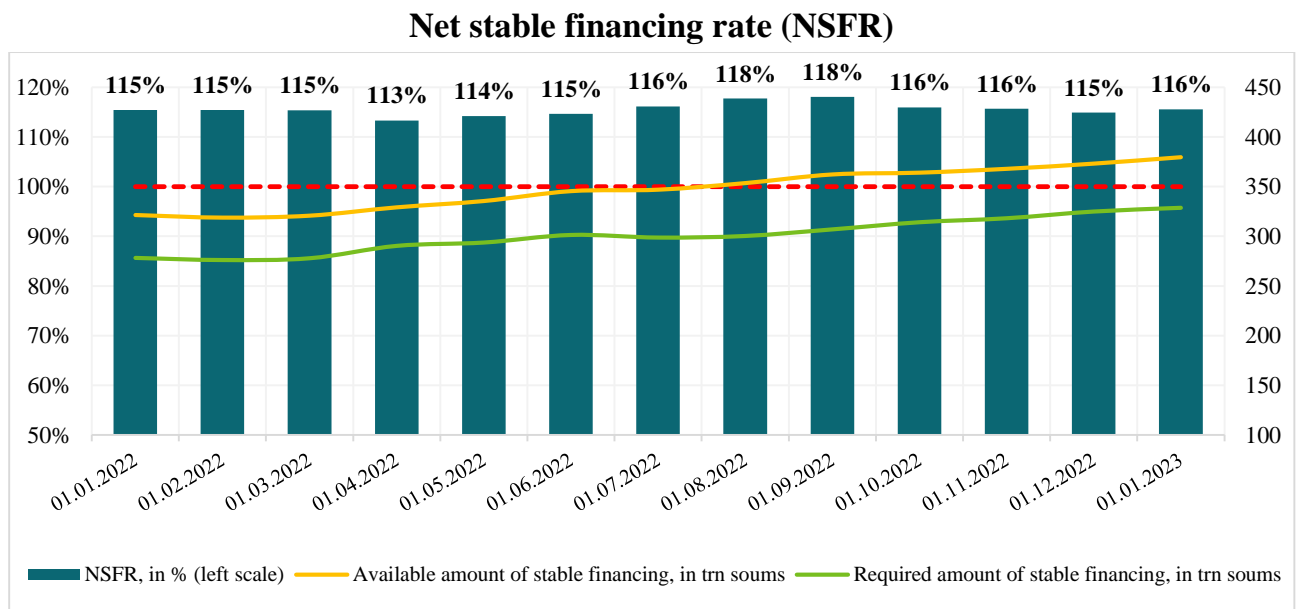
As a result, **the share of the HLA in total assets increased by 1.7 p.p.** compared to the beginning of 2022 and reached **19.4 percent** by the end of the year (*minimum requirement is 10%*).

Figure 2.1.4



The increase in the **liquidity coverage rate (LCR)** of the banking system from **190 to 212 percent** (*minimum requirement 100%*) during the year allowed banks to fulfill their obligations to customers **twice** as much in the next 30 days, even in the case of unexpected shocks in the banking system.

Figure 2.1.5

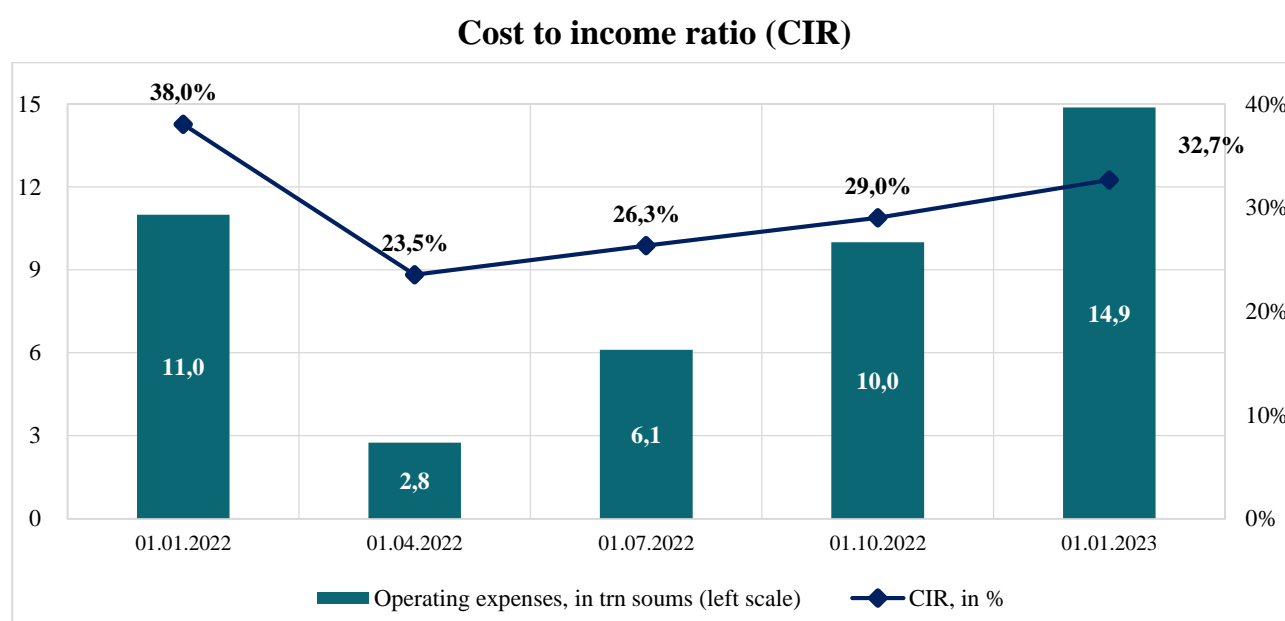


Measures to form stable sources in accordance with the volume of long-term financing were main factors to increase the **net stable financing rate (NSFR)** in the banking system from **115 percent** in 2021 to **116 percent** in 2022. The NSFR was **117 percent** in national currency and **113 percent** in foreign currency.

Total revenues of commercial banks in the reporting year was **95** trillion soums, the share of **interest** and **non-interest income** was 65 and 35 percent respectively. The **net profit** of the banking system achieved **10** trillion soums and increased by **2.6 times** compared to 2021 (6.1 trn soums).

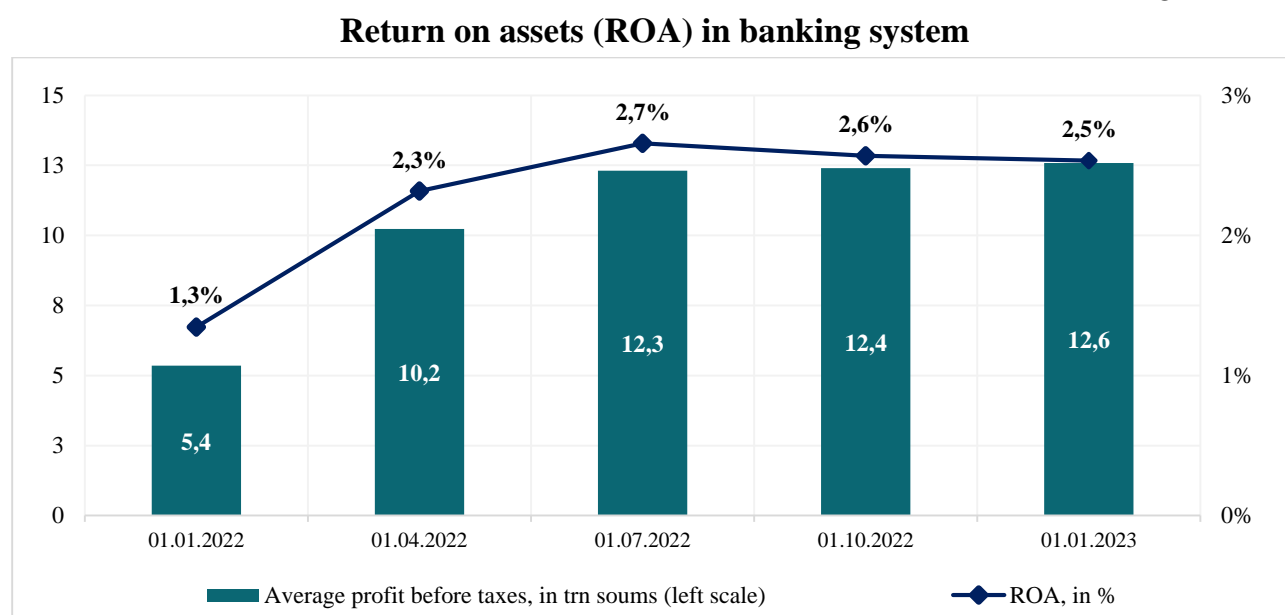
The **cost to income ratio (CIR)** was equal to **33** percent in 2022, which was positive compared to the maximum threshold (**50%**) set in international practice.

Figure 2.1.6



The improvement of the CIR indicator is related to the widespread introduction of modern technologies into the banking system and the digitalization of business processes, in particular, the use of microloans, deposit management, currency exchange, utility and other payments through mobile applications.

Figure 2.1.7



By the end of 2022, **the return on assets (ROA)** in the banking system almost doubled compared to the beginning of the year to **2.5** percent and **the return on equity (ROE)** was **13.3** percent.

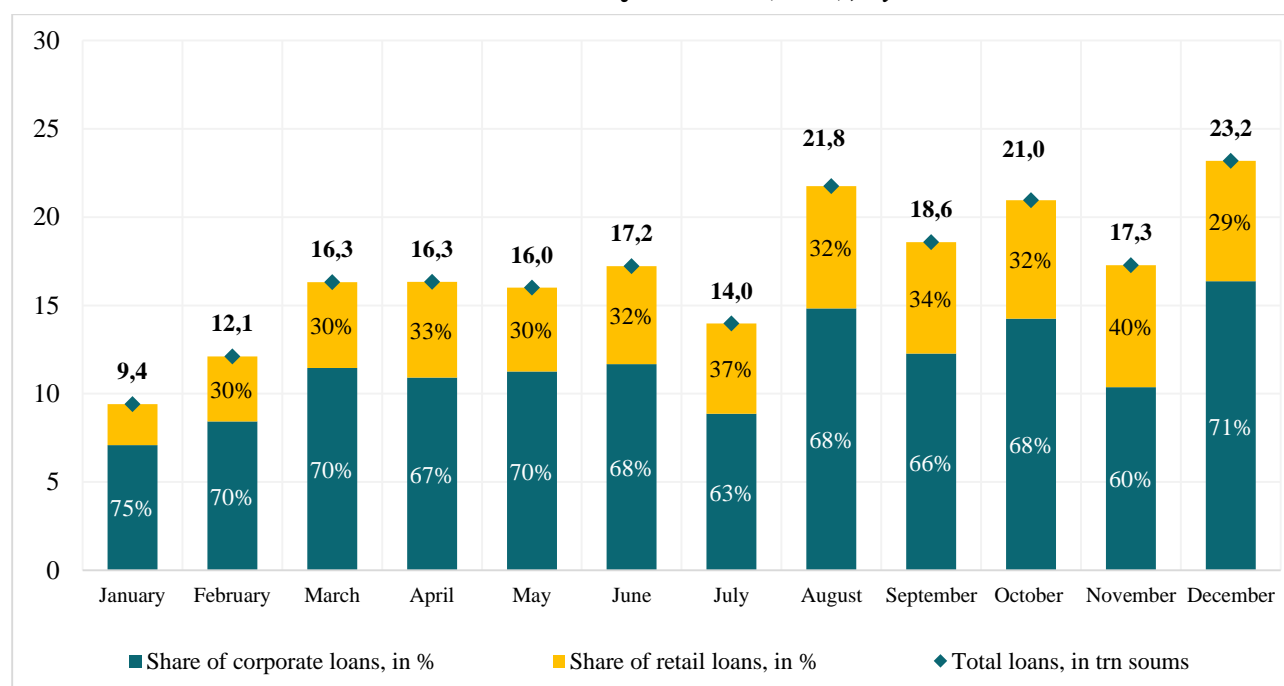
In this case, factors such as net interest margin (3.4%), ratio of non-interest income to assets (6%), leverage ratio (0.6%), reduction of the tax burden on profit (0.8%) had a **positive** effect on the **change of the ROE**, while stock growth (-2.5%) and the ratio of non-interest expenses to liabilities (-1.1%) had a **negative** impact.

2.1.1. Assets and liabilities of the banking system and their structural evaluation

In 2022, the **total assets** of commercial banks rose by 25 percent and reached **557** trillion soums of which **70** percent were loans.

Figure 2.1.1.1

Loans to the economy in 2022 (flow), by month



In 2022, **203** trillion soums were allocated for the purpose of financial support of the individuals and legal entities or 22 percent more loans than 2021. As January 1, 2023, the total loan portfolio of banks exceeded **390** trillion soums.

In particular, **68** percent of these loans (*138 trn soums*) were assigned to legal entities and **32** percent (*65 trn soums*) to the individuals.

The high return rate (67%) of previously allocated loans to bank circulation serves as the main source of financing the economy.

Figure 2.1.1.2

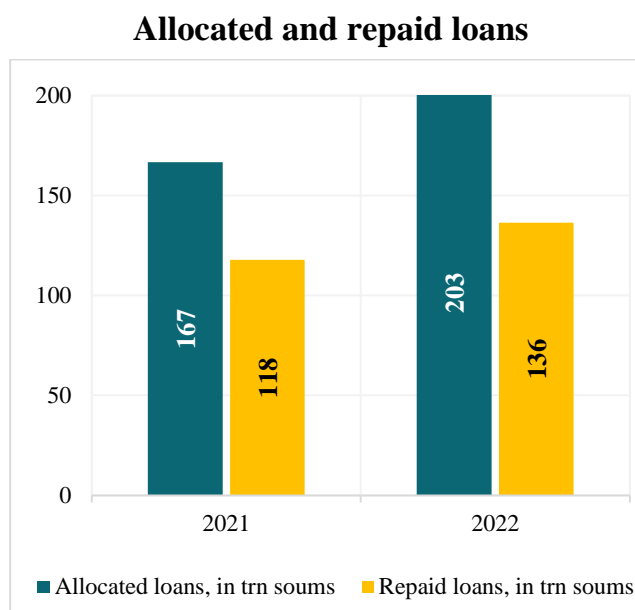
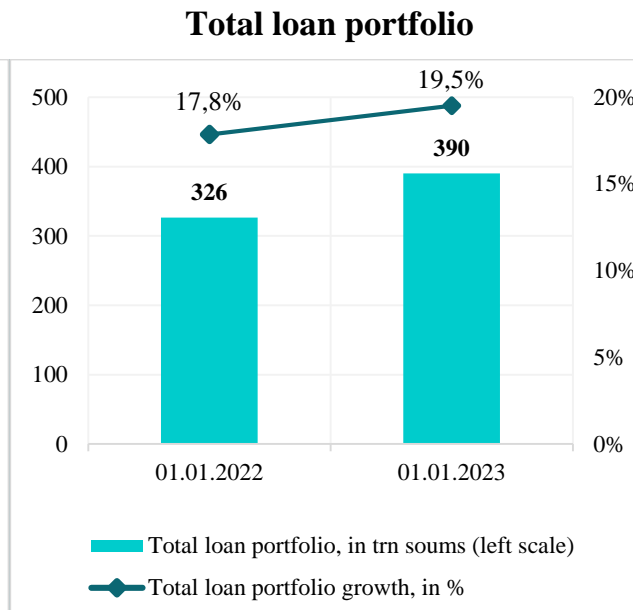
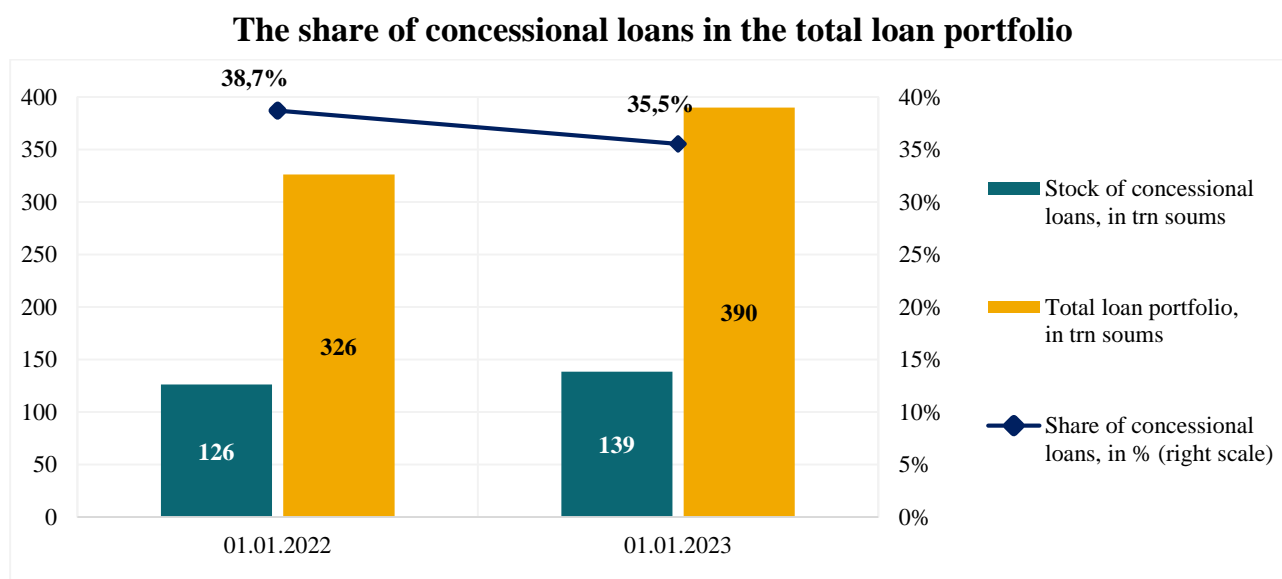


Figure 2.1.1.3



The improvement of business models of commercial banks and the increase in the offer of modern banking services by banks and the simplification of credit allocation processes led to expanding the scope of **lending practices based on market principles**.

Figure 2.1.1.4



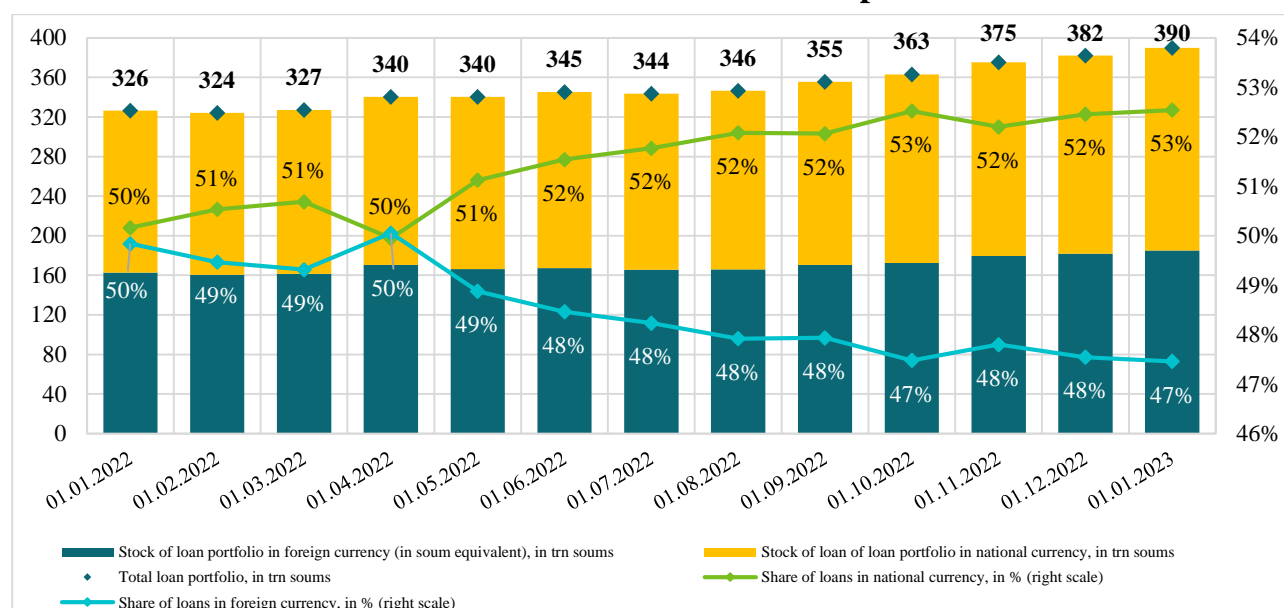
In particular, although the stock of the **concessional loans** reached **139** trillion soums in 2022, its **share in the total loan portfolio** decreased from **39** percent in 2021 to **36** percent.

The dollarization rate of the total loan portfolio decreased by **2 p.p.** in the reporting year and was **47** percent. This drop was explained by the

increase in the price of resources in the global financial market and the return rate of loans allocated in foreign currency (*from 63% in 2021 to 69% in 2022*).

Figure 2.1.1.5

The dollarization rate of the total loan portfolio



The total liabilities of commercial banks amounted to **477** trillion soums as of January 1, 2023 and increased by nearly **1.3 times** compared to 2021. This increase is explained by measures taken in 2022 to increase the resource base of banks and satisfy the economy's demand for loans.

Table 2.1.1.1

Balance of deposits, in billion soums

	Total	Deposits by type and maturity							
		Demand deposits		up to 6 months		from 6 months to 1 year		over 1 year	
			share, in %		share, in %		share, in %		share, in %
01.01.2022	156 190	66 129	42	24 070	15	20 826	13	45 164	30
in national currency	95 578	37 404	39	16 730	18	15 531	16	25 914	27
in foreign currency	60 612	28 726	47	7 341	15	5 295	9	19 250	32
01.01.2023	216 738	92 553	43	30 050	14	26 855	12	67 280	31
in national currency	131 795	45 054	34	17 025	13	22 161	17	47 555	36
in foreign currency	84 943	47 499	56	13 025	15	4 693	6	19 725	23

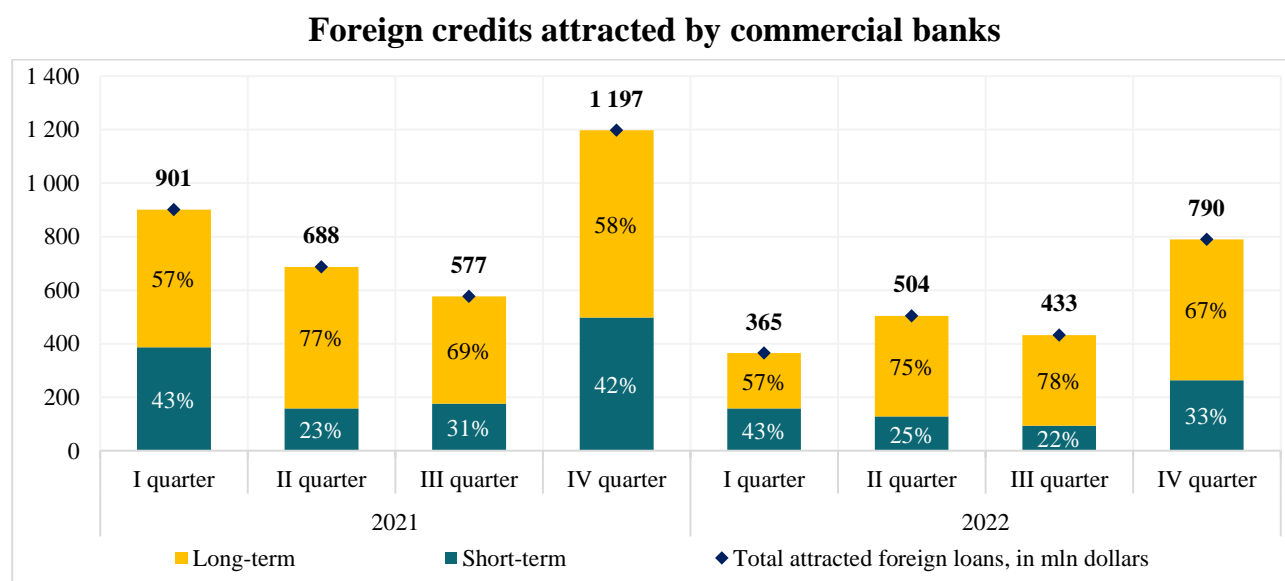
In particular, **59** percent of the increase in liabilities was formed by deposits, **23** percent – by interbank loans and deposits, **12** percent – by borrowed funds and **6** percent – by other liabilities.

As of January 1, 2023, deposits made up **45** percent of total liabilities, attracted credit lines – **39** percent, funds received from other banks – **9** percent, securities, subordinated debts and other liabilities – **7** percent.

In the reporting year, the balance of individual savings increased by **1.7 times** and reached **63.1** trillion soums, including the balance of deposits attracted in national currency to **39.5** trillion soums, and its share in total individual savings was equal to **62.5** percent.

In addition, the share of deposits with a maturity of **up to 1 year** decreased from 28 percent to **26** percent, the share of deposits **over 1 year** increased from 30 percent to **31** percent and the share of **demand deposits** increased from 42 percent to **43** percent.

Figure 2.1.1.6



In 2022, foreign credits attracted by commercial banks amounted to **2.1** billion dollars, decreased to **39** percent compared to 2021. In this case, the amount of short-term foreign credits up to one year was **643** million dollars.

In the reporting year, **2.4** billion dollars of foreign credits were repayed (*12% more than in 2021*), of which **1.4** billion dollars (*59%*) was accounted for long-term loans.

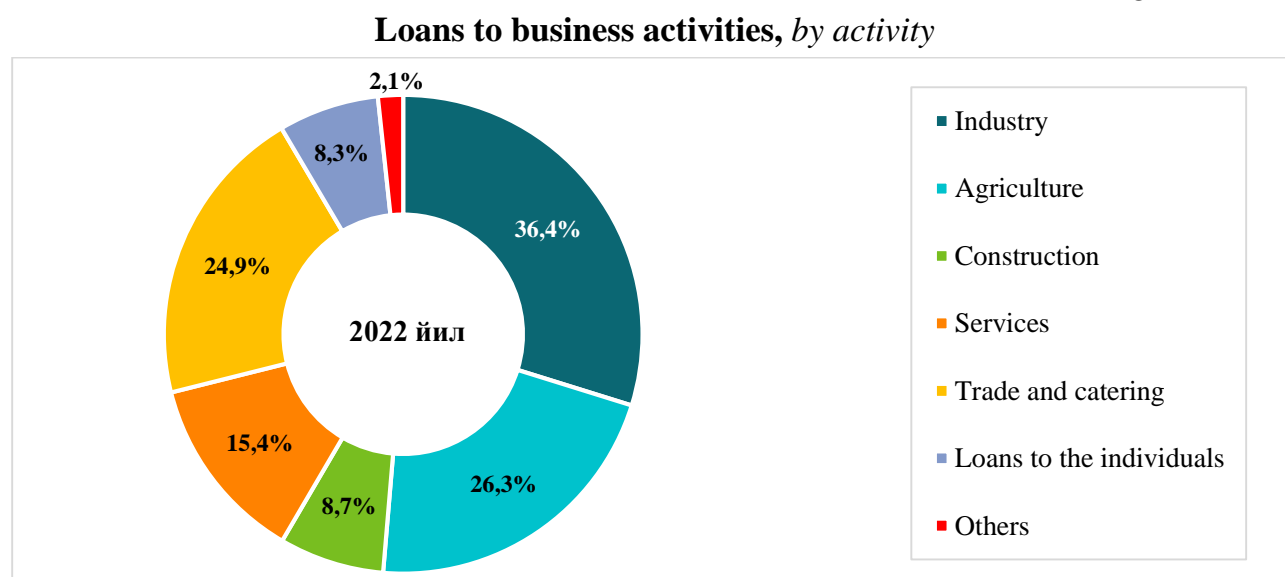
In 2022, measures to attract internal resources in the formation of financial resources were strengthened by commercial banks in the conditions of the increase in the price of external resources.

In particular, the **foreign credit resources** attracted by commercial banks decreased by 4.4 percent (*6.7 bn dollars*) compared to 2021, while the balance of **internal resources – deposits** increased by **39** percent (*61 trl soums*) and their share in total liabilities increased from 42 percent in 2021 to **45** percent.

2.1.2. The loans allocated for business activities

Financial support of business activities. In 2022, efforts to stimulate the share of private investment in financing the economy, increase the production efficiency of legal entities and provide financial support to new production projects with high value added were continued.

Figure 2.1.2.1



*Individuals who are self-employed are taken into account as well the Family entrepreneurship development programs.

In particular, commercial banks allocated **122** trillion soums in total to more than **545** thousand projects to support business activities in 2022 or **1.3 times** more than in 2021 (*together with the Family entrepreneurship development programs*³).

In the reporting year, loans in the amount of **69.8** trillion soums were allocated to more than **504** thousand projects for the purpose of developing small entrepreneurship, including family entrepreneurship and providing financial support to entrepreneurial initiatives of women and youth.

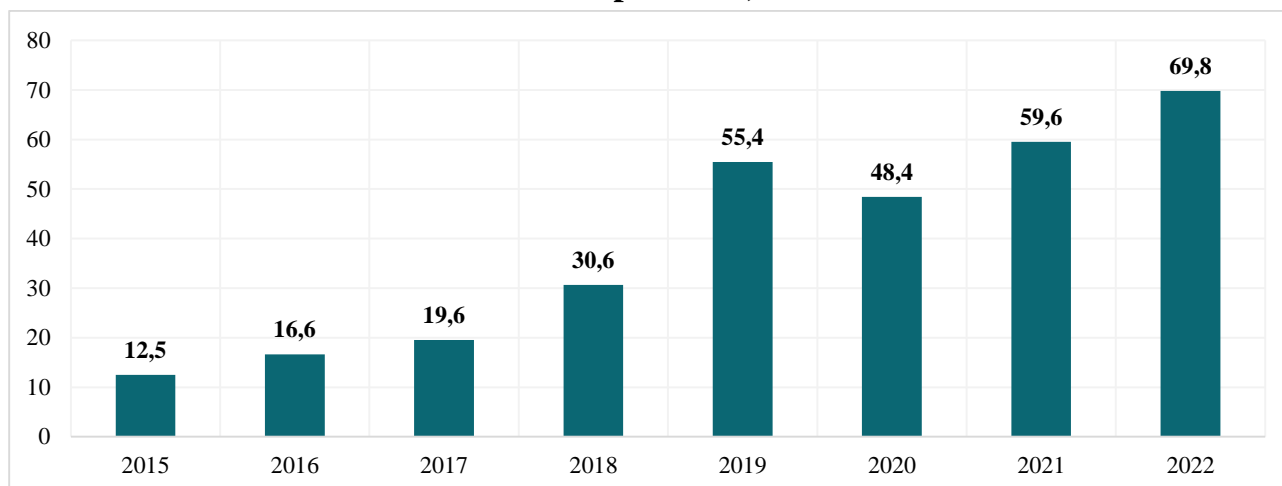
In 2022, foreign credit lines in financing more than **13.1** thousand projects of legal entities in the amount of **2.1** billion dollars were directed, of which **1.8** billion dollars (*86% of total foreign credit lines*) are direct funds (*without government guarantee*).

³ Individuals who are self-employed are also taken into account within the Family entrepreneurship development programs. Loans allocated to legal entities do not include concessional loans allocated to state-owned enterprises and cotton-grain cultivation.

About **1.5 billion dollars (70%)** of these loans were allocated to the industrial sector, **111 million dollars (5%)** – to the agricultural sector, **244 million dollars (12%)** – to the trade and catering sector, and **262 million dollars (13%)** – to the services and other activities.

Figure 2.1.2.2

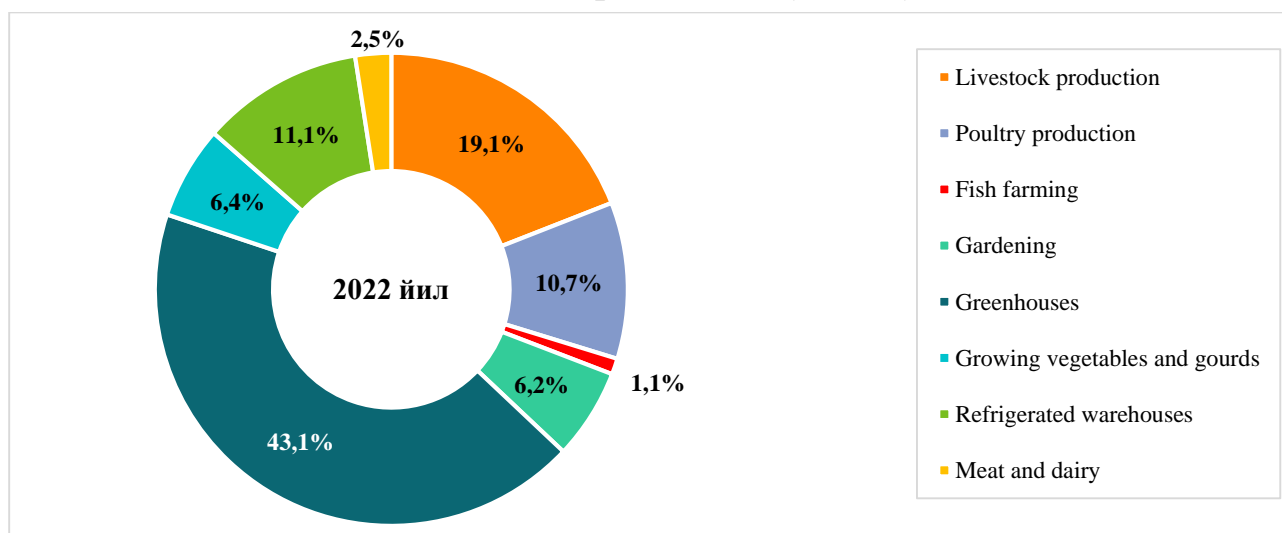
Loans to small entrepreneurs, in trillion soums



In 2022, **6.3 trillion soums** were allocated to projects related to the **food production** in order to continuously provide the domestic market with food products in the conditions of global economic fluctuations and a sharp increase in the prices of basic foods on the global market.

Figure 2.1.2.3

Loans to food production, by activity



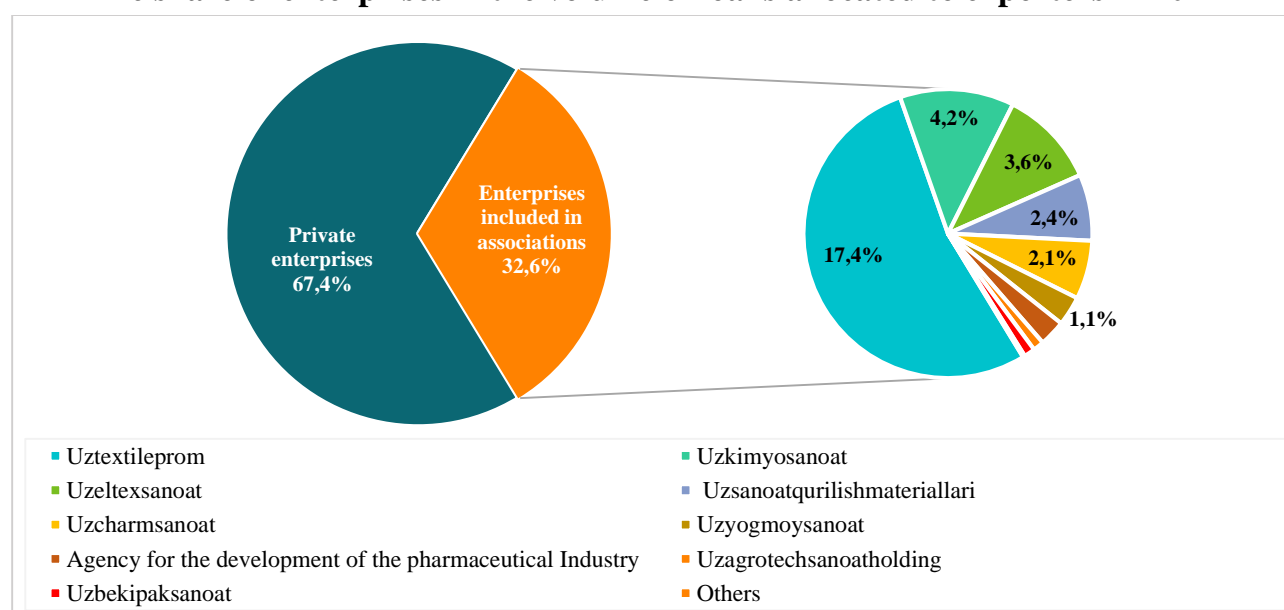
In particular, **702 billion soums** of loans were allocated to finance refrigerated warehouses, **678 billion soums** – to poultry farming, **403 billion soums** – to growing vegetables and gourds products, **393 billion soums** – to finance gardening, **156 billion soums** – to meat and dairy production, **69 billion soums** – to fish farms, **2.7 trillion soums** – to greenhouses, and **1.2 trillion soums** – to livestock production.

In 2022, **59.3** trillion soums were allocated to exporters under nearly **6.5** thousand loan agreements, of which **21.4** trillion soums directed on a revolver basis to replenish working capital.

19.3 trillion soums (33%) of these loans are directed to the projects of various associations, agencies (*Uzbekipaksanoat, Uzkimyosanoat, Uztextileprom, Uzsanoatqurilishmateriallari, Uzcharmsanoat, Uzyogmoysanoat, Uzagrotexsanoatholding, Uzbekipaksanoat associations, Agency for the development of the pharmaceutical industry*) and their member companies, and the remaining **40** trillion soums (67%) were allocated to private enterprises that are not members of unions.

Figure 2.1.2.4

The share of enterprises in the volume of loans allocated to exporters in 2022



Loans to trade and services. During 2022, commercial banks allocated **50.1** trillion soums of loans to finance more than **68** thousand projects of business entities in the field of trade and services.

Especially, **23.8** trillion soums of these funds were allocated to projects in the service sector, **14.9** trillion soums to trade activities, and **11.3** trillion soums to replenish the working capital of entrepreneurs in the service sector.

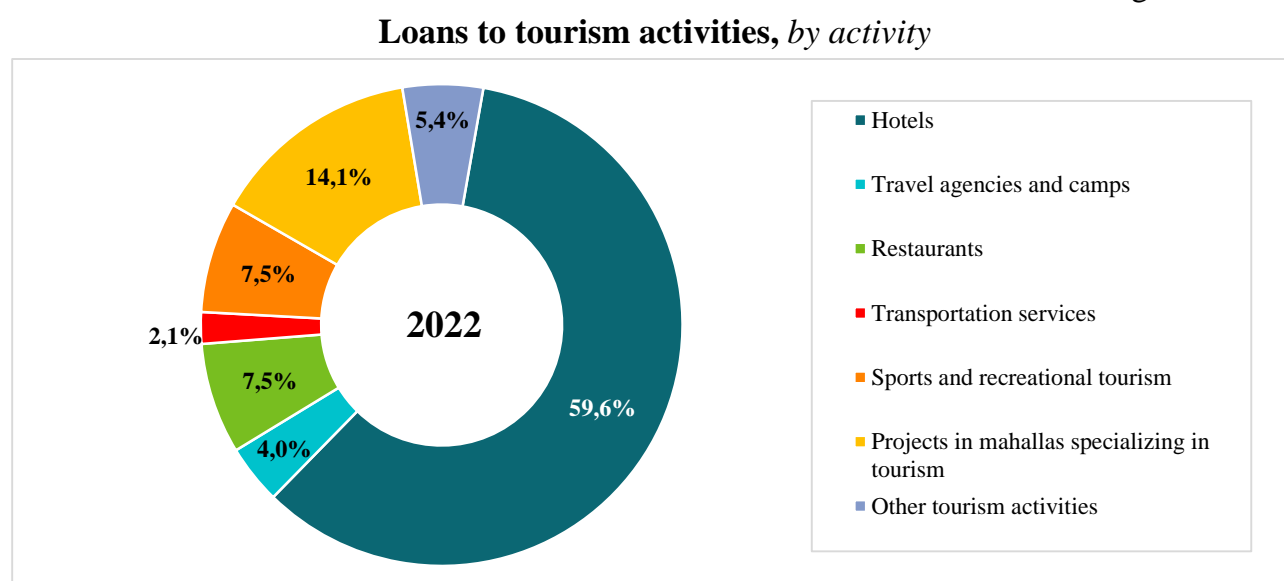
In order to support tourism activities, commercial banks granted loans in the amount of more than **4.2** trillion soums to **4,108** business entities.

2.5 trillion soums of these loans were for the development of hotels, 315.2 billion soums – for sports and recreational tourism, 314.9 billion soums – for restaurants, 167.5 billion soums – for tourist agencies and resorts, and 89.5 billion soums – focused on passenger transportation services.

In 2022, commercial banks continued systematic measures to involve the population in business activities and generate additional sources of income, as well as financial support for small business entities within the framework of **Family entrepreneurship development programs** (hereinafter – Programs).

Within the framework of the Programs, **34.1** trillion soums of concessional loans have been allocated in the last 5 years, and more than **1.4** million people have been given the opportunity to engage in income-generating activities. As a result, on average, **196** out of **every thousand households** in the country had the opportunity to earn additional income within the framework of the Programs.

Figure 2.1.2.5



In this regard, the main attention was focused on financial support of the population's entrepreneurial initiatives, on improving the environment of small business and entrepreneurship in the neighborhoods, and on employment of youth and women with permanent work.

