

National Bank of the Kyrgyz Republic

THE FINANCIAL SECTOR STABILITY REPORT OF THE KYRGYZ REPUBLIC

according to the results of the first half of 2021

December 2021

Bishkek

EDITORIAL BOARD

Chairman N. Jenish

Board Members: M. Jakypov

A. Karakozhaev

A. Kozubekov

E. Lelevkina

I. Sultankulov

Executive Secretary M. Abdyrakhmanov

Founder: National Bank of the Kyrgyz Republic

The publication is registered with the Ministry of Justice of the Kyrgyz Republic, mass media registration certificate No. 1863 of August 17, 2012

© National Bank of the Kyrgyz Republic, 2021

This publication may not be copied or redistributed in any form or by any means without authorization of the National Bank of the Kyrgyz Republic. The reference to the publication "Financial Sector Stability Report of the Kyrgyz Republic" is obligatory when copying and translating excerpts

On the issues related to the content of the publication, please contact:

Financial Stability Monitoring Division National Bank of the Kyrgyz Republic 168 Chuy Avenue, Bishkek, Kyrgyz Republic

Tel.: (+996 312) 61-22-46 Fax: (+996 312) 61-07-30 E-mail: mabdyrahmanov@nbkr.kg

This publication is released 2 times a year. It is published in three languages: Kyrgyz, Russian and English.

Statistical, analytical and calculated data/estimates are given as of the end of the reporting period in this report.

Adjustments to previously published data are possible, and, therefore, a period of 10 years is considered to be "open" due to possible change in accounting methods or historical data used in this publication.

Due to rounding of numbers, mismatch in the last number position is possible when summing up.

Other Publications of the National Bank of the Kyrgyz Republic

Annual Report of the National Bank of the Kyrgyz Republic

This publication is a complete report on the activity of the National Bank for the previous year. It contains assessment of changes in the real, financial and external sectors of economy, the description of decisions and actions of the National Bank in the monetary sphere, in the banking and payment systems, in the non-banking financial-credit organizations; it includes financial statements and general information on the National Bank, as well as the statistical appendices. It is published in the state, official and English languages.

Bulletin of the National Bank of the Kyrgyz Republic

The publication contains the statistical data on key macroeconomic and financial indicators of the Kyrgyz Republic. It is published on the official website of the National Bank in the state, official and English languages.

Monetary Policy Report

The Report informs the public of the decisions made by the National Bank in the monetary policy area based on the analysis and forecast of the key inflation factors and assessment of the economic development in the external and internal environment of the Kyrgyz Republic. It is published on the official website of the National Bank in the state, official and English languages.

Balance of Payments of the Kyrgyz Republic

The publication describes the recent development trends in the external sector and contains the data on the balance of payments, external trade, international reserves, external debt, and the international investment position, as well as the metadata and the information base to draw up the balance of payments. It is published quarterly – in February, June, August, and November in Kyrgyz, Russian and English languages.

Regulatory Acts of the National Bank of the Kyrgyz Republic

These are the regulations, instructions and other regulatory legal acts adopted by the National Bank of the Kyrgyz Republic. The estimated frequency of the journal publication is once a month in the state and official languages.

The publications of the National Bank are distributed according to the approved list, and are also posted on the official website of the National Bank at: www.nbkr.kg/Publications.

CONTENT

PREAMBLE	6
MAJOR CONCLUSIONS	8
I. MACROECONOMIC AND FINANCIAL ENVIRONMENT	9
1.1. Macroeconomic Conditions and Risks	9
1.2. Structure of the Financial Sector	17
1.3. Financial Markets	19
1.4. Real Estate Market	22
II. BANKING SECTOR	28
2.1. Major Trends of the Banking Sector Development	28
2.2. Banking Sector Risks	31
2.2.1. Credit Risk	31
2.2.2. Liquidity Risk	37
2.2.3. Concentration Risk	38
2.2.4. Currency Risk	39
2.2.5. Interest Rate Risk	41
2.2.6. Contagion" Risk	42
2.2.7. Country Risk	43
2.3. "Reverse" Stress Testing of the Banking Sector	44
2.3.1. "Reverse" Stress Testing of Credit Risk	44
2.3.2. "Reverse" Stress Testing of Liquidity Risk	45
2.3.3. "Reverse" Stress Testing of Market Risk	46
III. NON-BANKING FINANCIAL-CREDIT ORGANIZATIONS	47
3.1. Main Trends	47
3.2. Risks of Non-banking Financial-Credit Organizations	50
3.3. Stress Testing of NBFCOs Sector	54
IV. PAYMENT SYSTEMS	56
V. IMPROVEMENT OF THE FINANCIAL SECTOR REGULATION	59
GLOSSARY AND ABBREVIATIONS	60
I ICT OF ADDDEVIATIONS	(1

PREAMBLE

National Bank of the Kyrgyz Republic has been publishing the Financial Sector Stability Report of the Kyrgyz Republic since 2012. The objective of the Report is to inform the public on the general assessment of the stability and soundness of the financial system of the Kyrgyz Republic.

Financial Stability in this publication means smooth and continuous functioning of the financial institutions, the financial markets and the payment systems enabling to perform functions of the financial intermediation even in conditions of financial imbalances and shocks.

Results of the monitoring and analysis of financial stability are considered by the National Bank in forming the main directions of the National Bank's monetary policy, regulating the banking activity and development of the strategy for financial-credit organizations of the Kyrgyz Republic.

The Financial Sector Stability Report of the Kyrgyz Republic is oriented to financial market participants and the audience interested in the financial stability issues.

LIST OF BOXES

Box 1. Housing Affordability Index	26
Box 2. Stress Testing of Impact from Price Changes in the Real Estate Market on the Banking Sector	27
Box 3. Results of the Commercial Banks' Statistical Observation: Loans	34
Box 4. Results of the Commercial Banks' Statistical Observation: Largest Clients	35
Box 5. Credit and Currency Risks	40
Box 6. Concentration Indices based Assessment of NBFCOs Sector Activity	50

MAJOR CONCLUSIONS

In the first half of 2021, the economic recovery in the Kyrgyz Republic was restrained by the epidemiological situation in the country and in the world. The economy demonstrated acceleration of the inflationary process, the global rise in prices for food products and petroleum, oil and lubricants was the main reason therefor.

Despite the negative impact of the external economic factors, the KGS/USD exchange rate showed a relatively stable dynamics.

In the reporting period, there was an increase in the main indicators of the banking sector: assets, capital, deposit base, loan portfolio and the indicators of financial intermediation.

At the end of the reporting period, the systemic risks of the banking sector were present and were assessed as "moderate". The banking sector has a high level of capital adequacy, which indicates that there is potential for further increasing the level of financial intermediation, the efficiency of functioning and ensuring the stability of the banking sector in the future.

Development of the regulatory framework was mainly focused on mitigating the consequences of the crisis due to the coronavirus infection spread and creating equal opportunities for provision of the banking services.

The level of risks was generally minimal in the systemically important and significant payment systems, due to the risk management mechanisms provided for by the legislation of the Kyrgyz Republic and the rules of payment systems, the current high level of liquidity, the system of insurance deposits and prepayment. The National Bank took measures to ensure the uninterrupted operation of payment systems in an epidemiological situation.

I. MACROECONOMIC AND FINANCIAL ENVIRONMENT

1.1. Macroeconomic Conditions and Risks

In the first half of 2021, the economic recovery in the Kyrgyz Republic was restrained by the negative dynamics in the production output of the gold sector amid worsening epidemiological situation at the end of the reporting period.

In the reporting period, there was an acceleration of inflationary processes with the drivers being an increase in global prices for food products, and, as a result, high prices for socially important goods in the country, as well as an increase in prices for petroleum, oil and lubricants.

External Conditions

Most of the main trading partners of the Kyrgyz Republic demonstrated economic recovery in the first half of 2021 due to the government support measures and a noticeable easing of fiscal and monetary policies in 2020. At the same time, the active revival of demand in the global financial markets had a significant impact on the intensification of inflationary processes in the countries.

In the Republic of Kazakhstan, the first half of 2021 was marked by economic recovery after a recession from an unforeseen situation with the coronavirus infection. At the end of the reporting period, the GDP of the Republic of Kazakhstan was formed at a rate of 2.4 percent. The resumption of economic activity in the country was due to the world economic revival, the anti-crisis measures taken by the state, a decrease in quarantine restrictions, stimulation of investment in the non-extractive sectors of the economy, an increase in wages of the population and the positive indicators of the country's creditworthiness. On the other hand, rapid economic recovery and an increase in domestic consumer demand, together with the rise in prices in the world food market, accelerated inflation in the Republic of Kazakhstan.

In the reporting period, the level of the policy rate remained unchanged, since it contributed to control over the dynamics of inflationary processes and a gradual slowdown in inflation in the medium term. However, in the future, if the actual inflation rate does not match its forecast estimates and the risks realized by pro-inflationary factors, a decision will be made to tighten monetary policy.

In the reporting period, soft monetary policy and budgetary measures continued to support economic activity and domestic demand in the Russian Federation, as well as through lending activity. There was a steady growth in consumer and investment demand. The Russian economy was also supported by external demand, which continued to grow steadily.

At the end of the half-year, the economic growth of the Russian Federation was estimated at 4.8 percent compared to the corresponding period of 2020. At the same time, the Russian economic growth demonstrated slowdown as the recovery process was completed. In June, the country's GDP increased by 8.9 percent in annual terms, following an increase by 11.6 percent a month earlier, thereby reaching pre-pandemic levels. However, rapid demand recovery generated stable inflationary pressure, which increased due to the supply restrictions. Taking into account the emerging trends, the key rate was increased from 4.25 to 5.50 percent per annum during the first half of the year.

The Chinese economy recovery in the first half of the current year was uneven: in the second quarter of 2021, the economy demonstrated the lower rates of 7.9 percent compared to the highest values of 18.3 percent during the first three months. At the same time, the risks of further economic contraction remain amid possible expanding of measures taken to prevent the rapid spread of coronavirus in the country due to an increase of infection new cases.

Internal Conditions

Gross Domestic Product

During January-June 2021, the economic activity of the Kyrgyz Republic demonstrated uneven recovery with its slowdown by the end of the reporting period. Thus, according to the results of the first six months of the current year, the economic decline in the country was observed at the level of 1.7 percent compared to the same period of 2020 after a decline of 1.6 percent in January-May of the current year. In the reporting period, the negative indicator of the economy was due to a decrease in the production output at "Kumtor" gold-mining enterprises by 33.5 percent and a reduction in the volume of construction by 14.2 percent. At the same time, in Q2 2021, the GDP growth rate without "Kumtor" gold-mining enterprises entered the positive zone and reached 11.6 percent after the value of (-) 4.5 percent in Q1 of the current year, to make 3.7 percent at the end of the first six months (in January-June 2020, a decrease by 7.3 percent).

The GDP deflator was formed positive at 13.9 percent, having increased by 9.6 p.p. compared to January-June 2020.

The indicators of the service sector demonstrated positive dynamics. There was an improvement in transport activity (+19.2 percent), wholesale and retail trade (+10.0 percent), information and communication (+4.0 percent), etc. At the same time, for the first time since January-July 2020, mining sector demonstrated positive dynamics, to make 2.1 percent in the reporting period. In January-June 2021, gross agricultural output increased by 1.3 percent compared to the same period of 2020 due to growth of production output in the livestock industry.

The sectors of the economy such as industry (-2.9 p.p.), construction (-0.9 p.p.) and net taxes on products (-0.2 p.p.) made a negative contribution to the economic recession.

In the first half of the current year, the decrease in industrial production by 11.7 percent compared to the corresponding period of 2020 was due to a decline in the production output of pharmaceutical products (by 36.5 percent), basic metals and finished metal products, as well as chemical products (by 31.2 percent).

The volume of construction decreased by 14.2 percent amid a reduction in investment in fixed assets from the internal (by 3.6 percent) and the external (by 37.3 percent) sources of financing compared to January-June 2020. A decrease in investment in fixed assets was observed in the construction of facilities of most types of economic activity, excluding agriculture, forestry and fishing, provision (supply) of electricity, gas, steam and conditioned air, information and communication, real estate operations, government administration and defense, education, healthcare, and housing construction.