According to the Decree of the President of the Republic of Uzbekistan on December 20, 2021, PD-55 "On additional measures for the development of family entrepreneurship and expansion of the source of income of the population" starting from March 1, 2022, loan allocation processes within the Programs are fully digitized through **Single electronic platform**.

Especially, the processes of applying for a loan, analyzing the borrower's credit scoring, making a recommendation by the governor's assistants, issuing loan documents, ordering products, monitoring credit and identifying the applicant are **fully digitized**.

In accordance with the decision, the centralized supply system for the delivery of products and equipment and the provision of services was abandoned, and

the "marketplace" e-commerce platform (smart-market.uz) was launched, which includes a free choice and competitive environment for trading.

The e-commerce platform was integrated with the information systems of the Tax Committee, the Customs Committee, the Personalization Agency, "Electronic Government" and other ministries and agencies through secured communication channels and the **participation of the human factor** in all processes of credit allocation **was minimized**.

From March 1, 2022, more than **600** types of products and more than **220** thousand offers were put up for sale to the e-commerce platform by about 20 thousand large manufacturers, wholesale trade organizations and producers.

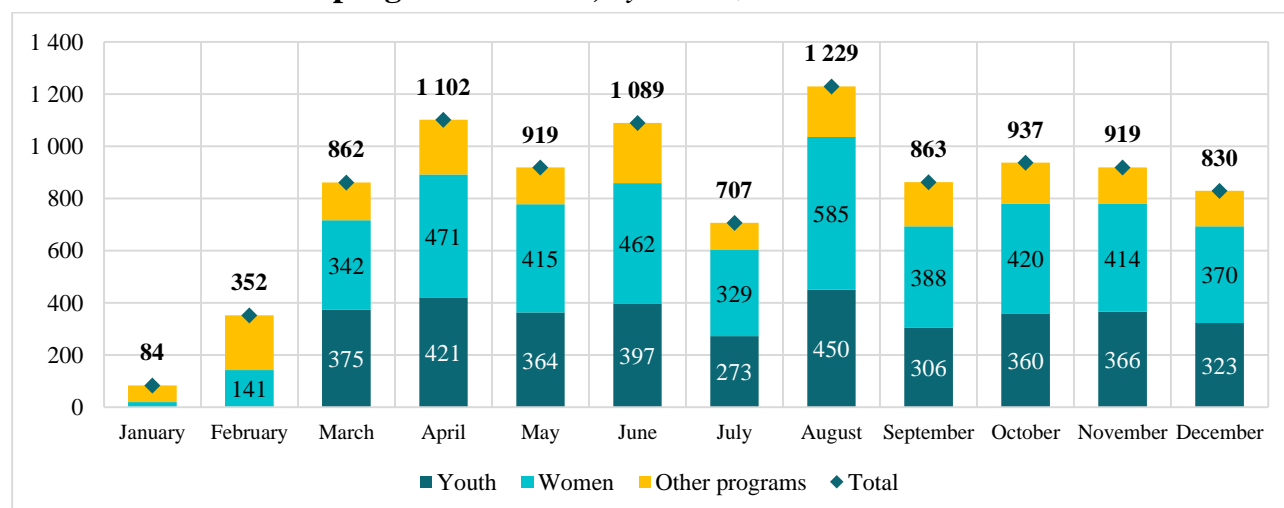
During 2022, **8.6** trillion soums worth of goods and services were delivered through the marketplace by more than 349 thousand residents and entrepreneurs recommended by the governor's assistants, **369.5** billion soums of **value added** and **160.2** billion soums of **turnover** (*total – 529.7 bn soums*) were calculated as **taxes to the budget**.

4.6 trillion soums of the loans allocated in 2022 within the framework of the Programs were for agriculture (*including 2 trn for livestock, 965 bn for the establishment of greenhouses, 726 bn for fruit and vegetables and gardening*), **3.6** trillion soums – for services, **1.4** trillion soums – for crafts, and **344** billion soums were directed to production and other activities.

382 thousand contracts, **436** thousand **invoices** and **397** thousand **documents** were issued in electronic form through the "Marketplace" e-commerce platform, which made it possible to significantly reduce both time and other expenses of business entities.

Figure 2.1.2.6

Loans allocated within the framework of the Family entrepreneurship development programs in 2022, by month, in billion soums



Based on the recommendations given by the governor's assistants, over **9.9** trillion soums of concessional loans were allocated by commercial banks in 2022 to more than **424** thousand projects within the framework of the Programs.

From these concessional loans, **3.6** trillion soums were allocated to more than **149** thousand projects to support entrepreneurial initiatives youth and **4.3** trillion soums were allocated to **225** thousand projects for concessional financing of women's entrepreneurship projects.

799 billion soums (8%) of loans allocated within the framework of the Programs for legal entities and individual entrepreneurs while **9.1** trillion soums (92%) is accounted for self-employed individuals.

In terms of creditors, **41.3** percent of these loans were allocated by Agrobank, **38.9** percent by Xalq bank and **19.6** percent by Mikrokreditbank.

Financing of government mortgage programs. Mortgage loans allocated to the population amounted to **14.4** trillion soums, an increase of **1.5 times** compared to 2021 and its stock reached **46.4** trillion soums (*1.3 times more than the corresponding period of 2021*) by the end of 2022. The share of these mortgage loans in the total loan portfolio allocated to the population was **46** percent.

The share of loans allocated from the funds of **Ministry of Finance** decreased from **92.1** percent in 2021 to **73.7** percent in 2022, while the share of **commercial banks' funds** increased from **9** to **26.3** percent. Moreover, the share of loans allocated under the "**New procedure**" increased from **49.5** percent in 2021 to **59.2** percent.

In particular, **10.8** trillion soums or **75** percent (*in relation to the number of mortgage contracts*) were directed to the purchase of houses in the **primary market**, **3.6** trillion soums or **25** percent in the **secondary market**.

Furthermore, the total number of house sales contracts approved by notary offices was **250.3** thousand, of which **28** percent or **70.9** thousand contracts were financed by mortgage loans in 2022.

In the reporting period, mortgage loans in the amount of **8.5** trillion soums (*3.7 trn soums or 1.8 times more than the corresponding period of 2021*) were allocated to **37,418** individuals under the **New procedure**. 50 percent of allocated mortgage loans were issued for the purchase of 1-2-room apartments, 37 percent for **3-room apartments and more** and 13 percent for **single-family houses**.

In addition, commercial banks allocated loans in the amount of **2.1** trillion soums to the construction companies of multi-apartment housing in 2022, and as of January 1, 2023, the stock of their loan obligations amounted to **2.8** trillion soums.

Activities carried out in connection with the implementation of programs of socio-economic development of regions. As of January 1, 2023, **23 844** projects were financed with **96.3** trillion soums of bank loans, and more than **727** thousand jobs were created as a result of the launch of **22 417** projects.

38.9 trillion soums of the allocated loans in 2022 were the own funds of commercial banks, **44.5** trillion soums were foreign credit lines, **11.5** trillion soums were funds of the Fund for Reconstruction and Development of Uzbekistan and **1.2** trillion soums were financed by other sources.

2.1.3. Financial stability of banks in the conditions of global instability

In 2022, the CBU considered prudential control measures to mitigate the negative financial effects of the external economic situation on the stability of banks and to prevent a sharp increase in credit risk of banks.

In particular, stress tests were conducted on the impact of the risks related to the early execution of the financial obligations of commercial banks to foreign banks on the liquidity of the banking system, as well as credit risks that may arise due to a sharp reduction in cash receipts of exporting enterprises in foreign currency.

As of March 1, 2022, the results of the stress test based on financial stability indicators:

– liquid funds reserve (*minimum 10%*) decreased from **15.3** to **14.4** percent and short-term liquidity (*minimum 100%*) decreased from **170** to **156** percent;

– total debt of domestic exporters showed that **1.5** trillion soums in the “**baseline**” scenario and **4** trillion soums in the “**risky**” scenario may turn into non-performing loans.

In order to mitigate the negative impact of the emerging risks on the stability of the banking system of Uzbekistan, following measures were recommended to the commercial banks:

– even if the financial assets of the foreign banks are withdrawn before the maturity, **not to withdraw the loans** allocated to local entrepreneurs that are financed by those funds **before the term specified in the contract**;

– use Russian affiliates of top ranked and sanctions-free banks to make customer payments in order to ensure **the continuity of transactions** with their partners in neighboring countries;

– in case of problems in repayment of credit debts, privileges were given to **not calculate penalties and fines** for loans that were not repayed on time until the end of 2022 and **not to generate reserves against expected losses**.

In 2022, in order to support business entities facing financial difficulties, the practice of extending the repayment terms of loans granted by commercial banks was continued. In particular, **36** trillion soums of customers' loan payments were extended during the year.

At the same time, the problems of export-import enterprises are constantly analyzed by the **working group** established as part of measures to mitigate the negative impact of external risks on the financial stability of banks.

Due to the negative impact of external risks, the repayment terms of 4 trillion soum loans of export-import enterprises that faced financial difficulties were extended.

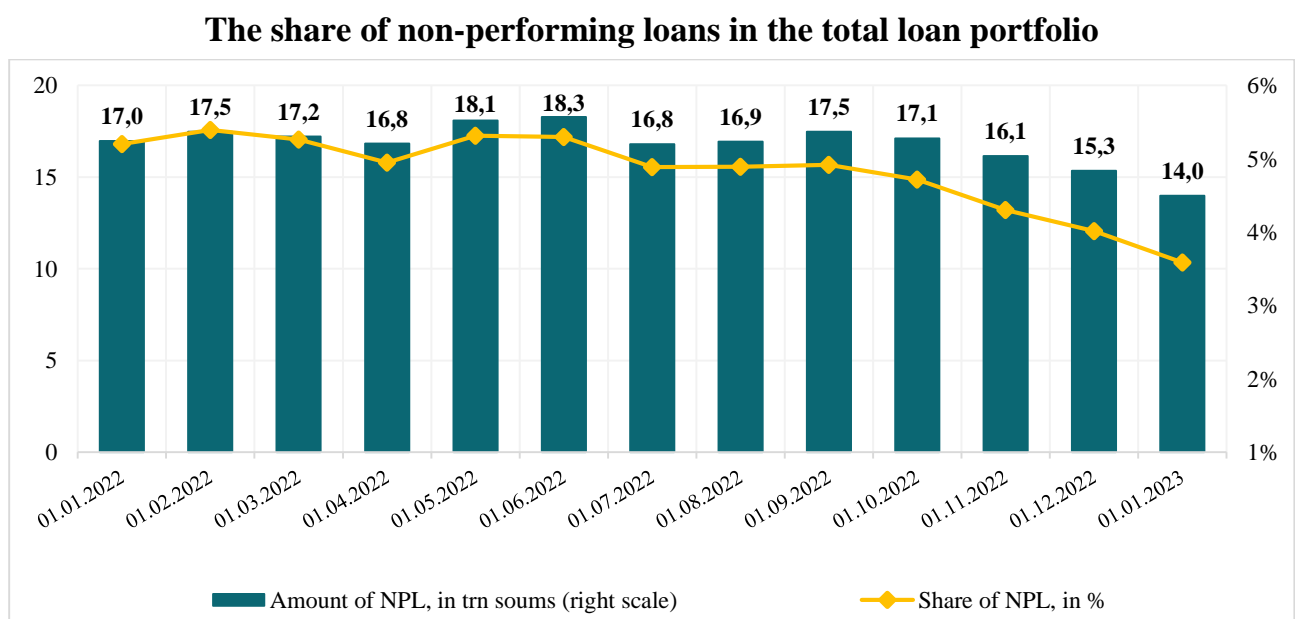
Within the framework of mitigating the negative effects of credit risks on the financial stability of banks, the system of working with non-performing loans was fundamentally improved and the CBU carried out relevant work during 2022. In particular,

– together with commercial banks and the Cabinet of Ministers of Republic of Karakalpakstan, regions and Tashkent city hokimiyats, a **monthly schedule-plan** was implemented;

– in the state-owned banks, the appropriate working group for the **collection of NPL** was established and individual work with customers was systematically carried out.

Implementation of these works made it possible to reduce NPL by **6.2** trillion soums in the IV quarter of 2022.

Figure 2.1.3.1



At the same time, **12.6** trillion soums of NPL were collected by banks and **9.6** trillion soums of problem loans were additionally created.

In 2022, banks created additional reserves in the amount of **11** trillion soums on assets and the level of **coverage of NPL with reserves** increased by **1.3 times** and reached **102** percent as of January 1, 2023.

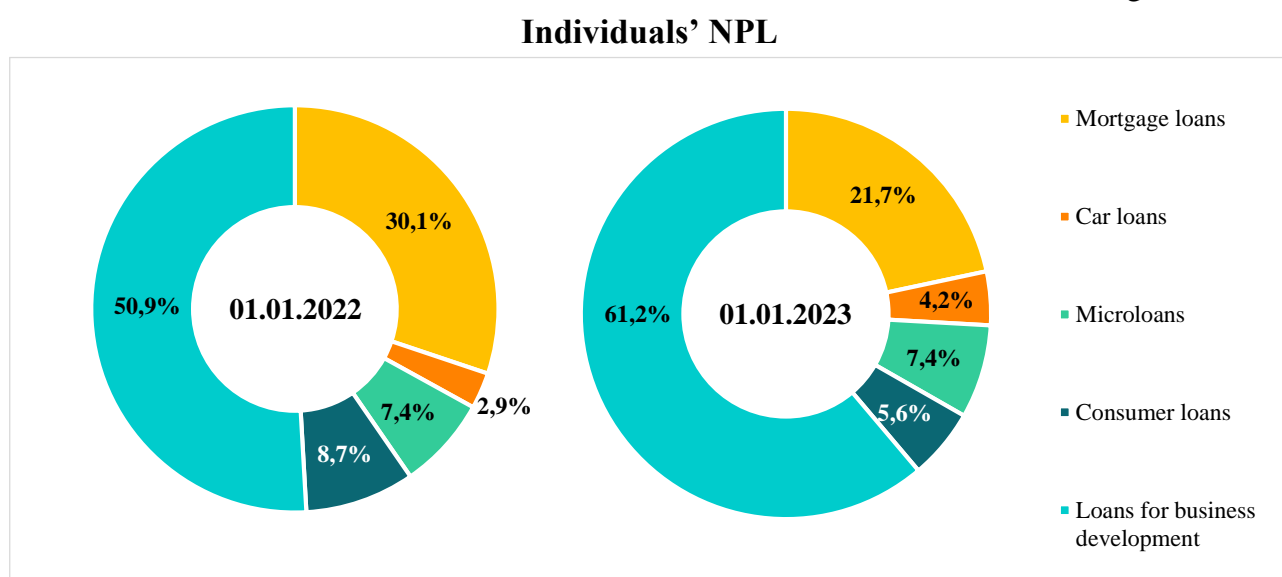
As a result of the measures taken, the share of non-performing loans was reduced by **1.6 p.p.** or to **3.6** percent (*14 trn soums*) as of January 1, 2023.

In particular, 84.1 percent of the loan portfolio of commercial banks are classified as "**standard**", 12.3 percent as "**substandard**" and 3.6 percent as "**unsatisfactory**", "**doubtful**" and "**bad**".

In the distribution of non-performing loans by segments, 72 percent of them (*10 trn soums*) belong to business entities, and **28** percent (*4 trn soums*) to individuals.

Especially, **2.4** trillion soums (*61%*) of non-performing loans of the individuals include loans for business development, **838** billion soums (*22%*) – mortgage loans, **285** billion soums (*7%*) – microloans, **164** billion soums (*4%*) – car loans, and **215** billion soums (*6%*) – other consumer loans.

Figure 2.1.3.2



As of January 1, 2023, the stock of loans extended by banks amounted to **74.5** trillion soums, **64.1** trillion soums (*86%*) belonged to legal entities and **10.4** trillion soums (*14%*) to individuals.

Particularly, **7** percent or 5.2 trillion soums of these loans are **NPL**, while **15** percent or 11.3 trillion soums are classified as **potentially NPL** (substandard) that are overdue for more than 30 days.

2.1.4. Debt burden of the households

The introduction of market mechanisms of service provision in the banking system, the increasing popularity of banking services and level of financial openness for the households are reflected in the increase of the debt burden of the households.

In order to reduce the negative impact of the increase of these obligations on the financial stability of the banking system, the CBU has introduced the practice of assessing the level of the household's debt burden on bank loans and the debt service indicator.

In particular, the **debt service ratio** calculated on the total **allocated loans** of the households remained almost unchanged compared to 2021 and amounted to **10.6** percent in 2022.

In this regard, no change was observed in this debt burden indicator due to the higher formation of the increase in the annual income of borrowers (63.7%) compared to the increase in the volume of allocated loans (60.6%) in the reporting year.

When the debt burden indicator of the households is analyzed by types of loans, the indicator of debt service on **consumer loans** has remained in the growing trend that has been continuing since 2019, it increased by **16.1** percent and reached **71.6** percent in 2022.

Figure 2.1.4.1

Debt service ratio of individuals,
in percent

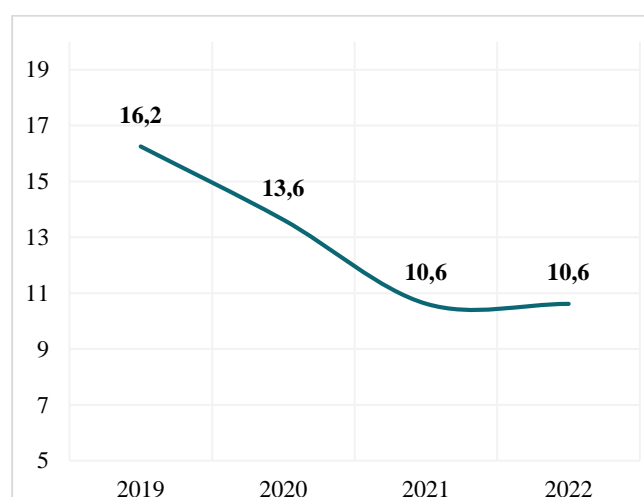
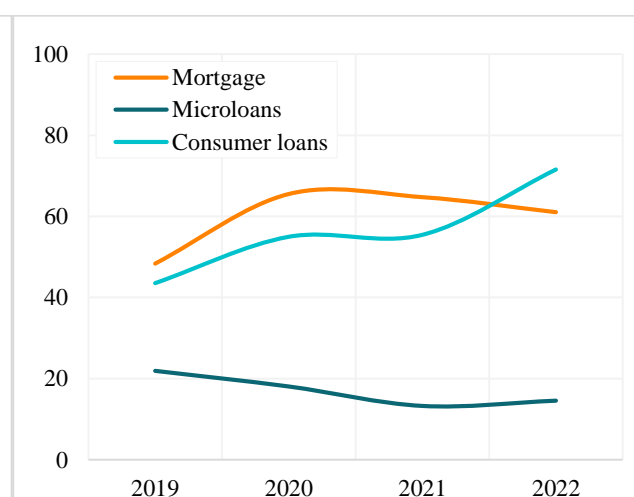


Figure 2.1.4.2

Debt service ratio of individuals,
by type of loans, in percent



In 2022, the increase in the debt service ratio on **consumer loans** was observed due to the decreasing factors such that the decline in the average annual interest rate by type of loan (1 p.p.), the average loan repayment period (from 3.4 to 3.8 years) and the monthly salary increase (21,1 p.p.) and the increasing factors such

that the conditions of an insignificant increase in the number of borrowers (4.5%), a sharp increase in the amount of the loan amount per borrower (2 times).

Moreover, the debt service ratio on **mortgage loans** decreased from **64.7** percent in 2021 to **61** percent in the reporting year.

In 2022, the decrease in the debt service rate for mortgage loans is explained by the fact that although the volume of allocated mortgage loans increased (46.6%), it was formed due to the increase in the annual income of borrowers (71.5%) and the number of borrowers (22.3%).

There was an increase in the dynamics of the debt service ratio on **microloans** and this indicator increased by **1.3** p.p. and amounted to **14.5** percent in 2022.

In the reporting year, the increase in the microloans debt service ratio was formed due to the increase in the volume of microloans allocated (59.5%) compared to the increase in the annual income of microloans (33.9%).

It should be noted that in estimating the debt burden of the households, data on bank loans was used, and the presence of installment payments for various goods and services (consumer goods and real estate objects) purchased in retail services and real estate markets outside the banking system means that the calculated value of debt service ratio may be higher than the current value.

In order to ensure the debt burden and financial stability of the households in Uzbekistan, the CBU has introduced the limitation of the ratio of the loan amount to the collateral amount (LTV) and the limitation of the ratio of payment to income (PTI) on microloans.

In particular, when disbursing microloans by the lender, the debt burden of an individual should not exceed 50 percent.

2.2. Transformation processes in the banking system

Transformation of state-owned banks was continued based on the strategy of reforming the banking system in 2022.

In particular, to increase the efficiency of corporate management in state-owned banks, 11 independent members with the strong experience in banking and finance were recruited in addition to the composition of the bank councils.

By the end of 2022, the number of independent members of the banks' councils totaled 36, including 5 from each Uzsanoatqurilishbank, Qishloq Qurilish Bank and Agrobank, 4 from each Mikrokreditbank, Turon Bank, Ipoteka-bank and Xalq Bank, 2 from both Asakabank and Uzmilliybank, and 1 from Aloqa Bank.

The activities of corporate management service and corporate consultant in

banks were revised based on new requirements and their practical participation in the effective organization of the work of the supervisory board was further advanced.

The system of evaluating the performance of bank management members and employees on the basis of the **key performance indicators** (KPI) and encouraging them has been improved.

At the same time, with the help of consultants from international financial institutions, appropriate changes were made to the organizational structures of banks, the activities of existing structural units were improved and new units were established.

In particular, in order to develop the retail services, Qishloq Qurilish Bank established 3 departments - Development of trade channels, Development of bank products and services and Improvement of the quality of products and services.

In Aloqabank, the processing center of the bank using the software of the European company Tieto (Latvia) was launched and in cooperation with the Visa international payment system, customer service in the direction of issuing bankcards was launched.

In order to increase the quality and speed of services in the front office of the National Bank, a universal manager and a universal cashier service were introduced, providing direct service to customers.

In order to increase the importance of the internal control (*compliance*) system in Turon Bank, the Anti-corruption and ethics committee was established under the bank board, and the "Compliance control" system was introduced in the bank and a number of internal regulatory documents were developed.

It should be noted that in order to increase the investment attractiveness of banks and attract additional resources from international financial institutions, special attention was paid to the development of "**green financing**" by banks and a number of measures were carried out in this direction in the reporting year.

In particular, Sanoatqurilishbank attracted foreign credit lines of 188 million dollars of the World Bank and 25 million dollars of EBRD and a procedure for checking the compliance of the projects presented by the consumers with the criteria of "green financing" was developed, and the practice of scoring based on its results within 1 day was established.

During 2022, "green" loans were amounted about 127.7 million dollars and the share of such loans in the total loan portfolio of Sanoatqurilishbank reached 6 percent. Currently, customers are offered 6 types of "green" products.

At the same time, within the framework of transformation processes, practical

measures were continued to optimize business processes in banks in the reporting year, provide quality service to customers and automate document exchange processes, as well as improve the system of protecting the rights of bank consumers and individual approach to customers.

In particular, in order to improve the efficiency of working with NPL in banks, the "**Soft Collection**" service, which deals with collection of overdue loan debts at the initial stage as call centers were launched.

In the Ipoteka bank, a special algorithm was developed to regularly study the requirements, opinions and comments of consumers through a survey, to study the level of quality of customer service, and the demand for bank products, it also created opportunities to send SMS messages and surveys to customers online through the system, and to freely evaluate the quality of customer service.

In addition, Turon Bank has established a system for allocating loans to business entities that do not have the status of a legal entity through the "**Colvir Analytical Platform (KFO)**" program, while in Qishloq Qurilish Bank, a new mobile platform "**Quant**" has been developed based on modern information technologies, with the help of which a number of additional opportunities have been created to make payments according to their details such as withdraw cash from ATMs without using a bank card and so on.

75 million dollars of a loan by the International Finance Corporation and 50 million dollars by EBRD was allocated to Uzsanoatqurilishbank to support the transformation processes.

Relevant decisions of the Cabinet of Ministers were adopted, aimed at bringing the transformation processes to a new stage and accelerating them in Xalq Bank, Asakabank and Uzsanoatqurilishbank.

A memorandum of cooperation on bank transformation was signed between Mikrokreditbank and the German savings bank fund and within the framework of cooperation, seminar-trainings were organized for the bank's management and employees on the successful implementation of the bank's transformation projects.

It should be noted that work on attracting foreign investors to the banking system was accelerated and a number of important contracts on the privatization of state-owned banks were signed during 2022.

In particular, in September of the reporting year, the Ministry of Finance organized a demonstration exhibition (**non-deal roadshow**) on attracting foreign investors to the process of privatization the banking sector of Uzbekistan with the participation of state banks in Dubai, United Arab Emirates.

On November 3-4, 2022, in Samarkand with the participation of more than

1,500 international financial institutions, foreign central banks, large investment banks, consulting companies and research institutes, within the framework of the II Uzbekistan Economic Forum in the field of banking and finance, 29 contracts with a total value of **1.3** billion dollars were signed.

In particular, the total amount of deals and agreements have been reached with financial institutions such as International Finance Corporation, Asian Development Bank, Islamic Corporation for Private Sector Development, Trade Finance International Islamic Corporation, "Accion International" (USA), "KDB Bank" JSC, "Landesbank Hessen Thuringen Girozentrale" (Helaba Bank, Germany), Gazprombank to National bank was 300 million dollars, Sanoatqurilishbank – 163 million dollars, Aloka Bank – 55 million dollars, Agrobank – 50 million dollars, Kishloq Qurilish Bank – 30 million dollars, Turon Bank – 35 million dollars, Mikrokreditbank – 30 million dollars.

Furthermore, according to the memorandum of agreement on the potential purchase of Ipoteka Bank signed in 2021, on December 12 in 2022, the chairperson of the board of OTP Bank of Hungary and the Minister of Finance of Uzbekistan signed *a sale and purchase agreement on the privatization of the Ipoteka Bank*.

According to this agreement, OTP Bank will purchase the share package belonging to the Ministry of Finance in the Ipoteka Bank in 2 stages, initially 75 percent of the shares and the remaining 25 percent after 3 years.

In addition, a sale and purchase agreement was signed between the State Asset Management Agency and the foreign enterprise "Support Level" LLC on the purchase of a package of 100 percent state shares in the authorized capital of Uzagroexportbank on December 29, 2022.

In accordance with this agreement, the investor is obliged to purchase the state share in the authorized capital of Uzagroexportbank by paying in full, as well as to increase the authorized capital of the bank to the value of not less than 29 billion soums and to invest at least 50 million dollars in the development of the bank's infrastructure, technology and products.

2.3. Infrastructure of the banking system

2.3.1. Operating credit organizations

As of January 1, 2023, the number of commercial banks operating in Uzbekistan is **32**, of which **11** are state-owned banks, **16** are private banks and **5** are banks with foreign capital.

As a result of non-fulfillment of the requirements established by banking legislation, the licenses of **2** commercial banks were revoked while **1** bank was granted a license to carry out banking activities in the reporting year.

As of January 1, 2023, there were **832** branches of commercial bank, **82** mini-banks, **1,461** banking service offices and **2,974** "24/7" bank branches.

Moreover, **15** microfinance organizations, **8** pawnshops and **15** payment organizations were granted licenses to carry out their activities, while **3** payment organizations were revoked in accordance with the law since they did not perform their activities for one year in 2022.

As a result, the number of **NBOs** operating in the republic is 167 (*microfinance organizations – 85, pawnshops – 81 and mortgage refinancing organization – 1*), **payment operators – 3, payment organizations – 47** and credit bureaus – 2 as of January 1, 2023.

2.3.2. State register of credit information, Credit bureau and collateral registry activities

The credit information exchange system includes **the State register of credit information** of the CBU and credit bureaus "**Credit-Information Analytical Center**" (hereinafter – CIAC) and "**CRIF Credit-Information Services**".

Figure 2.3.2.1

Number of credit agreements,
in thousand

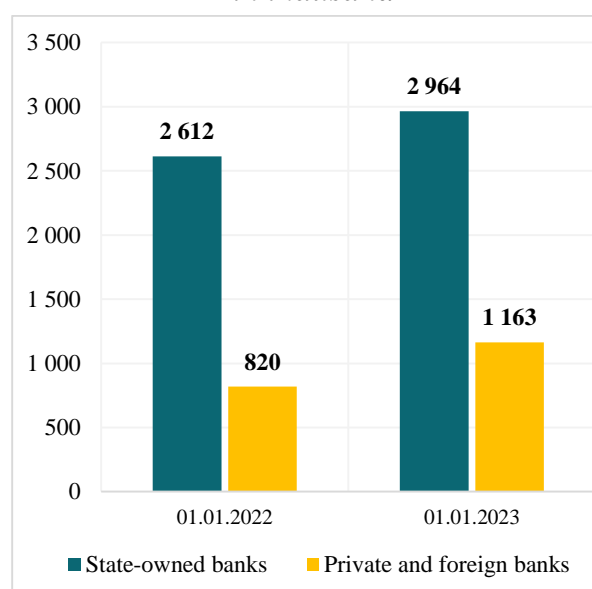
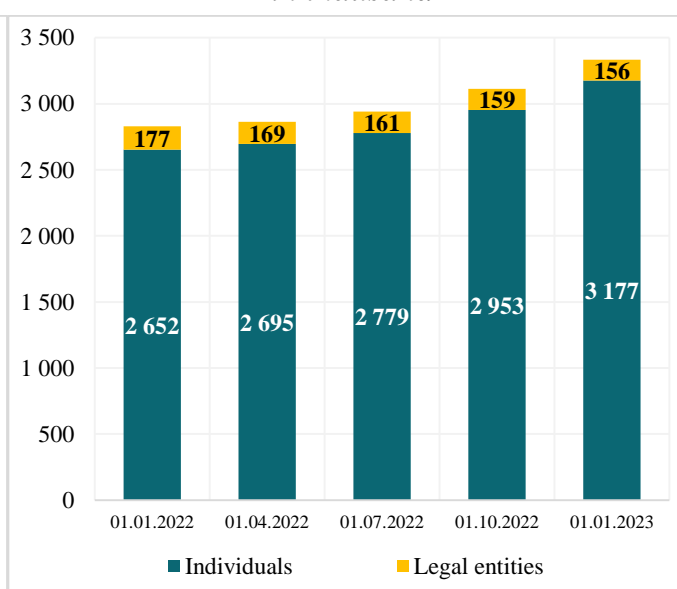


Figure 2.3.2.2

Number of debtors,
in thousand



In 2022, measures were continued on the development of **the credit information exchange system**, ensuring the continuity of the processes of receiving and processing large amounts of data and creating the possibility of providing data in real time.

The State register of credit information of the CBU maintains a database of borrowers from credit organizations and their credit operations, obligations, types of collateral, sources of credit in order to establish an effective mechanism for collecting reliable credit information and processing it.

In 2022, the total number of credit transactions included in the database of the State register of credit information (including fully executed credit transactions) increased by **25.7** percent compared to the beginning of the year and reached nearly **13** millions as of January 1, 2023.

Furthermore, the number of credit users included in the database reached **6.3** million and increased by **21** percent. This increase was formed due to **23** percent increase in the number of **individuals using credit**.

The increase in the number of credit users is due to a significant increase in the scope of retail lending, in particular, an increase in the scope of using benefits within the framework of government programs, online loans and concessional education loans for students.

By the end of 2022, **89** percent of the number of credit users were individuals, **7** percent were legal entities and **4** percent were individual entrepreneurs.

As of January 1, 2023, the number of credit agreements with outstanding debts has increased by 20 percent compared to the corresponding period of 2021 and was 4.1 million and the number of debtors increased by 18 percent to 3.3 million.

In this case, 72 percent of credit transactions are made by state-owned banks and 28 percent by private and foreign banks. In addition, 95.3 percent of the existing debtors are individuals, 3.2 percent are legal entities and 1.5 percent are individual entrepreneurs.

In order to ensure the compatibility of the information in the electronic database with the balance indicators and the accuracy of the information on loans (*type, purpose, source of financing, interest rate, supply, payment schedule, etc.*), the data of the registry database is regularly reviewed.

Table 2.3.2.1

Number of data on subjects of credit information, in thousand

Name of subjects of credit information	2019	2020	2021	2022
<i>Individuals</i>	9 880	11 226	12 657	13 974
<i>Legal entities</i>	727	746	774	937
Total	10 607	11 972	13 431	14 911

At the same time, in order to improve the speed of information exchange and its quality, a new software package of the State register of credit information was

launched in real mode. Currently, the necessary measures are being taken to expand the capabilities of the new software package.

Appropriate measures are being taken to launch a modern analysis complex (Business Intelligence) that allows in-depth analysis of data based on a new software package.

In 2022, the number of credit history information obtained by residents and business entities on the website of the CIAC credit bureau (portal.infokredit.uz) and through the Portal of interactive government services increased from 145.8 thousand in 2021 to 259 thousand.

During 2022, the number of data on subjects of credit information (*individuals and legal entities*) in the database of the CIAC credit bureau increased by 11 percent and reached **14.9** million as of January 1, 2023, of which 93.7 percent (*almost 14 mln*) were individuals and 6.3 percent (*937 th*) were accounted for legal entities.

Table 2.3.2.2

Number of credit information users

Ташкилотлар	2019	2020	2021	2022
<i>Commercial banks</i>	30	32	33	31
<i>Microfinance organizations</i>	55	59	68	83
<i>Pawnshops</i>	60	62	70	80
<i>Leasing organizations</i>	3	5	8	20
<i>Insurance companies</i>		1	1	4
<i>Retailers</i>	13	70	175	256
<i>Others</i>				5
Total	161	229	355	479

In 2022, the number of **credit information users** who signed agreements on the exchange of credit information with the CIAC credit bureau increased by 120 and reached to **479**.

Currently, the CIAC credit bureau provides a total of more than 40 types of credit reports to banks and non-bank organizations.

In 2022, the database of CIAC credit bureau and e-auksion.uz and oila-kredit.uz platforms were integrated in order to expand fast data exchange.

A total of 37.1 million reports were made from the CIAC credit bureau by banks and non-banking organizations, of which commercial banks – 23.6 million, NBOs – 10.5 million, e-auksion.uz and oila-kredit.uz platforms – 2.8 million, and individuals and legal entities – 259.1 thousand.

In 2022, appropriate measures were taken to ensure the continuous operation of the **collateral register** database, as well as to expand the scope of data and the possibilities of rapid inter-agency information exchange.

In particular, an online ban was created for all commercial banks and other credit organizations in the information systems of the Notary and Cadastre Agency based on the vehicle identification number (VIN) and the mortgage contract formalized as credit security for real estate purchased from the primary market.

Consequently, the practice of online registration, without paper registration of mortgage contracts by the debtor in the cadastral authorities and online registration was established.

As a result of the work carried out on the development of the collateral registry system and the convenience created for users, the scope of use of the collateral registry services is increasing. During 2022, the number of **users of the collateral register** increased by 304 and reached 897 at the end of the year.

In 2022, the number of new entries entered into the collateral register by users regarding their rights to collateral property exceeded 430 thousand. In this case, the share of commercial banks in new records was 78.8 percent, the share of microfinance organizations was 21.1 percent and the share of legal entities and state bodies was 0.1 percent. In the reporting year, more than 146,000 records were removed from the collateral register.

In addition, on the basis of the collateral agreement concluded by commercial banks on the property purchased from the primary market, about 140,000 pledged properties were banned by the "Notary" information system through the collateral register.

In 2022, commercial banks and other credit organizations received information about the status of more than 69,000 properties (*restricted or not*) from the "Notary" information system through the collateral register.

As of January 1, 2023, the total number of active records in the collateral registry database was 1.2 million and more than 110,000 changes were made to existing records during 2022.

2.3.3. System of guaranteeing households' deposits

Protection of the households' deposits in the banks is an important factor in attracting the uninvested money of the population to the banks by increasing the confidence in the banking system.

For this purpose, the amount of calendar contributions directed by commercial banks to **the Fund of guarantee citizens' deposits in banks** (hereinafter – the

Fund) increased by 2.4 times compared to 2021 and amounted to **421.5** billion soums.

Since the Fund started its activity, the total volume of calendar contributions has reached **1,360.2** billion soums as of January 1, 2023.

During 2022, revenues from calendar contributions, income received, funds in the account, and expiration of the term of income-generating assets, 1.3 trillion soums of funds invested to new income-generating assets, including 1 trillion soums to securities of the Ministry of Finance.

As a result, the total deposits of the Fund increased by 26 percent compared to the beginning of the year and reached **2.1** trillion soums as of January 1, 2023, (*after deducting 251 bn soums paid to depositors "Turkiston" private joint-stock commercial bank*) and the income from these investments amounted to 267.5 billion soums.

In connection with the revocation of the licenses of "HI-TECH BANK" and "Turkiston" private joint-stock commercial banks to carry out banking activities in 2022, in order to cover the funds of depositors of "Turkiston" private joint-stock commercial bank from the resources of the Fund 251 billion soums were transferred to Qishloq Qurilish Bank (Agent bank).

As of January 1, 2023, the funds of the depositors of the private joint-stock commercial bank "Turkiston" have been fully repaid.

2.4. Results of the activity of non-bank credit organizations

Due to the growing demand of the population for financial services, there has been a significant increase in the volume of NCO services, which are considered an alternative to banking services.

In 2022, the adoption of the Law "On non-bank credit organizations and microfinance activities", which reflects international principles and approaches, served as an important factor in regulating relations in the activities of NCOs.

As of January 1, 2023, the total number of NCO was 167, of which 75 were in Tashkent city, 22 – Fergana region, 16 – Bukhara region, 13 – Tashkent region, 10 – Andijan region, and 31 NCOs are operating in other regions.

Assets of NCO increased by almost **1.6 times** and reached **4.3** trillion soums in 2022. The growth of assets was mainly explained by the increase of credits by **58** percent.

In particular, the assets of **microfinance organizations** increased by **57** percent and the assets of **pawnshops** increased by **25** percent and their volume were **2** trillion and **260** billion soums respectively.

Figure 2.4.1

Assets of NCO, in billion soums

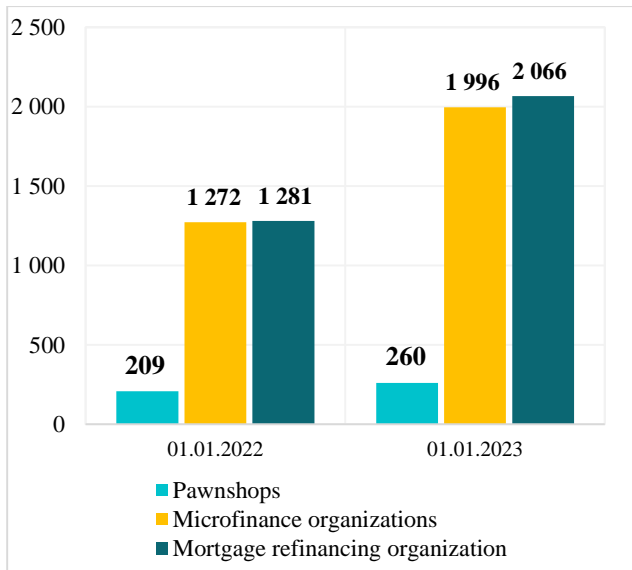
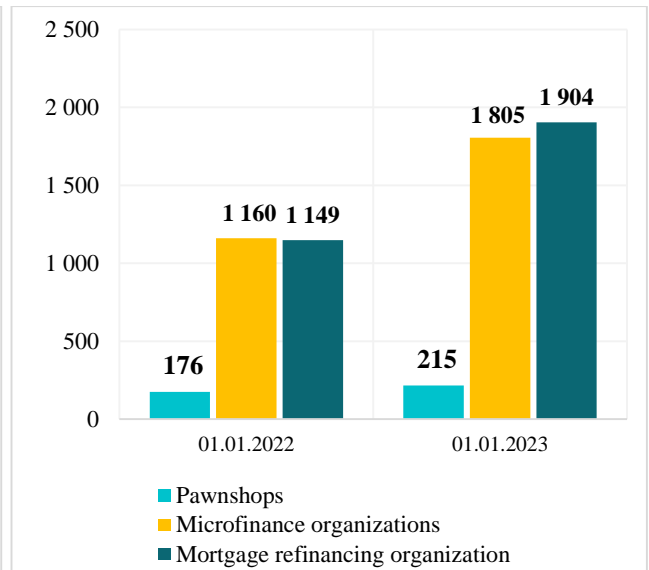


Figure 2.4.2

Credit portfolio of NCO, in billion soums



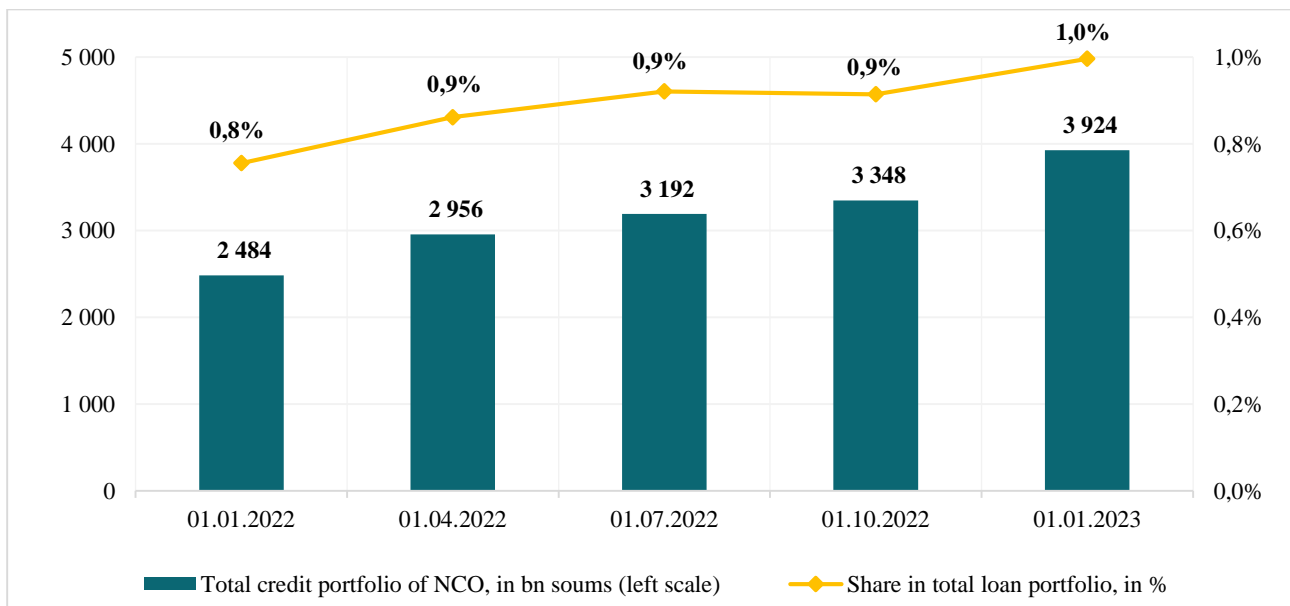
The increase in the volume of assets was formed mainly due to the increase of loans in microfinance organizations by **646** billion soums and in pawnshops by **40** billion soums.

The total assets of the **mortgage refinancing organization** increased by **61** percent (by 785 bn soums) and amounted to **2.1** trillion soums (in which the amount of loans increased by 755 bn soums).

During 2022, the volume of microfinance services provided by microfinance organizations and pawnshops increased by **50** percent compared to the corresponding period of 2021 and reached about **4.7** trillion soums.

Figure 2.4.3

Total credit portfolio of NCO and its share in total loan portfolio



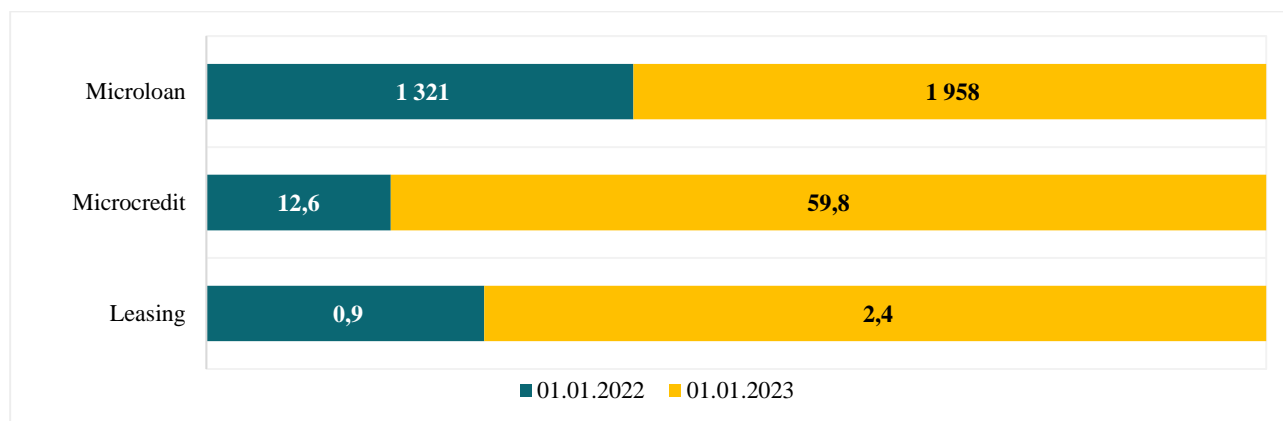
As of January 1, 2023, the total stock of microfinance credits (2 trn soums) increased by **51** percent, in particular, in **microfinance organizations** (1.8 trn soums) increased by 56 percent and in **pawnshops** (215 bn soums) increased by 23 percent.

Moreover, the stock of resources allocated to commercial banks by the **mortgage refinancing organization** in order to satisfy the households’s growing demand for housing increased by 66 percent and reached **1.9** trillion soums.

In 2022, the **total credit portfolio** of NCO increased by **58** percent compared to 2021 and reached **3.9** trillion soums or **1** percent of the total lending volume of all credit organizations.

Figure 2.4.4

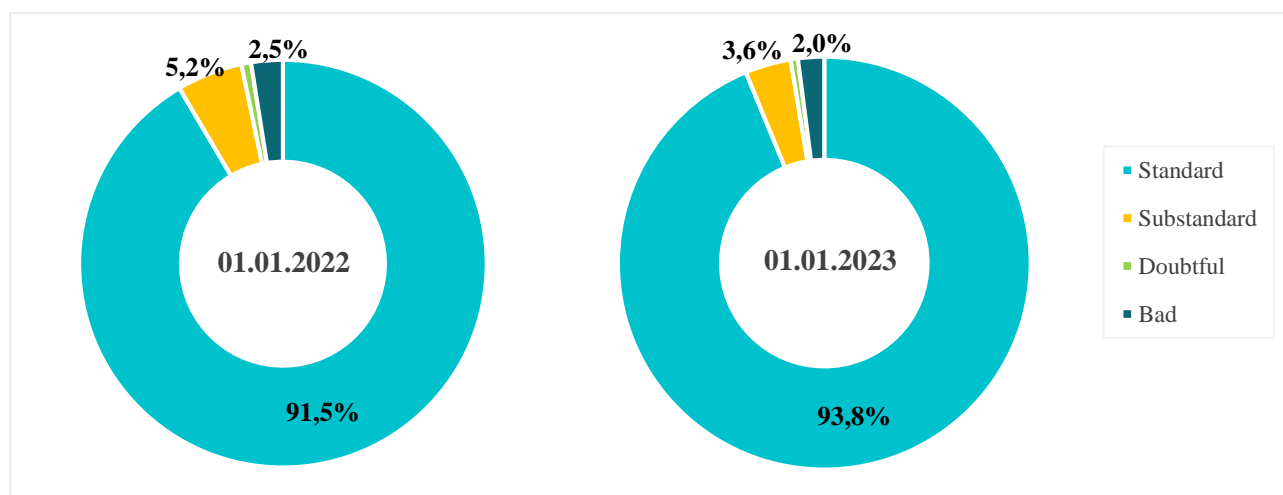
Stock of microfinance services of NCO, in billion soums



The **stock of microloans** allocated by NCO to individuals increased by 48 percent compared to 2021, reached **2** trillion soums as of January 1, 2023 while the **stock of microloans** allocated to business entities increased by 5 times to **60** billion soums, and the volume of **leasing services** increased by 3 times to **2** billion soums.

Figure 2.4.5

Classification of NCO’s credit portfolio



By the end of 2022, **93.8** percent of the total credit portfolio of NCO were classified as "**standard**", **3.6** percent – "**substandard**", **0.6** percent – "**doubtful**" and **2** percent – "**bad**" loans and constant monitoring of changes in the quality of credits was established.

The share of non-performing loans (NPL 30+) in NCO decreased by **2** p.p. compared to the beginning of 2022 and reached **6** percent or **126** billion soums as of January 1, 2023.

Figure 2.4.6

Non-performing loans in microfinance organizations

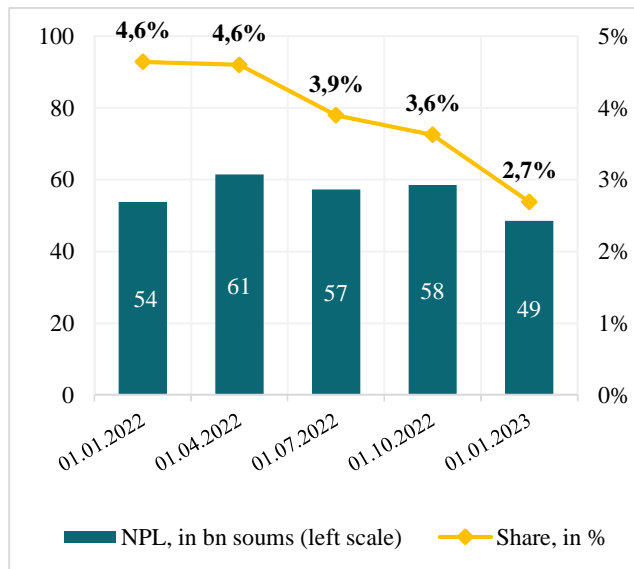
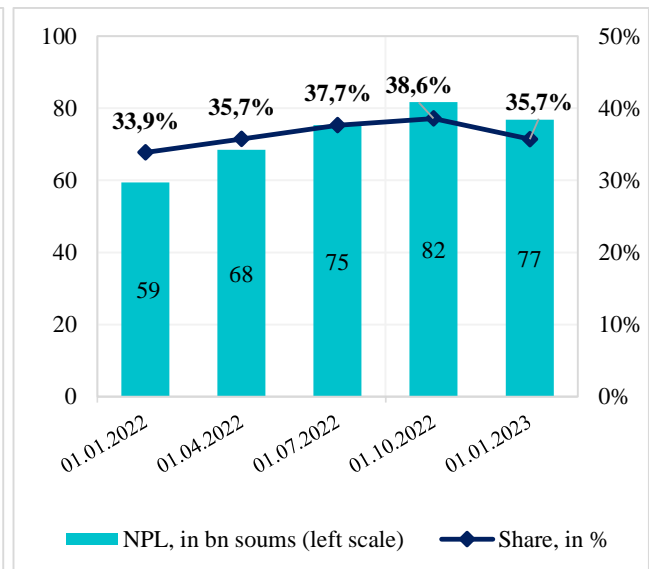


Figure 2.4.7

Non-performing loans in pawnshops



In particular, non-performing loans in **microfinance organizations** decreased by 2 p.p. or 5 billion soums (*the stock was 49 bn soums*), while in **pawnshops** they increased by 2 p.p. or 17 billion soums (*the stock was 77 bn soums*).

The total liabilities of NCO increased by **64** percent in 2022 and amounted to **2.9** trillion soums. In particular, liabilities of **microfinance organizations** increased by 61 percent to 942 billion soums, liabilities of **pawnshops** increased by 46 percent to 30 billion soums and liabilities of **mortgage refinancing organization** increased by 65 percent, reaching 2 trillion soums.

The main factor in the raise of liabilities was the increase of funds attracted by 65 percent (*1.1 trn soums*). At the same time, as part of the liabilities of microfinance organizations and pawnshops, funds attracted from banks increased by 1.4 times and amounted to 440 billion soums.

Furthermore, funds attracted from international financial institutions increased by **2.5 times** to 86 billion soums in microfinance organizations and **1.4 times** to 1.6 trillion soums in mortgage refinancing organization.

The total capital of **microfinance organizations** increased by 54 percent and the total capital of **pawnshops** increased by 22 percent and constituted 1 trillion and 230 billion soums, respectively, while the total capital of **mortgage refinancing organization** increased by 20 percent to 137 billion soums.

Figure 2.4.8

Total liabilities of NCO, in billion soums

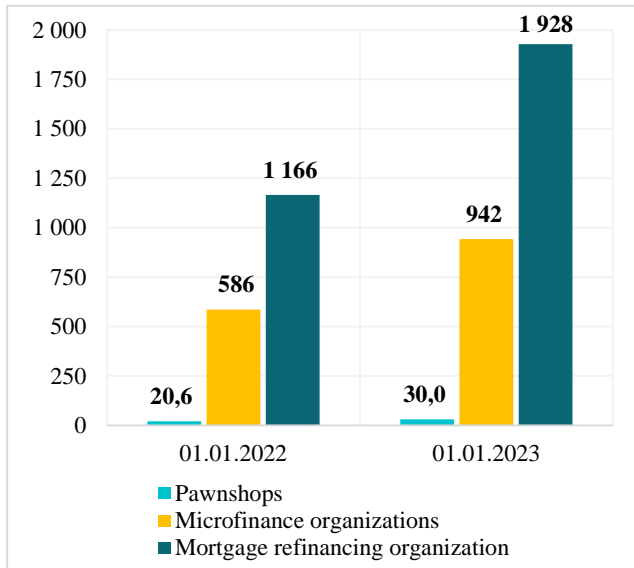
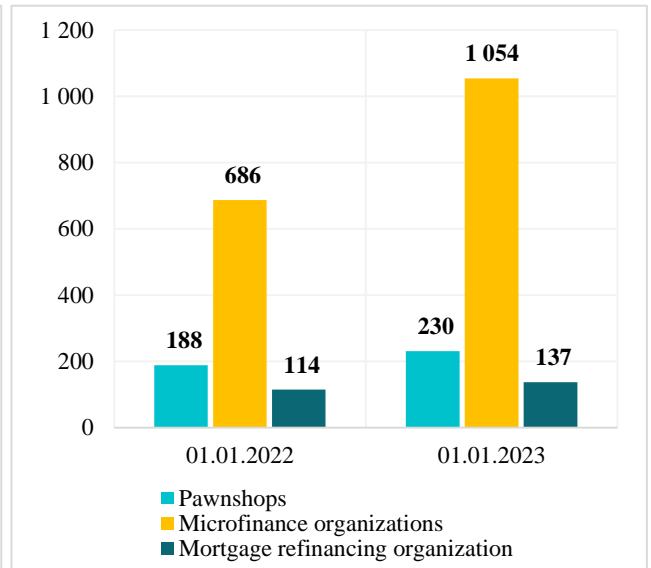


Figure 2.4.9

Total capital of NCO, in billion soums



The increase in the total capital of NCO was mainly due to the increase of the authorized capital by **206** billion soums and the retained profit by **47** billion soums.

The total income of NCO was **1.4** trillion soums, **89** percent of which was interest income.

Figure 2.4.10

ROA in NCO, in percent

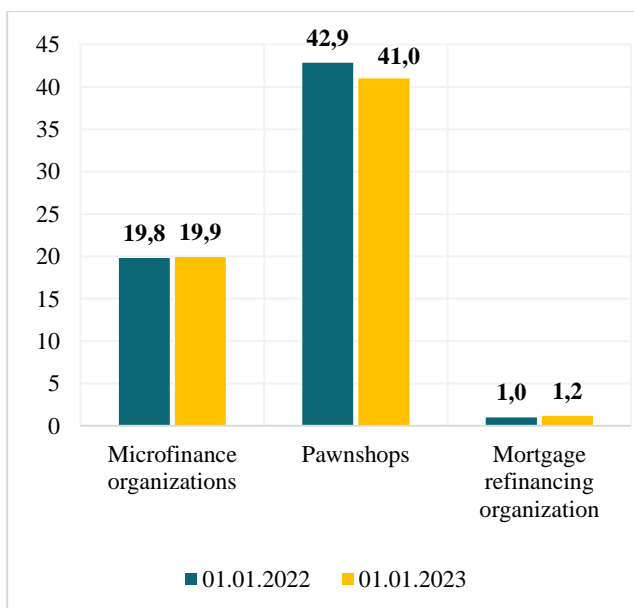
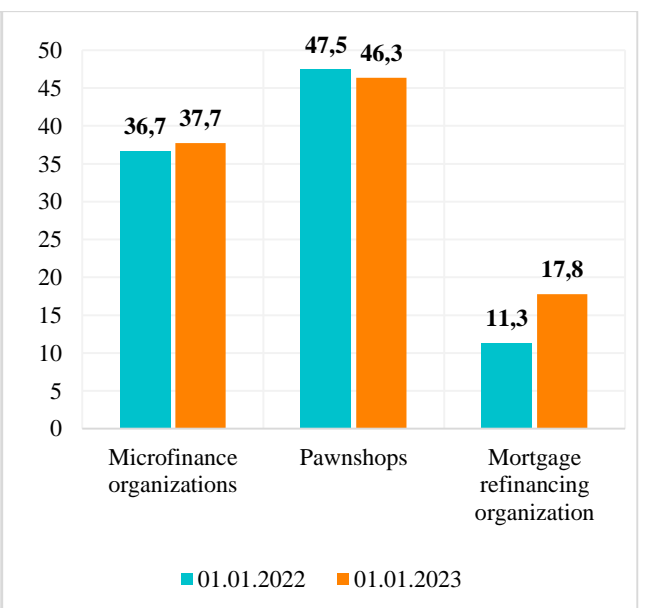


Figure 2.4.11

ROE in NCO, in percent



The total expenses of NCO increased by **324** billion soums (60%) and amounted to **863** billion soums. In particular, **41** percent of total expenses or **357** billion soums were interest expenses, the main part of which (256 bn soums) consisted of interest payments on loans taken from banks.

The net profit of **microfinance organizations** increased by **58** percent compared to 2021 and the rentability of their assets and capital was **20** percent and **38** percent respectively.

The net profit of the **mortgage refinancing organization** almost doubled compared to 2021, the ROA remained almost unchanged at **1** percent and the ROE increased by 6 p.p. and constituted **18** percent. The fact that the level of profitability of assets remained unchanged compared to the corresponding period of 2021 was explained by the high growth of the organization's assets (by 1.6 times).

2.5. Regulation and supervision of credit organization activities

2.5.1. Regulation and supervision of commercial banks

In 2022, work aimed at improving the methodology and instruments for regulating the activities of credit organizations was continued based on the international standards on bank supervision and the recommendations of the Basel Committee.

In particular, to implement enhanced control over banks that are likely to have a significant impact on the economy and the stability of the banking system, in cooperation with the experts of the World Bank, based on the guidelines of the Basel Committee on Banking Supervision "On the supervision of domestic systemically important banks", the standards of the Financial Stability Board "On policy measures for the supervision of systemically important institutions" and the experience of foreign countries, a **temporary procedure for identifying systemically important banks** was developed and tested throughout the year.

In order to prevent systemic risks and crises by implementing strengthened prudential control over systemically important banks, it was decided to identify these banks based on 9 indicators grouped by 4 criteria.

According to this regulation, 6 banks, including Uzmilloybank, Uzsanotqurilishbank, Asakabank, Agrobank, Ipoteka-bank and Xalqbank were recognized as systemically important banks in 2022.

In the reporting year, appropriate measures were continued to improve the control methodology of the CBU to gradually move from **micro**-level control to **macro**-level regulation.

In particular, to remove excessive bureaucratic obstacles in the processes related to obtaining a bank guarantee and to ensure that banks carry out their activities in accordance with the procedure established by legislation, a system of independently establishing requirements for the principal to obtain a bank guarantee was established in accordance with the bank's internal policy and risk appetite.

Moreover, in order to work with non-performing loans and to improve the mechanisms of their collection, proposals were made to ensure the priority of the rights of creditors in relation to property provided as collateral, to switch to full market principles in the sale of collateral property through auction and to introduce the practice of out-of-court collection of collateral obligations.

In order to improve the macroprudential measures aimed at ensuring the stability of the financial system and not increasing the debt burden of the population, the list of sources of income to be taken into account in the analysis of the borrower's solvency has been expanded.

In the reporting year, work on improving the risk-based bank supervision system of the CBU was continued.

In particular, based on the World Bank's "Risk-based banking supervision manual", sample presentation information on **business models** and **credit risk** assessment of **4** banks (*Asakabank, Sanoatqurilishbank, Kapitalbank and Silk Road Bank*) was prepared.

Control products were developed by the CBU, which **determine each step and sequence of thematic inspections** on **capital, liquidity coverage**, accurate calculation of **net stable financing standards** and correct classification of asset quality in banks.

Based on these approaches, **19** thematic inspections were conducted **in commercial banks** and **9 in microfinance organizations** in 2022.

Thematic inspections were focused on **strengthening the risk tolerance** of banks, as well as improving **the system of working with non-performing loans and monitoring** by ensuring the correct calculation of **capital** and **liquidity** standards in banks.

During the inspections, the largest **15,328** loans allocated by these banks to legal entities in **national currency** in the amount of **32** trillion soums and the largest **535** loans in **foreign currency** equivalent to **1.7** trillion soums, as well as the largest **13,185** loans allocated to **individuals**, **2.8** trillion soums of which was mortgage loans and the largest **9,896** **retail** loans totaling **574** billion soums were analyzed.

In general, during the inspections, 37 trillion soums worth of loans of 38,944 customers or 58 percent of the total loan portfolio of the banks were covered.

According to the results of the inspection, appropriate measures were taken against banks that did not fairly reflect information on **capital and liquidity** standards in the reports submitted to the CBU.

In addition, a study was conducted in **10 large state banks** in order to provide **practical assistance** to effectively organize the system of working with non-performing loans, to identify potential non-performing loans in advance and to eliminate existing weaknesses in this direction.

According to the results of the studies, in these banks:

- loan allocation and monitoring, prevention of conflict of interest in working with non-performing loans;
- organization of monitoring processes by categorizing loans based on a risk-based approach;
- establishment of a system for early identification of potentially non-performing loans and taking measures;
- recommendations and instructions were given on the introduction and improvement of "**Soft collection**", "**Hard collection**" and "**Legal collection**" methods of working with non-performing loans.

In addition, law enforcement agencies received a total of **2,993** requests to involve the CBU's employees in inspections in 2022, and **1,133** (38%) of these requests were executed in the prescribed manner.

The remaining **1,860** (62%) requests, in particular, **54** requests are related to the examination of the financial and economic activities of enterprises and organizations, **119** requests are **not related to banking activities** and **1,687** requests were rejected since they **have not sufficient grounds** to assign an expert to the check.

In 2022, the CBU imposed suspension of certain operations, **penalty sanctions** and other effective measures against banks that violated the requirements established by law.

In addition, **penalties** in the amount of **3.8** billion soums **were collected** from **26** banks for **56** cases for violating the requirements of banking legislation. In particular:

- **860** million soums for **12** cases determined in connection with the observance of established prudential norms;
- **785** million soums for **3** deficiencies identified in relation to compliance with the requirements set for family entrepreneurship development programs;
- **705** million soums **for 22** identified cases of foreign currency transactions;

- **700** million soums for 7 cases of legalization of proceeds from criminal activities, in the field of combating the financing of terrorism and the financing of the proliferation of weapons of mass destruction identified as a result of the inspection of compliance with legal documents;

- **700** million soums for **11** cases identified by commercial banks regarding the effective organization of information exchange;

- **20** million soums for **1** consumer protection case;

Moreover, due to the increased weight of non-performing loans and non-compliance with prudential regulations on liquidity, **2 commercial banks were banned** from carrying out all asset transactions that lead to the reduction of high-quality liquid assets.

Due to the lack of sufficient liquidity, **2** banks have **imposed restrictions** on deposit attraction and extension of the existing deposit return period.

In spite of the penalty sanctions applied by the CBU and the restrictions imposed on certain operations, the cases of non-compliance with prudential standards were chronically and grossly observed, irregularities were allowed that posed a real risk to the interests of bank depositors and creditors, as well as compliance with the requirements of banking legislation and regulatory documents of the CBU was not done, the licenses of "HI-TECH BANK" and "Turkiston" private joint-stock commercial banks were withdrawn.

2.5.2. Regulation and supervision of non-bank credit organizations

In the reporting year, the systematization of legal documents regulating the activities of NCO was continued.

In particular, the Law of the Republic of Uzbekistan "On non-bank credit organizations and microfinance activities" developed with the technical assistance of the World Bank, taking into account international experience, was adopted on April 20, 2022. By this Law:

- types of financial operations (services) performed (provided) by NCO;
- requirements to the founders, participants (shareholders) of NCO;
- the unified procedure for the account registration of microfinance organizations and mortgage refinancing organization and the procedure for sending a notification about the start of activity by pawnshops;
- proportionate (simplified order or prudential) regulation;
- rules for protecting the rights of consumers of NCO have been established.

Based on the requirements of this Law, regulatory legal documents regulating the activities of NCO have been improved.

In particular, in order to encourage the use of modern information technologies in the provision of financial services and to create a favorable environment for testing new types of financial services, the CBU developed a procedure for **introducing a special legal regime** in the field of financial services.

Furthermore, the procedure for calculating the debt burden of individual borrowers for loans (microloans), the permitted amount of debt burden and the requirements for limiting the growth of the debt burden have been improved.

In addition, a single document "On coordination and regulation of the activities of microfinance organizations and pawnshops" was developed by unification of 3 regulatory legal documents regulating the activities of microfinance organizations and pawnshops.

2.5.3. Risk management related to financial monitoring, economic sanctions and export restrictions

In the reporting year, monitoring of compliance by the CBU towards banks, microfinance organizations, pawnshops and payment organizations with the rules of internal control and the procedure for submitting information to the relative state authorities about **suspicious operations related to the legalization of proceeds from criminal activities and financing of terrorism** (hereinafter – related to the sphere) and systematic work on ensuring control was continued.

The main attention was paid to the implementation of the mechanisms of identification and minimization of risks related to the sphere in the activities of banks, microfinance organizations, pawnshops and organizations providing payment services, ensuring the harmonization of regulatory documents related to the sphere with international standards.

In cooperation with the relative state authorities, the CBU assessed the risks related to the sphere in the bank, NCO and payment organizations and took appropriate measures to reduce them.

It should be noted that the CBU's supervision related to the sphere is carried out based on a risk-based approach according to the risk profile of banks, microfinance organizations, pawnshops and organizations providing payment services.

In addition, 18 commercial banks and 1 payment organization conducted remote and on-site inspections on issues of combating the legalization of proceeds from criminal activities and financing of terrorism in the reporting year.

According to the results of the inspections, penalties in the amount of 700 million soums were imposed on 7 commercial banks and 50 million soums were imposed on 1 payment organization, that made mistakes and deficiencies related to the sphere, as well as measures related to warnings that rigorous measures will be taken against 7 commercial banks if deficiencies are detected in the future.

The international experts of the Eurasian group on combating the legalization of proceeds from criminal activities and the financing of terrorism completed the evaluation of the country's of the efficiency of the system related to the sphere and the compliance of the national legislation with international standards – FATF recommendations.

According to the results of the evaluation, the report "Reciprocal evaluation of the Republic of Uzbekistan" was reviewed and approved at the 36th plenary session of the Eurasian group. According to the report:

Efficiency of the system related to the sphere of Uzbekistan is above average for 6 out of 11 total indicators and equal to the average for the remaining 5 indicators;

National legislation on the level of compliance with FATF recommendations 8 out of 40 recommendations were assessed as "**conforming**", 23 as "**significantly conforming**" and the remaining 9 recommendations were as "**partially conforming**".

It should be noted that the performance indicators of the system related to the sphere in the sectors under the control of the CBU, as well as the compliance of the legislative documents were recorded as positive according to the recommendations of the FATF in this report.

In addition, relevant work was carried out to minimize the risks associated with **economic sanctions** and **export restrictions** and to **improve the compliance control system**. In particular:

– sanction risk management **units** were established in commercial banks and **a special structural unit** that monitors their activities in the CBU;

– in order to **create the legal basis** of the system of regulation and control of banks' sanctions compliance activities, **a project of law** was developed on making appropriate changes to the legislative documents;

– **A conditional analytical council** consisting of the relative employees of the CBU and commercial banks has been established, where the problems arising in the management of risks related to sanctions are **discussed every week** and **experience is exchanged regarding their solutions**;

– appropriate measures are being taken to restrict commercial banks from carrying out foreign trade operations with entities subject to economic sanctions by the US and the European Union, **to form a list of restricted goods for export (re-export)** as well as to combat the circumvention of sanctional restrictions;

– the processes of comparing the participants of the operation with the list of persons under international economic sanctions during the implementation of bank operations **were automated by installing a sanction screening module** in the SWIFT system;

– **a regulation was developed** defining the duties and obligations of managers and employees in charge of entering into practical business relations with persons included in the list of sanctions by commercial banks, making appropriate decisions regarding the implementation of their operations;

– international trade contracts of commercial banks' clients **were checked for compliance** with the requirements of sanctions and restrictions and **the practice of complying** with the requirements for managing risks related to economic sanctions and export restrictions was introduced in working with new contracts;

– **seminars and trainings were held** in cooperation with international financial institutions (**KPMG, Ernst and Young, Deloitte CRIF**) on the establishment of an effective sanctions compliance system;

– **cross-border emission** of international payment cards to non-resident customers **has been suspended.**

III. MONETARY, EXCHANGE RATE AND COMMUNICATION POLICY

3.1. Ensuring price stability

3.1.1. Analysis of the monetary conditions and instruments in 2022

Under the influence of external economic uncertainties in 2022, the Central Bank's monetary policy's level of rigidity was formed differently.

In particular, the CBU's policy rate was increased to **17** percent per year in March and "**tight**" **monetary conditions** were ensured in order to lessen the influence of external concerns on macroeconomic stability.

These monetary conditions in March eliminated the sharp fluctuations in the national currency exchange rate and maintained the balance of savings and consumption in the economy by enhancing the attractiveness of assets in the national currency and ensuring macroeconomic stability. This was done in the face of a temporary decrease in foreign currency flows (*in the form of remittances and export receipts*) and a sharp increase in population devaluation expectations.

The macroeconomic environment in the second quarter of the reporting year developed under circumstances where the effect of external risks was less significant than anticipated and the number of remittances and export revenues increased significantly.

Given the absence of any potential inflationary variables in June and July, the Central Bank lowered its policy interest rate to **15** percent annually. In this instance, the "**relatively tight**" monetary circumstances in the economy were ensured by the **positive** difference of **2-3** percent in real terms.

Through the use of the operational mechanism's tools, decisions on a change in the policy rate in turn caused a commensurate change in interest rates in the interbank money market.

Furthermore, the average interest rates in the money market increased to **18.2** percent in April as a result of the policy rate's increase in March and the temporary decrease in overall liquidity. The average interest rates then decreased to **14.1** percent in December as a result of the banking system's increased volume of liquidity and the policy rate's 2-time reduction.

The decisions made by economic entities are impacted by changes in interest rates in the money market, which are reflected in changes in the interest rates on deposits and loans.

Figure 3.1.1.1

The policy rate of the Central bank, in percent

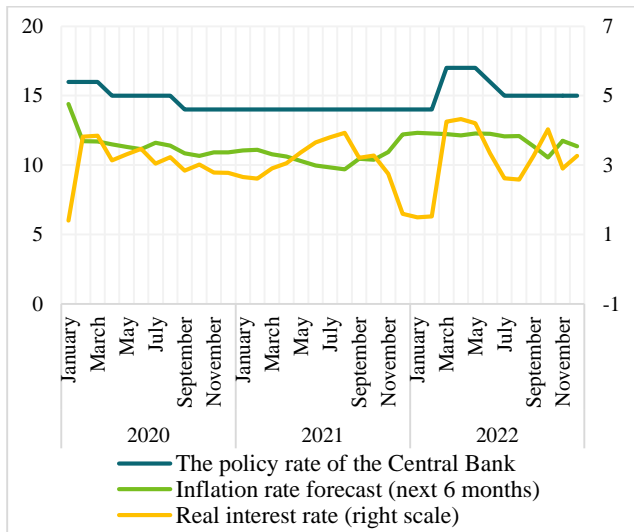
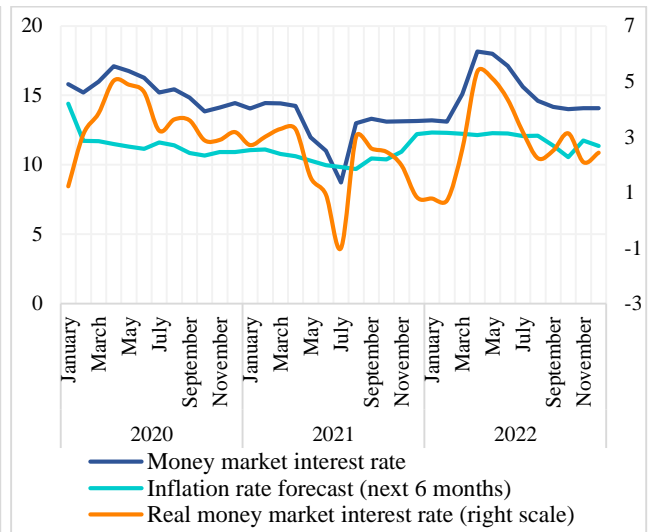


Figure 3.1.1.2

Money market interest rates, in percent



Additionally, in June 2022, the interest rate on time deposits made by people in local currency rose to **21** percent and then fell to **20.2** percent in December.

Real interest rates on these deposits were anticipated to decline from **9.5** percent at the beginning of 2022 to **7.1** percent in December under faster inflationary processes in the economy.

Figure 3.1.1.3

Interest rates on household deposits in local currency, in percent

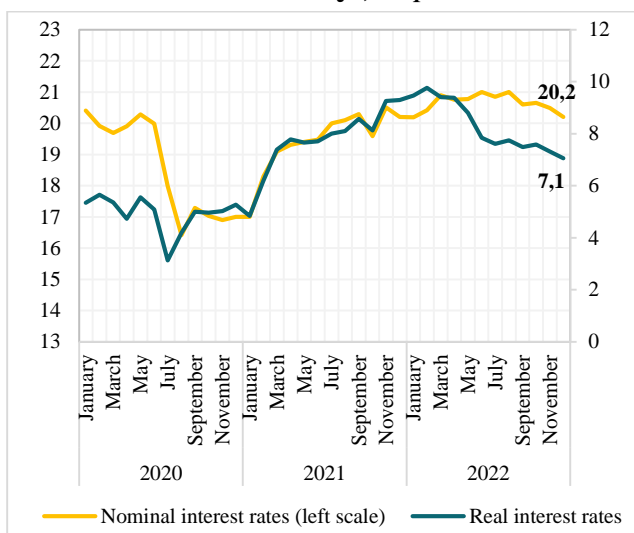
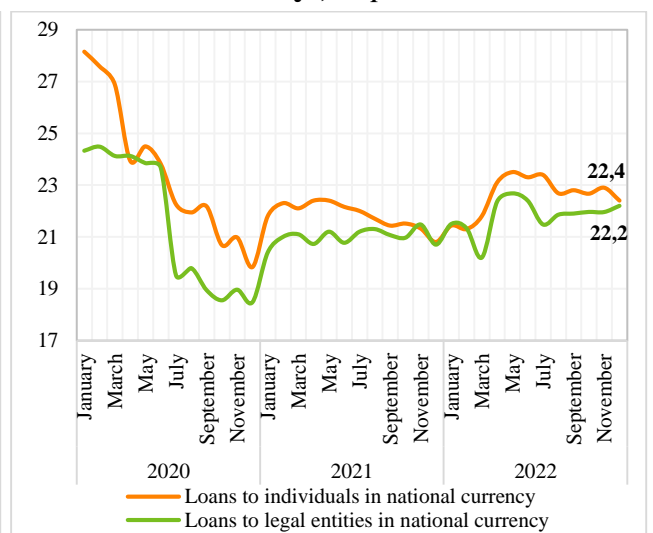


Figure 3.1.1.4

Interest rates on household loans in local currency, in percent



Even after taking into account the households' expected inflation rate for the following year (*15-16%*), the actual interest rates on time deposits in local currency still had a positive differential of about **4-5** percent.

The volume of household deposits in the local currency has expanded significantly, and the households' time deposits have increased by **1.6 times** compared to 2021, reflecting this favorable difference.

The policy rate of the CBU increased in the first half of 2022, which led to a minor increase in the interest rates for loans in the local currency; however, in the second half, a decline was seen. Because of this, interest rates on individual loans in local currency in December were equal to **22.4** percent, and they were equal to **22.2** percent for loans to legal entities.

3.1.2. Changes in the operational mechanism of monetary policy

The CBU modified monetary operations in accordance with the requirements of the inflation targeting regime in 2022, taking into account the increased overall liquidity of the banking sector.

In specifically, as of March 2022, the maximum yield cap on CBU bonds has been raised to the interest corridor's upper limit.

While the longer-term interest rates are generated based on the macroeconomic expectations of the market players and the CBU as a "*price taker*" on the long-term interest rates, these measures primarily affect the short-term liquidity price of the CBU.

Moreover, beginning in March, deposit auctions used to attract liquidity were conducted as "fully covered fixed interest rate" operations. This makes it possible to hold deposit auctions based on bank demand in a limitless amount of lots at the central bank's policy rate.

Further, it helps to improve the efficiency of deposit auctions, the primary tool for managing liquidity, which transfers essential rate decisions to the banking sector and ultimately to the economy's interest rates.

The average monthly limit on CBU bonds was raised from **15** trillion soums at the beginning of the year to **25** trillion soums. These changes were made in response to the banking system's growing need for liquidity, as well as to reduce the impact of monetary factors on inflation by effectively attracting liquidity with longer-term instruments.

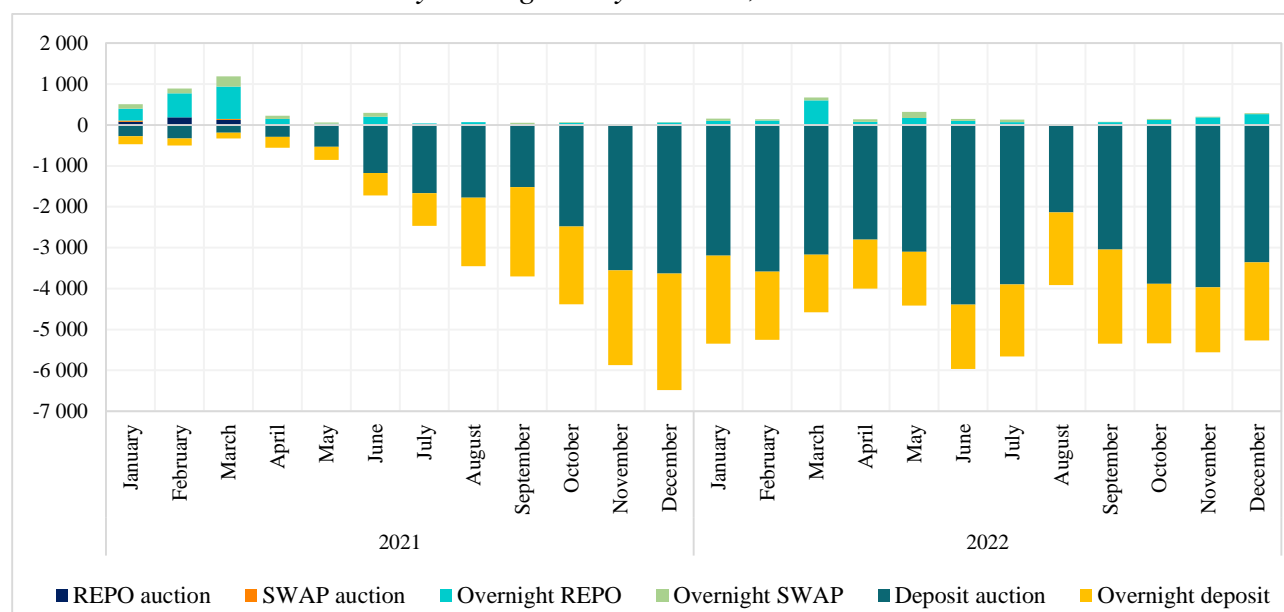
In general, short-term monetary policy instruments were actively used in 2022 to manage the level of overall liquidity, and the volume of these operations increased in accordance with the level of banking system liquidity and the degree of compliance by commercial banks with the established regulations.

In 2022, a total of **86.9** trillion soums in CBU bonds were issued in order to draw the resulting additional liquidity for a longer length of time. The total amount of CBU bonds in circulation as of January 1, 2023, was **14.7** trillion soums.

The general dynamics of liquidity in the banking sector contributed to the CBU's need for liquidity management tools.

Figure 3.1.5

**Short-term transactions balance of the Central Bank,
monthly average daily balance, in billion soums**



Owing to the seasonal decline in government spending and the external concerns that emerged in March, the need for operations to attract cash declined slightly in the first quarter of 2022, while the need for overnight REPO and SWAP operations to provide liquidity increased.

The demand for overnight REPO and SWAP operations has remained at a low level since April due to the balancing of the total liquidity volume and the growing influence of liquidity-enhancing factors, whilst the demand for deposit operations has increased.