Table 1.1.1. Contribution of Individual Activities in GDP

	Jan-June 2020			Jan-June 2021		
	Share, percent	Growth rate, percent	Contribution in growth, <i>p.p.</i>	Share, percent	Growth rate, percent	Contribution in growth, <i>p.p.</i>
GDP	100	-5.6	-5.6	100	-1.7	-1.7
Agriculture, forestry and fishery	9.3	1.0	0.1	9.8	1.3	0.1
Industry	25.1	0.4	0.1	22.8	-11.7	-2.9
Mining	1.9	10.1	0.2	2.3	2.1	0.0
Processing sectors (Processing industry)	20.1	-0.2	0.0	17.3	-16.2	-3.3
Provision (supply) of electric energy, gas, steam and conditioned air	2.9	0.6	0.0	2.8	6.1	0.2
Water supply, waste treatment and processing, receipt of recyclable materials	0.2	-16.5	-0.05	0.3	44.3	0.11
Construction	6.1	-8.8	-0.6	4.7	-14.2	-0.9
Services	48.6	-9.1	-4.4	47.7	4.4	2.2
Wholesale and retail trade; repair of cars and motor-cycles	13.4	-15.9	-2.4	14.8	10.0	1.3
Transportation activity and storage of cargo	3.1	-34.6	-1.6	4.0	19.2	0.6
Information and communication	3.1	-5.9	-0.19	2.9	4.0	0.12
Other	28.9	-1.0	-0.2	26.0	0.3	0.1
Net (exclusive of subsidies) taxes on products	10.9	-5.6	-0.8	15.0	-1.7	-0.2

Source: NSC KR

Inflation

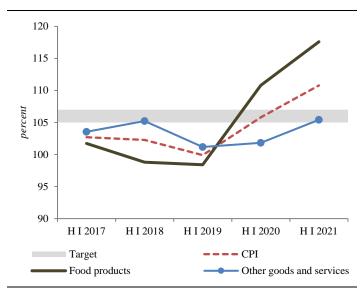
In the first half of 2021, inflation demonstrated an upward trend and constituted 14.2 percent in annual terms in June (in January, 10.1 percent). This is mainly due to rise in food prices conditioned by the global trend of an increase in food prices, including in the EAEU countries, as well as a gradual recovery in the domestic and the external demand. A significant rise in prices for petroleum oil and lubricants due to an increase in the wholesale selling prices in the Russian petroleum product market and the world prices for crude oil in 2021 was an additional driver. Further increase in prices for petroleum, oil and lubricants is expected considering the growth of selling prices for gasoline at the Russian refineries.

There was an increase in prices for the rest of the CPI groups based on the abovementioned factors, as well as taking into account all production chains.

At the same time, rise in prices for the group "alcoholic drinks and tobacco products" was observed amid an increase in excise duty on tobacco products. There was also an increase in prices in the service sector and for non-food products.

During the crisis associated with the spread of the COVID-19 infection, the National Bank of the Kyrgyz Republic, as before, was focused on ensuring price stability through implementation of appropriate monetary policy.

Chart 1.1.1. CPI in the Kyrgyz Republic (cumulatively year-to-date to the corresponding period of the previous year)



Source: NSC KR

Upsurge in food prices (in June 2021 against June 2020, prices increased by 22.8 percent) was the main reason for escalation of inflation.

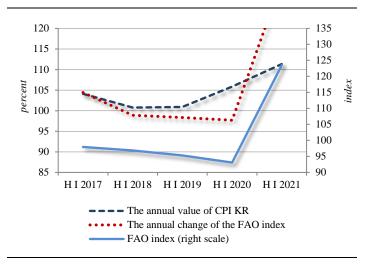
In the economy of Kyrgyzstan, a large share of food products consumed in the republic is imported, and therefore our country is most sensitive to fluctuations in food prices. In the reporting period, there was a significant increase in prices for meat, vegetable oils, fruits and vegetables, sugar (total contribution – 9.8 p.p.), mainly due to growth in meat exports to neighboring countries and an increase in the cost of goods in the producing countries.

Among the main factors that influenced the rise in food prices, one can single out accelerated increase in prices in the world commodity markets, depletion of

domestic products, a large share of food imports, late sowing and uncertainty about the future harvest due to unfavorable weather conditions in 2021.

In 2021, there are risks of an increase in food prices in the world and in our country amid these factors, as well as taking into account the situation in the world food markets.

Chart 1.1.2. Dynamics of the Kyrgyz CPI and the FAO Index

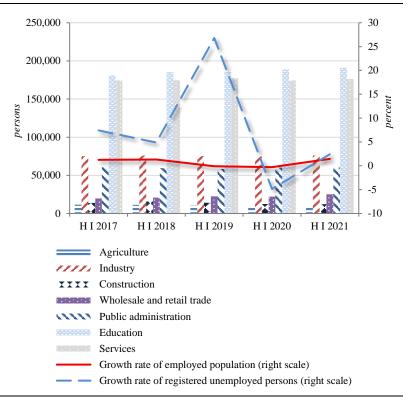


Source: NSC KR, www.fao.org

In 2021, there was a volatile price dynamics in the world food markets. In general, prices demonstrated ongoing growth, while at the end of the first half of 2021, there was a slight decrease in the world food prices amid seasonal harvesting in the exporting countries. The decrease in the FAO index in June, for the first time during twelve months, was due to decrease in prices for vegetable oils, grains and dairy products. At the same time, prices for sugar and meat remained relatively high.

Labor Market and Wages

Chart 1.1.3. Number of Officially Employed and Unemployed People



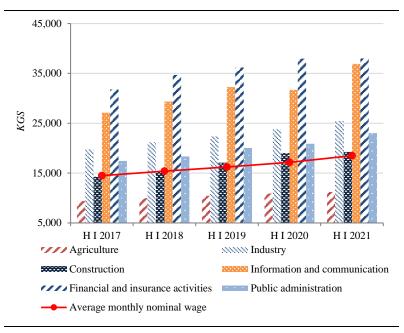
Source: NSC KR

According to the Ministry of Labor, Social Security and Migration of the Kyrgyz Republic, as of July 1, 2021, the number of unoccupied people in search of registered at the state employment service increased by 4.6 percent compared to the similar date in 2020 and constituted 104.8 thousand people. As of July 1, 2021, number of registered unemployed people increased by 2.4 percent compared to the same indicator of 2020 and constituted 80.5 thousand people. The registered unemployment rate made 3.1 percent of the economically active population. The coronavirus pandemic, which resulted in jobs decline in 2021, was among the main reasons for an increase in the number of officially registered unemployed people compared to the last year.

In addition, in the reporting period, the quarantine regime absence in the current year was the reason for an increase in registered unemployment rate, since in 2020, introduction of the quarantine measures was the main reason for a decline in the growth rate of the number of unemployed people, as due to such measures many could not register¹. Additionally, the Ministry of Labor, Social Security and Migration of the Kyrgyz Republic explains the increase in official unemployment rate by advanced number of the labor migrants who returned to the country in the first half of the current year and were registered with the state employment service due to the need for assistance in finding work.

¹ According to oral information from the Ministry of Labor, Social Security and Migration of the Kyrgyz Republic, May 2021.

Chart 1.1.4. Average Monthly Nominal Wages of the Employees at the Enterprises and Organizations by Economic Activity



Source: NSC KR

Education (34.7 percent), services (32.1 percent) and industry (13.8 percent) were the main employment sectors of the ablebodied population in the reporting period. It should be noted that the official data do not indicate that the number of employed population has significantly changed over the past five years.

In the reporting period, the country demonstrated a positive dynamics of wage growth in all types of economic activity, except for agriculture. At the end of the first half of 2021, the average monthly nominal wage per one employee increased by 7.9 percent compared to the same period of 2020 and amounted to KGS 19.4 thousand. The largest increase in the average

monthly wage growth rate was observed in transport activities and cargo storage (28.1 percent), information and communication (18.3 percent), professional, scientific and technical activities (15.3 percent) and in real estate operations (12.5 percent). Real wages in the first half of 2021 decreased by 2.6 percent compared to the corresponding period of the last year.

State Budget

During the reporting period, the resource part of the budget demonstrated an increase in the public finance sector, mainly due to growth in tax revenues amid gradual economic recovery in the Kyrgyz Republic and trading partners. Increased business activity of the population and worldwide increase in the commodity prices positively influenced the indicators due to relaxation of restrictions, which resulted in an increase in tax revenues to the budget, and a relative stabilization of the exchange rate. All applications received from the budget institutions for socially significant items of expenditures were satisfied in full, including for such items as "wage", "contributions to the Social Fund", "medicines", "food", "benefits", "scholarships" and "public debt service".

Thus, according to the results of the first half of 2021, there was a surplus of the state budget, which amounted to KGS 1.4 billion or 0.5 percent to GDP against the deficit in the same period of 2020 (KGS 16.6 billion or 6.8 percent to GDP). The state budget revenues from operating activities increased by 52.5 percent or KGS 31.7 billion compared to the same period of 2020 and amounted to KGS 92.0 billion or 34.0 percent of GDP. At the same time, expenses increased by 11.7 percent or KGS 8.2 billion and amounted to KGS 78.0 billion or 28.8 percent to GDP.

The net outflow of budget funds for operations on purchase of non-financial assets increased by 1.8 times or by KGS 5.6 billion compared to the same period of 2020 and amounted to KGS 12.6 billion or 4.7 percent to GDP.

At the end of the reporting period, the public debt decreased by 0.1 percent compared to the indicator of 2020 and amounted to USD 4.9 billion.

Table 1.1.2. Main Parameters of the State Budget of the Kyrgyz Republic

	Jan-June 2020		Jan-June 2021	
	billions of KGS	% to GDP	billions of KGS	% to GDP
Total incomes (including sales of non-financial assets)	60.3	25.0	92.1	34.0
including incomes from operational activity	60.3	24.9	92.0	34.0
sale of non-financial assets	0.0	0.0	0.1	0.0
Total expenditures (including purchase of non-financial assets)	76.9	31.8	90.7	33.5
including expenditures for operational activity	69.8	28.9	78.0	28.8
purchase of non-financial assets	7.1	2.9	12.7	4.7
Deficit(-) / Proficit (+)	-16.6	-6.8	1.4	0.5
Primary deficit (-) / proficit (+)	-12.4	-5.1	6.3	2.3
Budget financing	27.9	11.6	12.5	4.6
External financing	20.3	8.4	-2.2	-0.8
Internal financing	7.7	3.2	14.7	5.4

Source: MF KR

However, uncertainty about the prospects remains high as the pandemic can take an unexpected turn despite widespread vaccination of the population. The limited resources of the budget due to the negative consequences of the coronavirus infection spread do not allow to significantly increase expenses.

According to the main directions of the fiscal policy of the Kyrgyz Republic for 2022-2024, the budget expenses will demonstrate their social orientation, while expenses will be allocated to the priority areas.

In addition, in the medium term, the state budget will provide funds for measures to control the COVID-19 and eliminate the pandemic consequences.

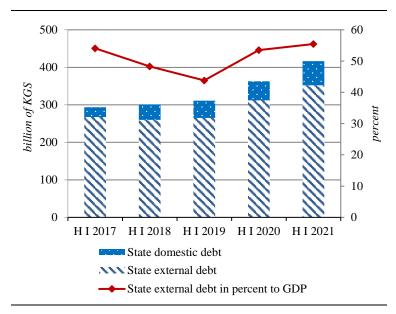
Macroeconomic Risks

In the reporting period, the economy of the Kyrgyz Republic and the main trading partners of the country was in a state of uncertainty due to the third wave of the coronavirus pandemic and the possible introduction of a quarantine regime. The epidemiological risk was aggravated by the slow rate of the population vaccination. A reduction in production output at the country's largest gold-mining enterprise, Kumtor, resulted in a decrease in the gross domestic product in the Kyrgyz Republic. The risks of further reduction in production output at the Kumtor Mine (together with the planned reduction), among other things, cause a negative trend in economic development and its slow recovery. In the external economic environment, the existing geopolitical risks in Central Asia, slow economic recovery in the partner countries, as well as pro-inflationary risks in the world markets will have a restraining effect on stabilization of the macroeconomic environment in the country.

According to the National Bank's forecasts, the inflation rate is expected to accelerate slightly in 2021 and exceed single-digit values amid the impact of non-monetary factors. At the end of 2021, an increase in administered prices and tariffs (electricity and public transport tariffs) and unfavorable climatic conditions in the spring-summer period of the current year, which conditioned a significant decrease in agricultural production output were the main non-monetary pro-inflationary factors.

In 2022, a gradual decline in the CPI level is expected amid recovery in supply in the commodity markets.

Chart 1.1.5. Public Debt Status



Source: MF KR

In the reporting period, the state continued to receive financial assistance international financial organizations in the form of loans/grants to control coronavirus. High share of external borrowings, as well as a worldwide rise in prices, weakening of the national currency and an increase in yields on government securities, may prevent from a more rapid economic recovery in the country. At the same time, the debt policy will be focused on increasing domestic borrowing developing a market of the long-term government securities to reduce the share of public debt in foreign currency, however it will require increased costs to service domestic debt.

1.2. Structure of the Financial Sector

Institutional structure of the financial sector in the Kyrgyz Republic is represented by the commercial banks and other financial institutions.

Table 1.2.1. Institutional Structure of the Financial Sector (number of the financial institutions)

Financial institutions	H1 2017	H1 2018	H1 2019	H1 2020	H1 2021
Commercial banks	25	25	25	23	23
Other financial companies, including:	691	681	672	650	609
Non-banking financial-credit organizations (NBFCO), including:	660	657	649	627	606
Microfinance organizations, including:	159	148	139	134	134
microcredit companies	101	98	92	87	87
microcredit agencies	52	42	39	38	38
microfinance companies	6	8	8	9	9
Specialized Financial-Credit Organization	1	1	1	1	1
Credit offices		1	2	2	2
Credit unions	114	108	96	93	91
Exchange offices	385	398	410	396	377
OJSC "Guarantee fund"	1	1	1	1	1
Insurance companies	19	17	17	17	-
Investment funds	9	4	3	3	-
Stock exchanges	1	1	1	1	1
Pension funds	2	2	2	2	2

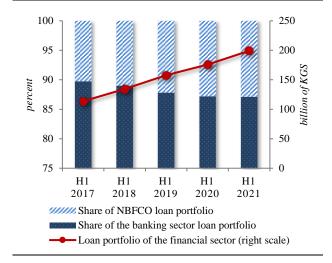
Sources: CBs, NBFCOs, NSC KR, State Financial Supervision Service

As of the end of the first half of 2021, assets of the banks and the NBFCOs constituted KGS 341.8 billion or 54.5 percent to GDP.

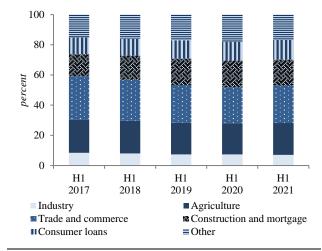
In the first half of 2021, the total loan portfolio of the financial sector constituted KGS 199.1 billion or 31.7 percent of GDP. The share of the banks' loans in the loan portfolio of the financial sector decreased by 0.1 p.p. and at the end of the first half of 2021 made 87.1 percent (Chart 1.2.1).

Chart 1.2.1. Structure of the Loan Portfolio

Chart 1.2.2. Sectoral Structure of the Loan Portfolio in the Financial Sector



ource: CBs and NBFCOs



Source: CBs and NBFCOs

......

The high concentration of loans was still observed in the trading sector (banks) and agriculture (NBFCOs) within the sectoral structure of the loan portfolio in the financial sector. The aggregate share of the loan portfolio in the financial sector of the aforementioned sectors of the economy at the end of the first half of 2021 constituted 46.0 percent of total issued loans and amounted to KGS 91.5 billion (Chart 1.2.2).

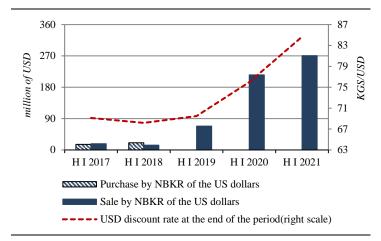
1.3. Financial Markets

In the first half of 2021, the KGS/USD exchange rate demonstrated relatively stable dynamics. However, demand for foreign currency exceeded its supply in some periods on the domestic foreign exchange market amid influence of the external economic conditions. During such periods, the National Bank, in accordance with the current floating exchange rate regime, conducted foreign exchange interventions to smooth sharp fluctuations in the exchange rate. The volume of operations in the money market was higher compared to the corresponding period of 2020. The long-term securities were still more attractive for the domestic and foreign investors compared to the short-term ones in the government securities market. In the reporting period, the activity of participants in the market for the National Bank's notes was relatively low.

1.3.1. Currency and Money Market

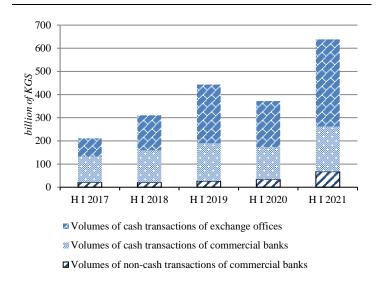
Currency Market

Chart 1.3.1.1. Dynamics of Interventions of the NBKR in the US Dollar Market



The situation in the domestic foreign exchange market demonstrated relative stability. The coronavirus pandemic and the following economic crisis, coupled with the risks of new variants of COVID-19, were the main reasons for weakening of the national currency in the reporting period. For six months of 2021 (compared to the exchange rate as of December 31, 2020), the USD/KGS exchange rate increased by 2.4 percent, from 82.6498 to 84.6640 KGS/USD.

Chart 1.3.1.2. Volume of Purchase and Sale of Foreign Currency by Types of Operations (in KGS Equivalent)



Source: NBKR

Additional demand for foreign currency liquidity or its supply in certain periods from the foreign exchange market participants due to their expectations amid changes in the international financial and commodity markets, was offset by the foreign exchange interventions of the National Bank. In the reporting period, the National Bank conducted operations for sale of foreign currency in the amount of USD 270.5 million in order to smooth significant fluctuations in the exchange rate. The National Bank did not conduct interventions to purchase foreign currency.

Current trends of a gradual recovery in economic activity by the end of the first half of 2021 resulted in an increase in the total volume of operations for

purchase and sale of foreign currency by all participants in the foreign exchange market (including operations with non-residents) by 71.4 percent, up to KGS 638.2 billion. Despite the fact that the bulk of operations in still conduced in cash (89.5 percent as of the end of June 2021), since 2019, there was a positive upward trend in the share of foreign exchange operations that are conducted in the non-cash segment, from 6.0 to 10.5 percent. In terms of currencies, the volume of operations increased in all major types of currencies, except for tenge.

Money Market

The money market is a component of the financial market, which presents financial resources with a maturity of 12 months or less. These financial resources are generally characterized by relatively high reliability and low interest rates. The money market is among the institutions that contribute to the efficient allocation of financial resources in the economy, providing the lenders with the opportunity to receive profit by placing their money, and the borrowers – with the opportunity to manage liquidity flexibly. In the first half of 2021, activity in the interbank credit market increased compared to the previous six months, and the interest rates were lower compared to the previous years. The interest rates in the money market are among the factors of their interest rates formation in the capital market.

In the first half of 2021, the volume of operations in the interbank credit market increased by 29.1 percent compared to the corresponding period of 2020 and amounted to KGS 20.9 billion. In the reporting period, the standard operations were not conducted in the national and foreign currencies, all operations were conducted on repo terms. The average weighted rate in the interbank market was 4.74 percent to be significantly higher than 3.70 percent registered in the first half of 2020. The volatility of rates was generally low and comparable to 2020. The weighted average terms decreased from 6.9 days in the corresponding period of the year, down to 4.2 days.

In the reporting period, the volume of overnight loans provided by the National Bank to support the banks' short-term liquidity increased by four times in the first half of 2020 and amounted to KGS 14,402.9 million. The volume of funds placed by the commercial banks on overnight deposits amounted to KGS 528.4 billion (-14.1 percent compared to the first half of 2020).

1.3.2. Securities Market

In the reporting period, there was a decrease of activity in the ST-Bills market compared to the previous year amid reduction of borrowings by the Ministry of Finance of the Kyrgyz Republic in the domestic market at the expense of these securities. The issuer offered only 12-month ST-Bills² in the short-term market, while in March-April, the auctions were not conducted due to lack of demand and insufficient number of participants.

According to the results of the auctions, the weighted average yield of ST-Bills remained unchanged at 5.92 percent year-to-date; in the first half of 2020, the yield was at 5.85 percent. The sales, taking into account additional placements, decreased from KGS 1.0 billion in January-June 2020 down to KGS 285.0 million in January-June 2021.

In the reporting period, operations on purchase/sale of ST-Bills were not conducted in the secondary market.

Long-term government securities are still more attractive for the domestic and foreign investors compared to the short-term ones, while, 7- and 10-year securities were in great demand in the first half of 2021. In the structure of ST-Bonds in circulation, the institutional investors were the main holders with the share of 54.3 percent as of the end of the reporting period.

² The Ministry of Finance of the Kyrgyz Republic offers only 12-month ST-Bills since February 2020.

The weighted average yield of ST-Bonds increased from 10.42 to 10.73 percent in the first half of 2021. The growth of rates in the long-term segment was still observed amid negative consequences of the pandemic, the current expectations of the possible spread of COVID-19 new variants and accelerated inflation. The total sales of ST-Bonds, taking into account additional placements for 6 months of 2021, increased by 2.1 times compared to the previous year and amounted to KGS 9.2 billion.

In the reporting period, the operations of participants in the secondary market of ST-Bonds decreased by 9.9 percent (down to KGS 228.7 million in nominal terms).

The activity of participants in the market of the National Bank's notes in the reporting period was relatively weak, which was characterized by a reduction in the number of participants and a decrease in the volume of demand and supply at the auctions of notes. Thus, in the reporting period, the total volume of demand for the National Bank's notes decreased by 23.1 percent (down to KGS 113.8 billion), while the supply decreased by 19.7 percent compared to the same period in 2020, down to KGS 112.9 billion. 14- and 28-day notes were in great demand, while in the same period of the last year, 7-day notes were in great demand, demand for longer instruments (91-day notes) remained low. The total weighted average yield of notes increased from 4.04 to 5.04 percent in the first half of 2021 (in the reporting period, the total yield varied within 4.36-5.78 percent).

1.4. Real Estate Market

At the end of the first half of 2021, there was an increase of the price index³ in the real estate market of the Kyrgyz Republic due to the rise in prices for individual houses and apartments compared to the same period of 2020.

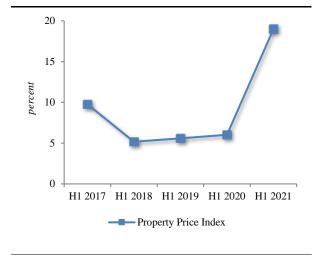
There was also an increase in the level of the average wage, which positively influenced the housing affordability index.

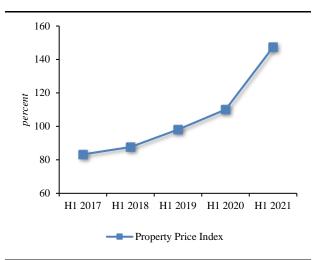
Risks to the financial sector from the real estate market remain moderate, which was conditioned by insignificant share of the mortgage loans⁴ in the total loan portfolio of the banks.

At the end of the first half of 2021, an increase in the property price index from 13.0 percent to 19.0 percent, as well as in the property basis price index from 37.4 percent to 147.4 percent was observed in the Kyrgyz Republic due to growth in prices for individual housed by 29.2 percent and for apartments by 9.8 compared to the first half of 2020.

Chart 1.4.1. Price Index Growth Rate in the Real Estate Market

Chart 1.4.2. Basis Price Index Growth Rate in the Real Estate Market⁵





Source: SALR GKR, NBKR calculations

Source: SALR GKR, NBKR calculations

As of June 30, 2021, the average price for 1 square meter of housing (apartments) in Osh increased by 16.2 percent, up to KGS 42.3 thousand and in Bishkek – by 7.6 percent, up to KGS 57.1 thousand compared to the same period of 2020. The average price for 1 square meter of individual houses in Osh increased by 19.4 percent, up to KGS 62.6 thousand, and in Bishkek – by 34.2 percent, up to KGS 71.3 thousand.

In the first half of 2021, the number of transactions on the real estate purchase and sale increased by 61.2 percent and amounted to 25,962. The transactions on purchase and sale of the apartments increased by 65.6 percent and the transactions on purchase and sale of the houses increased by 55.7 percent compared to the same period of 2020 and amounted to 14,735 and 11,227, accordingly.

 $L = (\sum_{i=1}^{\kappa} QoiPti / \sum_{i=1}^{\kappa} QoiPoi)*100,$

where

K = number of real estate types;

Qoi = number of real estate of type i in the base period;

Poi = price of real estate of type i in the base period;

Pti = price of the real estate of type i in the current period.

³ The Laspeyres index method was used in developing price index for the real estate. In general, the Laspeyres index is computed as follows:

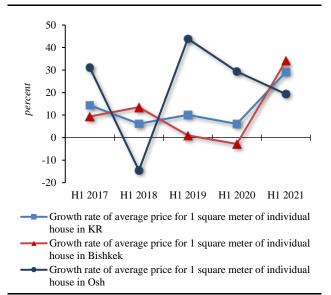
⁴ Currently, a mortgage loan is usually a long-term loan extended on security of the title to real estate in the Kyrgyz Republic.

⁵ The year 2010 was taken as the base period.

Chart 1.4.3. Dynamics of Price Changes for Apartments

18 16 14 12 percent 10 8 6 4 2 0 H1 2018 H1 2019 H1 2020 H1 2017 Growth rate of average price for 1 square meter of apartments in KR Growth rate of average price for 1 square meter of apartments in Bishkek Growth rate of average price for 1 square meter of apartments in Osh

Chart 1.4.4. Dynamics of Price Changes for Individual Houses

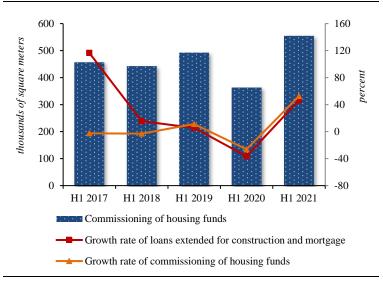


Source: SALR GKR, NBKR calculations

Source: SALR GKR, NBKR calculations

There was an increase in the level of commissioning of housing funds. At the end of the first half of 2021, the increase in the aggregate level of commissioning of housing funds constituted 52.7 percent compared to the same period of 2020 due to the growth in the volume of housing funds commissioning in all regions of the country, exclusive of Chui region (Table 1.4.1).