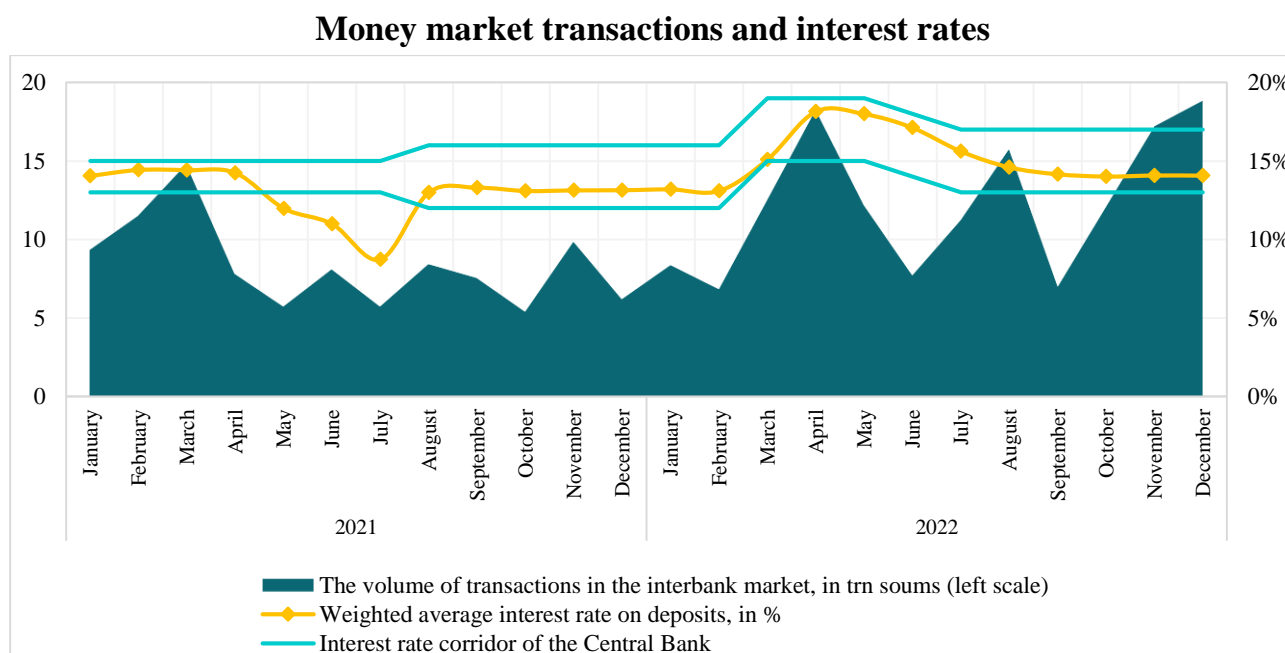
It is anticipated that the amount of additional liquidity in the banking system will rise in the upcoming years as a result of the active continuation of structural reforms in the economy, the improvement of the investment environment, the increase in the flow of foreign currency into the country, and the preservation of the overall fiscal deficit.

3.1.3. Analysis of interbank money market activity and interest rates

In 2022, there were approximately **1.5 times** as many transactions in the interbank money market (*147.8 trn soums*) as there were in 2021. According to the

general liquidity condition, the volume of money market operations surged to **18.8** trillion soums in December from reduction to 7 trillion soums in September.

Figure 3.1.3.1



During the reporting period, weighted average interest rates on money market activities were established across the whole interest corridor and adjusted in response to changes in the policy rate. The interest rate volatility is also moderate, remaining steady in the **14–14.2** percent band for the last four months of the reporting year.

The high level of liquidity in the banking sector explains why interest rates in the money market are lower than the policy rate.

Real interest rates on the money market declined in the second half of 2022 and formed about **2-3** percent, according to calculations based on the anticipated inflation rate for the following time frame.

The policy rate was lowered from 17 to 15 percent in June and July, and the money market's nominal interest rates were likewise lowered.

This demonstrated how "**relatively strict**" monetary conditions are being maintained in the economy via real interest rates in the money market.

Together with EBRD experts, a technique for determining the money market benchmark interest rate was devised. On the basis of this approach, a daily calculation and publication of the UZONIA benchmark interest rate, UZONIA index, and term UZONIA rates has been established.

Figure 3.1.3.2

UZONIA benchmark interest rate, in percent

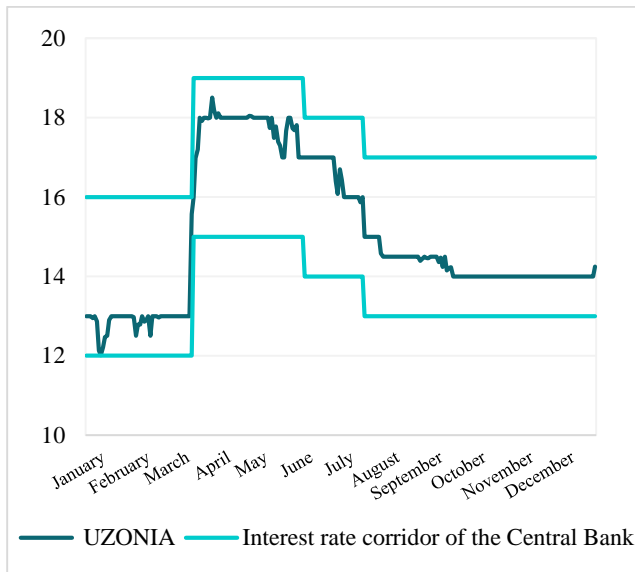
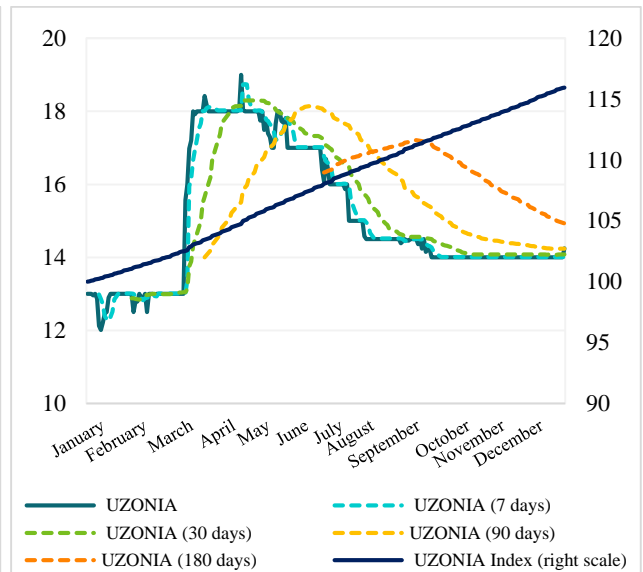


Figure 3.1.3.3

Term UZONIA interest rates and UZONIA index, in percent



The amount of transactions undertaken in the interbank money market has increased, and the average time of transactions has decreased, both of which are indicators of the commercial banks' rising efficiency and activity in managing liquidity. The average monthly amount of transactions in the money market, in instance, surged by **1.5 times** in 2022 and was made up of **12.3** trillion soums.

Commercial banks favored managing liquidity in 2022 mostly through overnight operations, while 1-day deposit operations account for **82.4** percent of all money market transactions.

Figure 3.1.3.4

Share of money market transactions by maturity

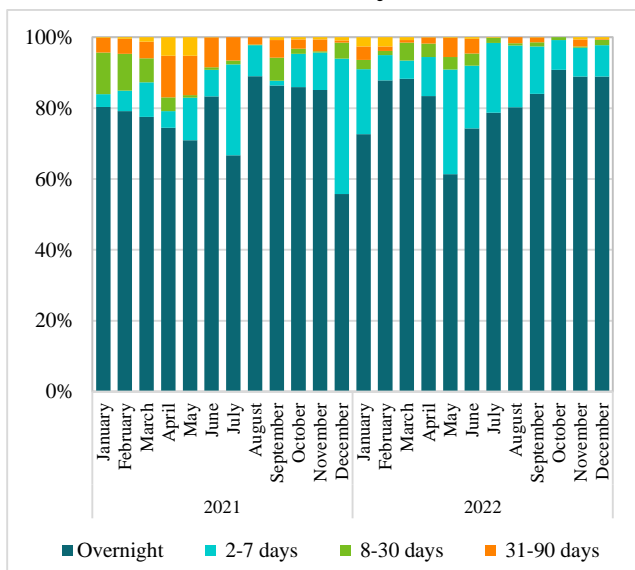
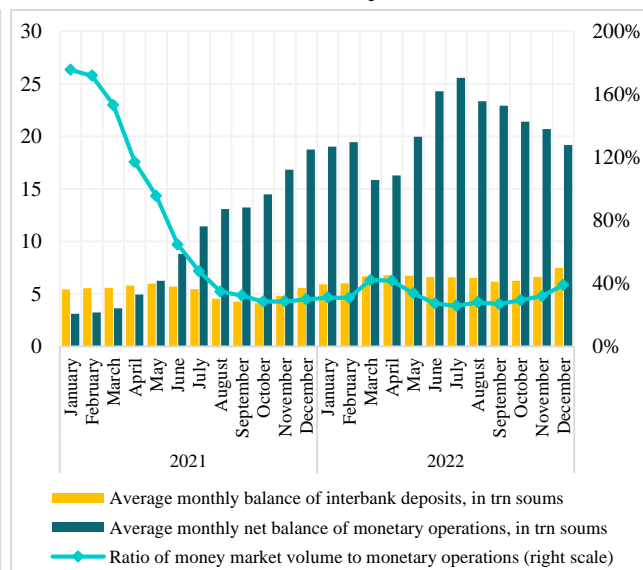


Figure 3.1.3.5

Interbank deposits and average monthly balance of monetary transactions



It should be noted that because money market transactions account for the majority of overnight transactions, the growth rate of the balance of interbank deposits is slower than the growth in transactions volumes.

In response, the monthly average balance of monetary operations increased by **2.2** percent compared to the similar period of 2021 and reached **19.2** trillion soums in December 2022 as a result of the banking system's liquidity being more evenly distributed.

Because of this, the ratio of interbank deposits to monetary transactions climbed during this time and reached **39** percent in December, which is **9** p.p. more than what was recorded for the same period in 2021 (30%).

Comparing to the relatively large amount of liquidity regulation operations of the CBU, the relatively low volume of operations in the money market is explained by the presence of credit risk and the practice of banks placing mutually exclusive restrictions because the majority of operations take place in the "unsecured" money market.

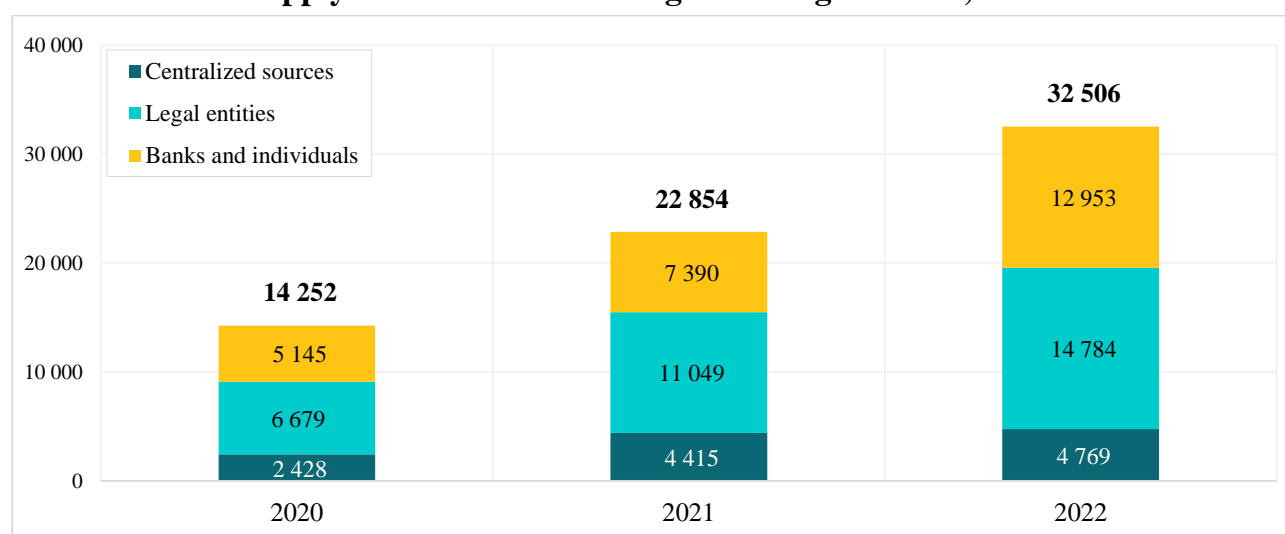
3.1.4. Analysis of domestic foreign exchange market operations

As a result of shifting foreign market conditions and rising economic activity in 2022, the domestic foreign exchange market emerged amid rapidly increasing foreign currency demand and supply.

Foreign **currency supply** on the domestic currency market totaled **32.5** billion dollars in 2022 (*excluding CBU interventions*), of which **14.8** billion dollars (45.5%) came from legal intities, **12.9** billion dollars (39.7%) from banks and individuals, and **4.8** billion dollars (14.8%) from centralized sources.

Figure 3.1.4.1

Sources of supply on the domestic foreign exchange market, in million dollars



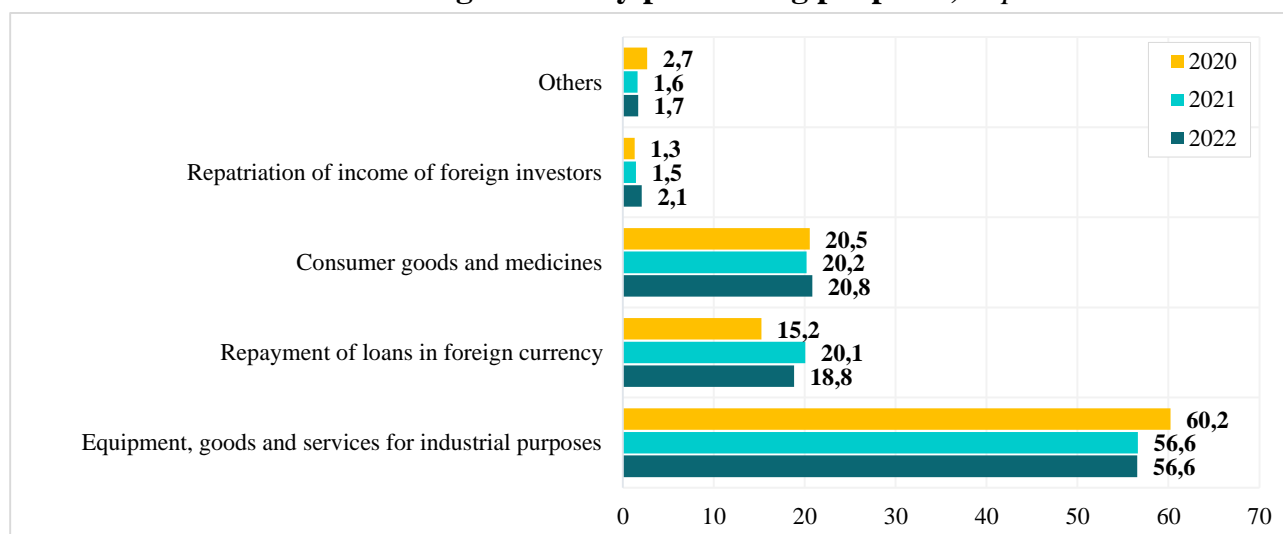
In addition, compared to 2021, the entire volume of the demand for foreign currency surged by **1.4 times**, reaching **36.6 billion dollars**. Legal entities supplied 75.7 percent of this demand, while individuals supplied the remaining 24.3 percent.

The equilibrium between supply and demand was maintained, and interventions in the domestic currency market totaling **4.1 billion dollars** were carried out in accordance with the CBU's "neutrality principle."

Legal entities' currency dealings. The demand for foreign money by legal entities surged by **1.3 times** in 2022, reaching **27.7 billion dollars**.

Figure 3.1.4.2

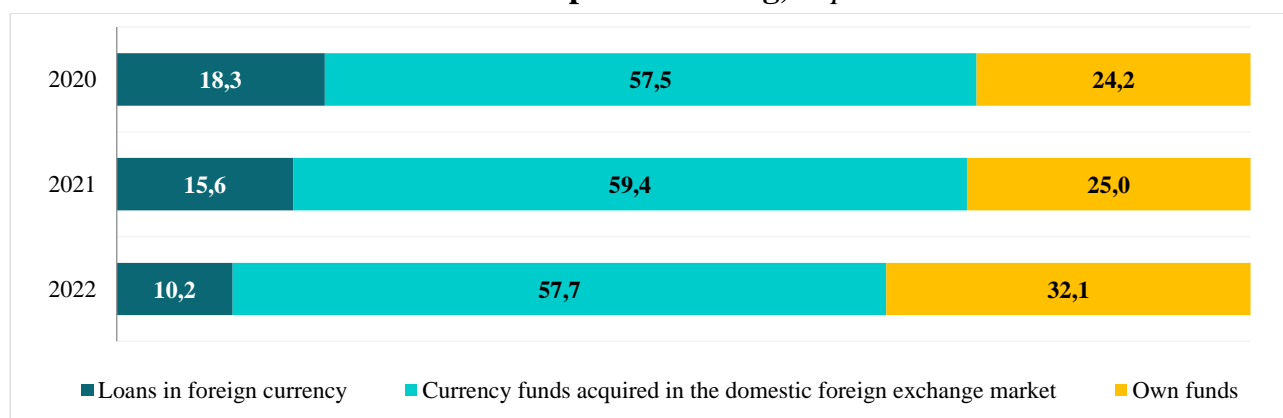
Structure of foreign currency purchasing purposes, in percent



The import of production equipment, raw materials, and services accounted for **56.6 percent** of the foreign currency in the domestic currency market, while the repayment of foreign loans accounted for **18.8 percent**, the import of consumer goods and pharmaceutical products accounted for **20.8 percent**, foreign investors and income repatriation accounted for **2.1 percent**, and the remaining **1.7 percent** was purchased for other purposes.

Figure 3.1.4.3

Sources of import financing, in percent



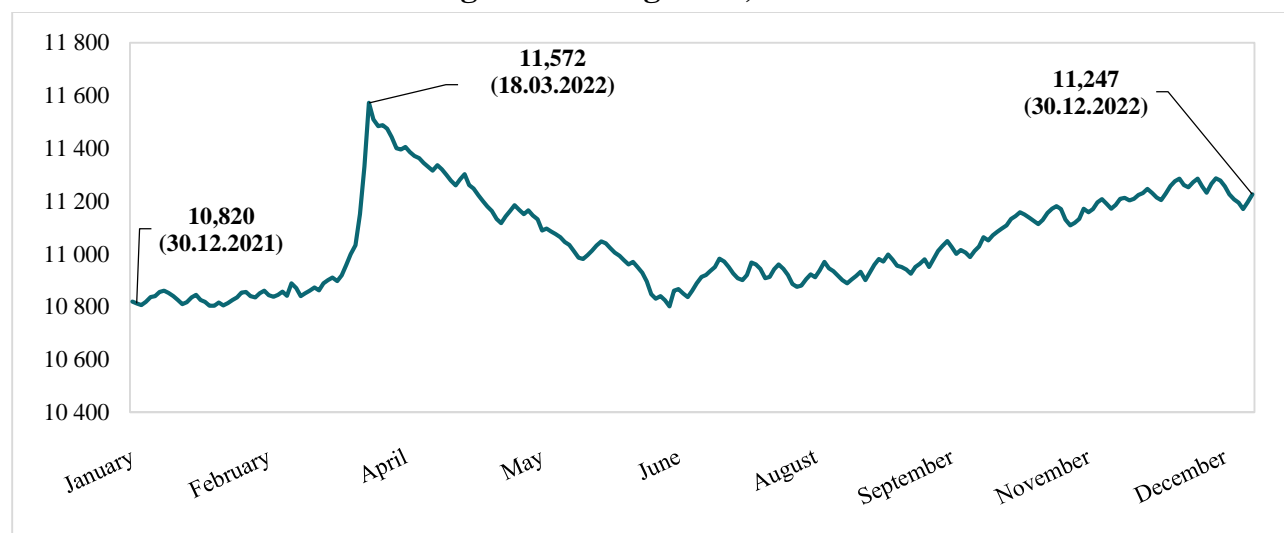
In 2022, the amount of economic entities' import payments climbed by **1.3 times** compared to 2021, reaching **34.5** billion dollars, with foreign exchange reserves purchased on the local currency market covering **57.7** percent of these payments.

In 2022, the monthly average number of business entities that purchased foreign currency in the domestic currency market reached 11.5 thousand, up **16** percent from 2021.

The dynamics of the national currency's exchange rate were determined by demand and supply variables in the domestic currency market, as well as external and internal economic situations.

Figure 3.1.4.4

Change of exchange rate, soum/dollar



In 2022, a large surge in demand for foreign currency was noticed in the first weeks of March, against the context of global economic uncertainty, depreciation of partner countries' currencies, and increasing devaluation expectations of the public and business entities.

As a result, the national currency exchange rate is expected to fall by more than 7 percent compared to the beginning of the year.

In this case, timely monetary policy tightening resulted in a significant decrease in demand for foreign currency and an increase in supply across all segments of the foreign exchange market, while the flexible exchange rate served to mitigate the negative effects of external shocks.

In general, the national currency compared to the dollar depreciated by **3.9** percent in 2022, fluctuating between **10,801-11,572** soums.

3.1.5. Monetary policy transmission mechanism measures to increase efficiency

The impact of the CBU 's monetary policy actions on economic processes in order to reduce the amount of inflation in the economy occurs via a variety of directions.

The **interest channel** is one of the key transmission channels in the inflation targeting system. The **policy rate** is the primary monetary instrument used by the central bank.

By adjusting the policy rate, the Central Bank influences interest rates on deposits and loans in the economy, financial asset values, and macroeconomic expectations.

Significant adjustments were made to the operational mechanism during the reporting year, boosting the efficiency of the transfer of decisions to the money market.

The Central Bank's policy rate was adjusted **three times** in 2022, and these adjustments were rapidly reflected in money market interest rates.

A favorable trend in the transfer of money market interest rates to deposit and loan interest rates has been noticed, and efforts to develop this section of the interest channel are planned for the next round of reforms.

The EBRD has contributed a technical assistance program aimed at "**improving the transmission mechanism of monetary policy**", with the major focus on strengthening the effectiveness of the interest channel.

A certain duration is required for the transfer of changes in interest rates generated in the money market to the price of deposits. Given that banks' deposit bases are relatively modest (*the ratio of deposits in total liabilities is roughly 40%*), the goal is to effectively attract non-bank funds into the banking system and therefore boost the deposit base.

Current interest rates offered by banks, including interest rates on time deposits in national currency, are deemed favorable in conditions of lowering inflation and reasonably stable exchange rates, and contribute to a dramatic growth in the amount of savings.

It is projected that the repatriation of savings to the banking system would continue in the future years, owing to the availability of real positive interest rates on national currency deposits, and that the dollarization of deposits will decline. This, in turn, suggests that the interest rate channel of monetary policy has grown in importance.

Deposit interest rates approach money market interest rates and exhibit comparable dynamics as the deposit base grows. As a result, when the interest margin is constant, loan interest rates tend to follow the same pattern as deposit interest rates.

The high demand for loans that had built over many years manifested in the last 4-5 years and was represented in a sharp increase in the volume of credit investments in the economy, and while it has slowed slightly in the last two years, the high growth rates of retail loans have been maintained. As a result, interest rates on loans to the general public are relatively high.

In the medium run, as the households' debt burden rises and credit demand falls, interest rates on retail loans are predicted to fall and alter in line with interest rates on other banking services.

The work on enhancing the money market benchmark interest rate was completed in 2022, and the technique for calculating the UZONIA interest rate was announced. In the coming years, it is intended to broaden the scope of this interest rate's application in banking practice and to implement **"shifting" interest rate deposit and credit services**.

In this situation, changes in the policy rate are reflected in the money market benchmark rate, and interest rates on deposits and loans adjust proportionately. As a result, "shifting" interest rate banking services are predicted to considerably contribute to an increase in interest channel efficiency.

Exchange rate channel. The relevance of the exchange rate channel and its involvement in monetary transmission is strong in nations with liberalized capital movement and highly advanced financial markets.

In the case of Uzbekistan, the transmission effect of the exchange rate channel is minimal, which may be explained by the existence of capital movement restrictions on the one hand, and insufficient development of financial and capital markets on the other.

Non-residents were authorized to purchase government bonds in 2022, and the construction of infrastructure allowing them to purchase government assets in the next years was deemed a significant undertaking.

At the same time, there is a direct impact of exchange rate changes on inflation, and because devaluation expectations play a large role in the population's inflationary expectations, as well as the significant share of imported goods in the consumer basket, changes in the exchange rate have a rapid impact on inflation.

The "transition coefficient" of the influence of exchange rate fluctuations on inflation was estimated to be in the range of 0.3-0.4 as a result of the investigation.

The medium-term creation of the exchange rate channel is highly dependent on factors such as capital-flow liberalization policies, non-residents' admission into the government securities market, and the dynamics of currency flows into the country.

Credit channel. Beginning in 2021, the economy's credit deposit growth will be balanced and formed within the nominal GDP growth rate. As a result, the impact of monetary forces on inflation is reduced.

The balancing of credit investment growth is largely related to factors such as strict monetary conditions forming in the economy, prudential regulations in place, an increase in the debt burden, an increase in the level of credit saturation, and a reduction in banks' current opportunities to attract external debt.

The credit channel is inextricably linked to the interest channel, and reducing the **level of dollarization of loans** and eventually **eliminating the practice of preferential loans** are regarded as critical steps for their efficient operation.

The establishment of a currency futures market for commercial banks in 2022, as well as its active operation in the future, will allow banks to effectively manage currency risks and allocate loans in national currency at the expense of sources attracted in foreign currency. The expansion of the currency options market is expected to limit the dollarization of loans.

Furthermore, through the reciprocal application of monetary policy and macroprudential rules, it is hoped that credit deposits to the economy will increase in line with nominal GDP growth in the medium run. As a result, the impact of monetary forces on inflation is reduced.

3.2. Analysis of exchange rate policy and operations

In 2022, our republic's exchange rate policy will be based on the obligations accepted within the framework of the "**Articles of Agreement with the IMF**", and the free implementation of calculations on current international operations, as well as the unrestricted purchase and sale of foreign currency for these operations, will be fully guaranteed.

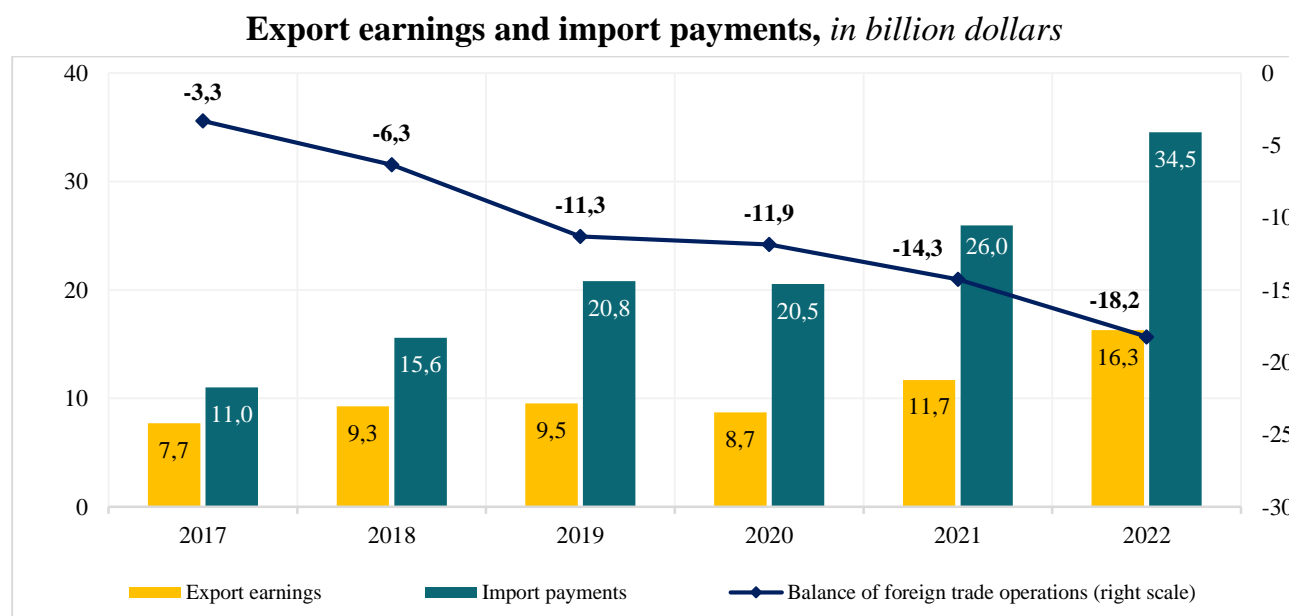
In the face of growing global economic uncertainty, it is vital to execute currency policy with caution and more oversight. In this regard, intensified monitoring was conducted to ensure that the requirements of regulatory and legal instruments governing currency operations by economic entities and individuals were met.

In this regard, detailed explanations and educational seminars for commercial banks on the application of regulations on foreign exchange operations and foreign trade activities are being arranged.

3.2.1. Analysis of the flow of funds in foreign trade transactions

Despite global economic uncertainty and volatility in the main trade partner nations' economies, as well as increased problems in the sphere of transportation and logistics, the volume of international trade activities increased in the reporting year.

Figure 3.2.1.1



Particularly, total legal entity **export revenues** climbed about **1.4 times** comparing 2021 to **16.3 billion dollars**, while import payments increased **1.3 times** to **34.5 billion dollars**.

The negative balance of foreign exchange funds movement in foreign trade activities climbed from 14.3 billion dollars in 2021 to **18.2 billion dollars** in 2022.

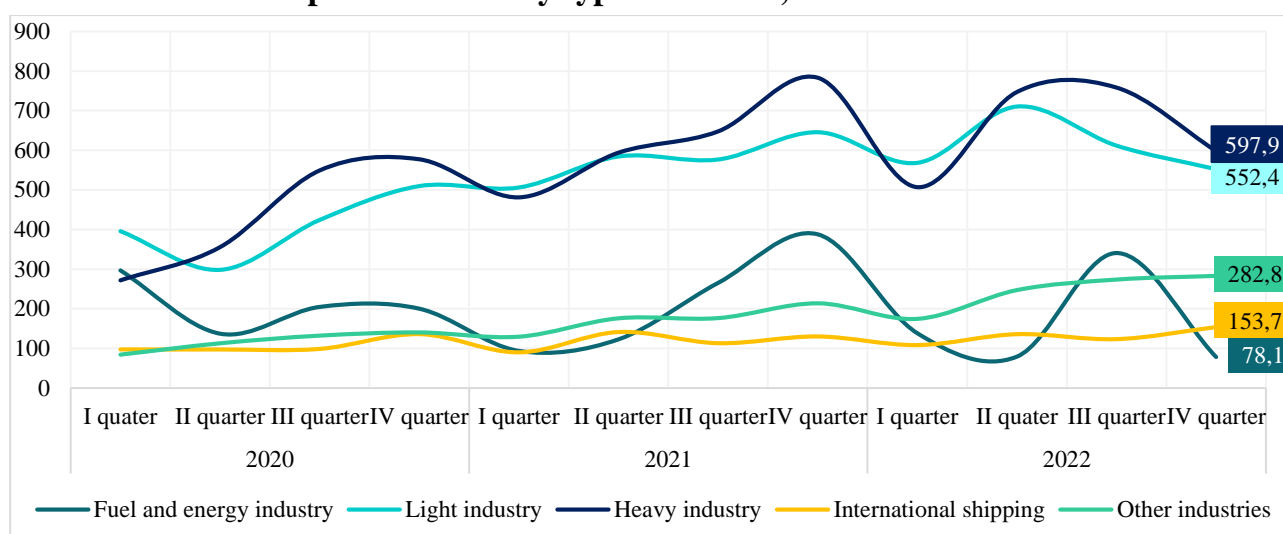
The increase in the price of export-import goods and services as a result of the global inflationary processes observed in 2022, as well as the increase in the complexity of the transport-logistics structure, explains the high growth in the volume of foreign trade operations in nominal terms.

Furthermore, the level of coverage of import payments with export revenues ("Terms of trade") increased from 45 percent in 2021 to **47 percent**, and the rest of the payments directed to imports will be paid by enterprises, with the exception of their own funds, which will be covered by funds purchased in the domestic currency market or loans in foreign currency.

In 2022, the economy's sector enterprises generated **44 percent** of total export earnings, or **7.2 billion dollars**, with heavy industry accounting for **36 percent**, light industry accounting for **34 percent**, and the fuel and energy sector accounting for **9 percent**.

Figure 3.2.1.2

Export revenues by type of activities, in million dollars



Regional and private firms accounted for **56** percent of total export revenue (**9.1 bn dollars**), an increase of **88** percent or **4.3** billion dollars from 2021 to 2022.

In terms of partner countries, **64** percent of export earnings go to five countries in particular: 27 percent (**4.4 bn dollars**) to **Russia**, 14 percent (**2.3 bn dollars**) to **China**, 9 percent (**1.5 bn dollars**) to **Kazakhstan**, 8 percent (**1.2 bn dollars**) to **Türkiye**, and 6 percent (**1 bn dollars**) to **Kyrgyzstan**.

During the reporting year, dollars accounted for **81** percent of total foreign exchange revenues from exports, followed by Russian rubles (**14%**), euros (**4%**), and other currencies (**1%**).

In 2022, **58** percent of total import payments, or **19.9** billion dollars, were made at the expense of money obtained from the domestic currency market, an increase of **1.3 times** over 2021.

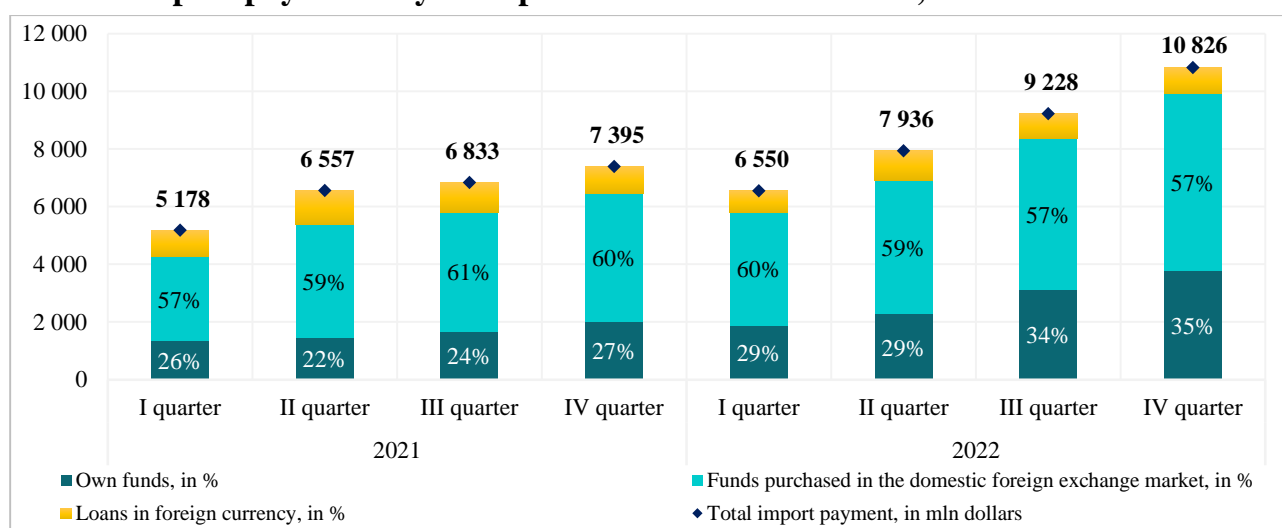
Import payments made at the expense of foreign currency loans declined by **13** percent, or **508** million dollars, in 2022, to **3.5** billion dollars.

59 percent of total import payments were routed to five partner nations, with **Russia** receiving 18 percent (**6.3 bn dollars**), **China** – 17 percent (**5.8 bn dollars**), **Türkiye** – 8 percent (**2.8 bn dollars**), **Kazakhstan** (**2.8 bn dollars**), and **Korea** (**2.6 bn dollars**).

In 2022, **80** percent of import payments under foreign trade agreements were paid in dollars, **10** percent in euros, **9** percent in Russian rubles, and **1** percent in other currencies.

Figure 3.2.1.3

Import payments by enterprises and sources of funds, in million dollars



The increase in the volume of payments under import contracts can be attributed to increased demand for foreign imports of technologies, equipment, and raw materials as a result of increased consumption and investment activity, the volume of fiscal stimulus to the economy, and the large-scale implementation of regional development programs.

3.2.2. Currency transactions with individuals

During the reporting year, measures to develop the currency exchange infrastructure were continued in order to provide additional convenience for the population in carrying out currency transactions, and systematic work aimed at creating all of the conditions for carrying out currency exchange transactions was carried out.

To improve the currency exchange infrastructure and increase the density of its location in settlements, the total number of currency exchange offices (*including automated offices*) was increased to **4.2** thousand, a **21** percent rise over 2021.

Currency exchange transactions with individuals (*purchase and sale of foreign currency*) grew by **1.8 times** in the reporting year compared to 2021, totaling **20.8** billion dollars.

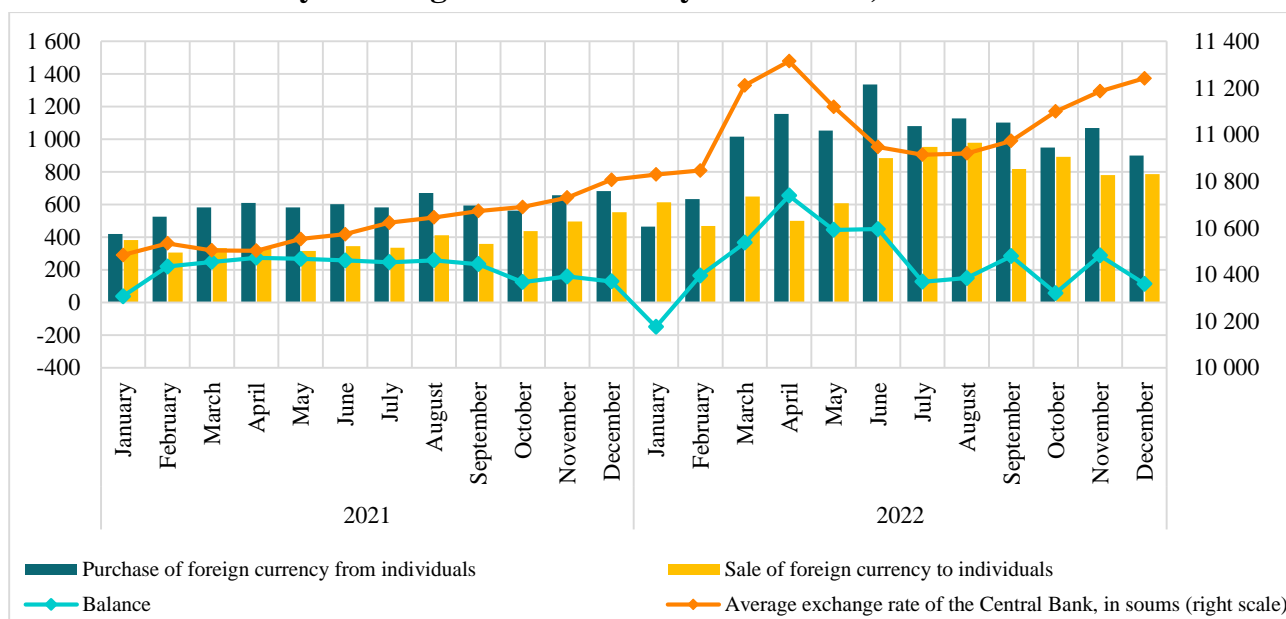
Commercial banks purchased **11.9** billion dollars of foreign currency from individuals in 2022, **1.7 times** more than in 2021.

Simultaneously, commercial banks sold foreign currency money to people worth **8.9** billion dollars, or **1.9 times** higher than in 2021.

The positive balance of foreign exchange operations increased from **2.5** billion dollars in 2021 to **3** billion dollars, serving as an **additional supply factor in the domestic currency market**.

Figure 3.2.2.1

Currency exchange transactions by individuals, in million dollars



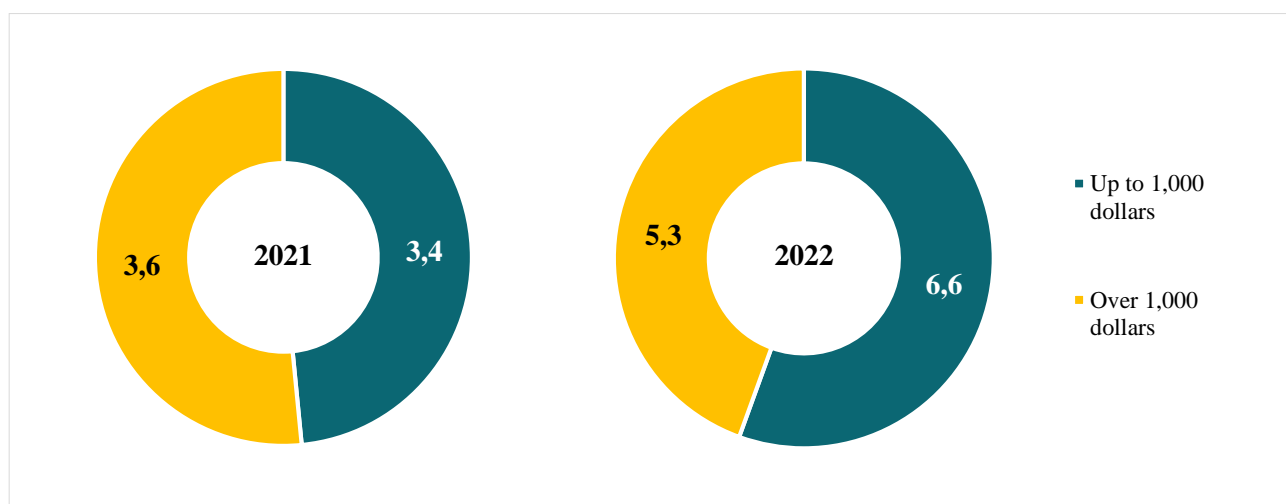
Individual purchases of up to 1,000 dollars in foreign currency climbed from 48 percent in 2021 to **56** percent of total transactions, while sales exceeding 1,000 dollars declined from 52 to **44** percent.