Chart 1.4.5. Dynamics of Housing Commissioning and Loan Extended for Construction and Mortgage⁶



Source: NSC KR, NBKR calculations

⁶ Data for the period.

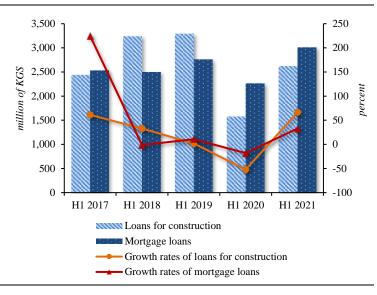
Table 1.4.1. Geographic Structure of Commissioned Housing

	HI 202	20	HI 2021		
	Total S commissioned to area thous. sq.m		Total commissioned area thous. sq.m	Share of total area, %	
Bishkek city and Chui region	111.5	30.7	184.6	33.3	
Osh city and Osh region	68.8	18.9	133.8	24.1	
Other regions of KR	183.0	50.4	236.2	42.6	
Total	363.3	100.0	554.6	100.0	

Source: NSC KR

As of June 30, 2021, there was an increase in the volume of loans issued to finance construction and mortgage loans compared to the same period of 2020. Thus, in the first half of 2021, the volume of loans extended for construction increased by 66.2 percent (up to KGS 2.6 billion), and the volume of mortgage loans increased by 32.8 percent (up to KGS 3.0 billion). The sector of construction and mortgage demonstrated growth in the volume of loans extended in the national and foreign currency.

Chart 1.4.6. Loans Extended for Construction and $Mortgage^7$



Source: CBs, NBKR

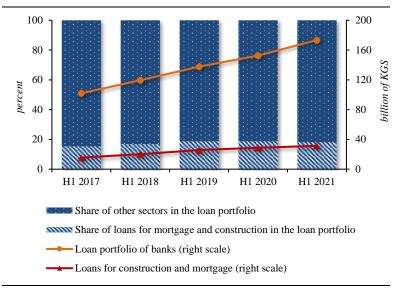
At the end of the first half of 2021, residential houses are generally constructed and commissioned at the expense of the population (90.6 percent of the total commissioning)⁸.

As of June 30, 2021, the share of loans for construction and mortgage decreased by 0.7 p.p. and constituted 18.1 percent (Chart 1.4.7) in the total loan portfolio of the commercial banks.

⁷ Data for the period.

⁸ "Social and economic situation of the Kyrgyz Republic (January-June 2021)", NSC KR.

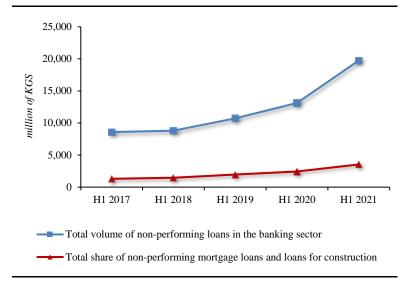
Chart 1.4.7. Total Share of Loans for Mortgage and Construction in the Loan Portfolio of Commercial Banks⁹



Source: CBs, NBKR

The total volume of non-performing loans for mortgage and construction increased by 45.7 percent and amounted to KGS 3,533.2 million; therefore, the aggregate share of non-performing loans in the aforementioned sectors decreased by 0.6 p.p. as of the end of the first half of 2021 and constituted 17.9 percent of the total volume of non-performing loans of the banking sector (Chart 1.4.8). Moreover, the volume of non-performing loans for mortgage and construction in foreign currency increased by 60.4 percent and amounted to KGS 2,362.3 million.

Chart 1.4.8. Dynamics of Non-performing Loans



Source: CBs

⁹ Data as of the end of period.

Box 1. Housing Affordability Index

As of June 30, 2021, the housing affordability level in the Kyrgyz Republic remained unchanged compared to the same period of 2020 (growth by 0.1 p.p.) and constituted 6.0 years. This is due to the growth rates of real estate prices (growth by 9.8 percent) outrunning the growth rates of the average monthly nominal wages (growth by 7.8 percent) (Chart 1).

Chart 1. Housing (Apartments) Affordability Index without Minimal Consumer Budget

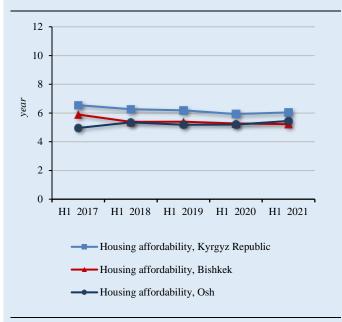


Chart 2. Housing (Apartments) Affordability Index including Minimal Consumer Budget



Sources: NSC KR, SALR GKR, NBKR

Sources: NSC KR, SALR GKR, NBKR

According to the results of the first half of 2021, to purchase an apartment of 54 square meters in the Kyrgyz Republic one should save the average monthly nominal wage of the family, where the income is received by two people, for 6.0 years with other conditions being equal.

According to the results of the first half of 2021, a family of three people in the Kyrgyz Republic with the minimum consumer budget of KGS 18,996.2 (49.0 percent of total family income) will need 11.8 years in order to purchase housing (Chart 2).

Box 2. Stress Testing of Impact from Price Changes in the Real Estate Market on the Banking Sector¹⁰

As of June 30, 2021, the share of loans, secured by pledged real estate, constituted 31.7 percent of the total volume of loans in the loan portfolio of the banks. The volume of pledged real estate (at collateral value) constituted 74.3 percent of the total collateral of the loan portfolio.

Credit risks of the banking sector are conditioned by possible decrease in the value of the pledged real estate below the loan repayment balance and further potential refusal of the borrower from loan repayment.

Stress testing is focused on quantitative assessment of possible losses from outstanding loans and identification of the most vulnerable banks (groups of banks).

Scheme 1. Results of Stress Testing of Impact from Price Changes in the Real Estate Market on the Level of Credit Risk of the Banking Sector

Scenario	Potential losses of the banking sector		Potential losses of large banks	\geq	Risk of capital adequacy ratio violation	
"Historical" scenario* (decrease in price for real estate by 23% per a year)				\geq	1 bank	
"Alternative" scenario (decrease in price for realestate by 40% per 2 years)		>			5 banks	
"Negative" scenario (decrease in price for real estate by 50% per a year)	KGS -9.7 billion		KGS -1.5 billion	\geq	7 banks	

^{*} At the end of 2008, prices for real estate in Kyrgyzstan decreased by 23 percent.

In addition to stress test, the threshold level of decrease in prices for real estate, when there is a risk of a decrease in the profits of the banking sector and when the banks potentially suffer losses, was calculated. The banking sector may face the risk of a decrease in profits and losses of individual banks if prices for the real estate decrease by 45.4 percent, large banks – by 47.1 percent. There is a risk of violation of the capital adequacy ratio by the banking sector, as well as by the large banks when prices for real estate are likely to decrease by 57.9 and 57.7 percent, respectively.

Possible difference in the estimated value of collateral real estate, which may be less than the market value by at least 20 percent, was not taken into account in calculations of the stress test. Taking into account aforementioned facts, the threshold level of decline in prices for real estate can increase by 20 percent.

¹⁰ Stress test was conducted on the basis of the commercial banks' data provided in the course of the survey as of June 30, 2021.

II. BANKING SECTOR

At the end of the first half of 2021, growth of the main indicators of the banking sector: assets, capital, deposit base, loan portfolio and indices of financial intermediation was observed compared to the first half of 2020.

At the end of the reporting period, systemic risks of the banking sector are estimated as moderate. The banking sector is characterized by a high level of capital adequacy, indicating the availability of the potential to further increase the level of financial intermediation, efficiency and sustainability of the banking sector in the future.

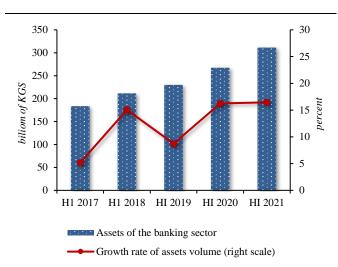
2.1. Major Trends of the Banking Sector Development

As of June 30, 2021¹¹, 23 commercial banks (including the Bishkek branch of the National Bank of Pakistan) and 310 of their branches worked in the territory of the Kyrgyz Republic, among which there were 16 banks with foreign participation in the capital, including 11 banks with foreign participation in the amount of more than 50 percent. All banking institutions of the country are universal by the type of business.

Assets

Generally, the growth in the volume of the banking sector assets was observed at the end of the first half of 2021. Assets of the banking sector amounted to KGS 311.2 billion, having increased by 16.4 percent compared to the first half of 2020 (Chart 2.1.1).

Chart 2.1.1. Dynamics of Assets in the Banking Sector



The growth of assets was mainly provided by increase of:

- the loan portfolio by 13.1 percent or KGS 20.1 billion;
- liquidity in the form of cash and funds on the correspondent accounts by 40.9 percent or KGS 27.1 billion.

The share of loan portfolio in the structure of assets constituted 55.7 percent, having decreased by 1.7 p.p. compared to the first half of 2020.

Source: NBKR

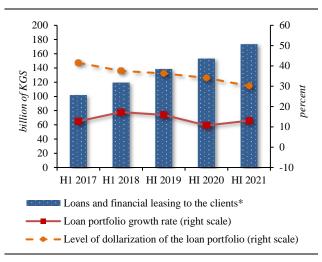
Loan Portfolio

In the first half of 2021, growth of the loan portfolio was observed in all sectors of economy.

At the end of the reporting period, the level of dollarization of the loan portfolio in the banking sector decreased by 4.0 p.p. compared to the first half of 2020 and amounted to 30.1 percent (Chart 2.1.2).

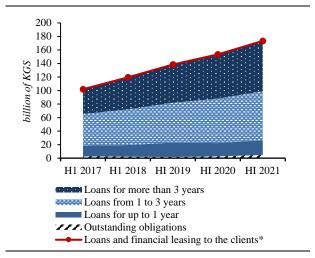
¹¹ The data are submitted according to periodic regulatory reporting of the commercial banks (PRBR).

Chart 2.1.2. Dynamics of Loan Portfolio in the Banking Sector



^{*} Exclusive of loans provided by FCO and special loan loss provisions
Source: NBKR

Chart 2.1.3. Structure of Loan Portfolio by Maturity



* Exclusive of loans provided by FCO and special loan loss provisions
Source: NBKR

In the structure of loan portfolio by maturity, the major shares are accounted for long-term loans¹² – 43.0 percent or KGS 74.5 billion and medium-term loans¹³ issued for 1-3 years – 41.8 percent or KGS 72.5 billion (Chart 2.1.3).

Liabilities

At the end of the first half of 2021, liabilities of the banking sector of the Kyrgyz Republic increased by 17.8 percent compared to the first half of 2020 and amounted to KGS 261.9 billion.

At the end of reporting period, deposits of individuals and non-financial enterprises increased by 22.3 percent and amounted to KGS 188.1 billion (Chart 2.1.4). The share of individuals' and non-financial enterprises' deposits in the banks' liabilities increased by 2.6 p. p. and amounted to 71.8 percent.

The share of liabilities in foreign currency in the total volume of attracted funds increased by 2.2 p.p. and amounted to 42.7 percent (Chart 2.1.5).

Chart 2.1.4. Structure of Banks' Liabilities by the Reserve Sources

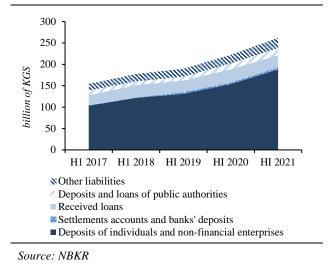
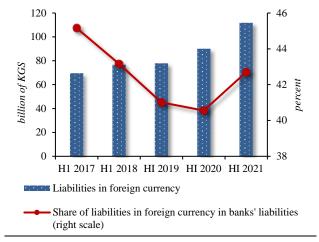


Chart 2.1.5. Banks' Liabilities in Foreign Currency



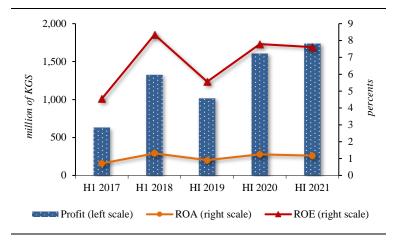
Source: NBKR

¹² Long-term loans are the loans extended for a period of more than three years.

¹³ Medium-term loans are the loans issued for a period from 1 to 3 years.

Financial Results

Chart 2.1.6. Profitability Indicators of the Banking Sector



At the end of the first half of 2021, a decrease of the banking sector's profitability indicators was observed compared to the first half of 2020 due to growth of the expenses for loan loss provisions:

- ROA constituted 1.2 percent;
- ROE formed at 7.6 percent.

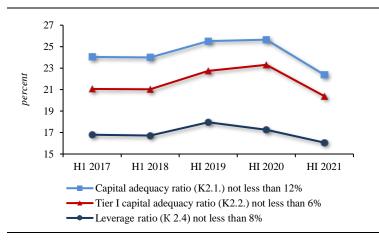
Net profit of the banking sector increased by 8.2 percent and amounted to KGS 1.7 billion (Chart 2.1.6).

Source: NBKR

Capital Adequacy

With statutory minimum capital adequacy at 12.0 percent, at the end of the first half of 2021, this figure decreased by 3.3 p.p. compared to the first half of 2020 and amounted to 22.4 percent (Chart 2.1.7).

Chart 2.1.7. Dynamics of Capital Adequacy Ratios



Source: NBKR

At the same time, the actual level of capital adequacy in the banking sector, generally formed according to the results of the first half of 2021, can further increase the volume of risky and earning assets by 2.0 times, without exceeding established level of capital adequacy.

The abovementioned information indicates relative stability of the banking sector to negative shocks and the presence of certain potential to increase the level of financial intermediation and efficiency of the banking sector activity in the future.

2.2. Banking Sector Risks

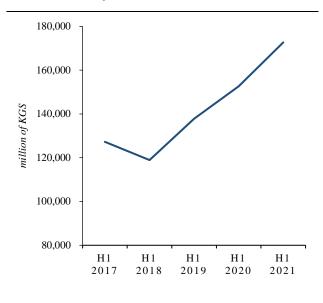
2.2.1. Credit Risk

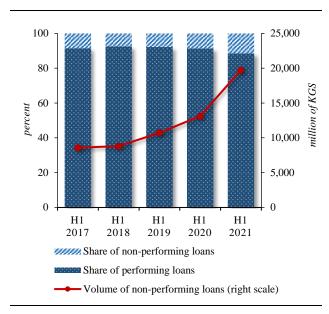
A credit risk is one of the main risks that accompany banking activity.

In the reporting period, the share of non-performing loans in the loan portfolio of banks increased from 8.6 percent to 11.4 percent compared with the first half of 2020 (Chart 2.2.2).

Chart 2.2.1. Dynamics of Loan Portfolio

Chart 2.2.2. Loan Portfolio Quality



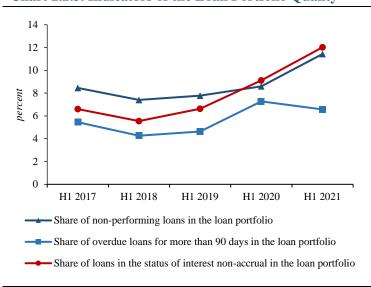


Source: NBKR Source: NBKR

In order to assess the quality of the loan portfolio, the commercial banks use a loan classification system, which contributes to determining the possible level of potential losses from bad loans and compensating them in time through creation of appropriate reserves (Chart 2.2.3).

The indicator of the risk of default on assets (the ratio of special loan loss provisions and loan portfolio) increased by 1.7 p.p. compared to the first half of 2020 and constituted 6.7 percent.

Chart 2.2.3. Indicators of the Loan Portfolio Quality



Aggregate reserves created by the commercial banks increased by 1.5 p.p. compared to the first half of 2020 and constituted 9.1 percent of the total loan portfolio.

Meanwhile, the share of special loan loss provision in the first half of 2021 constituted 73.5 percent of the total reserves (Chart 2.2.4).

Source: NBKR

Chart 2.2.4. Total and Special Reserves

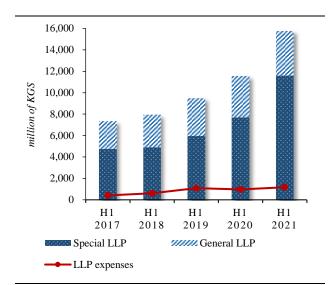
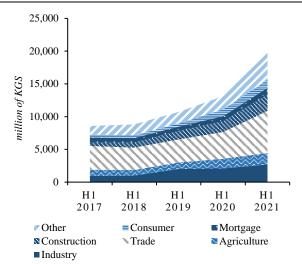


Chart 2.2.5. Volume of Non-performing Loans by Sectors of Economy



Source: NBKR Source: NBKR

As of the end of the first half of 2021, the highest concentration of credit risks was still observed in the trade sector of economy (Chart 2.2.5).

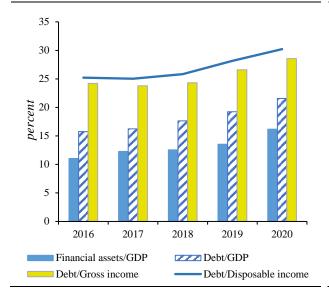
Financial Status of Households¹⁴

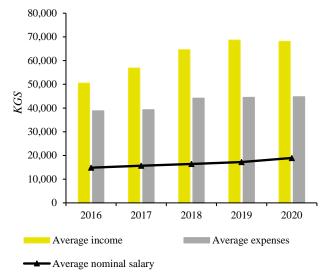
There was a slight deterioration in the financial sustainability indicators of households because the growth rate of the population's debt to the financial sector outran the growth rate of the population's income.

As of December 31, 2020, the households' debt ratio to GDP increased from 19.2 percent to 21.6 percent compared to the same period of 2019 (Chart 2.2.6).

Chart 2.2.6. Indicators of the Households' Financial Soundness

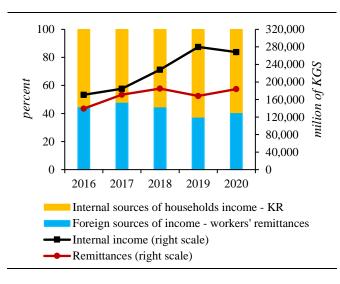
Chart 2.2.7. Factors of the Financial Soundness of the Population Balance





¹⁴ According to the official statistics of the NSC KR, based on a sample survey of the households.

Chart 2.2.8. Structure of Households' Income by Sources

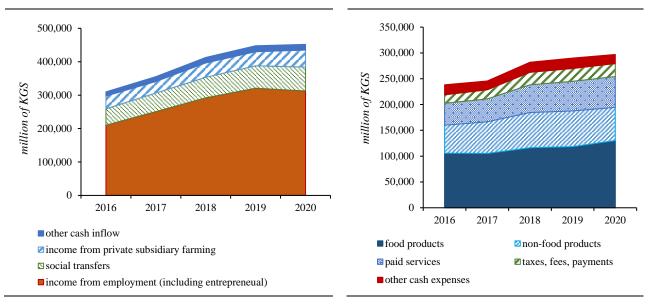


At the end of 2020, the share of remittances increased by 3.2 p.p., up to 40.7 percent of the population gross incomes (Chart 2.2.8). Meanwhile, remittances of migrant workers were still a significant source of household income.

In 2020, in the structure of households' income, the major share was accounted for labor income, which constituted 69.2 percent of the population gross incomes (Chart 2.2.9).

Chart 2.2.9. Structure of Households' Income

Chart 2.2.10. Structure of Households' Expenses



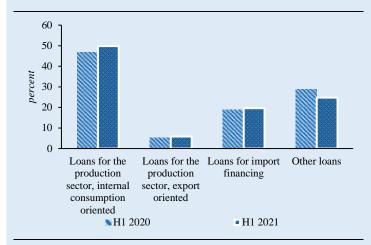
In the structure of household expenses, the main share fell on consumption (Chart 2.2.10), which limited the growth of savings and investments.

A significant share of consumer expenses, that constituted 85.6 percent of total expenses in 2020, may affect the ability of households to meet their obligations in case of financial receipts reduction.

Box 3. Results of the Commercial Banks' Statistical Observation: Loans

According to the preliminary survey of the commercial banks, at the end of the reporting period, a significant share of extended loans (49.8 percent of total borrowers' loans) was still concentrated in the production sector of the economy¹⁵, thereby reflecting contribution of the banking sector in creation of the country's GDP, meanwhile, 19.6 percent of issued loans were forwarded for financing of imports (Chart 1).

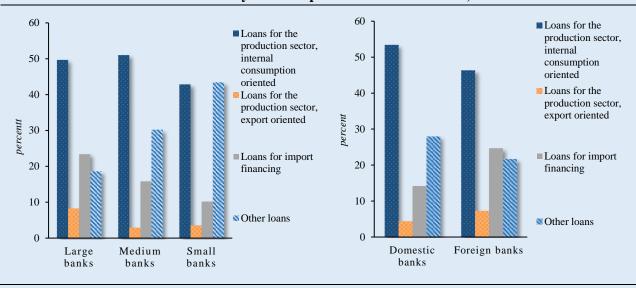
Chart 1 Sectoral Structure of Loans as of June 30, 2021



Domestic banks forwarded 53.4 percent of the loan portfolio to the production sector (GDP) and 14.2 percent – to finance imports. Generally, foreign banks also provided loans to the production sector of economy (46.3 percent). In the first half of 2021, the share of loans forwarded to finance imports constituted 24.7 percent of the loan portfolio (Chart 2).

Source: CBs

Chart 2. Sectoral Structure of Loans by the Groups of Banks as of June 30, 2021



Source: CBs

34

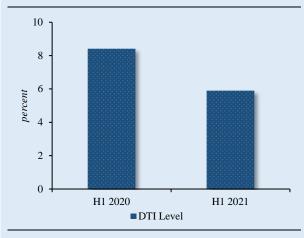
¹⁵ The production sector means the activity of the bank clients connected with the production of goods and services (construction, communication and automobile repair shop services, transport services, real estate leasing, hotels, restaurants, etc.).

Box 4. Results of the Commercial Banks' Statistical Observation: Largest Clients

Borrowers solvency

At the end of the first half of 2021, the level of debt burden of 15 banks' largest clients calculated through DTI index¹⁶ increased by 2.5 p.p. compared to the same indicator in the first half of 2020 and constituted 5.9 percent.

Chart 1. DTI Level on 15 Banks' Largest Borrowers



By the groups of banks, the largest debt burden was observed in the major borrowers of the *large banks* (7.4 percent of the borrowers' basic income) (Table 1). At the same time, the lowest level of debt burden was observed in the major borrowers of the *medium banks* and constituted 5.0 percent.

Source: CBs, NBKR

Table 1. Debt Burden of 15 Banks' Largest Borrowers at the End of the First Half of 2021

	Banking	Large	Medium	Small
	sector	banks	banks	banks
Loan balance, billions of KGS	66.9	33.5	27.7	5.7
Share of loans in 15 largest borrowers in the total volume of loan portfolio in the banking sector, <i>in</i> %	38.2	35.2	39.9	52.9
Ratio of expenses for loan debt servicing to the borrowers' total income, in %	5.9	6.8	5.0	7.4

Source: CBs, NBKR

In the first half of 2021, the level of debt burden in the foreign banks was higher than in the domestic banks (Table 2).

Table 2. Debt Burden in the Domestic and Foreign Banks at the End of the First Half of 2021

	Domestic banks	Foreign banks
Loan balance, billions of KGS	36.4	30.4
Share of loans in 15 largest borrowers in the total volume of loan portfolio in the banking sector, <i>in</i> %	42.7	33.9
Ratio of expenses for loan debt servicing to the borrowers' total income, in $\%$	4.9	7.3

Source: CBs, NBKR

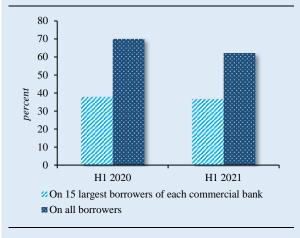
¹⁶ DTI (debt-to-income) is the ratio of the amount of the borrowers' payments on loans (including the amount of principal and interest payments for the reporting period) to the main annual income of the borrower declared at the time of issuing a loan.

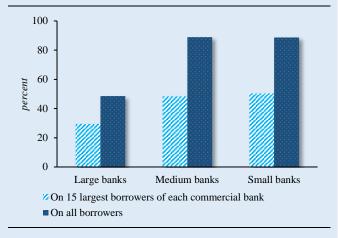
Security of the borrowers' loans

At the end of the first half of 2021, the LTV actual level¹⁷ in the banking sector amounted to 62.2 percent. The existing level of collateral indicates a relatively high level of the loans secured by the pledged property (Chart 2).

Chart 2. LTV Level on All Borrowers and on 15 Largest Borrowers of Each Commercial Bank as of June 30, 2021

Chart 3. LTV Level on All Borrowers and on 15 Largest Borrowers by the Banks' Groups as of June 30, 2021





Source: CBs, NBKR Source: CBs, NBKR

Meanwhile, the LTV value in the large banks is lower than in the small and medium banks and in the banking sector as a whole (Chart 3).

¹⁷ LTV (loan-to-value ratio) is the ratio of issued loans to the value of collateral.