In terms of **foreign currency sold to individuals**, the percentage of transactions up to 1,000 dollars in the entire volume of transactions was **25** percent, while transactions beyond 1,000 dollars accounted for **75** percent of the total volume.

The volume of foreign money **purchased by individuals** in Fergana (*4.3 times*), Andijan (*1.9 times*), Bukhara and Surkhandarya (*1.8 times*) increased greatly in 2022.

Figure 3.2.2.2

Structure of foreign currency purchased from individuals, in bn dollars



Fergana (*2.2 times*), Tashkent city and Samarkand (*2.1 times*), and Andijan (*1.9 times*) regions contributed to a significant increase in the volume of foreign currency sold to individuals during the reporting year.

The dollar's share of total foreign exchange operations remained steady in 2022 at **99** percent, but commercial banks' shares of the volume of purchases and sales of the Russian ruble were **0.7** and **0.6** percent, respectively.

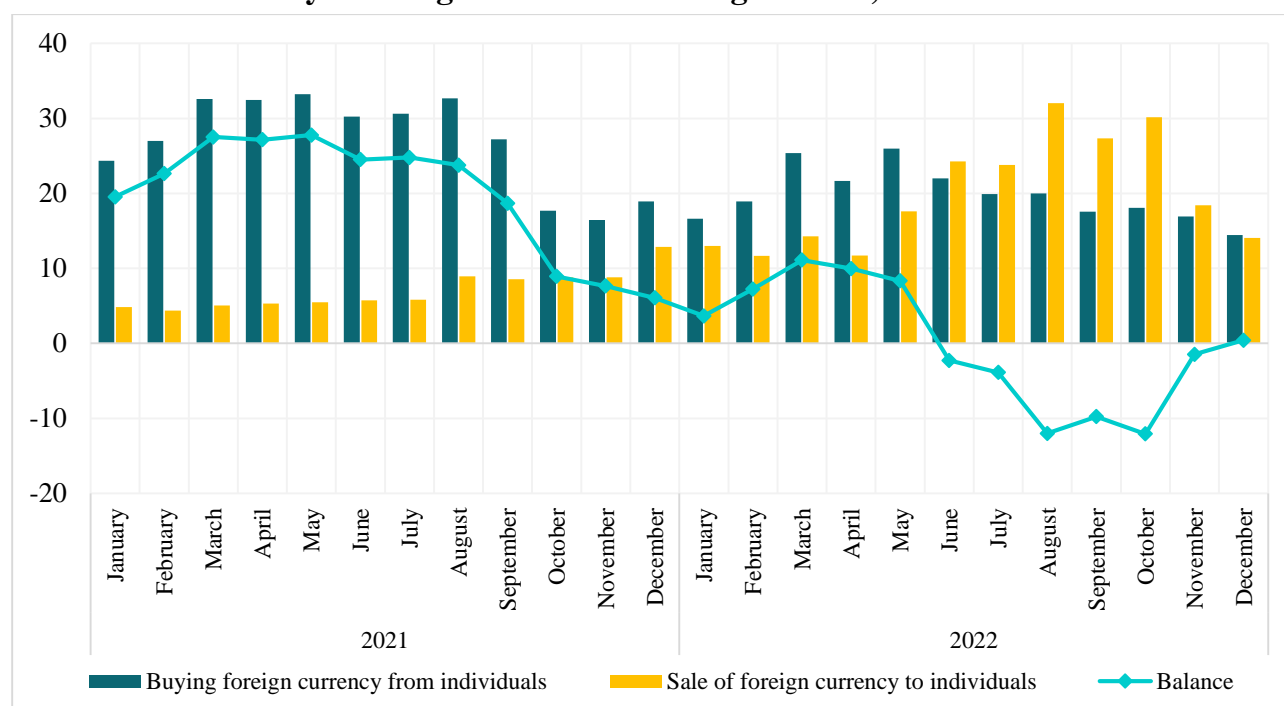
The number of **automated currency exchange offices (ATM)** operating "**24/7**" in crowded places, tourist zones, airports, train stations, shopping complexes, and marketplaces increased by 31 percent from 2021 to **2.1** thousand in 2022.

The amount of currency exchange operations (*purchase and sale of foreign currency*) conducted through the **ATMs** grew by **17** percent in the reporting year compared to 2021, totaling **476** million dollars.

Cash foreign currency purchased from individuals through **ATMs** operating in "**24/7**" mode amounted to **238** million dollars in 2022, a decrease of **27** percent from 2021. A total of **238** million dollars, or **2.8 times** more than in 2021, was sold through the sale of up to 100 dollars to individuals.

Figure 3.2.2.3

Currency exchange transactions trough ATMs, in million dollars



Individuals' cross-border money transactions. In light of economic insecurity in the main trade partner countries, exchange rate fluctuations, and the implementation of currency restrictions in neighboring countries in 2022, special

attention was paid to the provision of continuous withdrawal of funds from banks in foreign currency by the population.

In particular, an agreement on the supply of cash dollars was reached with the New York Federal Reserve Bank of the United States in order to assure that citizens receive their foreign money in cash from banks without interruption.

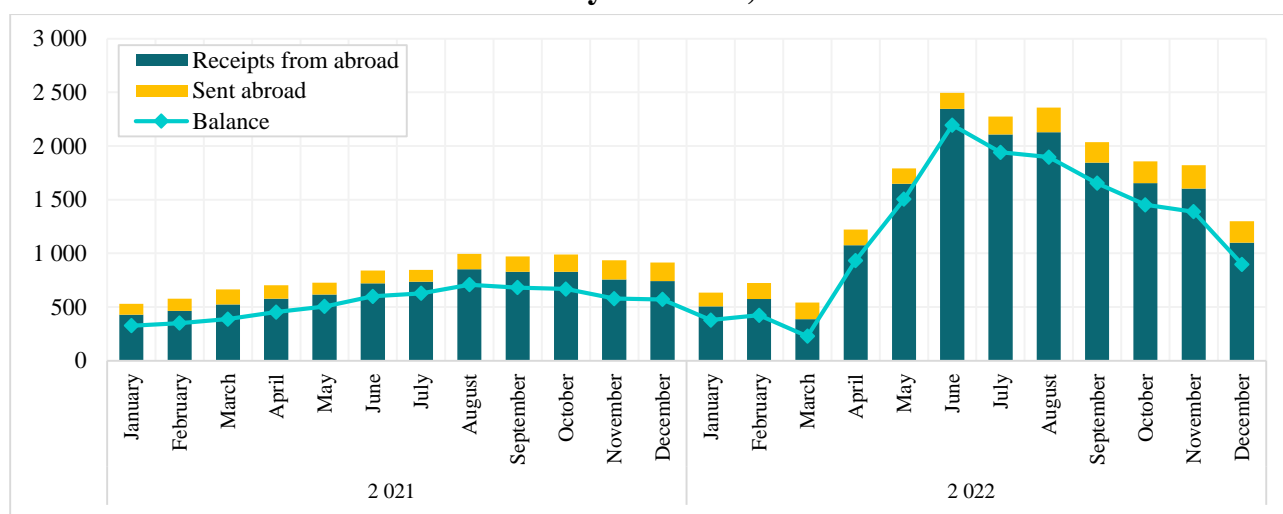
By the end of 2022, the amount of cross-border money transfers (*received and transferred from abroad*) had more than **doubled** when compared to the same period in 2021, totaling **19.1** billion dollars.

Money transfers sent directly (*through P2P*) to individuals' bank cards accounted for **34** percent of total received international cross-border money transfers in the reporting year.

At the same time, foreign currency funds totaling **17** billion dollars, or **2.1** times higher than in 2021, arrived in the country via international cross-border money transfers.

Figure 3.2.2.4

Cross-border money transfers, in million dollars



Tashkent city (22%), Fergana (16%), Samarkand and Andijan (11%) districts supplied 60 percent of the amount of international cross-border remittances in 2022.

Changes in the composition of international money transfers received by the republic were observed in 2022 as a result of an increase in the number of cases of individuals using the official money transfer system and sending a portion of export earnings through money transfers, as well as restrictions in neighboring countries on giving money transfers in dollars.

Individual remittances to other countries totaled **2.1** billion dollars in the reporting year, representing a **29** percent increase over 2021.

Individuals sold **11.9** billion dollars of foreign currency to commercial banks in 2022 (*up from 7.1 bn dollars in 2021*), with a **70** percent ratio to the volume of foreign currency received through international money transfers.

3.3. International reserves of the Republic of Uzbekistan

During 2022, the Central Bank managed, accounted for, and stored the Republic of Uzbekistan's international reserves, as well as compiled and released external sector statistics covering reserve assets.

International reserves, according to international standards, comprise monetary gold, foreign currency, foreign currency securities, special drawing rights and reserve position in the International Monetary Fund, derivative financial instruments, and other assets.

The above-mentioned assets must meet a variety of criteria in order to be included in foreign reserves. Assets must, in particular, be external assets that reflect non-resident demand, highly liquid, in foreign currency freely used in international payments, and under the unfettered supervision and control of monetary authorities. International reserves do not include assets that do not fit the aforementioned criteria.

Monetary gold purchased by the Central Bank from local manufacturing businesses is one of the primary sources of international reserves in the Republic of Uzbekistan.

Since 2017, the principle of "**neutrality**" has been implemented in the administration of international reserves, recognizing the relevance of currency and monetary policy liberalization in ensuring macroeconomic stability.

According to it, the CBU allocate the currency equivalent of gold purchased in order to sterilize the additional money released as a result of the acquisition of precious metals from manufacturing businesses to the domestic foreign exchange market.

Based on the objective of maintaining an acceptable level of international reserves, ensuring the stability of the country's national currency, the financial system, and increasing foreign investor confidence, the CBU creates international reserves in an amount sufficient to implement monetary policy and ensure the settlement of international transactions.

Monthly information on Uzbekistan's international reserves is published on the CBU's official website and in the IMF's "Enhanced General Data Dissemination System" to maintain transparency on the extent of international reserves and their management.

During the reporting year, the CBU continued its cooperation with the World Bank's **Reserve Advisory and Management Partnership** program in order to improve international reserve management practices, take in advanced foreign experiences, improve management system efficiency, and personnel qualifications.

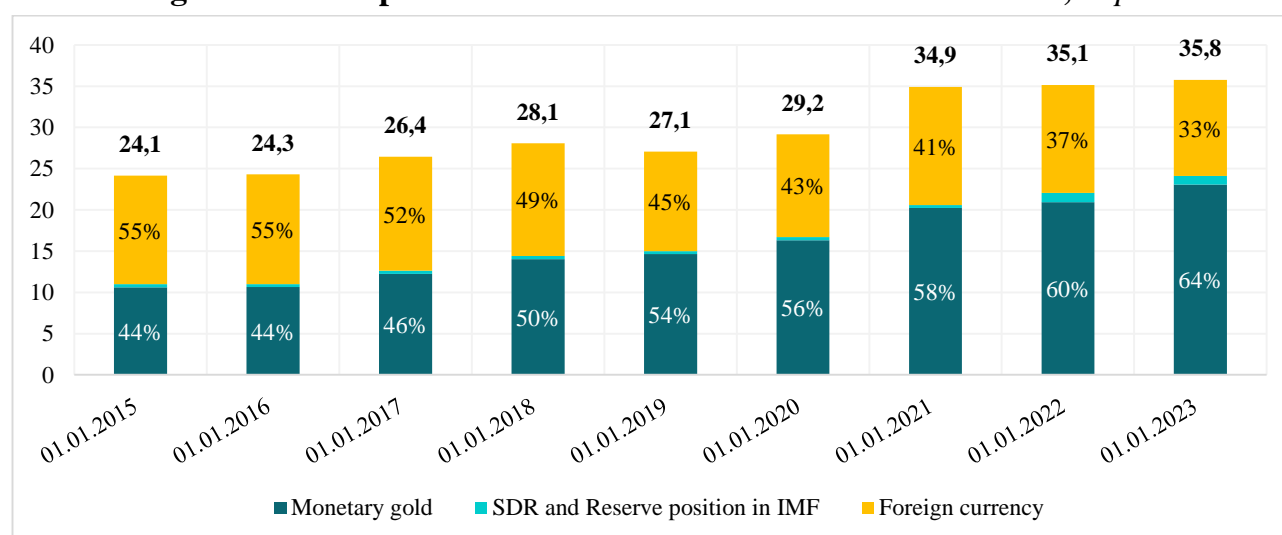
Specifically, during 2022, CBU employees who attended special seminars organized by World Bank experts to improve the management of financial reporting, accounting, auditing, and other international reserves (23 online, 3 offline) received a total of 26 qualification certificates.

3.3.1. International reserves and its structure

The Republic of Uzbekistan's international reserves totaled **35.8** billion dollars as of January 1, 2023, a rise of **628.3** million dollars over the same period in 2022.

Figure 3.3.1.1

Changes in the composition of Uzbekistan's international reserves, in percent

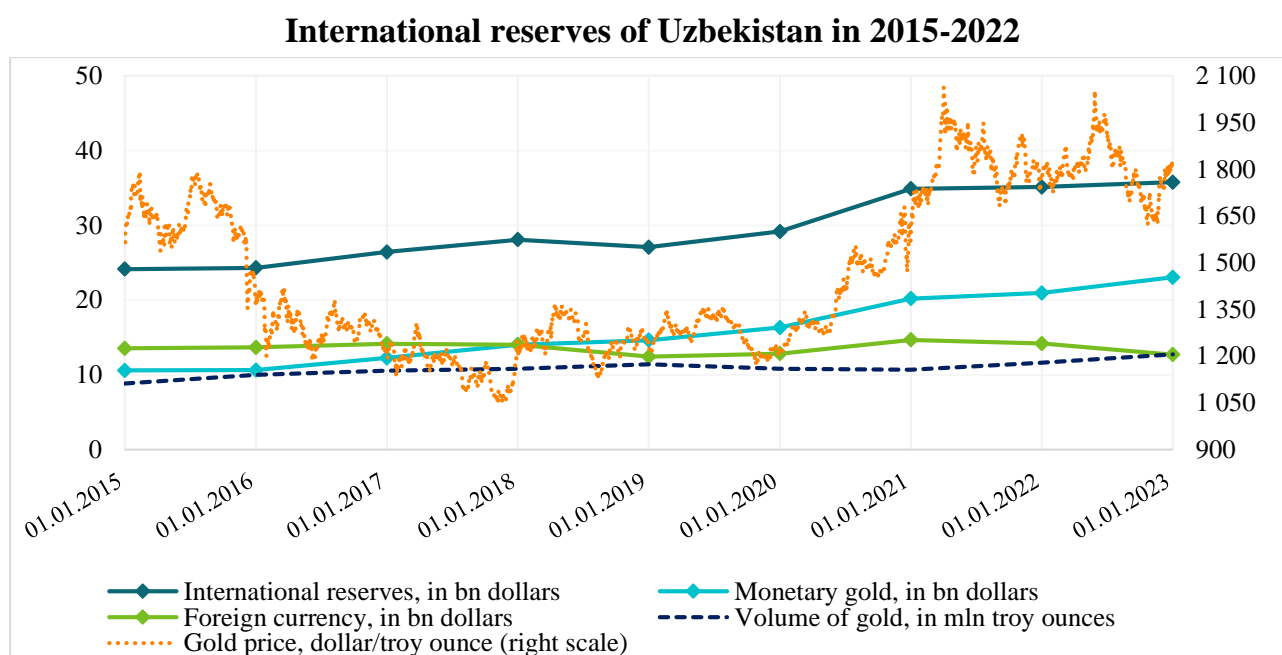


The volume of international reserves increased by **9.3** billion dollars, or **35.3** percent, owing to an increase in the amount of monetary gold in international reserves of 67 tons between 2017 and 2022, as well as an increase in the price of gold from 1,159.1 dollars at the beginning of 2017 to **1,812.4** dollars by the end of 2022. In this example, the impact of gold price changes on the size of abroad reserves was 6.9 billion dollars.

The share of **monetary gold** in the Republic of Uzbekistan's international reserves climbed from 46 percent in 2017 to **64** percent as of January 1, 2023, while the share of **foreign currency** declined from 53 to **36** percent.

Gold has been viewed as a safe asset and a hedge against inflation by investors in the setting of global economic crises, high inflationary pressures, and geopolitical instability, resulting in an increase in gold demand and gold prices.

Figure 3.3.1.2



In particulars, the price of gold saw substantial fluctuation in 2022, with a **20** percent variation between the high (2,050 dollars) and low (1,630 dollars).

The CBU purchased **66.3** trillion soums (103.7 tons) of monetary gold from local producers during the reporting year and exported 70 tons of gold. Foreign currency earnings from gold sales (4.1 bn dollars) were allocated to the domestic currency market.

Foreign exchange asset management. To reduce the **risk of concentration** of foreign currency assets in international reserves corresponding to the share of one country or one partner bank, the number of countries and partner banks with which cooperation relations have been established has increased fivefold in the last five years, reaching 16 and 38 respectively in 2022.

Both the international and financial status of partner banks became crucial in the administration of international reserves, and foreign currency assets were deposited in term deposits with banks operating in countries with high sovereign credit ratings and an international investment rating.

Furthermore, 26 percent of currency assets are **"AAA"**, 31 percent are **"AA"**, 34.7 percent of sovereign credit rating **"A"** countries, and the remaining 8.3 percent of the IMF's Special Drawing Right (SDR).

Currency funds are rated **"AAA"** in 3.3 percent of cases, **"AA"** in 22 percent of cases, and **"A"** in 66.4 percent of cases. The assets allocated to governments and institutions fluctuate in response to market conditions.

Figure 3.3.1.3

Share of foreign currency assets in sovereign credit ratings of countries

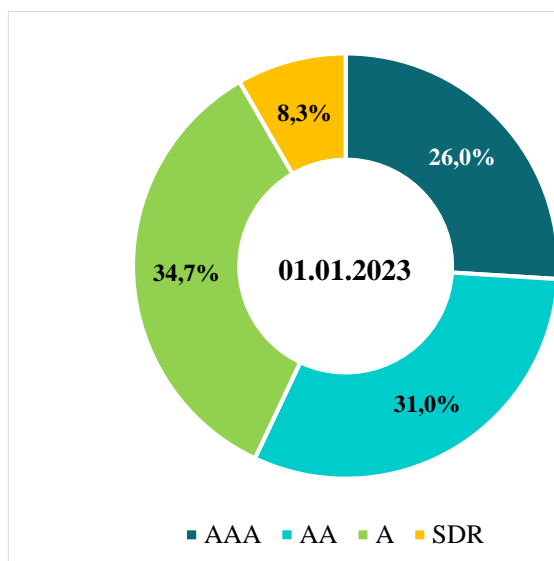
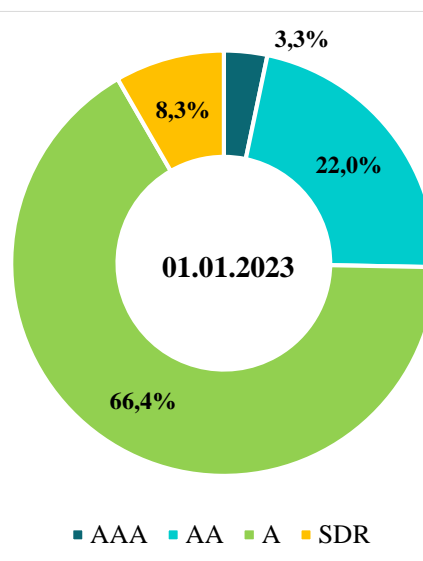


Figure 3.3.1.4

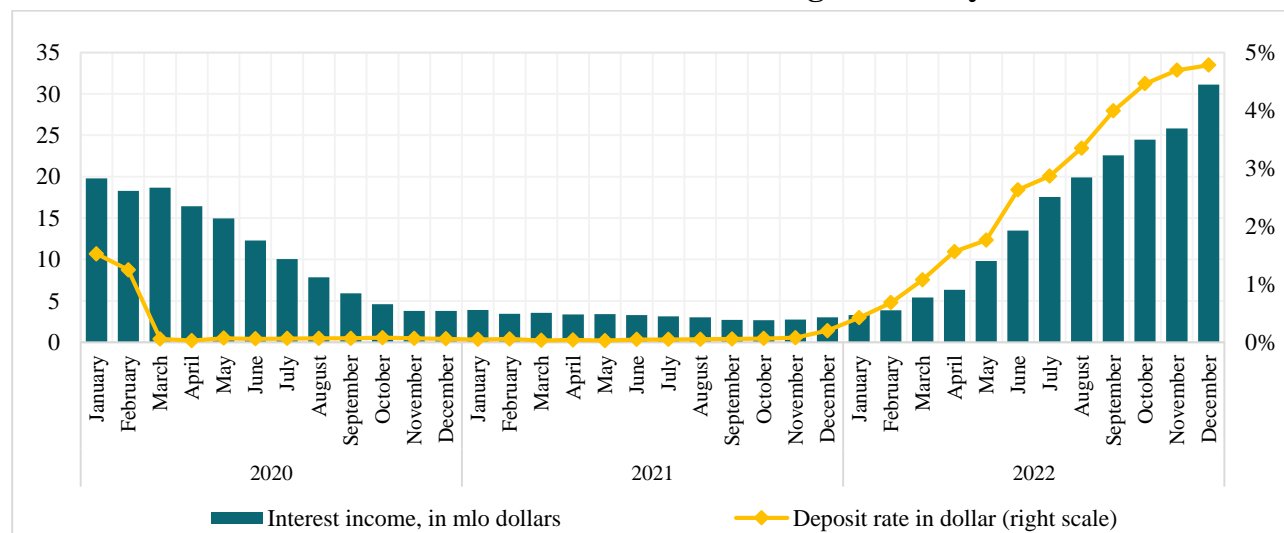
Share of foreign currency assets based on credit ratings of partner banks



The currency mix in international reserves is updated on a regular basis to reflect the country's abroad economic activity, currency and money market conditions, currency value preservation, and currency profitability.

Figure 3.3.1.5

Interest income on assets in foreign currency



Interest revenue from the placement of foreign currency assets in time deposits with foreign partner banks totaled **184** million dollars in 2022, up from 38 million dollars in 2021. The rise in interest income in 2022 can be attributed to an increase in interest rates in the international money market.

3.3.2. Indicators of adequacy of international reserves and their analysis

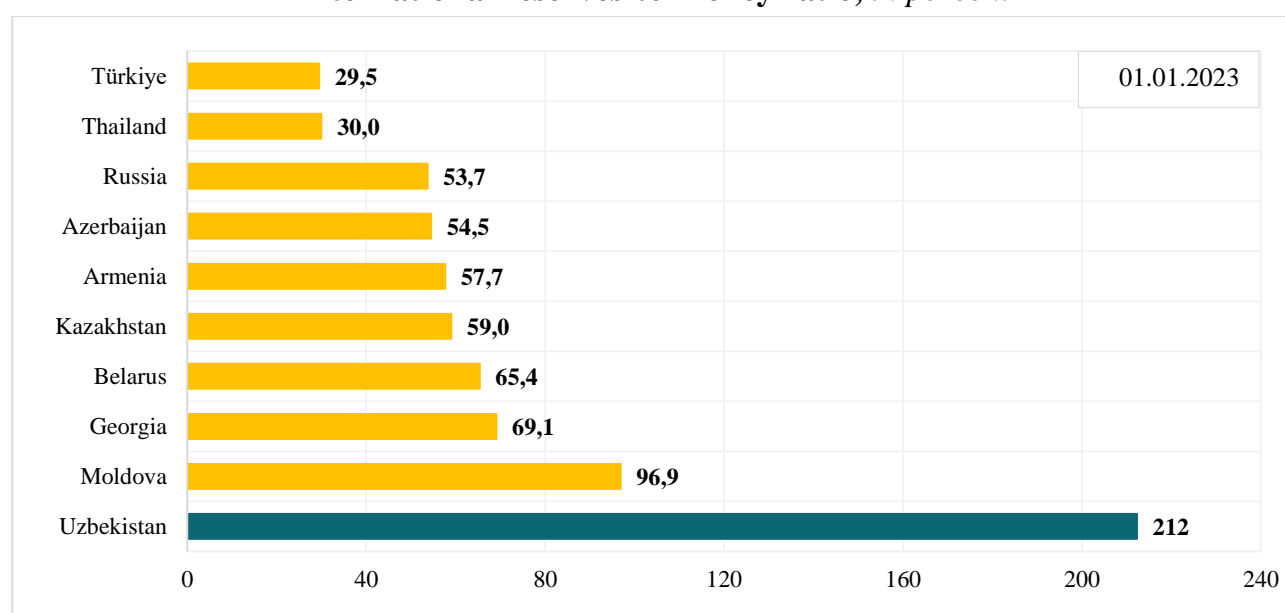
Indicators such as **the short-term debt coverage rate, the import coverage rate, the ratio to broad money supply, and reserve adequacy for developing countries** (*ARA EM – Assessing Reserves Adequacy for Emerging Markets*), which are easily understood by users and widely used in the practice of assessing the adequacy of international reserves, remained high in 2022.

In international practice, the minimum requirements for international reserves based on these indicators are that the reserves can cover short-term debts in full (*100%*), cover **at least three months** of imports, account for at least **20** percent of the broad money supply, and be in the range of **100-150** percent of the ARA EM indicator.

It should be mentioned that **the Republic of Uzbekistan's international reserves currently fully meet these basic requirements**, and our country has comparatively high indicators in this regard among the CIS and other Asian countries.

Figure 3.3.2.1

International reserves-to-money ratio, in percent



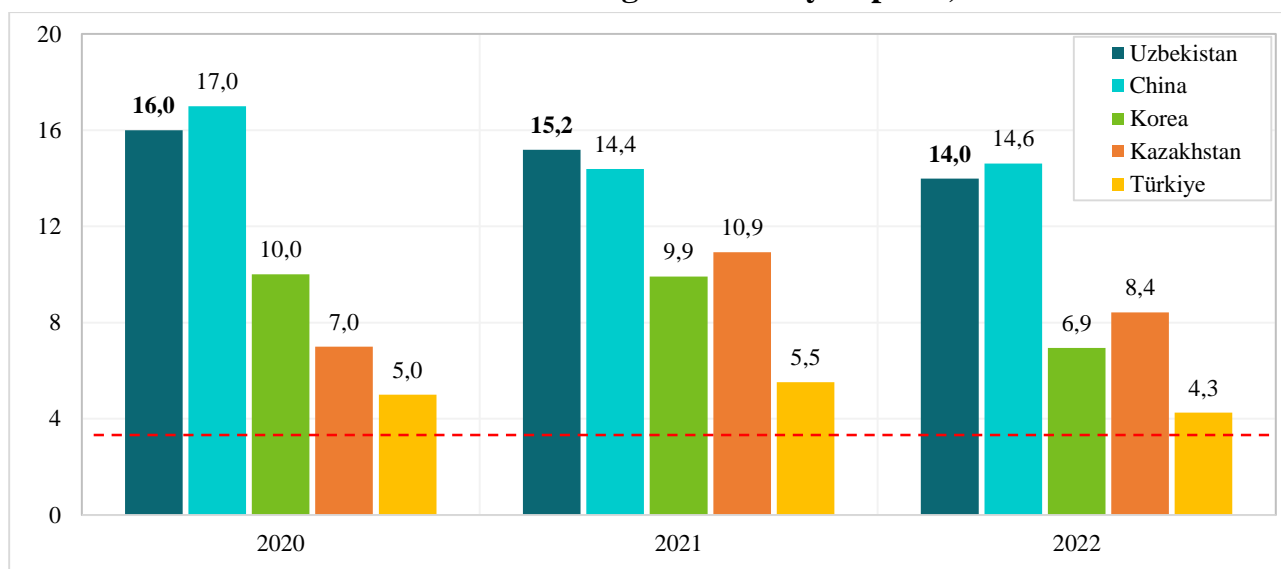
Source: IMF, Central bank

As of January 1, 2023, the ratio of international reserves to broad money supply is **212** percent, which is 10 times greater than the minimum need of 20 percent.

At the same time, Uzbekistan's international reserves will cover **14 months of imports** by the end of 2022. This is over five times the minimum need.

3.3.2.2-чизма

International reserve coverage of monthly imports, in months

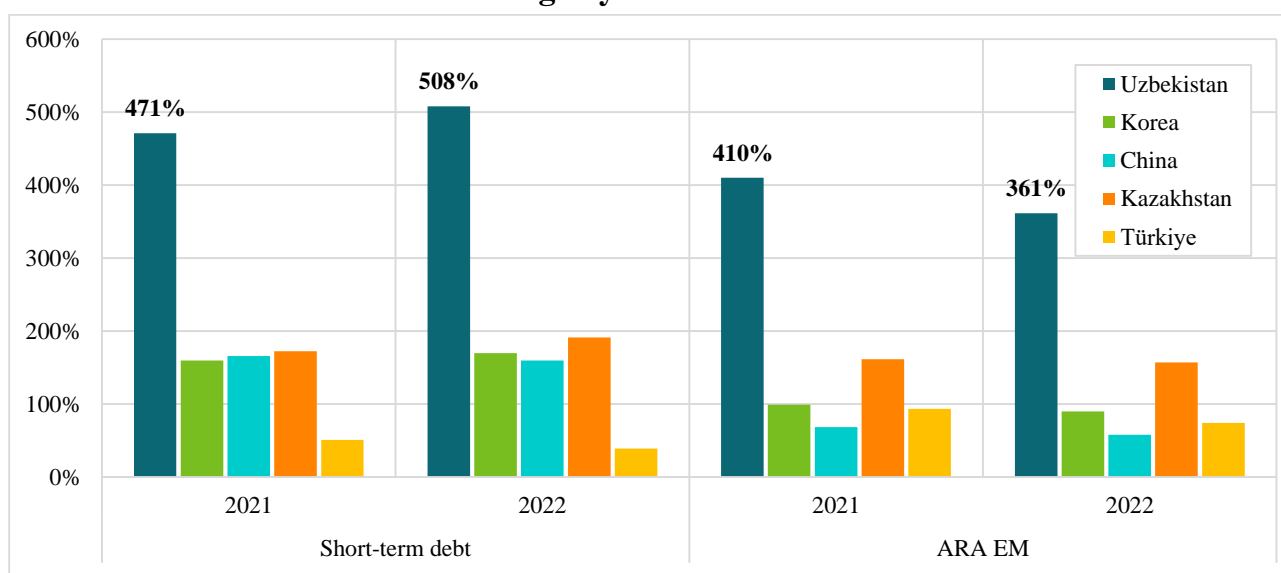


Source: IMF, Central bank

The available foreign reserves fully cover Uzbekistan's short-term external debt, which is due to be repaid in 2023 and is currently **5.1** times more than the minimal required. Reserve adequacy is **3.6** times greater than the minimum need, according to the IMF's ARA EM indicator.

Figure 3.3.2.3

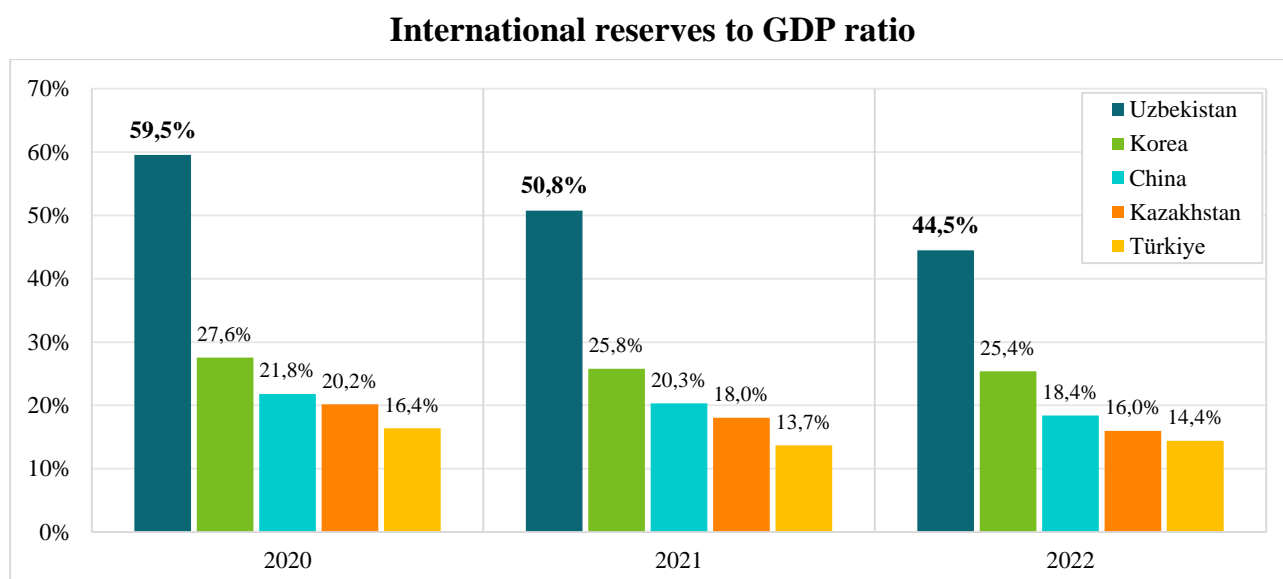
Short-term external debt coverage by international reserves and ARA EM ratio



Source: IMF, Central bank

In comparison to the indicators of the partner countries, Uzbekistan's international reserves were established at a reasonably high level, accounting for **44.5** percent of GDP as of January 1, 2023.

Figure 3.3.2.4



Source: IMF, Central banks of countries

These indicators, like other major macroeconomic indicators, provide investors and other users with positive information.

Gold price forecasts for the global market in 2023. The analysis predicts that the gold price dynamics will be formed in 2023 based on **the basic, alternative-optimistic, and alternative-risky scenarios** of global economic development.

In the **basic** scenario, the global economy experiences a moderate recession, interest rates are raised at a relatively modest rate by Central Banks, and geopolitical conflict remains.

Furthermore, the IMF predicts that a third of the global economy will enter a recession in 2023 as a result of a simultaneous fall in corporate activity in Europe and the United States.

In particular, at the most recent FRS meeting (*January 31 – February 1, 2023*), the policy rate was reduced from 0.50 to 0.25 p.p. (*the current rate is 4.5-4.75%*) in order to mitigate the negative impact of strict monetary policy on economic growth.

According to market participants, based on the level of inflation, the policy rate may be hiked to 5.5 percent in 2023 at a reasonably low rate (*according to the expectations of market participants 3 times per 0.25 p.p.*).

In addition, the US FRS reduced its projection for 2023 economic growth from 1.2 to 0.5 percent, while expectations for the jobless rate jumped from 4.4 to 4.6 percent (*unemployment rate in February 2023 – 3.4%*).

Experts predict that the price of gold will range between 1,800 and 1,900 dollars in 2023 as a result of sustained demand for gold as an inflation hedge and the dollar's increasing profitability.

In the alternative scenario, the global economy experiences a deep recession, as well as high inflationary pressures and an increase in unemployment.

In this scenario, as the US FRS continues to tighten monetary policy and raise interest rates to 5.5 percent or higher (*at least twice per 0.5 p.p. and over*), gold has become an anti-inflation hedge as well as a safe-haven asset, and demand will rise further, with gold prices expected to fluctuate above 1,900 dollars in 2023.

The alternative-optimistic scenario is associated with lower inflationary pressures and global economic growth. In this regard, it is expected that after the geopolitical situation stabilizes and delays in the worldwide supply chain are gradually eliminated, the prices of consumer products and energy resources would fall in the global market.

The fall in the level of inflation in the countries, as well as the emergence of lower unemployment indicators, will urge the world's leading central banks to tighten monetary policy at a slower pace than in the base scenario.

In this situation, the price of gold may fall to 1,600 dollars in 2023 as a result of investors shifting cash away from the gold market, which is regarded a safe asset, and toward the stock market and real sectors of the economy.

3.4. Improving the efficiency of monetary policy through the Central Bank's communication policy

The central bank is taking appropriate steps to ensure price stability and achieve target inflation.

This, in turn, fully conveys the measures taken in this direction to market participants through monetary policy communication, on the one hand, allowing the population and business entities to make the right decisions on investment and business expansion, on the other hand, allowing the individuals and legal entities to achieve the intended inflation target indicators faster.

To improve the effectiveness of communication policy in 2022, attention was paid to information flow coordination, close collaboration with external audiences, information exchange through the established communication system, and the use of modern information technology achievements.

The acceleration of global inflationary processes, as well as the recognized volatility in the economies of the country partners, prompted a change in monetary conditions.

The timely dissemination of accurate and reliable information about this circumstance helped to shift the population's and corporate entities' economic expectations in a positive direction.

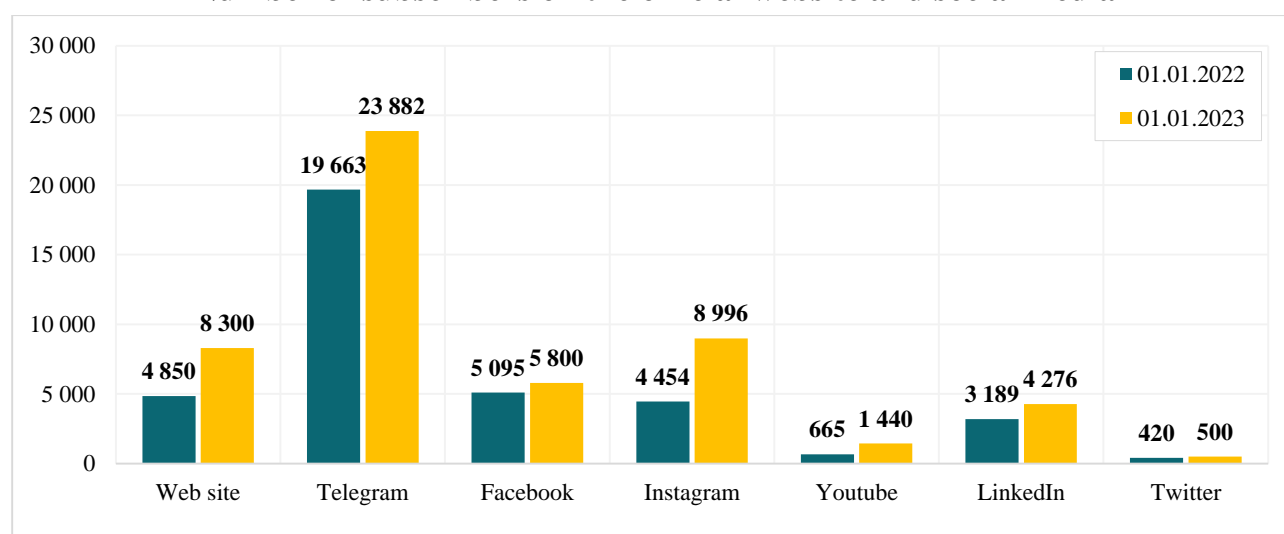
At the same time, prompt and complete coverage of information about monetary policy and the objective, results, and expectations of activities aimed at ensuring bank stability, in general, the macroeconomic situation, is the framework for increasing trust and understanding of the CBU's information policy.

The scope of necessary information and communication channels is being expanded in order to increase public awareness of monetary policy, influence inflationary expectations, inform the general public about changes in the banking system, and protect the rights of banking service consumers.

The CBU's official website, www.cbu.uz, remains the primary source of information. Special sites on social networks such as "Telegram", "Facebook", "Instagram", "Twitter", "LinkedIn", "Youtube" and "Odnoklassniki" play a significant role in communicating information in a simple and graphic manner.

Figure 3.4.1

Number of subscribers on the official website and social media



In specifically, in 2022, the number of visitors to the CBU website from Uzbekistan's territory was 1.5 million, while visitors from other countries was more than 973 thousand.

In comparison to 2021, the number of subscribers to official social media pages climbed over 1.5 times.

The CBU's monetary and financial system stability decisions are distributed by major news agencies like as Reuters, Bloomberg, TASS, Interfax, and Xinhua, as well as regional media outlets such as uz.sputniknews.ru, uz.kursiv.media, and trend.az.

On the official website and social media sites, information and reviews are posted on a daily, monthly, quarterly, and annual basis.

Because analyses of ensuring the transparency of the CBU's activities and the effectiveness of communication necessitate the presentation of statistical data related to the banking system based on the necessary information and explanations, special consideration was given to the provision of statistical data and necessary information to the population in a visual form.

This helps to shape and develop the general public's understanding of financial stability.

During the reporting year, 28 online briefings, press conferences, and training seminars were held, and information was disseminated in real time.

430 messages, 14 press releases, 71 reviews, 3 lectures and speeches, more than 150 statistics and other information on the CBU's and credit organizations' actions, and more than 200 infographics were uploaded on the CBU's official website in 2022.

At the same time, 26 statutes, 34 presidential orders and decrees, and 30 additional regulatory legal papers on the banking system were uploaded on the official website, and a database of necessary information and explanations on the banking system's regulatory and legal basis was created.

The CBU's leaders and responsible employees participated in over 30 shows, seminars, conferences, and roundtable discussions, providing the public with detailed and understandable information about the reforms and transformational changes implemented in the monetary and currency spheres, as well as the banking system.

The adoption of a quarterly seminar-training program for representatives of the mass media covering banking and finance has had a positive impact, with approximately 40 journalists and bloggers improving their skills. In addition, a new format of periodic media communication on the topic "Modern new system in the provision of financial services – advantages and opportunities" was organized.