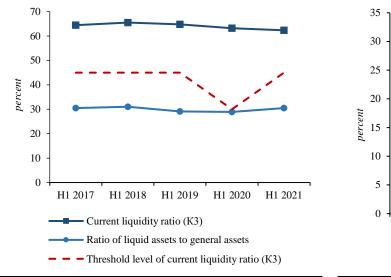
2.2.2. Liquidity Risk

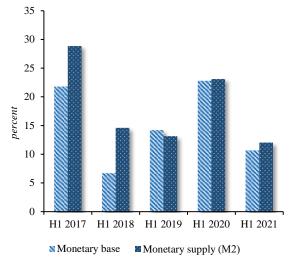
Since February 1, 2021, the National Bank increased the value of the economic liquidity ratio (K3.1.) from 30.0 to 45.0 percent and resumed compliance with the prudential standards for short-term liquidity (K3. 2) and quick liquidity (K3.3) due to improvement of the situation in the banking sector and to ensure financial stability.

At the end of the first half of 2021, current liquidity ratio decreased slightly from 63.2 percent (as of the end of the first half of 2020) to 62.3 percent (Chart 2.2.11).

Chart 2.2.11. Liquidity Indicators in the Banking Sector

Chart 2.2.12. Growth Rates of Money Supply (M2) and Monetary Base





Source: NBKR Source: NBKR

Liquidity ratio of the banking sector decreased due to excess of current liabilities over liquid assets growth rates.

Table 2.2.1. Maturity of Financial Assets and Liabilities as of June 30, 2021, millions of KGS

	Maturity					
Name	up to 1 month	1-3 months	3-6 months	6-12 months	more than 12 months	Total
Total financial assets	125,907	12,151	13,221	26,131	150,610	328,021
including loans and financial leasing to the clients	8,412	6,910	10,276	22,542	124,542	172,684
Total financial liabilities	147,917	12,820	20,977	29,369	46,176	257,259
including deposits of individuals and time deposits of legal entities	58,888	8,895	12,361	21,256	23,304	124,704
Gap	-22,010	-669	-7,755	-3,238	104,435	70,762
Including on loans and deposits	-50,475	-1,985	-2,084	1,286	101,238	47,980

2.2.3. Concentration Risk

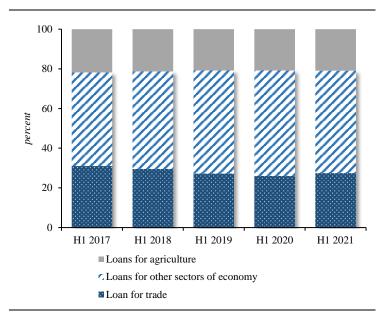
Concentration of the Largest Sources of Financing

The results of "reverse" stress testing show that some banks could not withstand the shock related to outflow from one to five large clients, when the liquidity ratio decreases below the threshold level of 30 percent.

Loan Concentration

Potential default from one to five largest borrowers in separate banks may decrease regulatory capital below economic standard of the NBKR.

Chart 2.2.13. Sectoral Concentration of the Loan Portfolio



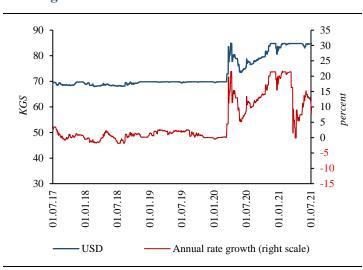
Increase of the level of trade loans concentration was observed in the sectoral structure of loan portfolio amid increase of lending to all sectors. At the end of the first half of 2021, the share of loans for trade increased from 26.0 percent to 27.5 percent (Chart 2.2.13).

Source: CBs, NBKR

2.2.4. Currency Risk

At the end of the first half of 2021, the annual average level of *currency risk* in the banking sector was at a moderate level.

Chart 2.2.14. Dynamics of USD/KGS Nominal Exchange Rate



In general, the banks kept open currency positions of assets and liabilities within the limits set by the prudential standards of the National Bank of the Kyrgyz Republic.

In the first half of 2021, the risk of currency position overestimation in the banking sector was minimum (VaR: 0.1–1.4 percent of the net total capital, Chart 2.2.15) i.e. the banks adhered to a conservative policy when conducting operations with foreign currency and were weakly exposed to currency risk.

Source: NBKR

Chart 2.2.15. Dynamics of Open Currency Position (OCP) and Revaluation Risk (VaR), in percent of NTC

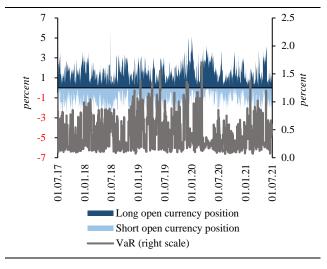
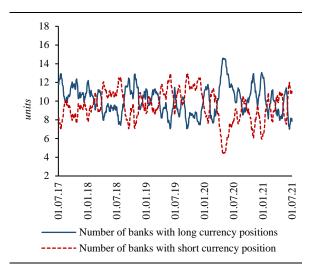


Chart 2.2.16. Currency Position of the Banks



Source: NBKR Source: NBKR

Box 5. Credit and Currency Risks

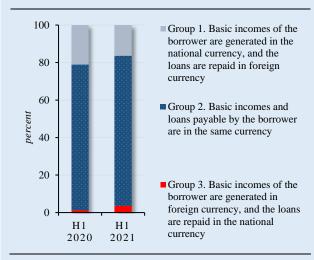
As of June 30, 2021, 16.4 percent of the total loan portfolio was accounted for the loans, which were repaid in foreign currency, while the income of the borrowers was generated in the national currency (Chart 1). This volume of the loan portfolio was potentially exposed to credit and currency risks.

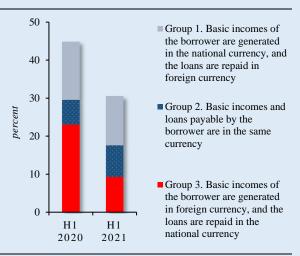
The impact made by the currency risk on the credit risk is given in Chart 2 that displays the proportion of non-performing loans by groups of loans:

- Group 1 13.0 percent, basic incomes of the borrower are generated in the national currency, and the loans are repaid in foreign currency;
- Group 2 8.4 percent, basic incomes and loans payable by the borrower are generated in the same currency;
- Group 3 9.3 percent, basic incomes of the borrower are generated in foreign currency, and the loans are repaid in the national currency.

Chart 1. Loan Portfolio by Groups of Loans¹⁸

Chart 2. Share of Non-performing Loans by Groups of Loans 19





Source: CBs, the volume of loan portfolio is specified exclusive of overdraft loans.

¹⁸ Breaking of loans into groups is presented in this chart. For example, the volume of loans for Group 1 as of June 30, 2021 amounted to KGS 28.0 billion or 16.4 percent of the total loan portfolio.

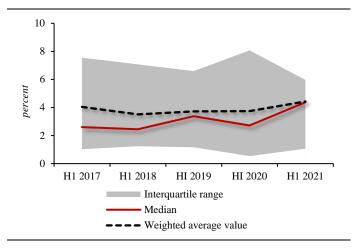
¹⁹ This chart shows the shares of non-performing loans in the loan portfolio by each group of loans. For example, the volume of non-performing loans for Group 1 as of June 30 2021 amounted to KGS 3.6 billion or 13.0 percent of the total loan portfolio for Group 1 (KGS 28.0 billion).

2.2.5. Interest Rate Risk

At the end of the reporting period, there was an increase in the *interest rate risk* due to the high growth rates of risk-weighted assets compared to the net total capital.

Average value of interest rate risk during the period of 2010 – the first half of 2010 was within accessible limits (2.4-4.4 percent of net total capital).

Chart 2.2.17. Dynamics of Interest Rate Risk (VaR) *in percent of NTC*

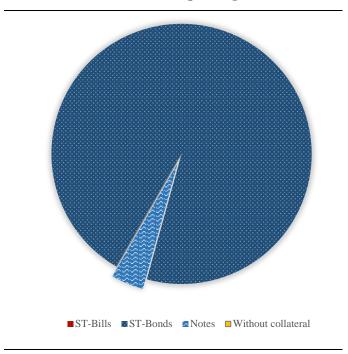


2.2.6. "Contagion" Risk

The purpose of this analysis is to assess the "contagion" risk in case of interbank lending, which can set off chain-reaction upon occurrence of problems with liquidity in one bank.

At the end of the first half of 2021, the volume of interbank transactions amounted to KGS 20.9 billion²⁰.

Chart 2.2.18. Distribution of Interbank Loan Transactions Made during the First Half of 2021 between Resident Banks, Depending on Collateral



The loans in the interbank market are generally covered by collateral in the form of highly liquid government securities (Chart 2.2.18) in the banking sector of Kyrgyzstan.

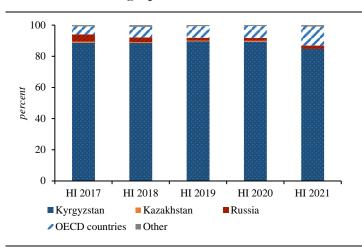
In general, the probability of the "contagion" risk materialization in the interbank credit market of the country is minimal, which is caused by highly liquid collateral.

²⁰ The total volume of transactions made between the resident banks during the first half of 2021 is meant here.

2.2.7. Country Risk

As of June 30, 2021, the aggregate volume of disposed assets of non-residents constituted KGS 50.6 billion or 15.3 percent of the total banking sector assets. The highest concentration of placement was observed in the OECD countries – 80.0 percent (KGS 40.4 billion) of non-residents' assets.

Chart 2.2.19. Geographic Structure of Assets



Source: NBKR

The main share of the assets placed abroad was focused on correspondent or deposit accounts and constituted KGS 49.0 billion or 96.8 percent of total placed assets of non-residents.

At the end of the first half of 2021, banks' liabilities to non-residents of the Kyrgyz Republic totaled KGS 30.8 billion or 12.0 percent of the total liabilities of the banking sector. Significant volume of the resources was drawn by the non-resident banks in the form of loans and deposits, which amounted to KGS 29.5 billion or 96.5 percent of the total liabilities to non-residents. 58.0 percent of the liabilities to the non-residents were accounted for the

OECD countries, 15.8 and 12.0 percent – for Russia and Kazakhstan, accordingly (Chart 2.2.20).

Chart 2.2.20. Geographic Structure of Liabilities

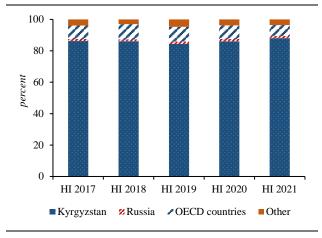
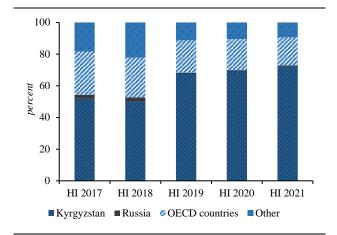


Chart 2.2.21. Authorized Capital by Countries



Source: NBKR Source: NBKR

At the end of the first half of 2021, foreign capital amounted to KGS 9.4 billion or 27.4 percent of the total authorized capital of the banking sector. The structure of foreign capital by countries is distributed among (Chart 2.2.21):

- residents of the OECD countries 64.6 percent;
- residents of Kazakhstan 23.6 percent;
- residents of Russia 1.3 percent.
- residents of other countries 10.5 percent.

43

2.3. "Reverse" Stress Testing of the Banking Sector

2.3.1. "Reverse" Stress Testing of Credit Risk²¹

Maximum allowable share of "performing" loans²² in the loan portfolio, which upon categorized as "non-performing" loans can reduce the CAR (capital adequacy ratio) down to the threshold level of 12 percent, is calculated by means of the "reverse" stress testing of the credit risk.

This method allows detecting a buffer stock of capital (net total capital) of banks, which can cover the additional allocations to LLP in connection with the transformation of "performing" loans into the category of "non-performing" loans²³.

Moreover, the maximum growth rate of "non-performing" loans, where capital adequacy (K2.1) will be reduced to the threshold level of 12 percent, can be calculated by means of this method.

Based on the results of the "reverse" stress testing of the banking sector as of June 30, 2021, the maximum allowable share of "performing" loans, transferring to the category of "non-performing" in the banking sector, amounted to approximately 56.7 percent (Chart 2.3.1).

Thus, the banking sector can sustain a significant deterioration in the quality of the loan portfolio, which may require the creation of additional LLP approximately up to 46.9 percent of net total capital (Chart 2.3.2).

Chart 2.3.1. Maximum Possible Share of "Performing" Loans that May Become "Non-performing" Loans²⁵

percent of performing loans

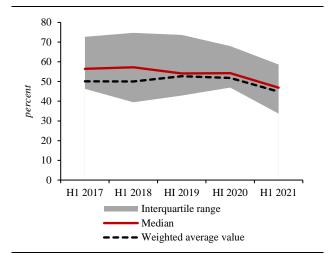
100 80 60 20 H1 2017 H1 2018 HI 2019 HI 2020 H1 2021

Interquartile range

Median

Weighted average value

Chart 2.3.2. Additional LLP, in Creating thereof CAR Decreases to 12 Percent percent of NTC



Source: NBKR Source: NBKR

²¹ Exclusive of troubled banks.

²² Exclusive of "normal" loan category, which are risk free.

²³ Herewith, transition of "performing" loans to the category of "non-performing" loans is fulfilled smoothly by three categories ("substandard", "doubtful" and "losses").

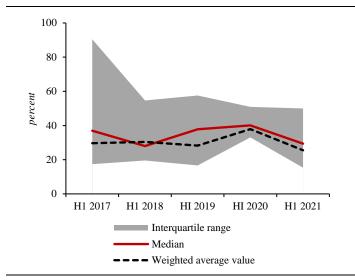
²⁴ Exclusive of "normal" loan category, which are risk free.

²⁵ When CAR decreases to the threshold level of 12 percent.

2.3.2. "Reverse" Stress Testing of Liquidity Risk

Chart 2.3.3. Scope of Potential Outflow of Deposits when K3 May Drop to 45 Percent,

percent of clients' total deposits



Source: NBKR

The reserve of liquid assets, which can cover a massive outflow of deposits of the clients' total deposit base, without violating the NBKR prudential standard on the current liquidity, was calculated for the evaluation of the liquidity risk in the banking sector.

Shock is the maximum volume of the outflow of the individuals' and non-financial enterprises' deposits, which may reduce the liquidity ratio down to the threshold level of 45 percent.

The results of the "reverse" stress testing show (Chart 2.3.3), that as of the end of the first half of 2021 the actual amount of liquid assets of the banking sector was able to cover the deposits outflow of an average of 25.5 percent of the clients' total deposit base (Table 2.3.1).

2.3.3. "Reverse" Stress Testing of Market Risk

The results of the "reverse" stress testing of the market risk indicate that the banking sector as of the end of the first half of 2021 has little sensitivity to the interest rate and currency risks.

Interest Rate Risk

Scenario 1 – decrease of average weighted interest rate on loans, when the level of capital adequacy decreases to the threshold level (12 percent).

The results of the "reverse" stress testing indicate little sensitivity of the banking sector to the direct interest rate risk. Decrease of the average interest rates on loans by 13.4 p.p. can reduce the level of capital adequacy ratio to 12 percent (Table 2.3.1).

Generally, the results of the "reverse" stress testing show that the banking sector is characterized by low level of interest rate risk.

Currency Risk (Revaluation Risk)

Maximum increase level of the KGS/USD exchange rate, which will influence capital adequacy and net profit, is calculated for valuation of the currency risk in the banking sector.

Scenario 1 – maximum increase level of the KGS/USD exchange rate, when the level of capital adequacy (K2.1) declines to the threshold level (12 percent).

Calculations of the "reverse" stress testing indicate that the banking sector is characterized by low risk of assets and liabilities revaluation and confirms availability of low sensitivity to currency risk (Table 2.3.1).

Scenario 2 – maximum increase level of the KGS/USD exchange rate, when net profit of the commercial banks decreases to zero level.

The results of stress testing indicate that the commercial banks can stand the impact of currency risk (Table 2.3.1).

Table 2.3.1. General Results of the "Reverse" Stress Tests as of June 30, 2021

	Banking sector						
	Credit risk						
Scenario 1	Share of performing loans transferring to the category of "non-performing" loans, <i>in percent</i>	56.7					
	Interest rate risk						
Scenario 1	Decrease of weighted average interest rate on loans, when CAR declines to 12%, in percentage points	13.4					
	Currency risk						
Scenario 1	Growth rate of USD/KGS (±) exchange rate, when CAR decreases to 12%, in percent	change of currency rate by 100 percent (KGS/USD)					
Scenario 2	Growth rate of USD/ KGS (\pm) exchange rate, when net profit decreases to zero level, in percent						
Liquidity risk							
Scenario 1	Outflow of clients' deposit and received loans of the total deposits and loans, when current liquidity ratio declines to 30%, <i>in percent</i>	25.5					

III. NON-BANKING FINANCIAL-CREDIT ORGANIZATIONS

In general, the state of the non-banking financial-credit organizations (NBFCOs) system is assessed as moderately stable. Increase of major indicators such as assets, loan portfolio, resource base is observed. Stress test results indicate that the credit risk of the NBFCOs system is moderate.

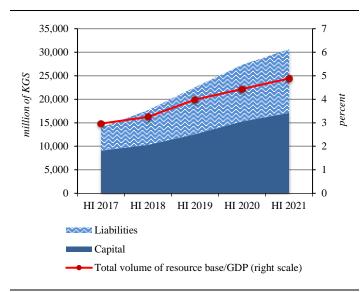
The weighted average interest rates on loans of the microfinance organizations increased compared to the same period of 2020. The weighted average interest rates on loans of the credit unions remained practically unchanged as compared to the same period of 2020.

3.1. Main Trends

The system of non-banking financial-credit organizations subject to licensing and regulation by the National Bank as of June 30, 2021 in the Kyrgyz Republic, included: the specialized financial and credit institution – "FCCU" OJSC, "Guarantee Fund" OJSC; 91 credit unions, 134 microfinance organizations (including 9 microfinance companies, 87 microcredit companies and 38 microcredit agencies), and 377 exchange offices and 2 credit bureaus.

Resources

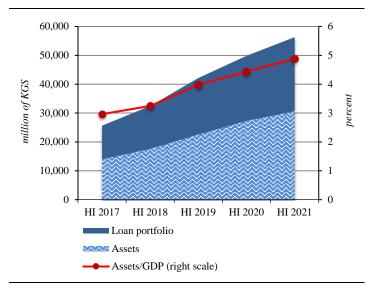
Chart 3.1.1. Dynamics of NBFCOs Liabilities and Capital



At the end of the first half of 2021, NBFCOs liabilities increased by 12.7 percent compared to the same period of 2020 and were formed in the amount of KGS 13.6 billion. NBFCOs capital demonstrated an increase by 11.9 percent and totaled KGS 17.1 billion (Chart 3.1.1).

Assets

Chart 3.1.2. Dynamics of NBFCOs Assets and Loans



Source: NBKR

According to periodic regulatory reporting, the total assets of NBFCOs in the first half of 2021 increased by 12.3 percent and amounted to KGS 30.6 billion²⁶. This increase was due to growth in the loan portfolio of NBFCOs (Chart 3.1.2).

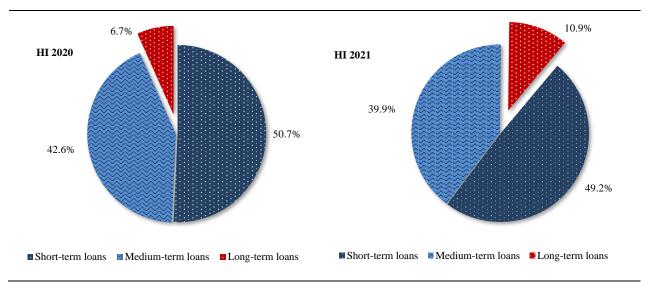
Lending remains the main activity of NBFCOs. As of June 30, 2021, the loan portfolio of NBFCOs increased by 13.9 percent and was formed in the amount of KGS 25.7 billion.

At the end of the reporting period, the number of borrowers increased by 3.4 percent compared to the same period of 2020 and amounted to 443,728 borrowers.

There was a decrease in the share of short-term and medium-term credit

resources and an increase in the share of long-term loans within the maturity structure of loans provided by the NBFCOs during the reporting period. (Chart 3.1.3).

Chart 3.1.3. Structure of the NBFCOs Loan Portfolio by Maturity²⁷



Source: NBKR

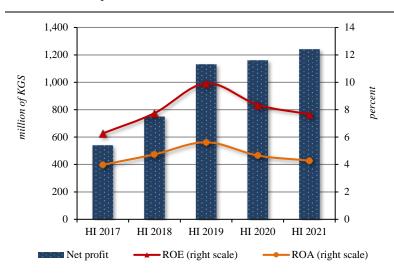
The main regions where the major share of NBFCOs loan portfolio is concentrated (72.8 percent of the total loan portfolio) are Bishkek city, Chui, Osh and Jalal-Abad regions, which is due to the highest level of business activity in these regions of the republic.

²⁶ Exclusive of SFCOs.

²⁷ Data for the period.

Revenue Position²⁸

Chart 3.1.4. Dynamics of NBFCOs Revenue Position²⁹



At the end of the first half of 2021, net profit of NBFCOs increased by 6.9 percent compared to the same period of 2020 and amounted to KGS 1.2 billion. As of the first half of 2021, ROA decreased by 0.4 p.p. and amounted to 4.3 percent. ROE decreased by 0.7 p.p. and constituted 7.7 percent (Chart 3.1.4).

²⁸ ROA and ROE indices are provided in annual terms.

²⁹ Exclusive of SFCOs.

3.2. Risks of Non-banking Financial-Credit Organizations

Major risk factors of the activities of NBFCOs are the quality of the loan portfolio, sectoral and institutional concentration, as well as status of the NBFCOs external debt.

Quality of the NBFCOs Loan Portfolio

As of the end of the reporting period, the share of non-performing loans in the loan portfolio of NBFCOs constituted 6.6 percent, meanwhile, their nominal volume increased by KGS 500.1 million or 41.8 percent compared to the same period of 2020 (Chart 3.2.1).

At the end of the first half of 2021, the structure of NBFCOs non-performing loans demonstrated increase in the share of defaulting loans issued to agriculture (by 2.5 p.p.), and decrease in the share of defaulting loans to trade (by 4.5 p.p.) compared to the same period of 2020. The share of defaulting loans issued to agriculture and trade in the total non-performing loans of NBFCOs constituted 21.9 and 22.4 percent, respectively (Chart 3.2.2).

Chart 3.2.1. Quality of NBFCOs Loan Portfolio

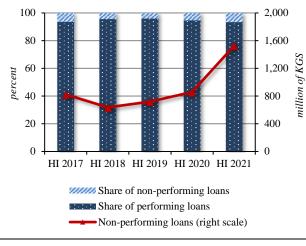
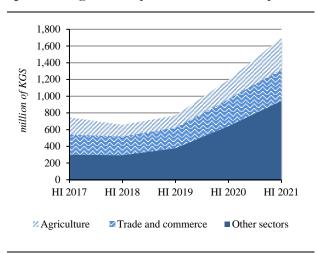


Chart 3.2.2. Structure of NBFCOs Nonperforming Loans by Sectors of Economy



Source: NBKR Source: NBKR

Sectoral Concentration

NBFCOs loan portfolio is concentrated in the sphere of agriculture (29.9 percent of NBFCOs total loans), as well as consumer loans and trade (27.9 percent and 12.1 percent of the total loan portfolio, accordingly, Chart 3.2.3). Lending of agriculture is associated with significant dependence on climate conditions.

Institutional Concentration

According to the results of the reporting period, the share of assets of three largest NBFCOs increased by 2.6 p.p. compared to the same period of 2019 and amounted to 55.1 percent of the total assets of NBFCOs sector (Chart 3.2.4).

Chart 3.2.3. Sectoral Structure of NBFCOs Loan Portfolio

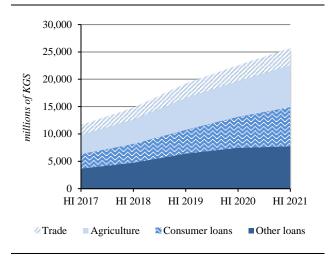
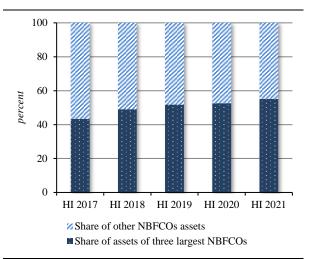


Chart 3.2.4. Institutional Structure of NBFCOs Assets



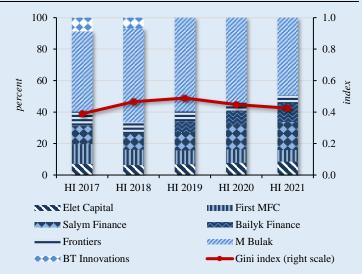
Source: NBKR Source: NBKR

Box 6. Concentration Indices based Assessment of NBFCOs Sector Activity³⁰

The Herfindahl-Hirschman Index

Herfindahl-Hirschman³¹ index was calculated for the purposes of concentration risk analysis in the NBFCOs sector. As of the end of the first half of 2021, Herfindahl-Hirschman index for the NBFCOs sector constituted 1,483.5 points. According to the rule of thumb³², resulting value indicates availability of moderate concentration of NBFCOs assets or moderate concentration of microfinance market.

Chart 1. Dynamics of the Gini Index and Assets of 6 Largest NBFCOs



The Gini Index

The Gini index was calculated for estimating the uniformity of the NBFCOs assets distribution. As of the end of the first half of 2021, the index value constituted 0.43 with a simultaneous decrease of concentration level (Chart 1).