Seminars and trainings are organized for media representatives to better their skills in analyzing, digesting, and covering information on the CBU's monetary policy and banking sector changes.

In addition, the IMF provided technical assistance during the reporting year in order to improve the CBU's communication policy on monetary policy.

The CBU's communication policy instruments were examined and future orientations were defined within the context of the technical assistance program, in collaboration with IMF specialists. Specifically,

- increase the number and quality of monetary policy communication instruments;
- expand data transmission channels, ensuring data flow continuity;
- study advanced foreign experiences in improving the effectiveness of monetary policy communication;
- measures will be taken to expand mutual cooperation in evaluating and analyzing communication policy effectiveness.

IV. NATIONAL PAYMENT SYSTEM, INFORMATION TECHNOLOGIES IN THE BANKING SYSTEM, DATA PROTECTION AND CYBER SECURITY

In 2022, work was continuing to enhance the type and scope of services in the payment services, as well as to further expand the existing payment infrastructure, aiming to provide high-quality and comprehensive coverage of the population's expanding desires and requirements.

Effective steps have been implemented to identify and avoid cyber security risks associated with payment systems, as well as to combat cyber attacks and financial fraud.

In addition, **6 banks** have begun to operate on the basis of single bank code (MFO) technology in order to deliver excellent banking services to consumers through any bank branch by optimizing commercial bank branches and constructing compact banking service centers.

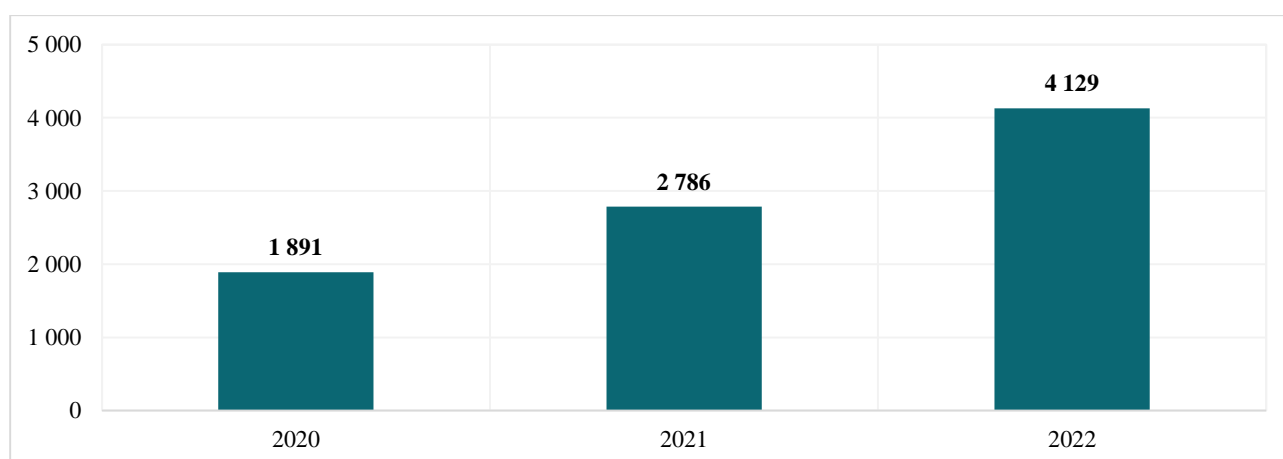
4.1. Central bank payment system activity

Work on the steady and uninterrupted operation of all payment systems in the CBU's infrastructure was carried out systematically during the reporting year.

In instance, the volume of transactions processed through the CBU's Interbank payment system surged by **1.5 times** over 2021 to 4,129.2 trillion soums in 2022. The average amount of one-day transactions increased from 11.1 trillion soums in 2021 to **16.6** trillion soums in 2022.

Figure 4.1.1

**Transactions carried out through the CBU's Interbank payment system,
 in trillion million**

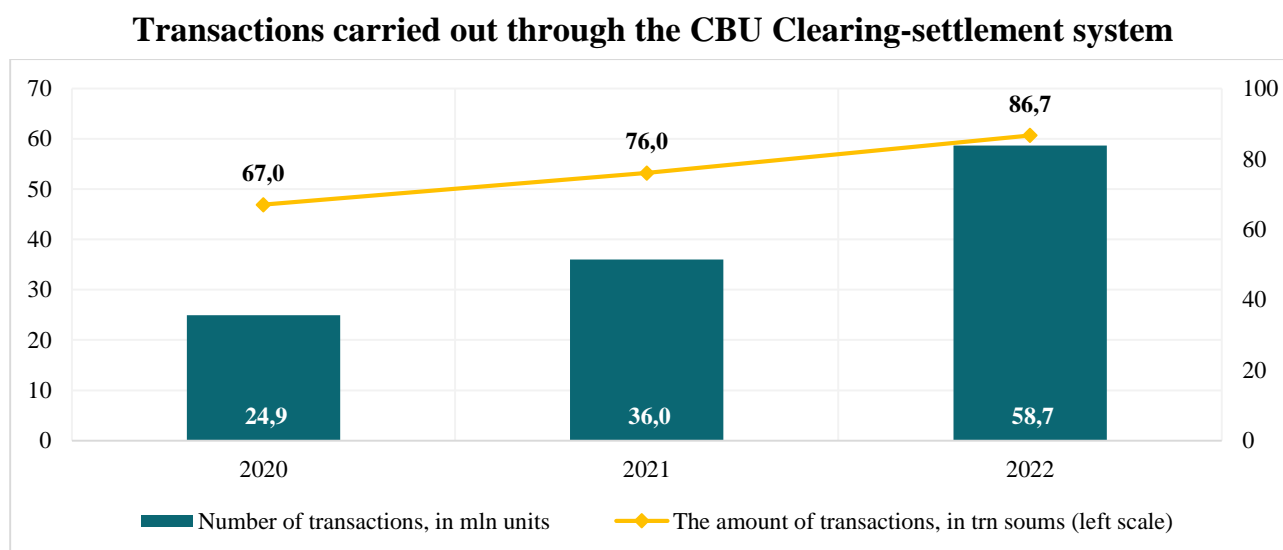


The growth of the economy's financing, investment activity, the upgrading of the types and infrastructure of financial services, and an increase in foreign trade turnover all explain the increase in the number of transactions conducted through the system.

The **CBU's Clearing-settlement system**, which specializes in real-time retail payments for individuals and legal entities, was kept operational.

The number of offices and organizations (*service providers*) accepting payments through the **CBU's Clearing-settlement system** increased from 41 in 2021 to 46 in 2022, with an emphasis on expanding the list of organizations accepting payments for goods and services through this system and introducing customer-friendly and simple payment services.

Figure 4.1.2



During the reporting year, customers were able to pay for a variety of ministries, agencies, and universities, as well as the customs committee at state border crossing locations, using the system.

The volume of payments made through the Settlements clearing system was **58.7** trillion soums in 2022, up **1.6 times** from 2021.

During the reporting year, **the CBU Instant payments system** remained stable and operational, allowing legal entities and individual entrepreneurs to conduct payment transactions online 24/7.

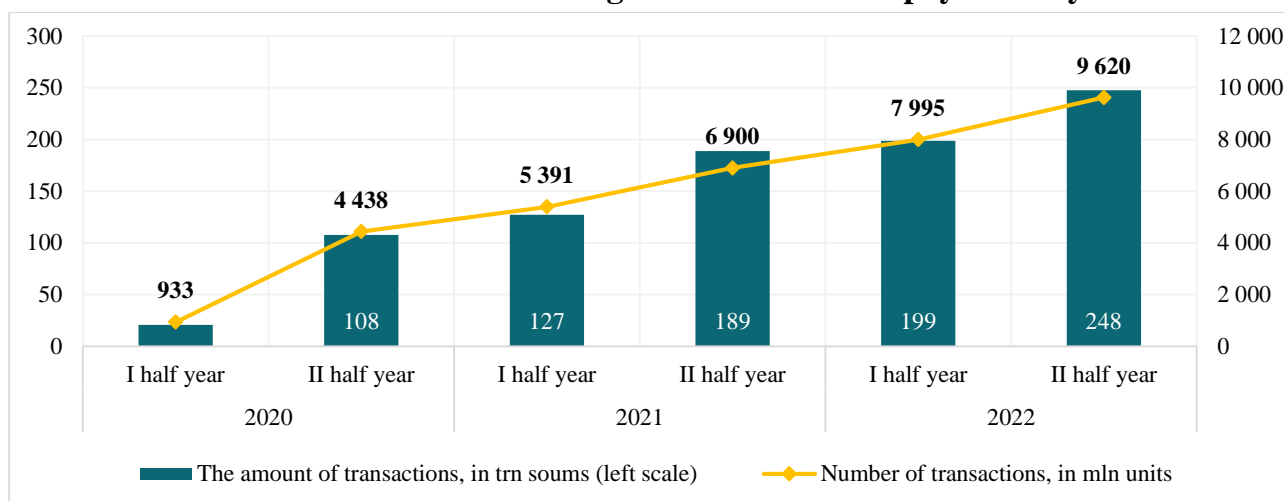
The number and amount of transactions conducted through this system increased by **1.4 times** in 2022 compared to 2021, totaling 17.6 million and 446.4 trillion soums, respectively. The amount of budget payments delivered to the Ministry of Finance's Treasury increased by **1.8 times** over 2021, reaching 21.6 trillion soums.

As the scale of payments made through the instant payments system increased, more than **90** percent of total payment orders of legal entities were made remotely without visiting the bank.

The extensive usage of remote bank account management systems by commercial enterprises functioning in the country explains this.

Figure 4.1.3

Transactions carried out through the CBU Instant payments system



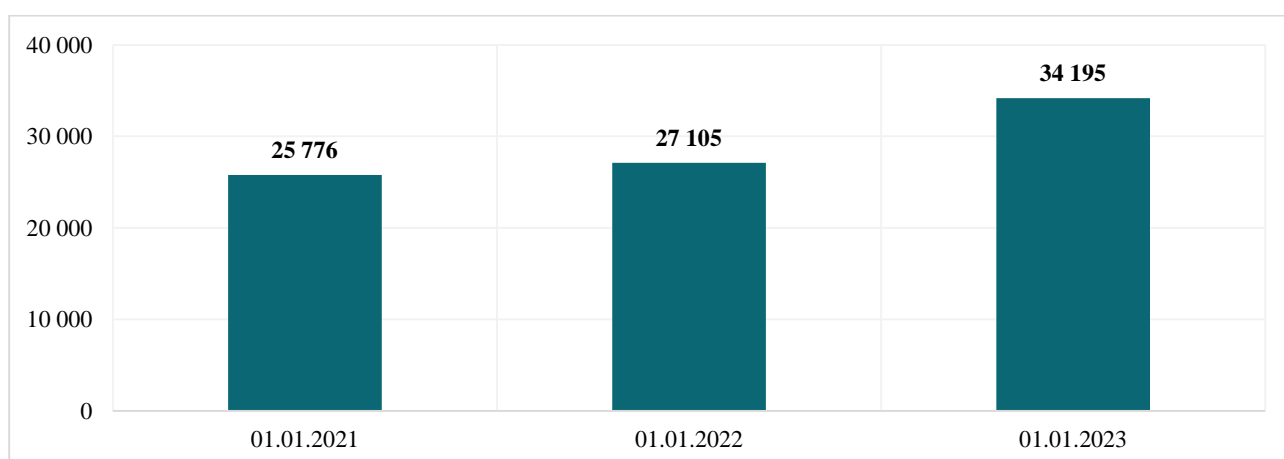
The number of firms that use the instant payment system to transfer money for goods and services at any time of day (*even on weekends*) is growing. This share of evening/night transactions climbed from 14 percent in 2021 to 17 percent in 2022.

4.2. Development of retail payment systems based on bank cards

In 2022, the main focus was on developing the infrastructure of retail payment systems based on bank cards and the availability of current infrastructure in terms of establishing advantageous conditions for carrying out cashless payments.

Figure 4.2.1

Number of bank cards, in thousand



The public's perception of bank cards as a convenient way of payment, as well as the growing use of remote banking services, combine to raise demand for bank cards. In example, the number of bank cards in circulation in 2022 reached 34.2 million, a 26 percent increase over 2021.

The number of **co-badged bank cards**, which allow to perform transactions using one card in the local and international payment systems' infrastructure, has climbed by 2.7 times since 2021, reaching 1,737 thousand pieces.

Payments received through 434 thousand payment terminals increased by **1.6 times** in 2022 compared to 2021, totaling **177.7** trillion soums.

Figure 4.2.2

The number of payment terminals, in thousand

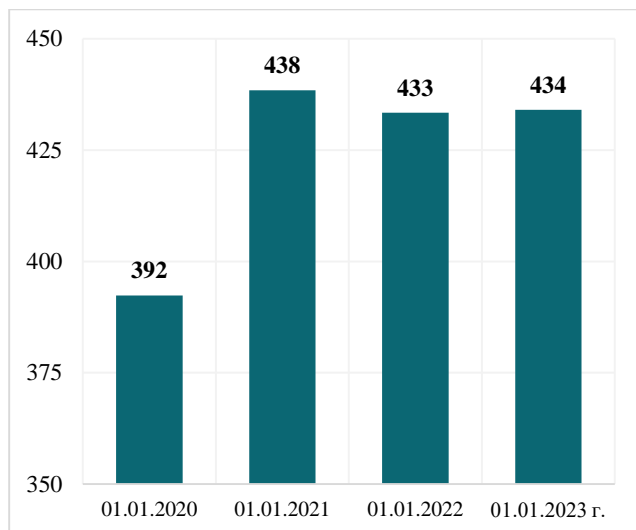
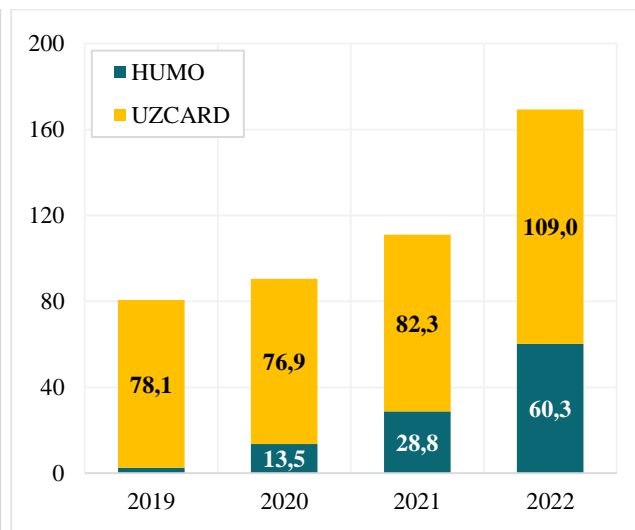


Figure 4.2.3

Transactions processed by payment terminals, in trillion soums



The share of payments made using HUMO terminals in the number of transactions in 2022 climbed from 26 percent in 2021 to **36** percent in 2022 as an outcome of the work done to develop the functionality, infrastructure, and popularity of the HUMO retail payment system.

Figure 4.2.4

Number of ATMs and info kiosks, in units

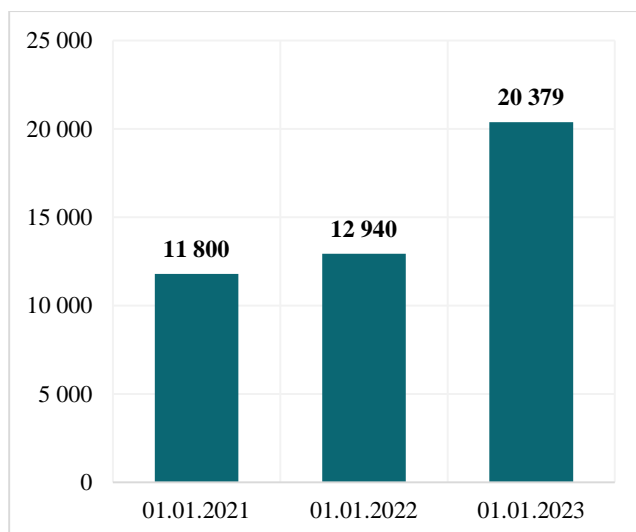
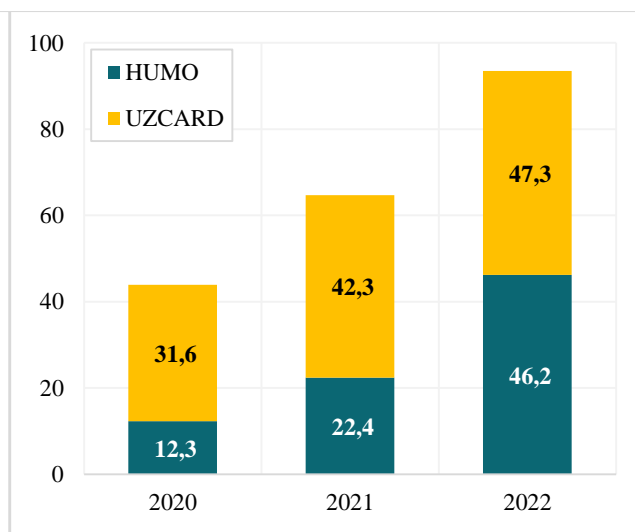


Figure 4.2.5

Transactions processed by ATMs, in trillion soums



Measures are made on a regular basis in collaboration with the State tax agency to ensure the timely and comprehensive deployment of payment terminals to newly established business entities in the field of retail trade and payment services, as well as the formation of skills in their usage.

To facilitate payment services for users, the number of ATMs and info kiosks deployed in banking infrastructures, tourism facilities, and other facilities expanded over **1.6 times** in the reporting year, reaching more than **20.3** thousand as of January 1, 2023.

During the reporting year, the share of operations performed by HUMO ATMs in the total amount of transactions performed by ATMs increased from 35 percent in 2021 to **49** percent in 2022.

4.3. Financial technologies and innovations in the market of payment services

As part of its efforts to enhance the national payment system and increase the appeal of financial services, the CBU is focusing particularly on the digitization of banking services.

The number of users of remote bank account management services increased by **1.5 times** over the reporting period, reaching **30** million on January 1, 2023. In this example, **1.2** million users were **legal entities**, while **28.8** million were **individuals**.

The number of operations carried out remotely by users online through mobile applications of banks during the reporting year amounted to **145.8** trillion soums.

Online deposits performed through mobile applications totaled 21.9 trillion soums, **online conversion operations** – 20.9 trillion soums, **online microloans** – 5.6 trillion soums, **loan repayments** – 8.2 trillion soums, and other payments – 8.2 trillion soums.

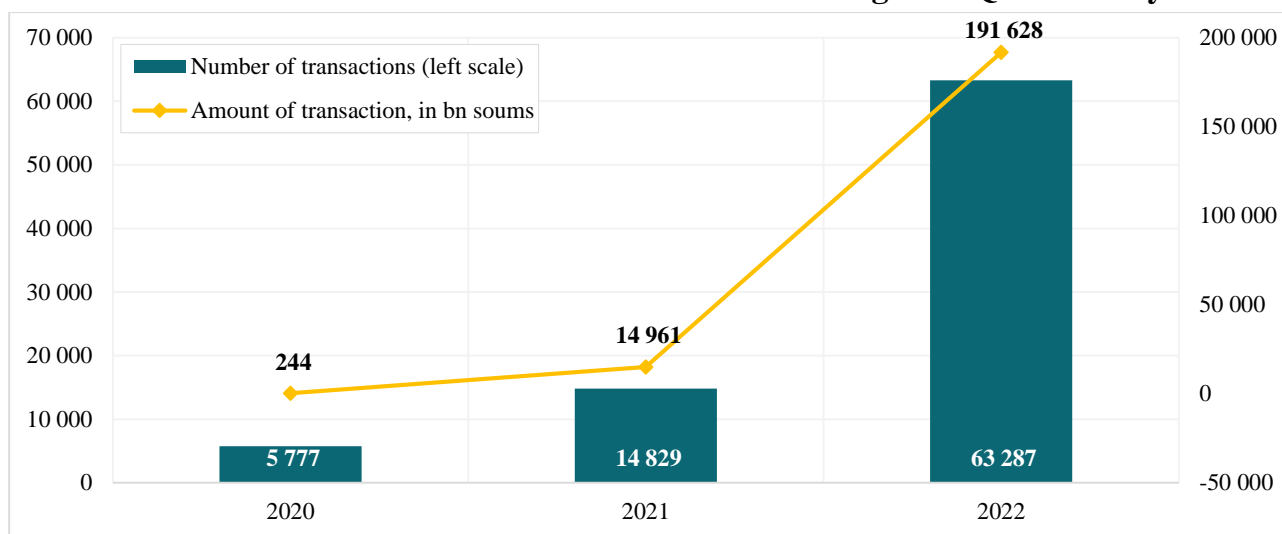
To broaden the scope of contactless payments in payment system infrastructure, the CBU, along with all commercial banks, is focusing on the issue of providing payment tools that allow making payments based on QR-code and NFC technologies to trade and service entities.

The "QR-online" system, which was developed to enable speedy purchases for goods and services using mobile applications that use a QR code rather than a bank card and payment terminal, is gaining popularity.

The number of QR-codes issued to legal entities by the "QR-online" information system increased by **8** thousand in 2022 compared to 2021, when it was 99 thousands, and the number of transactions climbed by over **13 times**, reaching **191.6** billion soums.

Figure 4.3.1

Number and amount of transactions carried out through the QR-online system



Simultaneously, as part of the spread of contactless payment technology, the "HUMO PAY" program (NFC system of a smartphone) is providing the service of making payments for trade and paid services without using a bank card through the mobile applications of **21 banks**.

The number of entities using the **Tap-to-phone** system (*allows receiving payments like a payment terminal*) established as part of the development of contactless payment services had climbed to over **2.3** thousand as of January 1, 2023.

The amount of NFC-based transactions increased by **2.1 times** in 2022 compared to 2021, totaling **25.5** trillion soums.

The remote biometric identification system (**Face ID**), which was developed to increase the convenience of utilizing banking and payment services through the widespread use of digital technology, is becoming increasingly popular.

Customers can now not only make payments online without visiting to the bank, but also open bank accounts via remote authentication. This development increases clients' capacity to use banking and payment services remotely.

The number of commercial banks utilizing this technology climbed from 11 to **26** in 2022, while the number of payment firms increased from 4 to **13**.

2.6 million clients passed digital identification through bank and payment organization mobile applications.

It should be noted at this point that our country's digital identity (Face ID) service has been recognised by World Bank specialists as one of the most effective and successful financial services introduced in the Central Asian region.

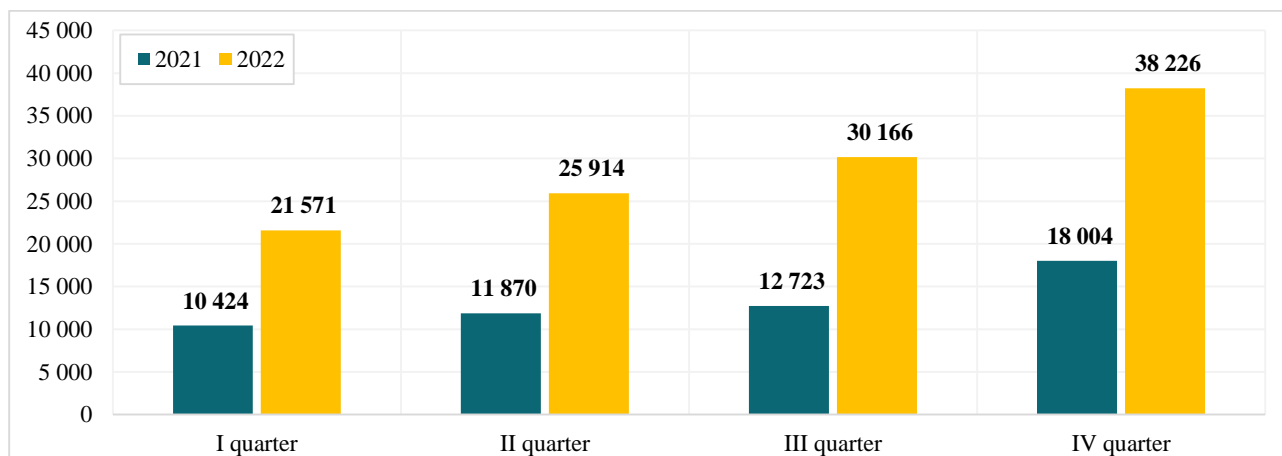
Specifically, on January 26, 2023 in Moscow, Russia, the "**Biometric identification**" project, which was implemented in our country's banking system, was named the winner of the "project of the year" contest among 434 projects submitted from CIS countries in the contest organized by the "Global CIO" (*Association of Digital Transformation Leaders*).

4.4. Development of fintech companies in the payment services market

In the reporting year, the CBU continued to issue licenses to payment organizations to carry out their activities in order to promote the competitive environment in the payment services market; the number of payment organizations reached **47**.

Figure 4.4.1

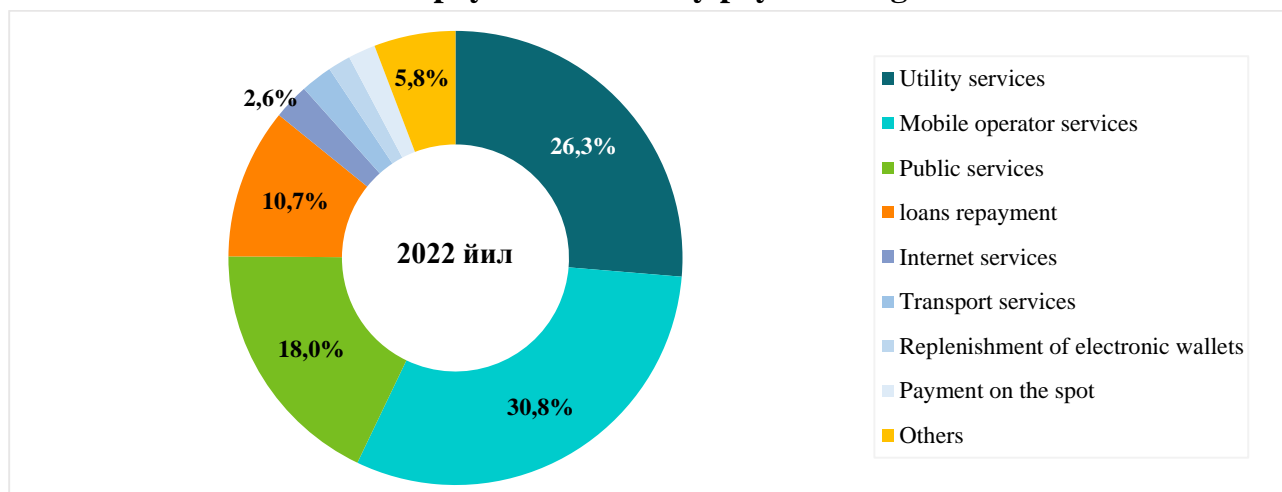
Amount of transactions performed by payment organizations in 2021-2022,
in billion soums



This is explained by the increased demand for payment services from not just commercial banks, but also payment organizations.

Figure 4.4.2

Structure of payments made by payment organizations



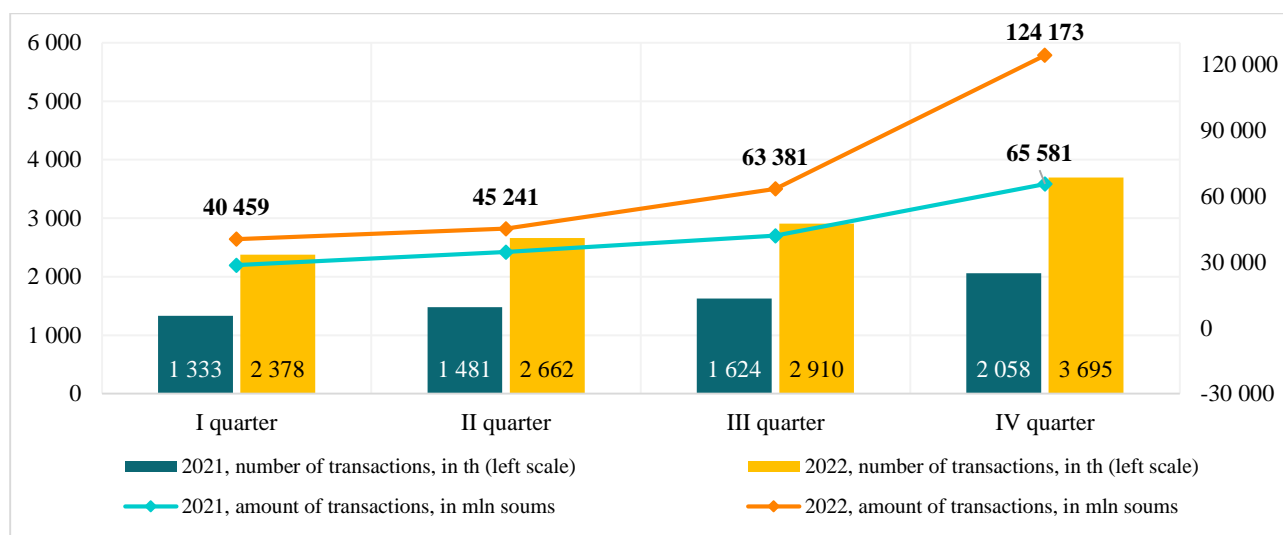
The number of transactions made by payment organizations increased by **2.1 times** in 2022 compared to 2021, reaching **116 trillion soums**.

In the reporting year, individuals paid **10.5 trillion soums** through payment organization services for **mobile operator services**, 8.9 trillion soums for **utility services**, 6.1 trillion soums for **public services**, and 3.6 trillion soums for **loan repayments**.

The introduction of electronic money systems into the payment services market leads to the further development of cashless settlements and the creation of new prospects for payment service users.

Figure 4.4.3

Transactions carried out through electronic money systems in 2021-2022,
in billion soums



15 electronic money systems were listed in the CBU's register of electronic money systems as of January 1, 2023, and the number of electronic wallets opened in these systems climbed to 8.4 million in the reporting year (*01.01.2022 – 5 mln*).

In addition, the number of electronic money transactions rised by 1.8 times to 11.6 million in the reporting year compared to 2021, and the amount of transactions increased by 1.6 times to 273.2 billion soums.

It should be pointed out that 92 percent of e-wallet holders' transactions were made as payment for specific items (services, works) to e-wallets of legal entities, and 8 percent were made to transfer money to individual e-wallets.

28 percent of electronic money payments are for mobile operator services, 10 percent for utility services, 10 percent for video games and social networks, 9 percent for replenishment of electronic wallets abroad, 5 percent for purchases, and 38 percent for other services.

4.5. Data and cyber security in commercial banks' payment and information systems

In the reporting year, work on enhancing information protection and cyber security in payment systems was continued based on a review of international experience.

Based on global experience, a early warning information system (cert.cbu.uz) aimed at preventing cyber security issues was created in the banking system.

A monitoring system was introduced in the CBU's Cyber Security Center "CERT-CBU" to continuously control the state and continuous operation of information systems and resources of payment system operators, credit and payment organizations, in order to warn of potential cyber threats and take prompt countermeasures.

During the reporting year, a rating system for measuring the state of cyber security in the operations of payment system operators, credit and payment organizations was developed.

In 2022, investigations were undertaken on the state of information protection and cyber security in the information systems of the republic's 31 commercial banks and 29 payment organizations. Appropriate instructions and recommendations were provided to address the issues discovered throughout the investigations.

A legislative project has been developed that allows the Central Bank to identify and prevent cyber security risks related to payment systems, as well as to coordinate effective measures against cyber threats and financial fraud, and to establish measures aimed at eliminating and investigating computer attacks.

Memorandum of Understanding signed on cooperation in the area of cyber security with the international payment system **MasterCard Europe**.

During the reporting year, staff of the "CERT-CBU" Cyber Security Center improved their knowledges and skills through training courses held by international organizations.

In addition, the CBU organized regular training seminars to strengthen the skills employees responsible for data and cyber security and organizations under its supervision, such as banking and payment institutions.

In particular, the CBU, together with MasterCard Europe, an international payment organisation, held a seminar on "**Cyber security and countering payment card fraud**".

With the participation of responsible employees from key ministries and agencies, the Central Bank developed a cooperation plan for the exchange of expertise on cyber security problems.

To warn legal entities and individuals about financial fraud and increase their financial literacy, the Central Bank's official websites and social media channels are constantly updated with recommendations on protecting funds on bank cards from criminals and complying with security measures when using bank cards at ATMs and POS-terminals.

4.6. Implementation and advancement of information and communication technologies in the Central Bank system

Efforts were undertaken throughout the reporting year to widen the use of telecommunications based on modern technologies in Central Bank activities, as well as to increase the integration of state administrative agencies' and the financial sector's information systems.

Several projects were completed, including those to improve the efficiency of monitoring commercial banks' activities and simplify their compliance with regulatory requirements (SupTech and RegTech), as well as to introduce **artificial intelligence** technologies to analyze the quality of banking services and assess credit risks. Here are examples:

- the membership of the working group for the development of an efficient and high-tech supervision system (SupTech) in the banking system was approved, and steps for implementation were defined;

- the information system "Data Warehouse of the Banking System" was introduced to ensure the processes of automatic reception, control, storage, and analysis of specified data from the information systems of commercial banks and NCO.

Moreover, work was carried out to ensure uninterrupted operation of the official website of the CBU www.cbu.uz, to improve the design and structure of the site, to expand the possibility of obtaining one or more (*or all*) data simultaneously visual form (*graphics*). As a result, the number of visitors to the website increased from 844 thousand in 2021 to 1.1 million in 2022.

More than 58 types of information related to the CBU's activities and the banking system are published on time and in full on the Republic of Uzbekistan's "**Open Data Portal**" in order to provide the households, firms, and foreign investors with understandable and transparent information about the banking system.

The CBU's information systems and resources were included in the Republic of Uzbekistan's "Unified register of E-Government information systems and resources" (www.reestr.uz).

Reviewed 7 projects of information systems and resources in the CBU system for compliance with the requirements of the Ministry of Digital Technologies.

V. CURRENCY CIRCULATION

The organization for currency circulation in 2022 came about during a year of high demand for cash owing to economic activity, increased popularity of banking services, and a significant increase in remittances.

The CBU placed additional currency into circulation to fulfill the economy's demand for cash and to assure accounting continuity.

As the amount of cash in circulation in the economy rose, steps were taken to handle procedures associated with working with currency, performing operations, and providing services utilizing new and modern technologies.

5.1. Currency circulation and its structural evolution

The dynamics of currency circulation through banks grew in the reporting year, reaching **700.3** trillion soums, a rise of **1.4 times** over 2021.

Cash receipts to bank cashiers as a percentage of GDP climbed from 34.3 percent in 2021 to 38.7 percent in 2022.

The increase in flows to bank cashiers was influenced by a **12.3** percent increase in retail trade and a **15.9** percent increase in payment services .

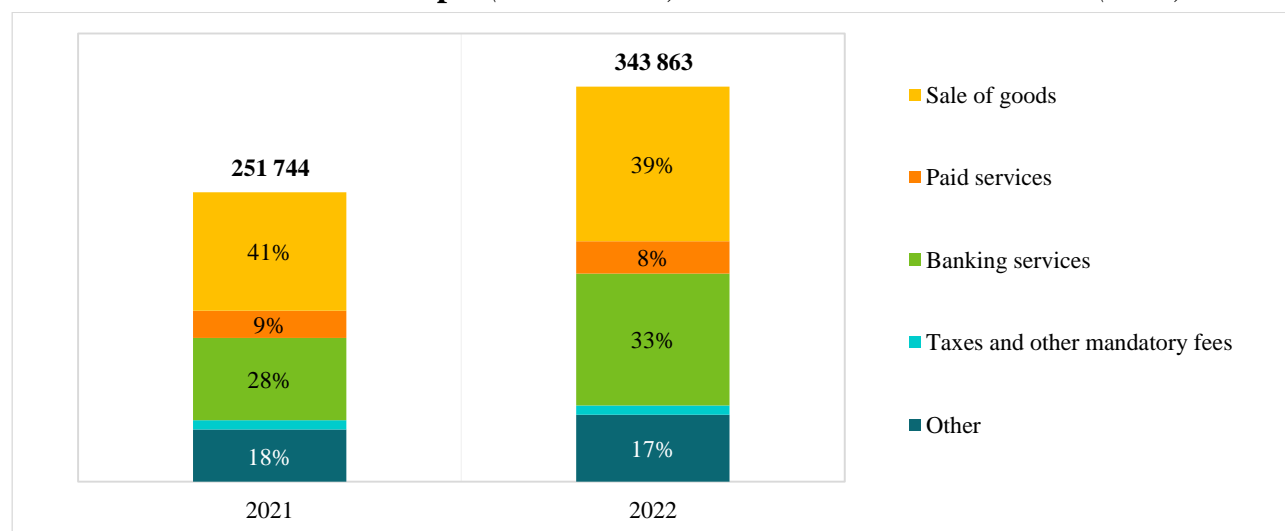
In comparison to 2021, there was a **36.6** percent rise in cash at bank cashiers, reaching **344** trillion soums.

This scenario is explained by an increase in cash receipts from banking services of 1.6 times (*43.3 trn soums*), trade and services of 1.3 times (*36.1 trn soums*), and taxes and other areas of 23.7 percent (*12.1 trn soums*).

During the reporting year, the structure of total cash receipts by source in bank cashiers differed.

Figure 5.1.1

Amount of cash receipts (*in bn soums*) and its structural evolution (*in %*)



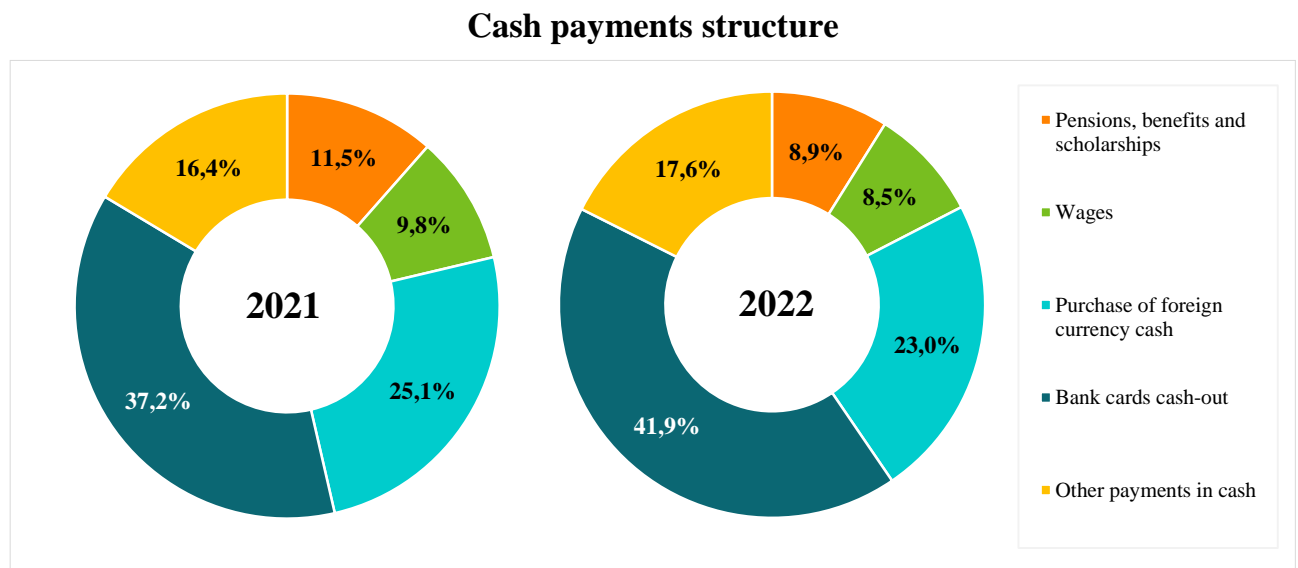
In particular, while the share of revenue from the sale of goods declined to **39.1** from **41** percent in 2021, in paid services – from **9** to **8** percent, and in tax collection and others – from **21** to **19** percent, banking services increased from **28** to **34** percent.

The amount of **cash supplied** to the the individuals and legal entities through banks increased by **1.4 times** or **100.9** trillion soums compared to 2021 and reached **356.4** trillion soums.

54 percent withdrew cash from bank cards, **18** percent resulted from a rise in the amount of cash supplied by banks for the purchase of foreign currency, and **7.7** percent resulted from an increase in the amount of cash provided for pensions, benefits, and salary payments.

This is explained by a growth in the value of wages, benefits and other social payments, as well as an increase in remittances directly to bank cards and the individual's purchase of foreign currency.

Figure 5.1.2



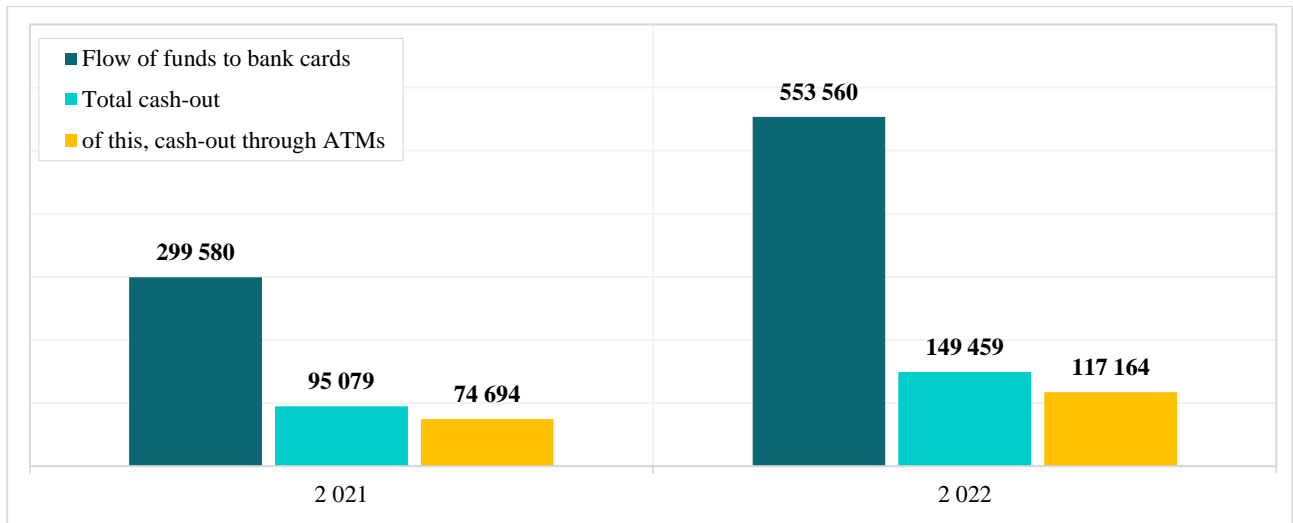
The amount of bank cards cash-out in the reporting year was **149.5** trillion soums, a rise of **1.6 times** over 2021.

The considerable increase in the amount of cash-out was attributable to an increase in the amount of funds flowing to bank cards (*54.4 trn soums*) and the widen of the ATM infrastructure.

The amount of cash-out grew by 42.5 trillion soums in 2022 compared to 2021. The share of cash-out through ATMs was 78.4 percent.

Figure 5.1.3

Operations through bank cards, in billion soums



The reforms implemented over the last five years to increase cash inflows to banks, develop banking infrastructure, and improve the scope and quality of cash-based services served to mitigate risks that could arise in the event of a sharp increase in the demand for cash in the economy in 2022.

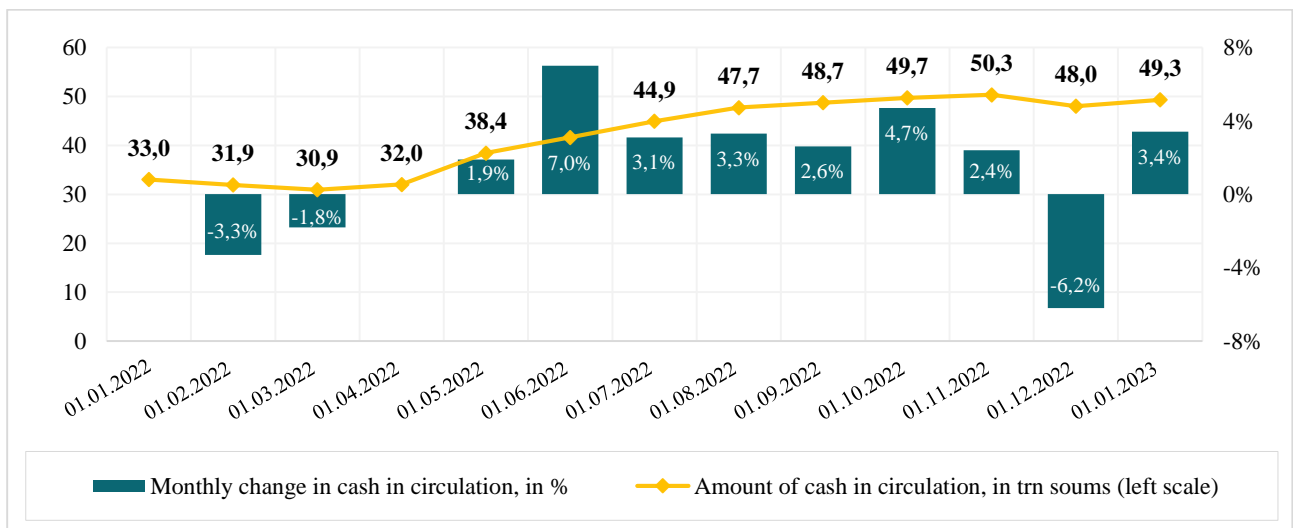
5.2. Currencies in circulation and their structure

The amount of currency in circulation (including the balance of cash in commercial banks' cashiers) reached **49.3** trillion soums in the reporting year, up **1.5 times** from 2021.

This rapid rise can be ascribed to increasing economic activity as well as rised demand for cash as a result of an increase in remittances and currency exchange operations with individuals.

Figure 5.2.1

Changes in amounts of currency issued in circulation during 2022



To meet demand the CBU issued an additional **16.2** trillion in cash into circulation in 2022.

To improve cash settlements and payments and to simplify cash-related operations, new banknotes with a nominal value of 200,000 soums and a coin with a nominal value of 1,000 soums were placed into circulation in 2022.

As a result, total money in circulation fell by 104.9 million, or 4.8 percent, compared to the beginning of 2022, and the average number of banknotes in circulation per capita fell from 62 in 2021 to 58.

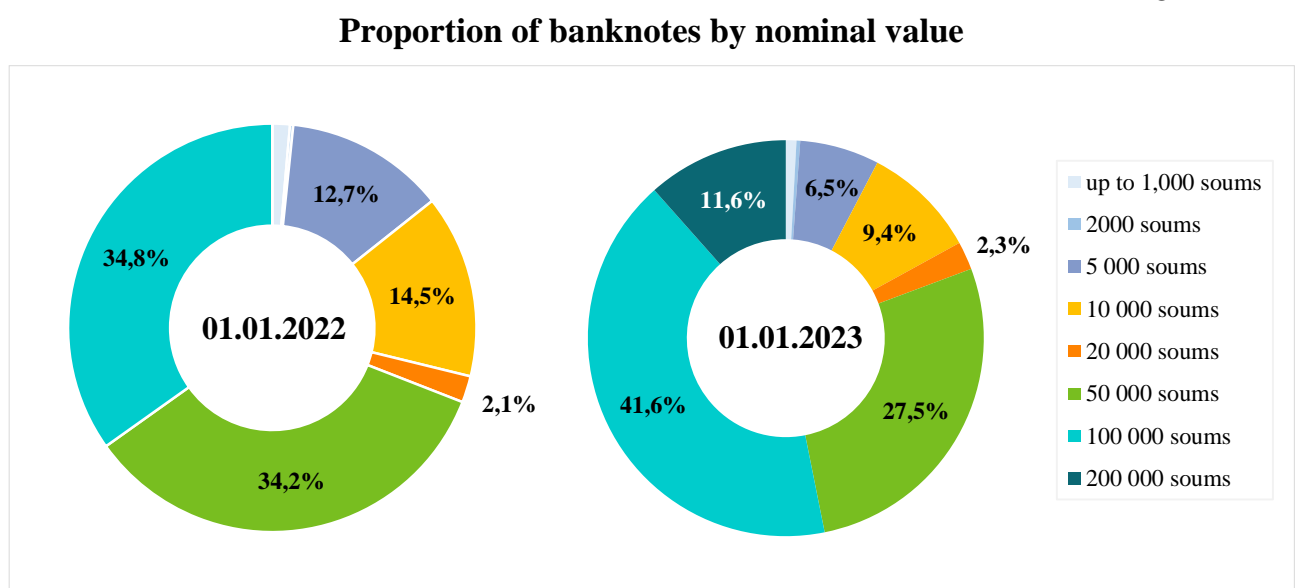
The share of 50,000 soum banknotes in circulation reduced from 34.2 percent in 2021 to 27.5 percent in 2022, 10,000 soums – from 14.5 to 9.4 percent, and 5,000 soums – from 12.7 to 6.5 percent, up to 1,000 soums – from 1.4 to 0.9 percent, while the share of 20,000 soum banknotes increased from 2.1 to 2.3 percent, and 100,000 soums – from 34.8 to 41.6 percent.

The remaining 11.5 percent of cash in circulation was made up of 200,000 soum banknotes issued in 2022.

The share of new designed banknotes of 5,000 soums, 10,000 soums, 50,000 soums and 100,000 soums among the banknotes of the same denomination but previous design has increased from 3 percent in 2021 to 17 percent

Simultaneously, 24.5 billion soums in coins were put into circulation to simplify their use as a change, and the amount reached **78.5** billion soums as of January 1, 2023.

Figure 5.2.2



The issuance of a new 1,000 soum coin in December 2022 will ensure an increase in the amount of coin settlements in the future.

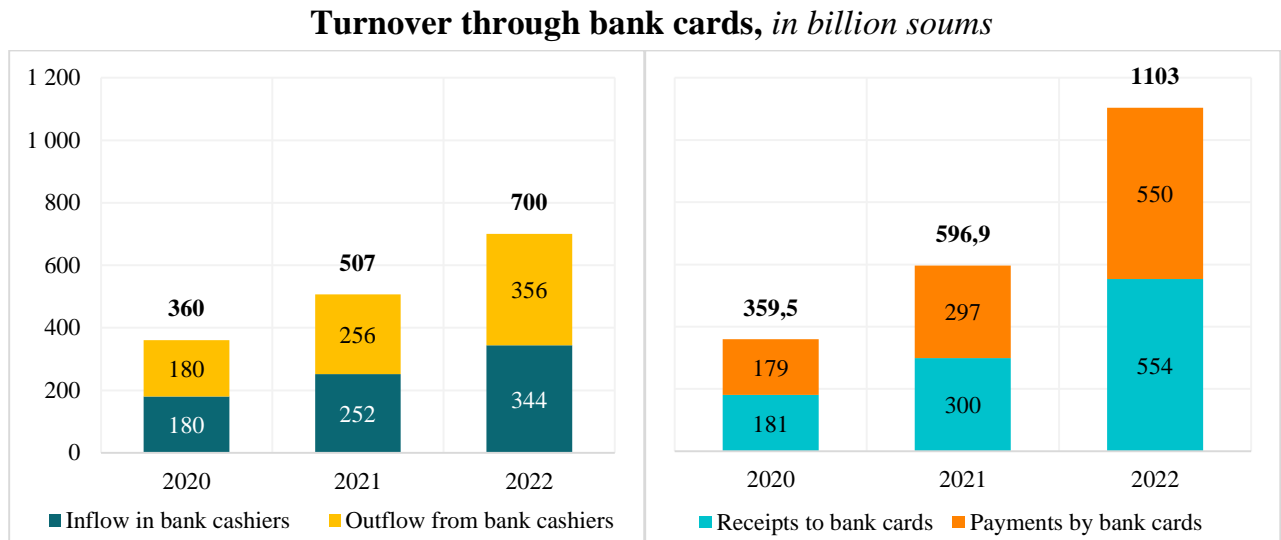
Measures conducted to improve the infrastructure of cashless payments,

notably the rise in popularity of payments through mobile payment systems, have a significant impact on favorable changes in money circulation.

5.3. Bank card transactions

Individuals bank card transactions totaled 1,103.4 trillion soums in the reporting year, up 506.5 trillion soums or 1.8 times from 2021. The overall amount of money received by bank cards was 553.6 trillion soums, whereas the total amount of money paid by bank cards was 549.8 trillion soums.

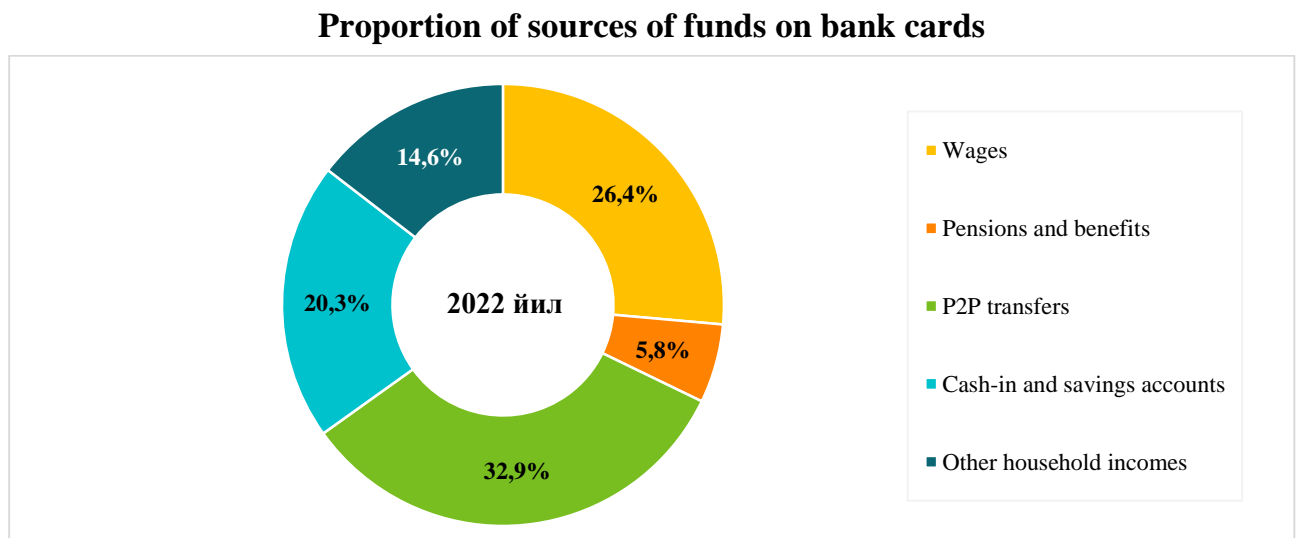
Figure 5.3.1



It should be mentioned that in recent years, the amount of individuals bank card transactions has grown faster than the amount of cash transactions through banks.

Comparing to the circulation of cash through banks, the amount of transactions through bank cards increased by 1.2 times in 2021 and by 1.6 times in 2022.

Figure 5.3.2



The money received by bank cards increased by **1.8 times** in the reporting year compared to 2021, with the majority of funds coming from wage payments (26.4%), pension and benefit payments (5.8%), P2P transfers (32.9%), cash-in and savings accounts (20.3%), and other household incomes (14.6%).

In 2022, we can see a significant increase in P2P transfers (*up 3 times over 2021*), cash-in and savings account replenishment (*up 1.9 times*), payments of pensions and benefits through bank cards (*up 1.8 times*), and other types of household's incomes (*up 1.6 times*).

Actually, compared to 2021, the amount of bank card payments increased by 1.8 times, the amount of cashless settlements and transfers increased from 68 to 72.8 percent, and the amount of cash-in decreased from 32 to 27.1 percent, all of which can be attributed to the increasing acceptance of bank card payments.

Simultaneously, the results of the work done on dealing with cash and developing settlements with bank cards, which are an alternative method of payment, allow for flexible (adaptive) management of cash demand even in the face of economic and seasonal fluctuations.

VI. FINANCIAL INCLUSION AND CONSUMER RIGHTS PROTECTION

6.1. Financial inclusion

During the reporting year, the CBU maintained comprehensive efforts targeted at enhancing the households' and firms' access to financial services.

The number of banking service points, including bank branches, banking service points, mini-banks, **24/7 self-service offices**, ATMs, and infokiosks, increased by **1,174** or **10** percent from 2021 to **12,544** as of January 1st, 2023.

The indicator of the availability of financial services, the number of banking service points per **hundred thousand adult population**, reached an average of **54**, up **5 points** from the beginning of the year.

Tashkent city had the highest rate (*176*), while Andijan (*31*), Tashkent (*36*) and Kashkadarya (*37*) regions had the lowest.

Along with the expansion of the banking infrastructure during the reporting year, a positive change in the share of the adult population (18 years and older) with bank accounts was observed; as of January 1, 2023, the number of adults with bank accounts reached **17.3** million, or **75** percent of the total adult population.

It should be noted that there is essentially no difference between the genders in bank account ownership, with males accounting for **49** percent of the total adult population with bank accounts (*8.6 mln persons*), while women account for **51** percent (*8.9 mln persons*).

Table 6.1.1

Population with a bank account, in thousand persons

Age group	Adult population	Population with a bank account	Share, in %	Women	Women with a bank account	Share, in %	Men	Men with a bank account	Share, in %
Total	23 153	17 288	75	11 681	8 820	76	11 471	8 468	74
18-29	6 818	4 653	68	3 330	2 224	67	3 488	2 428	70
30-39	5 878	4 663	79	2 916	2 416	83	2 962	2 247	76
40-49	4 154	2 940	71	2 083	1 523	73	2 071	1 416	68
50-54	1 671	1 144	68	860	581	67	811	563	69
55-59	1 528	1 135	74	802	621	77	725	514	71
60-69	2 119	1 894	89	1 124	991	88	995	904	91
70+	985	860	87	565	465	82	419	396	94

Taking a look at the indicator of bank account ownership by age groups, the majority of whom are 18-29 years old (*4.6 mln persons*) and 30-39 years old (*4.7 mln persons*), it can be seen that 89 percent of the population (*the highest rate*) belongs to the 60-69 age group.

Simultaneously, in the reporting year, the rate of credit services usage by adult population increased from **16** percent in 2021 to **18** percent.

It was noticed that men took **54** percent of all bank loans, women **46** percent, and the **30-39 age group** used credit services more than the other age groups.

Table 6.1.2

Population with bank credit, in thousand persons

Age group	Adult population	Population with bank credit	Share, in %	Women	Women with bank credit	Share, in %	Men	Men with bank credit	Share, in %
Total	23 153	4 224	18	11 681	1 952	17	11 471	2 272	20
18-29	6 818	1 064	16	3 330	455	14	3 488	609	17
30-39	5 878	1 446	25	2 916	643	22	2 962	803	27
40-49	4 154	909	22	2 083	466	22	2 071	443	21
50-54	1 671	339	20	860	185	22	811	154	19
55-59	1 528	247	16	802	114	14	725	134	18
60-69	2 119	192	9	1 124	77	7	995	115	12
70+	985	26	3	565	12	2	419	14	3

Special emphasis was placed on the expansion of the provision of banking services via nontraditional channels.

In particular, on the basis of the agency agreement signed between Aloqa Bank and "Uzbekiston poch-tasi" JSC, **5 types** of banking services (*such as bank card replenishment, cashing out from a bank card, accepting payments, bank card delivery, and customer identification*) have been launched through approximately **1.9** thousand post offices throughout the republic, including remote areas.

In addition, the Law of the Republic of Uzbekistan "On non-bank credit organizations and microfinance activities", adopted in April 2022, microfinance organizations are granted the right to issue loans and leases, provide factoring services, provide guarantees and Islamic finance services to legal entities in an amount exceeding the amount of microcredit (*300 mln soums*), and they are allowed to act as an agent for banks, payment institutions, insurance and other financial institutions.

6.2. Financial education

During the reporting year, the CBU's activities aimed at improving the population's financial literacy included broadening the scope of activities based on mechanisms and systems developed for training target groups, focusing on planned works in conducting large-scale international educational events, and promoting the form of "edutainment" (interactive education) in mass media and social networks.

The main objective was to develop a "**savings culture**," prudent borrowing, and improving digital financial literacy.

In total, more than **384** thousand persons directly participated in financial literacy programs in **87** educational events organized within the scope of **21** projects, and this figure grew by **1.3 times** compared to 2021.

As a result of comprehensive basic financial knowledge education efforts through the media (*TV and radio channels, print media*) and social media (*website and social media*), more than **11.3** million persons have been reached, which is 1.5 times more than in 2021.

In addition, educational programs involving **5,046** schools and **69** universities were established in collaboration with **21** banks, **5** payment organizations, and **14** insurance companies.

The programmes for the target groups included meetings and round tables, as well as large events in cooperation with organisations, in which 5.3 times as many people participated as in 2021:

- in order to improve **women's** financial literacy **42** seminars and trainings were held throughout the regions and the Republic of Karakalpakstan, with **2,557** women from the "**Women's Register**," deputy chairs of the mahallas on family issues, and businesswomen who had recently begun entrepreneurship;

- **2,140 youth** took part in master classes offered by the Republic of Karakalpakstan, regions, and Tashkent city in collaboration with the "Youth Affairs Agency" to increase their financial literacy;

- trainings for **labor migrants and their family members** were held in six regions (*Bukhara, Surkhandarya, Kashkadarya, Syrdarya, Tashkent, and Tashkent city*), with 505 residents participating. Furthermore, business trainers from the Foreign Labor Migration Agency who got special training from the Central Bank taught financial literacy to **1,257** labor migrants in Tashkent.

In addition, the scope of financial literacy activities for pupils has been expanded:

- from March to May 2022 and from October to November 2022 throughout the republic For pupils attending grades 5 to 11, the "**Financial Literacy Month**" initiative was launched. The survey included **799** teachers and approximately **24,000** pupils from **253** schools of general education;

- during the academic year 2021-2022, 19 commercial banks offered **6,033** open classes for **270,863** pupils in grades 5 to 11 from **3,106** schools of general education.

– on the web portal Kundalik.com, over 15 thousand participants took an online test summarizing financial and mathematics exercises for pupils in grades 7-8.

The coverage of financial literacy programs were expanded through the establishment of a system of trainer-consultant courses with the help of multipliers for various population target groups. The project involved **73,825** persons, an increase by **11.3 times** over 2021:

– **48** experts from **11** banks were trained as main trainers to improve the financial literacy of **current and potential bank clients**, and they educated a total of **297** trainers-consultants who supply financial help to people in the regions. **27,241** residents received financial assistance as part of the program;

– more than 500 bank agents were trained by 50 master trainers to improve financial literacy in **remote regions** of the country, and educational events were held to explain the use of banking services;

– **260 students** were trained to improve the financial literacy of non-economic university students **as volunteer trainers** to conduct educational training sessions. In the reporting year, they conducted **72** training seminars and reached **3,984** students.

In comparison to 2021, there has been a **16** percent rise in the coverage of international educational activities to promote the financial literacy of children and youth.

The international educational events "**World Money Week**" and "**World Savings Day**" had a total coverage of **25** events was **146,217** participants, of whom **35,081**, or **24** percent of pupils were taught saving techniques and digital financial security practices.

During the events, non-traditional teaching approaches were used. The interactive calendar "Financial Discipline" produced for 2022, in particular, was dedicated to **12** different subject areas of financial literacy, in collaboration with commercial banks; **2,3** thousand copies were printed, and explanations on each topic were given at the events.

Within the framework of the "**learning by doing**" technique, 3,000 clear designed co-badged bank cards were produced in cooperation with Agrobank and given to the winners of financial literacy competitions and quizzes, in addition to with educational materials on the safe use of bank cards.

As a result of large-scale education activities carried out in social media and traditional media with the purpose of widespread distribution of financial education to varied parts of society, coverage has increased by **1.5 times** since 2021:

– **5.5** million people were reached through various financial literacy topics, web content, and projects published on **the Finlit.uz website**, social networks (*Telegram, Instagram, Facebook, Tiktok, Youtube, Yandex music, Spotify*), and projects of various forms (*interactive educational tools, video interview, video survey, audio podcast, infoblog, and so on*);

– through media projects, particularly the publication of articles in the newspaper "Darakchi," educational audio projects and quizzes on the radio channels "AutoRadio" and "OriatDono," as well as creative and large-scale communication work on financial literacy on the TV channel "MY5" and the "UzReport" carried out on a regular basis during the reporting year, the population coverage increased to approximately **5.8** million people.

Banners on the formation of savings skills were presented to the public in the Tashkent metro station, which has a daily coverage of **400** thousand people, and on bus routes with a capacity of **50** thousand people in Tashkent city, and on bus routes with a daily capacity of **61** thousand people in the centers of Kashkadarya, Surkhandarya, Tashkent.

Experience and information exchange events were held as part of the ongoing collaboration with international organizations on the adoption of international best practices and methodologies on financial literacy.

In order to increase financial literacy, including digital financial literacy, in an unusual way, a song titled "**Moliyaviy xatolar**" (Financial Mistakes) was produced in collaboration with the International Finance Corporation, and a music video was shot and presented to the public.

Continued actions on the exchange of experience and information within the scope of cooperation with international organizations on the implementation of international financial literacy practice and methodology.

Cooperation with the Organization for Economic Cooperation and Development was carried out, in particular, in the context of research on the development of financial education in Uzbekistan, the use of digital technologies in the field of financial services, and the enhancement of the skills and potential of specialists in the field of studying successful practice abroad.

In addition, work has begun on the exchange of educational experience with the Central Bank of Italy to apply "edutainment" tools in the field of financial literacy for the implementation of the National strategy for increasing financial inclusion, particularly in projects to improve the financial literacy of youth and entrepreneurs.

6.3. Consumer rights protection

In 2022, the CBU continued to work on improving legal documents to protect the rights and interests of financial service consumers, finding a legal solution to systemic problems identified in this area, and implementing advanced foreign experience.

In particular, in the area of consumer protection, regulations on microfinance institutions and pawnshops have been included in the legislation.

Furthermore, the current requirements for the activities of microfinance organizations and pawnshops have been reviewed, and the minimum requirements for the activities of microfinance organizations and pawnshops in the implementation of mutual relations with financial service consumers have been established.

The legislation on resolving problematic situations that arise in bank-consumer relationships regarding their services has been improved. Specifically,

- third parties pledging or becoming guarantors must be aware of the risks that may incur in the future as result of the loan, pledge, or guarantee agreement;
- giving the required information about this service to the consumer before to signing into a loan agreement by banks;
- it was agreed that the consumer would receive a reasoned communication regarding the decision to approve or deny a loan.

Banks were also forbidden from offering subordinated debt as a deposit or loan equal to a deposit to individuals.

In 2022, an interview study was conducted with 1,210 citizens (*51% of these citizens live in cities, 49% live in rural areas*) in collaboration with the specialists of the **German Sparkassenstiftung** covering all regions of the republic to determine the status of the population's use of financial services and customers' trust in banks.

Based on the study's findings, a plan of relevant steps was prepared in collaboration with commercial banks to minimize problems in providing of banking services.

In addition, regulators from seven countries (*Malaysia, Australia, the Netherlands, Portugal, Belarus, Georgia, and Italy*) on the protection of financial services consumer rights and two international financial institutions (*Asian Development Bank and FinCoNet*) on the protection of financial services consumer rights exchanged experiences and determined future collaboration directions.

The average monthly number of users of the information portal about commercial banks' financial services for individuals (bankkhizmatlari.uz) reached 21 thousand (*a 21-fold increase over 2021*), and the average monthly number of visits to the site pages reached 30 thousand (*a 3-fold increase over 2021*).

In 2022, **729** control activities were carried out in **673** institutions of **28** commercial banks, in collaboration with the Central Bank's regional head offices, regarding the provision of complete information about credit, microloan, and deposit products in commercial banks' local institutions, acceptance of payments through terminals, and provision of cash funds through bank cash registers.

Disciplinary actions were taken against **627** commercial bank employees who committed infractions as a result of the study's findings and deficiencies.

As a result of the control efforts, a system was implemented to give consumers with complete information on the terms of loan and deposit products, and samples of bank contracts were developed for local institutions.

At comparison to 2021, the number of cases of non-acceptance of payments at banks and refusal to issue cash from cashiers using bank cards reduced by **twofold**.

20 commercial banks have set up brief digital professional call centers.

During the reporting year, individual and legal entity appeals were evaluated in line with the legal procedure, and the rights and legal interests of 166 banking service consumers (*139 individuals and 27 legal entities*) were helped to be restored.

During the study of the concerns highlighted in the appeals, 56 customers whose rights and legal rights were enabled to recover received a total cash benefit of **2.1** billion soums.

In particular, overpayments on loans worth **650.9** million soums were returned and recalculated, and practical assistance was provided for the timely repayment of deposits worth **583.6** million soums.

The practice of regularly monitoring applications (*materials*) related to the provision of banking services through various social networks and providing useful information for the population on problematic topics that cause a lot of discussion on financial services was established during the reporting year.

In particular, credit organizations were provided instructions regarding **68** applications (materials) published on various social networks for the provision of banking services in 2022.

The issues mentioned in these appeals were investigated by responsible commercial bank personnel, the issues highlighted in **45** appeals concerning the

provision of banking services were resolved, and relevant explanations and information were provided to the applicants in **23** appeals.

In addition, based on the issues mentioned in the CBU's appeals and the misunderstandings experienced by citizens, more than **20** materials on loan guarantee, credit history, collateral relations, and explaining loan terms were published on the CBU's social media accounts.

On Telegram only these contents were viewed by **277** thousand persons, and they were shared with others **3,2** thousand times.

Simultaneously, over **915** inquiries and difficulties submitted by individuals and businesses through the **@CBUz_bot** telegram-bot were answered with legal advice and explanations.

6.4. Assisting with individual and legal entity appeals

Working with appeals in the CBU system was organized in 2022 in accordance with the criteria of the Republic of Uzbekistan's Law "On Appeals of Individuals and Legal Entities."

This subject was thoroughly debated during quarterly CBU Board meetings and weekly sessions held in the presence of the CBU's Chairman. Appropriate instructions were issued to resolve the difficulties mentioned by the applicants in compliance with current regulations, as well as to improve employees' professional qualifications and personal responsibilities.

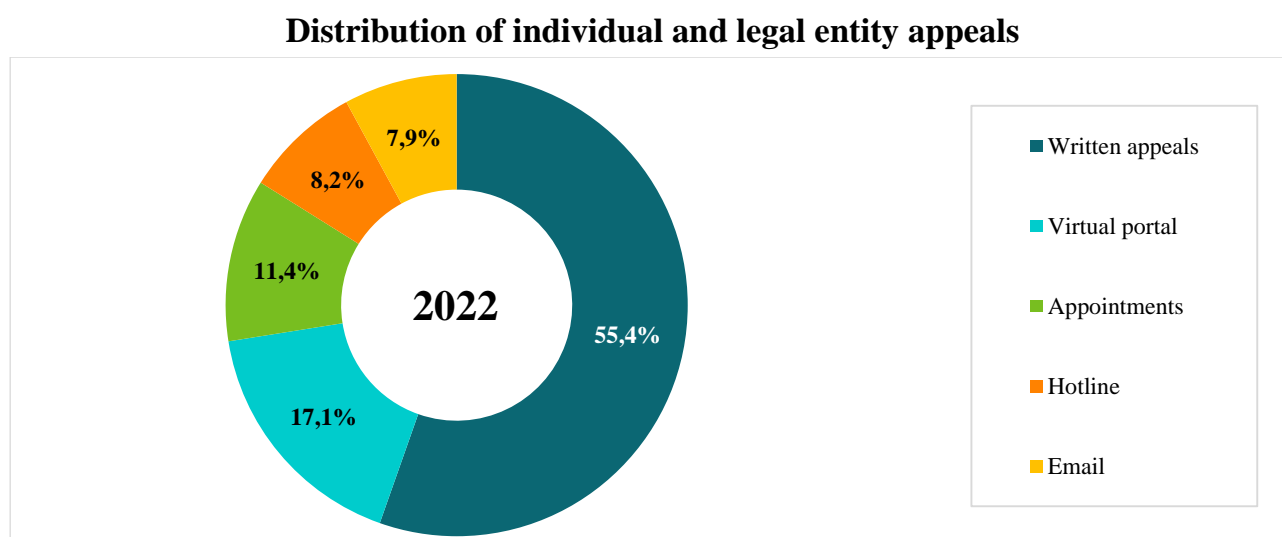
Furthermore, the Central Bank's management organized outreach appointments in rural and densely populated areas during the reporting year in order to explore and solve issues that were bothering citizens. Particular attention was placed on resolving issues raised by applicants, in a fair and timely manner, as well as ensuring the effectiveness of receptions and public consent.

Along with providing timely and high-quality application processing, detecting and resolving systemic faults in the use of financial services is one of the CBU's major criteria for its action in this field.

The fact that appeals from individuals and legal entities are accepted and processed immediately through the Central Bank's official website, the mobile application program in electronic form, and the "**Hotline**" is critical in detecting and resolving current issues.

In particular, systemic problems and shortcomings are identified based on the analysis of appeals from individuals and legal entities, and the minimum requirements for credit organizations' activities in the implementation of mutual relations with banking service consumers are improved.

Figure 6.4.1



In 2022, the CBU received a total of **5,302** applications, 17.1 percent of which came from the President of the Republic of Uzbekistan's virtual portal, 7.9 percent from the CBU's e-mail, and 55.4 percent came directly and through other ministries and agencies, with 8.2 percent received through the "hotline" and 11.4 percent received during appointments.

The CBU received **4,979** appeals, or 93.9 percent, of which were directly related to commercial bank activities. These appeals were transmitted to commercial bank headquarters for evaluation in the prescribed manner, and monitoring was created to notify applicants of the outcomes in a timely manner.

During the reporting year, **5,036** (95%) of the appeals received from individuals and legal entities were responded to in the prescribed manner, provided with appropriate explanations, and resolved positively, 123 (2.3%) of the appeals were sent to other ministries and agencies for consideration, and 10 (0.2%) of the appeals were not considered because they were anonymous.

About 80 percent of the CBU's appeals were linked to credit, bank employee behavior, creating bank accounts, the payment system, and non-cash settlements.

Table 6.4.1

Composition of issues raised in the appeals of individuals and legal entities

No	Matter of appeal	Number of appeals	percent
1	Bank loans and credit operations	3 128	59,0
2	Behavior of bank employees	511	9,6
3	Opening bank accounts, payment system and cashless settlements	508	9,6
4	Bank deposits and other deposit operations	296	5,6

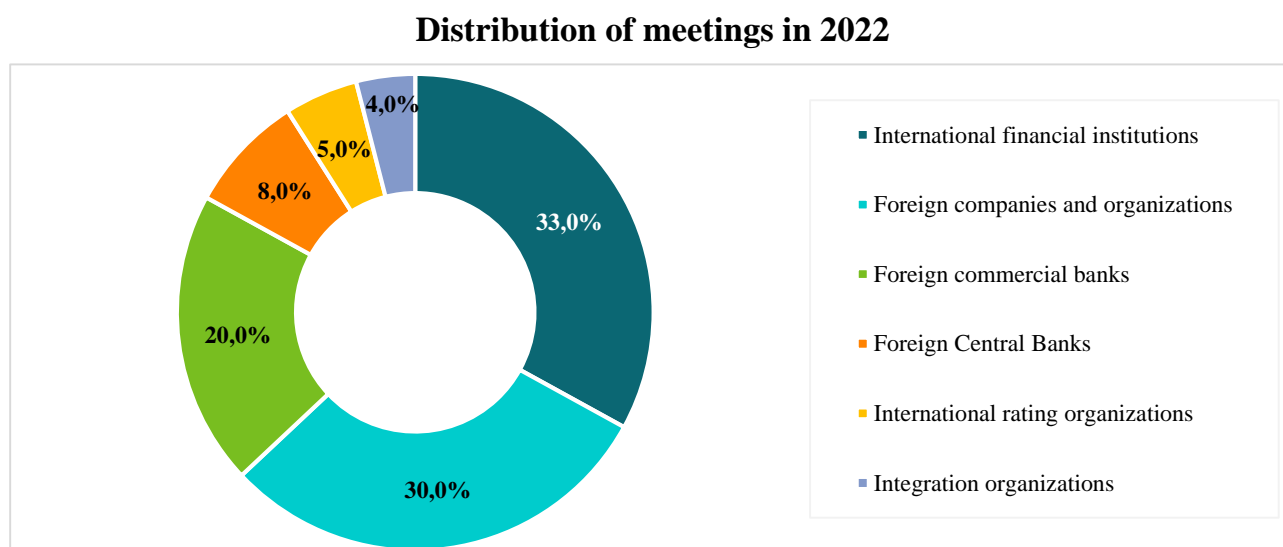
№	Matter of appeal	Number of appeals	<i>percent</i>
5	Obtaining information and offers on banking activities	213	4,0
6	Currency regulation and currency control	200	3,7
7	Bank cards and terminals	169	3,2
8	Employment	95	1,8
9	Receiving pensions	38	0,7
10	The issue of establishment and liquidation of banks and credit organizations	24	0,5
11	Other issues	120	2,3
	Total	5 302	<i>100</i>

The primary purpose of banking system changes is to provide more convenient and high-quality banking services to the public through expanding the availability of digital services. The comprehensive use of market procedures in lending will aid to reduce the number of appeals in this field while also increasing loan efficiency.

VII. INTERNATIONAL RELATIONS AND COOPERATION

More than **200** meetings and events with international financial institutions, foreign central banks, and other foreign organizations were organized by the CBU in 2022. Regardless of the improved pandemic situation, 70 percent of the sessions were held offline (*face-to-face*).

Figure 7.1



7.1. Cooperation with international financial institutions and foreign central banks

Over **70** meetings with the IMF, World Bank Group, EBRD, and other international financial institutions were held throughout the reporting year.

The sessions included topics such as **monetary and foreign exchange policy, balance of payments statistics, credit organization regulation, compliance and financial control system enhancement, and improving financial inclusion, knowledge, and skills of employees.**

Cooperation with the **IMF** was maintained in areas such as the enhancement of macroprudential and monetary policy instruments, as well as the implementation of contemporary methods of commercial bank regulation.

In particular, as part of the consultation mission on **Article IV of the IMF Agreements** in March-April 2022, the study of the country's macroeconomic situation and changes, the effectiveness of the Central Bank's monetary policy, and the prudential control of credit organizations were discussed.

The macroeconomic situation in our country was positively evaluated in the mission's results statement, and it was recognized as one of the countries that successfully passed the economic difficulties during the pandemic, as well as

conclusions and recommendations on the impact of the geopolitical situation on the economy of Uzbekistan.

In 2022, a **qualified foreign expert** was hired for a one-year contract as part of the IMF's technical assistance for the **enhancement of our country's macroprudential policy**. This specialist contributes to the production of necessary suggestions for ensuring Uzbekistan's financial stability.

During the reporting year, IMF missions provided technical assistance to the CBU in the areas of **macro stress testing, compliance-control and internal audit, transition to international accounting standards, mandatory reserve standards improvement, and communication policy formation**.

A number of meetings were scheduled with the chiefs of international financial institutions and foreign central banks as part of the **II Economic Forum of Uzbekistan**, which was held in Samarkand, and plans for future mutual collaboration were agreed upon.

At this seminar, CBU specialists discussed *"Macroeconomic stability and sustainable growth: a new stage of structural changes," "Development of the financial market: tools and goals," and "Economic Prospects of the Region."*

Under the chairmanship of the Republic of Uzbekistan, the IMF **Regional Capacity Development Center** for the Caucasus, Central Asia, and Mongolia (CCAMTAC) held two sessions in 2022 (*online on June 16 and on November 3 as part of the II Uzbekistan Economic Forum*). The member countries' delegates addressed methods to improve the effectiveness of the center's activities as well as the work to be done in 2023.

During 2022, the governors of the CBU attended the IMF and World Bank's **spring** (*April 18-24, Washington*) and **annual meetings** (*October 13-16, Washington*), as well as the meeting of the IMF's **"Swiss Group" member countries** (*July 3-6, Bad Ragatz*), where they participated and conducted negotiations on macroeconomic risk assessment, effective monetary policy, and mutual cooperation.

During the reporting year, the **World Bank Group** conducted 3 technical assistance missions in areas such as improving **banking supervision mechanisms**, developing a legislative framework for the **sanation of credit institutions**, and enhancing financial inclusion.

In particular, a number of seminars and trainings on bank supervision were organized in collaboration with the World Bank, during which the experience of advanced countries in implementing risk-based supervision and credit risk assessment was studied and relevant recommendations were received.

Furthermore, preliminary diagnostic results were prepared for the introduction of **mechanisms for the sanitation and improvement of the deposit guarantee system**, in collaboration with World Bank experts, and the preparation of a related law was initiated.

In 2022, in order to further develop the activities of **NCOs**, joint studies were conducted with experts from the World Bank, and on the basis of the recommendations formulated, a related law was developed and adopted.

In cooperation with the World Bank experts on the implementation of an **effective and high-tech management system (SupTech)** in 2022-2026, a roadmap for the implementation and practical application of the SupTech system was developed.

Work on projects to enhance regulations on movable asset financing, develop the microfinance services market, improve the quality of digital financial services, and develop the commercial mortgage market has begun in collaboration with the **International Finance Corporation**. The CBU established a mechanism for implementing a **specific legislative regime in the sector of financial services** in collaboration with this organization's specialists.

In addition, activity on gender equality and inclusion, as well as projects to help female entrepreneurs, was continued.

The Asian Development Bank held a number of consultative sessions and missions on projects implemented in the country. Furthermore, with the assistance of the Asian Development Bank, the involvement of qualified specialists in the field of consumer protection of banking services in the country was secured, as was the continued development of the fields of enhancing the financial literacy of businesses.

Cooperation with **the Alliance for Financial Inclusion** has grown in terms of boosting financial inclusion and enhancing policy for protecting the rights of banking service users.

Throughout the reporting year, CBU experts participated in the Alliance for Financial Inclusion's relevant working groups (*digital financial services; financing of SMEs; sustainable development of the green economy; measuring the level of financial inclusion*), as well as topics such as **digital currency, inclusive financial technologies, digital identity, and the green economy**. They took part in a total of nine educational activities, improving their knowledges and skills in the field.

In addition, at the Alliance for Financial Inclusion's annual conference in Jordan on September 7-8, 2022, information on the work on increasing financial inclusion in Uzbekistan was given, foreign experience in various areas was studied, and negotiations on improving employee skills were held.

The Central Bank expressed relevant opinions in round table discussions on the topics "*Digitalization of the financial market,*" "*Maintaining macroeconomic stability during reforms,*" and "*Financial market as a driver of market development*" on March 24-26, 2022, at the **I Tashkent International Investment Forum**.

On May 25-26, 2022 at the **II "PLAS" forum** on the topic "Banks and retail. Digital Transformation and Interaction" was attended by representatives of 1,600 leading fintech companies and banks from 50 countries, who presented the best practices and solutions in such areas as the development of national payment systems, the introduction of artificial intelligence technologies, cybersecurity, electronic money, distant biometrics.

A total of 12 events were organized in 2022 to further improve bilateral relations with **foreign central banks** and provide a legislative framework for mutual information exchange. More specifically:

– on March 3-4, as part of the state visit of the President of the Republic of Uzbekistan to the Islamic Republic of Pakistan, a **Memorandum of Understanding was signed with the State Bank of Pakistan** in the field of banking supervision. This memorandum provides a basis for the exchange of information between the two regulators in order to effectively perform tasks related to the control of the bank and ensure the reliability and stability of the banking system. As a result of negotiations with central banks and commercial banks of the two states, agreements were reached on the expansion of interbank relations;

– on May 20, a **meeting of the Subcommittee on Interbank Cooperation between the Republic of Uzbekistan and Russia** was organized in Samarkand, negotiations on interbank cooperation, payment systems and the activities of currency exchanges between the two countries were held within the framework of the event.

Following the event, a number of agreements were signed between the CBU and the **Central Bank of Russia** (*an agreement on cooperation in the field of banking supervision, supervision of pawnshops and microfinance organizations; an agreement on supervision and supervision of participants in the payment services market and payment systems; an agreement on cooperation in countering money laundering and terrorist financing*) and "Roadmap" for cooperation in the banking and financial sector for 2022-2026;

– the *Agreement on the bilateral educational cooperation program for 2022* was signed on June 22, during the visit of a delegation from the **Central Bank of Korea** to the CBU. A preliminary seminar was held at the CBU during the first part of this three-stage training program. At the occasion, a presentation was given on the topic of "**Financial stability in Uzbekistan**" on the external and internal

macro-financial situation, financial system analysis, potential risks and their impacts, and preliminary findings of the macro stress test;

– Bilateral meetings were held with the management of the **Central Banks of Switzerland, Kazakhstan, Georgia, Armenia, and Azerbaijan** on November 3-4, as part of the **II Economic Forum of Uzbekistan** in Samarkand, and it was agreed to begin mutual visits for the purpose of expanding cooperation and sharing experience.

In addition, an *"Agreement in the field of control and monitoring of payment services market participants and payment systems"* was made with the **National Bank of Tajikistan**;

– on December 1, as part of the meeting of the joint commission between Uzbekistan and Russia in Samarkand, the Ministry of Finance of Russia, the Central Bank of Russia, the Ministry of Finance of Uzbekistan, and the CBU signed a **Memorandum on cooperation in the field of increasing the population's financial literacy**.

The CBU joined the **Network of Central Banks and Supervisors for Greening the Financial System (NGFS)** in 2022 to exchange experience with leading international organizations on the development of environmental and climate risk management mechanisms in the republic's banking system.

7.2. Cooperation with international rating companies, foreign investors and other financial institutions

In 2022, international rating agencies (*Fitch Ratings, Moody's Investors Service, and S&P Global Ratings*) held **9** online and **2** face-to-face meetings.

At these meetings, the country's macroeconomic analysis, external sector statistics, monetary policy directions, and the current state of development of the banking system, specifically the banking system's financial indicators and observed trends, as well as privatization processes of state banks, were discussed.

The results of the discussions influenced the positive assessment of the sovereign rating of the Republic of Uzbekistan by these prestigious agencies.

A **Memorandum of agreement on cooperation with MasterCard Europe** was signed on July 22, 2022. This memorandum suggests putting out relevant work in areas such as cyber security, payment infrastructure development, financial inclusion, and financial literacy.

A **Memorandum of understanding** was also signed on December 21, 2022, between the CBU and the **Deutsche Sparkassenstiftung für internationale Kooperation**. According to this memorandum, it is intended to strengthen the

protection of financial service customers' rights in our country and to conduct collaborative actions in promoting the scope of responsible and customer-oriented financial services by the banking sector.

In 2022, representatives of the Central Bank actively participated as members of working groups formed within the framework of membership in **interstate and international integration unions**, including the **World Trade Organization**, as well as within the framework of the activities of the **Commonwealth of Independent States, the Shanghai Cooperation Organization, the Economic Cooperation Organization**, intergovernmental and interdepartmental commissions (*committees*).

The **last 10th round** of negotiations on the proposal of the **Extended Partnership and Cooperation Agreement between Uzbekistan and the European Union** was held in Tashkent from March 28 to April 1. Representatives of the CBU gave all essential information on banking services in the "**Investment and trade of services**" section of this negotiation. On July 6, following the conclusion of the final negotiations, a signing ceremony was place in Brussels.

Furthermore, the CBU governors attended the **5th meeting of the Working Group** on the Accession of the Republic of Uzbekistan to the **World Trade Organization**, which was held in Geneva on July 19-25, and during the negotiations with the member countries of this organization, detailed explanations regarding banking services in accordance with current legislation were given.

VIII. HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT, INTERNAL CONTROL AND RESEARCH ACTIVITIES

8.1. Organizational structure

The CBU's central office consists of **30** departments, **2** agency, and **2** divisions, as well as 14 regional offices in the Republic of Karakalpakstan, regions, and Tashkent city, as well as **4** subordinate organizations.

As of January 1, 2023, a total of 2,125 employees and specialists are working in the central office of the CBU, the Republic of Karakalpakstan, regional and Tashkent city offices.

8.2. System of working with employees

In 2022, the main focus of the development of the system of working with employees was on improving the types of professional standards based on labor market requirements, increasing the transparency of the recruitment processes, and increasing labor efficiency through employee retraining.

In particular, a branch council on professional qualifications and expertise in the area of banking activities was established, and by 2022, a total of **8 types of professional activities** had been developed and posted on the website mehnat.profstandart.uz in the state and Russian languages.

Cooperation with prestigious universities is being maintained in **order to fill open positions** in the CBU system. Vacancies are advertised on the CBU's official website as well as on social media.

The recruitment process was conducted as an open competition, with the process of submitting documents, testing through the telegram-bot, and establishing the degree of knowledge of foreign languages being organized for everyone at the same time online through the Google Meet platform.

The processes of arranging and running the competition are periodically monitored by professionals from the Compliance control and internal audit department.

In 2022, the Central Bank and its regional offices received **4,017** applications through telegram-bot, of which **1,474** candidates were suggested for the test stage and **218** candidates who passed the necessary steps were interviewed.

As a result, the CBU hired a total of **107** employees, including 55 for the central office and 52 for the regional offices.

In 2022, **102** staff reserves for **50** management positions were approved. Of these, **2** employees were appointed to the position of head of the regional offices,

and **4** employees from the reserve were appointed to the position of heads of structural divisions of the central office.

3 candidates included in the staff reserve are studying for a master's degree at universities in the UK and Japan, as well as 19 candidates have improved their qualifications and completed an internship abroad.

To attract talented youth to work and encourage them, a competition for a **scholarship of the CBU** was held from September 5 to 22, 2022.

25 most talented students were selected in the following areas: banking, economics, accounting and information technology from the Tashkent Financial Institute, the University of World Economy and Diplomacy, the International University of Westminster, the Singapore Institute of Development and Management, Inha University, Tashkent State University of Economics and the Mirzo Ulugbek National University of Uzbekistan.

The CBU has developed a program of seminars and cultural events for the fellows, as well as organized, on the day of the passage, three-hour practical internships in the relevant structural units of the CBU, each scholarship holder is assigned a qualified coach.

As of January 1, 2023, the CBU system employed 32 employees graduated from the Academy of Public Administration under the President of the Republic of Uzbekistan, 138 employees graduated from the Academy of Banking and Finance, and 72 employees received bachelor's and master's degrees from foreign university.

A total of 22 CBU employees are studying abroad, including, **1** at the Japanese National Institute of Political Science (*GRIPS*), **3** at the University of Tokyo, **1** at the Ritsumeikan University of Japan, **3** at the Hitotsubashi University of Japan, **1** at the Williams University (*USA*), the World Bank and **1** at Milken University, **1** at Glasgow University and **9** staff members who received the **El-Yurt Umid** Foundation scholarship for the training of specialists abroad and communication with fellow citizens and are currently at the universities of Swansea, Reading, Sussex, Dundee, Birmingham and Bonn in Germany studying for a master's degree.

In addition, **1** employee is studying doctoral studies at Yokohama State University of Japan and **1** employee is pursuing doctoral studies at the Japanese National Institute of Political Science (*GRIPS*).

In 2022, **119** employees of the central office and **2** employees of the organization at the CBU (**89 managers and 32 specialists**) improved their qualifications and completed internships in the USA, Hungary, Russia, Germany, Türkiye, Austria, Great Britain, Luxembourg, the United Arab Emirates, the Czech

Republic, Switzerland, Jordan, Kyrgyzstan, Korea, Italy, Armenia, France, Singapore, Malaysia and Belgium.

In the CBU system, 39 employees have IELTS (*International English Language Testing System*) certificates.

More than 75 employees were trained in courses to improve theoretical and practical knowledge in the field of office management, in the state language, at the Center for Training in the Basics of Office Management at the Tashkent State University of Uzbek Language and Literature named after Alisher Navoi and received the appropriate certificates.

8.3. Corporate center of retraining banking professionals

Comprehensive efforts were implemented in 2022 to centrally improve the professional abilities of professionals from the CBU and its regional offices, commercial banks, NCOs, and payment companies.

In particular, 293 training events, exchange of experience, and training practices were organized in collaboration with foreign and local partners, 264 of which included the CBU's central office, 76 of which were attended by regional head offices, 57 by commercial banks, and 19 by NCO employees.

75 percent of the events were planned online, while 25 percent were taught in the usual manner. 11 training programs were arranged to help CBU's staff develop their personal and management skills.

In addition, 79 certification-offering educational trips and 10 experience-sharing educational visits were planned to help personnel improve industry-specific knowledge and abilities.

Priority themes such as monetary policy, prudential control, financial stability, new information technologies, and information security were stressed in the creation of the CBU's training system for personnel based on the principles of proportionality and relevance.

Total participant coverage within training activities was 6,834 people, of which 29 percent were CBU employees, 15 percent were regional offices employees, 49 percent were commercial bank employees, and 7 percent were NCO employees.

Cooperation with international and local organizations was established in order to raise the professional knowledge and skills, personal and management skills of employees to a level that meets modern requirements. In the reporting year, 253 trainings were held with foreign and local partners, and 40 trainings were held by the CBU.

In order to improve workers' legal literacy, transition to international financial reporting standards, compliance control, and professional competence in doing work in the Uzbek language, 17 training events were arranged, with 122 CBU employees participating.

9 internal trainers from the CBU's structural divisions arranged 15 training events on various topics, and a total of 1,015 workers from the CBU and commercial banks strengthened their professional knowledge and abilities.

Work was focused on the systematic enhancement of the qualifications of the CBU's personnel reserve. Taking into account the importance of developing management, leadership, strategic, and critical thinking skills in addition to managers' professional knowledge, 24 online training events aimed at improving reserve staff members' professional knowledge and 11 online training events aimed at developing management skills (*soft skills*) were organized.

Special attention is being devoted to the organization of training activities based on the requirement for commercial bank and NCO workers to acquire professional knowledge and personal capabilities.

3,325 commercial bank employees who attended 57 events during the reporting year learned about the content and essence of regulatory legal documents on the organization and regulation of the payment system, compliance and control, protection of the rights of banking service consumers, financial fraud, corporate management, risk management, and it was achieved to increase their knowledge in topics such as management, sanitation.

Four workshops on "Sanctions compliance" for managers were organized in collaboration with audit firms KPMG, Deloitte, and Ernst & Young.

Almost twice as many training events (18) were held for NCO personnel on banking, finance, microfinancing activities, consumer rights, cyber security, and other industry themes, with a total of 489 participants.

Employees now have more opportunities to participate in educational courses offered by famous online platforms and to pursue independent education. To increase the share of prospective female leaders in the field of management, six leading employees of the CBU successfully completed an educational program designed by Oxford University's Said Business School and the "Women's World Banking" organization to improve the leadership and management skills of high-potential female employees, and all of them received certificates.

25 employees of the CBU on bank supervision participated in certified training courses on increasing the level of professional knowledge of factoring services on the FSI (Financial Stability Institute) Connect platform of the Bank of

International Settlements, including 3 employees of the EBRD on the online training platform.

19 employees took part in seven training courses organized in collaboration with foreign educational institutions to expand their understanding of modern information technologies (cyber security, data management, complex computer programs, and so on).

8.4. Monetary and financial statistics improvement

Measures were taken during the reporting year to align the practice of keeping monetary and financial statistics with international standards and to improve the granularity of reported statistical data.

In particular, in the domain of CBU activities, the transition from the IMF's Enhanced General Data Dissemination System (e-GDDS) to the Republic of Uzbekistan's Special Data Dissemination System (SDDS) has been accomplished.

For this purpose, the Republic of Uzbekistan's monetary and credit reviews (*review of the CBU, review of other deposit organizations, review of deposit organizations and monetary aggregates*) in the 14 days following the reporting month (*previously 20 days*) and external sector statistics "International reserves of the Republic of Uzbekistan" from the reporting month in the next 7 days (*previously 20 days*) were established.

The CBU's metadata in the IMF's e-GDDS was improved based on SDDS standards and delivered to the IMF.

Furthermore, the scope of statistical data on the extent and accessibility of the country's financial system published on the IMF's Financial Accessibility Survey statistical platform has been extended, entirely reformed, and released on this platform.

The practice of systematic publication of statistical and other data on the CBU's website on the Bloomberg platform, which is regarded as one of the primary databases on the international financial market, was improved throughout the reporting year.

In particular, together with Bloomberg experts, the CBU's page in this platform was supplemented with monetary indicators, external sector statistics, results of CBU operations, including deposit auctions conducted by the CBU, overnight deposits placed by commercial banks in the CBU, bonds issued by the CBU and placed in commercial banks, as well as data on inflation expectations of the households and firms.

The placement of the UZONIA interbank money market index has been launched on the Bloomberg platform for a period of 7, 30, 90 and 180 days, which is published daily on the CBU's official website.

8.5. Analysis and research in the Central bank

In the reporting year, based on the approaches of fundamental research, changes and trends in the national and foreign economies, their impact on price stability, the banking system and payment systems were studied.

In particular, in order to determine the compatibility of monetary and fiscal policies and the period of their active and passive phases, as well as to assess the impact of scenarios of various combinations of these phases on macroeconomic stability, including inflation, consumer and investment behavior of the households in decision-making, the activities of firms, a study was conducted on the topic **"Analysis of monetary and fiscal policy in Uzbekistan using the Dynamic Stochastic General Equilibrium Model (DSGE)"**.

The risks of macroeconomic instability in Uzbekistan's partner countries, increased pressure on the national currency, rapid inflation, and decreased investment were also investigated.

In this context, by making monetary policy decisions to assess the impact of interest rates and exchange rate fluctuations on domestic private investment, as well as to ensure an equilibrium between inflation and economic growth, an empirical study was conducted on the topic **"The impact of fluctuations in interest rates and exchange rates on domestic private investment"**.

A study on the topic **"Analysis of the effectiveness of concessional loans"** was undertaken in order to examine the influence of loans given at preferential and market interest rates on the efficiency of firms.

In this study, a comparative analysis of the incomes of enterprises that received loans from commercial banks at a preferential interest rate and at an interest rate formed on the basis of a market mechanism over the last 5 years was conducted, and conclusions about the effectiveness of loans allocated at a preferential and market interest rate were drawn.

A study on the topic **"Financial inclusion and the efficiency of the inflation targeting policy"** was done to analyze the effects of the amount of financial services coverage on the effectiveness of the inflation targeting regime.

During the recent period of reforms aimed at liberalizing the economy, improving the investment environment, sharply reducing the interference of the government in the business' activities, and easing the requirements for business

inspections, the possibility of an increase in the scale of our country's shadow economy has been formed.

In this respect, the CBU conducted **monetary methods based analyses to assess the shadow economy**, the results of which revealed that the size of the country's shadow economy has been growing in recent years, with volumes increasing from 40.3 percent in 2017 to 52.6 percent in 2021 to GDP.

In addition, with the start of complicated global economic processes in February 2022, changes began to occur in the countries' international economic activities. A study was undertaken on the topic "**Analysis of Uzbekistan's exports to the main trading partner countries, structural changes in it**" to identify the influence of global economic uncertainties on Uzbekistan's export potential.

The role of Uzbekistan in export-import operations with major trading partners, as well as price competitiveness and further export potential, were specifically examined.

Furthermore, monthly surveys were conducted among the individuals and legal entities during 2022 in order to analyze the impact of our country's economic policy on the standard of life of the households and the firms.

Monthly surveys of over 700 firms from all regions of the republic are done to analyze the current state of the real sector and their expectations. The "**Index of Economic Activity**" and the "**Index of Economic Expectations**" are developed based on the survey results.

Further development of analytical and forecasting potential is critical when making fully informed judgments in the field of CBU monetary policy and boosting the effectiveness of the influence of these decisions on other sectors and indicators of the economy.

A number of models are used in the processes of macroeconomic analysis and forecasting in the CBU.

In particular, Moving Average and Bayesian vector autoregression (BVAR) models are used for short-term inflation forecasting, quarterly projection models (QPM) for medium-term forecasting, multivariate regression models (DFM, VAR and ARDL) for forecasting short-term GDP growth.

As part of the QPM model's enhancement, the forecasting of direct investments and external sector indicators was fully implemented in 2022.

A project was launched in collaboration with the Swiss National bank and international consulting firms to build a Dynamic Stochastic General Equilibrium model (DSGE) allows assessing macroeconomic policies and studying the influence of structural changes and reforms on economic development.

8.6. Compliance control and internal audit

Internal audits of the CBU's structural divisions, subordinate organizations, and main territorial departments were conducted in accordance with the "Plan for the Organization of Compliance Control and Internal Audit in the System of the Central Bank of the Republic of Uzbekistan for 2022."

An assessment of the state of control tools for assuring the veracity of financial statements, the safety of assets, compliance with legal requirements and internal departmental documentation, and the efficacy of activities was performed during the internal audit.

Action plans were prepared to resolve deficiencies and inconsistencies revealed by the internal audit results, as well as to improve business procedures, with regular progress reports presented to the CBU's Audit Committee.

In 2022, the CBU's Audit Committee met 11 times, during which the following subjects were discussed:

- for the central office: execution of the financial plan of income and expenses in the context of structural divisions of the CBU, procurement processes, construction and repair work, management of international reserves, storage and work with precious metals;
- for subordinate organizations: issues of execution of forecast indicators, asset management, procurement processes and organizational issues;
- for the regional offices: issues of ensuring the safety of assets, procurement processes and customer service;
- issues of quality control of services provided by the audit company "Deloitte & Touche" for the external audit of the financial statements of the CBU, as well as the organization of the implementation of recommendations;
- issues of organization and improvement of the activities of the Compliance Control and Internal Audit Department, the development of appropriate action plans.

The Audit Committee of the CBU has assigned more than 109 tasks to structural divisions, of which **53** tasks have been completed in **full**, **24** tasks are expected to be completed in 2023, and **32** tasks are provided for **permanent execution**.

The internal audit service continued to improve its procedures in 2022. More specifically,

– an external examination of the internal audit service's serve was carried out as part of the IMF's technical support, and recommendations on improving internal audit were received from international specialists;

– adopted **the action plan for 2022-2027** on upgrading the CBU's internal audit activities to highest standards based on IMF guidelines;

– there has been an improvement in the objectives of the internal audit service: the internal audit has been transformed from a controller who primarily checks compliance with legislation and procedures to a risk-oriented internal audit, which, in accordance with international practice, provides coverage of all business processes in the audited entity, assessment of major risk management, and recommendations and suggestions for improving activation;

– employee knowledge and skills were enhanced, and audit skills in information technology and data security were developed.

The CBU's compliance control. The CBU's internal regulatory legislative actions on combating corruption have been strengthened as part of the implementation of anti-corruption compliance control activities.

Regulatory and legal documents were developed in particular on the issues of identifying and managing conflicts of interest in the Central Bank system, forming and submitting reports on the effectiveness of the anti-corruption system, researching contractors and hiring candidates, and organizing ethics and anti-corruption training for employees.

The CBU established the guidelines for receiving and reviewing reports of corrupt behavior and conflicts of interest through authorized communication channels, as well as performing official inspections in situations of staff corruption and etiquette violations. The approach for assessing corruption risks and monitoring anti-corruption measures has also been accepted.

Within the framework of procedures designed to monitor compliance with the requirements outlined in the preceding documents:

– information on the previous workplace conduct of more than **200** hired applicants was studied, as well as the honest completion of the tasks assigned to him in his employment, the presence of situations of conflict of interest, and the commission of corrupt behavior;

– during the implementation of competitive procurement, controls were developed to avoid participant affiliation, conflict of interest, and other corruption issues. Based on the results of control procedures, a number of competitive auctions that were deemed suspicious and hazardous were canceled;

– official examinations of cases of violations of internal regulation documents or etiquette were carried out in response to **13** appeals received alleging corruption

offenses and conflicts of interest in the CBU system. At the same time, the cases documented in the appeals were not confirmed, according to the results of official inspections;

– a procedure has been implemented that requires the supply of conflict of interest certificates for new workers when they are appointed to vacant positions, for current employees when they change jobs, and for all employees on an **annual** basis;

– steps have been taken to detect, assess, and decrease corruption risks in order to prevent corruption and eliminate the causes that contribute to its commission.

Based on the President of the Republic of Uzbekistan's Decree No. PP-81 dated January 12, 2022 "On Measures to Introduce a Rating System for Evaluating the Effectiveness of Anti-Corruption Activities," information on 5 categories and 29 indicators of the rating assessment of the effectiveness of anti-corruption activities, as well as information on the measures taken, are posted on the electronic platform "E-Anticor.uz."

An anti-corruption audit of regulatory legal papers governing banking activity was conducted.

X. APPENDIX

Table 1

Macroeconomic indicators of the Republic of Uzbekistan*
(at current prices)

Indicators	2022	
	amount, <i>in billion soums</i>	real growth, <i>in %</i>
Gross domestic product	888 341,7	5,7
Industrial production	551 050,9	5,2
Production of consumer goods	197 892,7	19,4
Agricultural production	347 564,4	3,6
Investments in fixed assets	269 857,5	0,9
Construction works	130 767,1	6,6
Retail turnover	319 288,2	12,3
Services	343 374,3	8,5
Foreign trade turnover, <i>in million dollars</i>	50 008,1	18,6
Export	19 308,8	15,9
Import	30 699,3	20,4
Balance of foreign trade turnover, <i>in million dollars</i>	-11 390,5	x

* Preliminary data of the Agency of Statistics

Table 2

Key indicators of socio-economic development of main trading partner countries for 2022*

(comparing with the previous year)

Indicators	Uzbekistan	Russia	Kazakhstan	China	Türkiye
Gross domestic product, in %	5,7	-2,1	3,2	3,0	5,6
Industrial production, in %	5,2	-2,5	1,0	3,4	3,3
Agricultural production, in %	3,6	6,7	9,1	4,3	0,6
Inflation, in %	12,3	11,9	20,3	1,8	64,3
Foreign trade turnover, in billion dollars	50,0	850,6	134,4	6 310,0	617,9
Export, in billion dollars	19,3	591,5	84,4	3 590,0	254,2
Import, in billion dollars	30,7	259,1	50,0	2 720,0	363,7

* Based on indicators of national statistics services

Таблица 3

Information on export-import transactions carried out with the main trading partner countries of the Republic of Uzbekistan for 2022*

Countries	Export		Import		Foreign trade turnover	
	<i>in millions dollars</i>	share, in %	<i>in millions dollars</i>	share, in %	<i>in millions dollars</i>	share, in %
Total	19 308,8	100,0	30 699,3	100,0	50 008,1	100,0
<i>including:</i>						
Russia	3 066,9	15,9	6 212,8	20,2	9 279,7	18,6
China	2 519,0	13,0	6 404,8	20,9	8 923,8	17,8
Türkiye	1 507,4	7,8	1 716,5	5,6	3 223,9	6,4
Kazakhstan	1 379,7	7,1	3 241,2	10,6	4 621,0	9,2
Kyrgyzstan	979,3	5,1	280,7	0,9	1 260,0	2,5
Afghanistan	750,6	3,9	9,3	0,0	759,9	1,5
Tajikistan	519,6	2,7	154,5	0,5	674,1	1,3
Turkmenistan	194,8	1,0	731,5	2,4	926,3	1,9
Iran	139,7	0,7	296,0	1,0	435,7	0,9
Pakistan	127,3	0,7	112,2	0,4	239,5	0,5
Belarus	126,5	0,7	409,7	1,3	536,2	1,1
Germany	88,9	0,5	1 070,4	3,5	1 159,3	2,3
USA	68,5	0,4	368,3	1,2	436,8	0,9
Korea	48,1	0,2	2 292,5	7,5	2 340,6	4,7

* Based on data from the Agency of Statistics

Table 4

Number and structure of credit institutions

	01.01.2022	01.01.2023
1. Credit institutions, total*	177	199
<i>including:</i>		
Commercial banks, of which:	33	32
State-owned banks	12	12
Other banks	21	20
Non-bank credit institutions, of which:	144	167
Microfinance organizations	70	85
Pawnshops	73	81
Mortgage refinancing organizations	1	1
2. Branches of commercial banks, total	860	832
3. Banking service centers (service offices and mini-banks)	1 244	1 543
4. 24/7 self-service offices	2 287	2 974

* There are not foreign branches of commercial banks and non-banking credit organizations

Table 5

Main indicators of commercial banks performance

(as of January 1, 2023)

in billion dollars

Banks	Assets		Loans		Capital		Deposits	
		share, in %		share, in %		share, in %		share, in %
Total	556 746,3	100,0	390 048,9	100,0	79 565,4	100,0	216 737,5	100,0
State-owned banks	435 135,6	78,2	324 680,8	83,2	61 919,2	77,8	135 534,4	62,5
Other banks	121 610,7	21,8	65 368,2	16,8	17 646,3	22,2	81 203,1	37,5

Table 6

Main indicators of commercial banks performance

in billion soums

Indicators	01.01.2022			01.01.2023			Nominal growth, <i>in %</i>	Real growth (excluding devaluation effect), <i>in %</i>
	Total	in foreign currency	share, <i>in %</i>	Total	in foreign currency	share, <i>in %</i>		
Assets	444 922,5	215 414,6	48,4	556 746,3	264 550,7	47,5	25,1	23,1
Loans	326 385,6	162 662,7	49,8	390 048,9	185 118,3	47,5	19,5	17,5
Deposits	156 189,8	60 611,7	38,8	216 737,5	84 942,7	39,2	38,8	36,9
Capital	70 917,6	346,8	0,5	79 565,4	359,2	0,5	12,2	12,2

Table 7

Comparative indicators of the banking system of the Republic of Uzbekistan

in billion soums

Indicators	01.01.2022			01.01.2023		
	Total	including:		Total	including:	
		State-owned banks	Other banks		State-owned banks	Other banks
Assets to liabilities, in %	119,0	118,9	119,1	116,7	116,6	117,0
Assets	444 922,5	362 421,9	82 500,6	556 746,3	435 135,6	121 610,7
Liabilities	374 004,9	304 726,7	69 278,2	477 180,8	373 216,4	103 964,4
Loans to deposits, in %	209,0	268,7	89,2	180,0	239,6	80,5
Loans	326 385,6	280 073,6	46 311,9	390 048,9	324 680,8	65 368,2
Deposits	156 189,8	104 248,0	51 941,8	216 737,5	135 534,4	81 203,1

Table 8

Commercial banks grouped by capital size

Indicators	Total		of which:											
			up to 100 billion soums		from 100 to 300 billion soums		from 300 to 500 billion soums		from 500 billion to 1 trillion soums		from 1 to 2 trillion soums		above 2 trillion soums	
	number of banks	amount, in billion soums	number of banks	share, in %	number of banks	share, in %	number of banks	share, in %	number of banks	share, in %	number of banks	share, in %	number of banks	share, in %
01.01.2022														
Total capital	33	70 917,6	2	0,1	8	1,8	5	2,6	2	2,1	8	17,3	8	76,0
including authorized capital	33	54 760,0	2	0,2	11	2,8	7	4,7	3	4,4	3	8,2	7	79,7
01.01.2023														
Total capital	31	79 565,4	1	0,1	5	1,1	4	1,9	5	4,5	5	10,4	11	82,1
including authorized capital	31	59 856,7	1	0,1	7	1,5	7	4,1	5	5,7	4	9,4	7	79,2

Table 9

Main performance indicators of commercial banks grouped by asset size
(as of January 1, 2023)

in billion soums

Indicators	Total		Categorization of commercial banks, grouped in terms of asset size							
	number of banks	amount	up to 3 trillion soums		from 3 to 10 trillion soums		from 10 to 30 trillion soums		30 trillion soums and more	
			number of banks	amount	number of banks	amount	number of banks	amount	number of banks	amount
Assets										
Assets	31	556 746,3	10	9 606,4	7	42 400,5	8	140 450,4	6	364 289,0
Total loans	31	390 048,9	10	5 221,9	7	20 190,0	8	92 240,0	6	272 397,0
Loans to individuals	31	100 948,7	10	1 905,7	7	8 655,3	8	36 168,0	6	54 219,8
Loans to legal entities	31	289 100,2	10	3 316,2	7	11 534,8	8	56 072,0	6	218 177,2
Short-term loans	31	51 139,7	10	1 360,2	7	3 084,0	8	8 847,8	6	37 847,7
Long-term loans	31	338 909,3	10	3 861,7	7	17 106,0	8	83 392,2	6	234 549,3
Loans in national currency	31	204 930,7	10	4 105,6	7	13 619,1	8	61 256,4	6	125 949,6
Loans in foreign currency	31	185 118,3	10	1 116,4	7	6 570,9	8	30 983,6	6	146 447,4
Equity and financial performance										
Total capital	31	79 565,4	10	2 651,8	7	6 248,0	8	19 199,2	6	51 466,4
Capital adequacy ratio, in %	31	17,8	10	22,6	7	18,4	8	15,9	6	18,4
Profit	31	9 993,4	10	182,8	7	1 486,9	8	3 478,3	6	4 845,4
Return on assets, in %	31	2,5	10	3,2	7	5,0	8	3,7	6	1,8
Return on equity, in %	31	13,3	10	8,2	7	27,2	8	20,1	6	9,8
Liabilities										
Deposits of individuals	31	63 123,8	10	3 496,4	7	8 787,8	8	25 321,9	6	25 517,8
Deposits of legal entities	31	153 613,7	10	2 218,1	7	22 166,2	8	44 711,1	6	84 518,3

Table 10

Financial Soundness Indicators of banking system

in billion soums

Indicators	December 2021	December 2022
Regulatory capital to risk-weighted assets, in %	17,5	17,8
Total regulatory capital	70 191,1	83 413,0
Risk-weighted assets	401 104,8	467 999,7
Tier 1 capital to risk-weighted assets, in %	14,6	14,5
Tier 1 capital	58 624,2	67 793,5
Risk-weighted assets	401 104,8	467 999,7
Nonperforming loans net of provisions to capital, in %	13,1	9,0
Nonperforming loans net of provisions	9 186,2	7 466,8
Total regulatory capital	70 191,1	83 413,0
Nonperforming loans to total gross loans	5,1	3,5
Nonperforming loans	16 974,0	13 992,4
Total gross loans	330 863,2	396 130,4
Return on assets, in %	1,3	2,5
Net income before taxes	5 350,6	12 579,5
Total assets	397 406,8	497 363,1
Return on equity, in %	6,1	13,3
Net income after taxes	3 885,3	9 993,4
Capital	63 657,7	74 890,2
Interest margin to gross income, in %	49,0	42,1
Interest margin	16 595,4	24 161,7
Gross income	33 846,3	57 343,9
Noninterest expenses to gross income, in %	47,1	46,5
Noninterest expenses	15 942,1	26 688,4
Gross income	33 846,3	57 343,9
Liquid assets to total assets, in %	18,6	21,5
Liquid assets	82 873,5	119 709,5
Total assets	444 922,5	556 746,3
Liquid assets to short-term liabilities, in %	46,9	47,3
Liquid assets	82 873,5	119 709,5
Short-term liabilities	176 642,0	253 038,6
Tier 1 capital to assets, in %	13,2	12,2
Tier 1 capital	58 624,2	67 793,5
Total assets	444 922,5	556 746,3

Table 11

Non-performing loans of commercial banks (NPL)*in billion soums*

Date	of which:								
	Loans			Non-performing loans			Share of non-performing loans to total loans, <i>in %</i>		
	Total	State-owned banks	Other banks	Total	State-owned banks	Other banks	Total	State-owned banks	Other banks
01.01.2022	326 385,6	280 073,6	46 311,9	16 974,0	15 068,8	1 905,2	5,2	5,4	4,1
01.01.2023	390 048,9	324 680,8	65 368,2	13 992,4	12 643,3	1 349,1	3,6	3,9	2,1

Table 12

Profitability indicators of banking sector*in billion soums*

Income and expense of banking sector	01.01.2022	01.01.2023
Interest income	47 391,6	61 727,8
Interest expense	30 796,2	37 566,1
Interest margin	16 595,4	24 161,7
Non-interest income	17 250,9	33 182,3
Non-interest expense	4 944,3	11 811,9
Operating expense	10 997,8	14 876,5
Non-interest income (loss)	1 308,8	6 493,9
Allowance for probable loan and leases losses	12 221,0	13 862,7
Evaluation of non-credit losses	332,6	4 213,4
Net profit (Loss) before Tax	5 350,6	12 579,5
Expense regarding income tax	1 465,3	2 587,2
Net income (loss)	3 885,3	9 993,4

Profitability indicators of the banking sector	2022	2023
Return on assets (ROA)	1,3	2,5
Return on equity (ROE)	6,1	13,3
Ratio of net interest income to total assets	3,7	4,3
Ratio of net interest income from loans to total loans	5,1	6,2
Ratio of net interest income to total liabilities	4,4	5,1
Ratio of net interest margin to total assets	4,2	4,9

Table 13

Capital adequacy of banking sector

Indicators	01.01.2022		01.01.2023	
	<i>in billion soums</i>	share, in %	<i>in billion soums</i>	share, in %
Regulatory Tier I capital	58 624,2	83,5	67 793,5	81,3
Main capital stock	58 428,9	83,2	67 598,1	81,0
Capital surplus	195,4	0,3	195,4	0,2
Regulatory Tier II capital	11 566,8	16,5	15 619,6	18,7
Total regulatory capital	70 191,1	100,0	83 413,0	100,0
<i>Capital adequacy ratio, in %</i>	<i>17,5</i>		<i>17,8</i>	
<i>Ratio of regulatory Tier I capital, in %</i>	<i>14,6</i>		<i>14,5</i>	

Table 14

Liquidity dynamics of banking sector

Indicators	01.01.2022	01.01.2023
Ratio of highly liquid assets to total assets, in %	17,7	19,4
<i>in national currency, in %</i>	17,1	18,7
<i>in foreign currency, in %</i>	17,2	20,2
Liquidity coverage ratio, in % (minimum: 100%)	189,6	211,6
<i>in national currency, in %</i>	217,0	216,8
<i>in foreign currency, in %</i>	167,6	202,2
Net stable funding ratio, in % (minimum: 100%)	115,4	115,6
<i>in national currency, in %</i>	119,0	117,4
<i>in foreign currency, in %</i>	111,8	113,4
Immediate liquidity ratio, in % (minimum: 25%)	99,3	110,1

Table 15

Total loan portfolio of commercial banks, by activity

Indicators	01.01.2022		01.01.2023		compared to the previous year, in %
	in billion soums	share in %	in billion soums	share in %	
Total loans:	326 385,6	100,0	390 048,9	100,0	19,5
Industry	117 638,5	36,0	126 646,6	32,5	7,7
Agriculture	35 022,4	10,7	42 096,4	10,8	20,2
Construction	9 281,8	2,8	10 399,7	2,7	12,0
Trade and catering	27 406,0	8,4	28 910,6	7,4	5,5
Transport and communications	28 708,1	8,8	29 672,6	7,6	3,4
Development of material and technical support	3 814,4	1,2	3 856,1	1,0	1,1
Individuals	69 496,2	21,3	100 948,7	25,9	45,3
Other activities	35 018,2	10,0	47 518,1	12,2	35,7

Table 16

Allocated loans of commercial banks to exporters, by region

in billion soums

Regions	of which:					
	Total loans		For working capital		Long-term	
	number	amount	number	amount	number	amount
Total	6 473	59 339,8	2 407	21 414,7	4 066	37 925,1
Republic of Karakalpakstan	60	394,6	21	221,0	39	173,6
Andijan region	952	4 126,3	176	1 455,6	776	2 670,7
Bukhara region	402	1 908,7	94	1 217,3	308	691,4
Jizzakh region	68	1 061,6	24	449,4	44	612,1
Kashkadarya region	117	1 009,7	49	673,9	68	335,8
Navoi region	57	185,6	17	47,5	40	138,1
Namangan region	256	1 350,7	90	378,9	166	971,9
Samarkand region	234	1 607,7	86	698,7	148	909,0
Surkhandarya region	93	712,2	28	352,8	65	359,4
Sirdarya region	71	1 389,6	34	593,3	37	796,2
Tashkent region	163	1 371,0	73	774,7	90	596,3
Fergana region	247	1 510,2	103	784,6	144	725,6
Khorezm region	120	2 010,0	46	860,9	74	1 149,1
Tashkent city	3 633	40 701,9	1 566	12 905,9	2 067	27 796,0

Table 17

Classification of deposits and deposit certificates of commercial banks

in billion soums

Date	Total	maturity:					over 1 year
		demand deposits	up to 30 days	from 31 to 90 days	from 91 to 180 days		
01.01.2022	156 189,8	66 129,4	5 290,7	18 779,7	20 825,7	45 164,3	
<i>share, in %</i>	100,0	42,3	3,4	12,0	13,3	28,9	
01.01.2023	216 737,5	92 552,6	4 463,0	25 587,5	26 854,6	67 279,9	
<i>share, in %</i>	100,0	42,7	2,1	11,8	12,4	31,0	

Table 18

Monetary aggregates

Indicators	01.01.2022		01.01.2023		compared to the previous year, in %
	<i>in billion soums</i>	<i>share, in %</i>	<i>in billion soums</i>	<i>share, in %</i>	
Money supply (M2), total	145 254,6	100,0	189 085,1	100,0	30,2
<i>including:</i>					
currency in circulation (M0)	28 656,9	19,7	42 206,2	22,3	47,3
non-cash funds	116 597,7	80,3	146 878,9	77,7	26,0
<i>of which:</i>					
funds of legal entities	71 232,9	49,0	96 625,9	51,1	35,6
funds of individuals	45 364,8	31,2	50 253,0	26,6	10,8

Table 19

Reserve money and its structure

Indicators	01.01.2022		01.01.2023		compared to the previous year, in %
	in billion soums	share, in %	in billion soums	share, in %	
Reserve money, total	60 132,6	、	78 985,5	100,0	31,4
<i>including:</i>					
cash outside the Central Bank	32 791,8	54,5	48 842,9	61,8	48,9
funds in correspondent accounts of banks	25 014,4	41,6	27 276,1	34,5	9,0
funds on obligatory reserves of banks	2 107,3	3,5	2 638,0	3,3	25,2
deposits in the Central Bank	219,1	0,4	228,5	0,3	4,3

Table 20

Number of ATMs and infokiosks, by region

Regions	01.01.2022	01.01.2023	compared to the previous year, <i>in %</i>
Total	12 940	20 379	57,5
Republic of Karakalpakstan	492	642	30,5
Andijan region	559	1 347	141,0
Bukhara region	743	873	17,5
Jizzakh region	300	390	30,0
Kashkadarya region	620	747	20,5
Navoi region	423	499	18,0
Namangan region	616	933	51,5
Samarkand region	949	1 222	28,8
Surkhandarya region	630	741	17,6
Sirdarya region	263	323	22,8
Tashkent region	722	1 645	127,8
Fergana region	1 185	1 486	25,4
Khorezm region	489	715	46,2
Tashkent city	4 949	8 816	78,1

Table 21

Transactions carried out through payment terminals*in billion soums*

Regions	2021	2022	compared to the previous year, in %
Total	111 136,9	177 671,0	59,9
Republic of Karakalpakstan	3 829,2	3 908,0	2,1
Andijan region	4 843,5	7 006,0	44,6
Bukhara region	3 672,1	3 848,9	4,8
Jizzakh region	1 673,5	1 856,1	10,9
Kashkadarya region	4 788,0	5 670,1	18,4
Navoi region	3 188,6	3 563,6	11,8
Namangan region	3 013,9	3 535,2	17,3
Samarkand region	4 926,2	6 478,8	31,5
Surkhandarya region	3 043,6	3 713,7	22,0
Sirdarya region	1 526,5	1 551,2	1,6
Tashkent region	5 605,4	5 764,9	2,8
Fergana region	5 202,4	6 298,2	21,1
Khorezm region	2 880,6	3 970,0	37,8
Tashkent city	62 943,4	120 506,5	91,5