³⁰ Concentration indices are calculated on the basis of data submitted by 6 largest NBFCOs.

 $^{^{31}} H = \sum_{i=1}^{n} (sharei)^{2}.$

³² The following rule of thumb was used for determining the level of market concentration:

⁻ index value is below 0.1 (or 1,000) – insignificant market concentration;

⁻ index value is from 0.1 to 0.18 (or from 1,000 to 1,800) – average market concentration;

⁻ index value is above 0.18 (or 1,800) – high market concentration.

External Debt Status of NBFCOs

As of the end of the reporting period, the external debt of NBFCOs amounted to USD 79.3 million. Major part of the external debt of NBFCOs are loans provided by the foreign financial-credit organizations (60.0 percent of total external debt of NBFCOs), and the rest (40.0 percent) are loans of the international financial institutions.

At the end of the first half of 2021, external debt of the largest NBFCOs decreased by 1.9 percent compared to the same period of 2020 and amounted to USD 66.0 million.

3.3. Stress Testing of NBFCOs Sector

Stress Testing of the NBFCOs Credit Risk

Stress testing was conducted to assess the effect of deterioration of the loan portfolio quality on the NBFCOs sector.

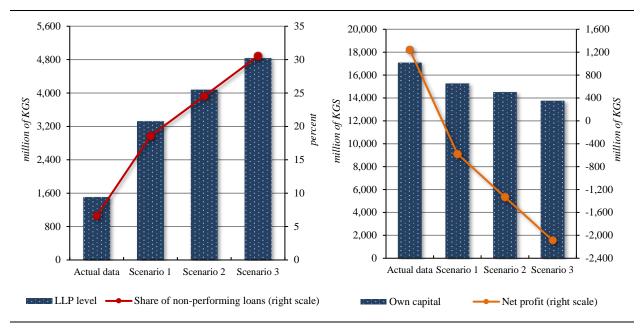
Three scenarios were considered when conducting stress testing:

- scenario 1: 50% of loans transition from one category to another;
- scenario 2: 75% of loans transition from one category to another;
- scenario 3: 100% of loans transition from one category to another.

The transition of loans from one category to another occurs uniformly by such categories as: "standard", "under supervision", "substandard", "doubtful" and "losses".

The level of loan loss provisions³³ in the loan portfolio of NBFCOs increased from 120.5 to 220.7 percent, depending on the scenario in conducting this stress testing (Chart 3.3.1)

Chart 3.3.1. Results of Stress Testing of the Credit Risk as of June 30, 2021



Source: NBKR

It should be noted that the deterioration of the loan portfolio quality entails a gradual decline in equity and net profit of NBFCOs. In case of the first, second and third scenario implementation, the NBFCOs will experience losses in the amount of KGS 576.6; 1,331.9 µ 2,087.2 million, accordingly (Chart 3.3.1).

³³ MFOs create general and special loan loss provisions for relevant categories of classifications implementing the following allocations indicated in percentage from the amount of assets:

⁻ Standard, in % - from 0 to 5

⁻ Assets under supervision, in % – 10

⁻ Assets under supervision, in % = 10 - Substandard, in % = 25

⁻ Doubtful, in % - 50

⁻ Losses, in % - 100

Table 3.3.1. Results of Stress Testing of the Credit Risk, percent

	Share of non-performing loans in the loan portfolio of NBFCOs
Scenario 1: transition of 50% of loans from one category to another	18.6
Scenario 2: transition of 75% of loans from one category to another	24.6
Scenario 3: transition of 100% of loans from one category to another	30.5

Source: NBKR

Implementation of the first scenario may result in an increase in the share of non-performing loans in the loan portfolio of NBFCOs by 12.0 p.p., to the level of 18.6 percent. In the case of the second scenario, non-performing loans may increase by 18.0 p.p., to the level of 24.6 percent, and in the implementation of the third scenario – by 23.9 p.p. and may reach the level of 30.5 percent.

IV. PAYMENT SYSTEMS

During the first half of 2021, the level of risks was within acceptable limits and was determined by the risk management mechanisms provided for by the legislation of the Kyrgyz Republic and the rules of payment systems, the current high level of liquidity, the system of insurance deposits and prepayment in the systemically important and significant payment systems.

Effective and uninterrupted payment system is one of the main factors, which determine stability of the financial sector in the country.

As of the first half of 2021, the payment system of the Kyrgyz Republic included the following components:

- 1. Large Value Payment System of the National Bank Real Time Gross Settlement (RTGS).
- 2. Systems of Retail Payments: the System of Batch Clearing of Small Retail and Regular Payments (SBC), Systems of Payment Cards Settlement, Money Transfer Systems, Emoney Payment Systems, systems to accept payments in favor of third parties.
- 3. Payment Messages Receiving and Processing Infrastructure (SWIFT Service Bureau, Interbank Communication Network.

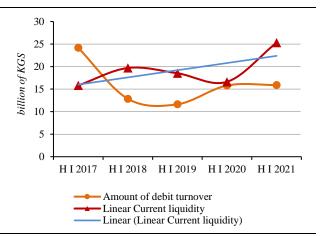
At the end of the first half of 2021, the following systems were recognized³⁴ according to the criteria for the payment systems significance³⁵:

- 1. systemically important payment systems the RTGS and SBC systems;
- 2. National payment systems RTGS, SBC and Elcart systems.

The RTGS functioned normally during the first half of 2021.

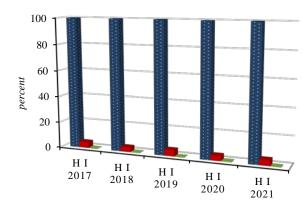
The level of financial risks in the RTGS remained low due to high level of liquid funds on the participants' accounts in relation to the turnovers in the system: average daily volume of liquid assets of participants showed an increase by 52.3 percent (compared to the first half of 2020) and amounted to KGS 25.3 billion.

Chart 4.1. Dynamics of Changes of Daily Average Indicator of Payment Volumes and Liquidity in the RTGS



Source: NBKR

Chart 4.2. Ratio of Affordability and Operational Risk in the RTGS



■ Affordability ratio ■ Operational risk level ■ Technical failure

	H I 2017	H I 2018	H I 2019	H I 2020	H I 2021
Technical failure, %	0.0	0.1	0.0	0.2	0.0
Affordability ratio, %	100.0	99.9	100.0	99.8	100.0
Operational risk level, %	4.6	3.7	4.9	4.0	4.5

Source: NBKR

³⁴ Approved by the Resolution of the Payment System Committee of the National Bank of the Kyrgyz Republic No. 2021-ZSD-KOM-KPS-7/3 on August 13, 2021.

³⁵ Approved by the Resolution of the Board of the National Bank of the Kyrgyz Republic No. 2021-P-14/6-1-(PS) on February 10. 2021.

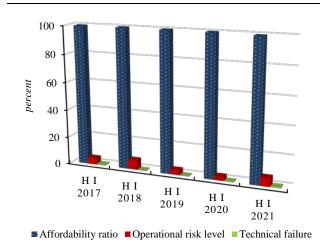
During the first half of 2021, the RTGS affordability ratio remained high and constituted 100.0 percent; meanwhile, the level of operational risk, taking into account prolongation of the transaction day, was 4.5 percent.

In functioning of the SBC the level of financial risks in the reporting period was also low. Reserves exhibited by the participants to cover a debit net position were 5.3 times higher than the required level. According to the results of the SBC operation monitoring, the system affordability ratio remained high and amounted to 99.5 percent during the reporting period. Meanwhile, the level of operational risk was 6.2 percent taking into account extending upon request of separate participants and system failures.

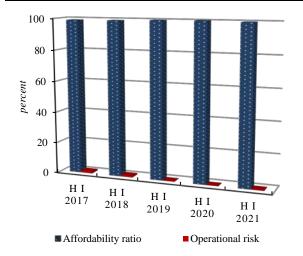
Systemically important payment systems are the key components of the payment system of the Kyrgyz Republic, failures thereof may result in systemic risks for the payment and banking systems of the country, and therefore are subject to increased requirements.

Chart 4.3. Ratio of Affordability Index and Operational Risks in the SBC

Chart 4.4. Ratio of Affordability Index and Operational Risk in the SIPC



	H I 2017	H I 2018	H I 2019	H I 2020	H I 2021
Technical failure, %	0.5	0.04	0.0	0.1	0.5
Affordability ratio, %	99.8	100.0	100.0	100.0	99.5
Operational risk level, %	4.6	6.9	3.4	2.8	6.2



	H I 2017	H I 2018	H I 2019	H I 2020	H I 2021
Affordability ratio, %	98.9	99.1	99.7	100.0	99.7
Operational risk, %	1.1	0.9	0.3	0.0	0.3

Source: NBKR Source: NBKR

Systems of Bank Payment Cards Settlements. As of July 1, 2021, five international payment card systems, the national system "Elcart" and co-badging cards "Elcart-UPI³⁶" operated in the Kyrgyz Republic.

In the reporting period, all 23 commercial banks worked with the national system "Elcart".

In the first half of 2021, the results of operation monitoring and analysis indicated that the system affordability ratio was 99.7 percent, and the level of operational risks in the system, taking into account technical failures was 0.3 percent.

Money transfer systems. During the first half of 2021, receipt and transfer of international remittances without opening an account in the commercial banks was carried out by means of eight international money transfer systems.

³⁶ According to the Regulation "On bank payment cards in the Kyrgyz Republic", a co-badging card is a card issued within the framework of two payment systems. Thus, "Elcart"-UPI is serviced according to the rules of the "Elkart" system in the territory of the Kyrgyz Republic, and outside the country - by Union Pay.

Outgoing Share of the Share of the Share of the Share of the Money transfer system total number, total volume, total number, total volume, in % in % in % in % Zolotaya Korona 51.8 57.3 84.0 80.1 2.7 1.0 2.1 Unistream 1.4 42.7 30.8 7.6 10.9 Western Union CONTACT 2.6 5.1 6.5 5.8 Money Gram 1.0 2.6 0.8 1.0 Other 0.6 1.5 0.1 0.1

Table 4.1. Distribution of Flows among International Money Transfer Systems

Source: NBKR

Total

14 local money transfer systems operated as of July 1, 2021, the banks of the Kyrgyz Republic are the operators thereof.

100.0

100.0

100.0

100.0

E-money payment systems. As of July 1, 2021, the number of e-wallets increased by 46.5 percent compared to the same period of 2020 and amounted to more than 4.1 million wallets.

Indicators on turnovers with e-money for the first half of the current year compared to the same period of 2020 were as follows:

- the volume of operations for transfer of funds between e-wallets increased by 2.5 times compared to the same period of 2020 and amounted to KGS 5.4 billion, the number of funds transfers increased by 5.9 times and amounted to 2.7 million operations;
- the volume of operations on redemption (cashing) of e-money increased by 55.0 percent and amounted to KGS 10.3 billion, the number of operations increased by 2.0 times and amounted to 2.0 million operations;
- the volume of operations on payment for goods and services with e-money in the reporting year increased by 21.8 percent compared to the same period of 2020 and amounted to KGS 4.1 billion, while the number of operations decreased by 12.6 percent and amounted to 6.6 million operations;
- the volume of emission (issue) of e-money increased by 43.3 percent and amounted to KGS 14.6 billion, while the number of emission (issue) of e-money decreased by 36.4 percent and amounted to 3.5 million operations.

Financial messaging channels. As of July 1, 2021, the exchange of cross-border financial messages was made through the SWIFT network, "bank-client" services, while the main flow fell on the SWIFT telecommunications network.

SWIFT is the main channel for the banking system to securely exchange cross-border financial messages with its correspondent banks. In order to minimize the financial burden for participation in this network, in 2002, the National Bank, together with individual banks, created the SWIFT shared use node (SWIFT SUN), which was transformed into a SWIFT service bureau since January 1, 2019.

Currently, the National Bank and 14 commercial banks of the Kyrgyz Republic operate through the SWIFT service bureau.

As of July 1, 2021, the payment infrastructure of the Kyrgyz Republic included 18 non-banking systems to **accept payments in favor of third parties**. In the reporting period, licenses of two payment system operators were revoked.

Based on the analysis of the data received in the reporting period, payment system operators processed 74.8 million payments to the total amount of KGS 37.8 billion. The volume and number of payments increased by 99.1 and 4.0 percent, respectively, compared to the same period of 2020.

Considering that there are a large number of systems in the market for accepting payments in favor of third parties, competition is developed in this segment.

V. IMPROVEMENT OF THE FINANCIAL SECTOR REGULATION

In the reporting period, development of the legal framework governing the activities of the financial-credit organizations was mainly aimed at mitigating the consequences of the crisis due to the spread of coronavirus infection for the banking system, creating opportunities for provision of the banking services and an equal legal environment for the financial-credit organizations.

- 1. The Board of the National Bank approved Resolution No. 2021-P-12/4-6-(NLA) on January 27, 2021 in order to cancel the temporary regulations adopted due to the spread of coronavirus infection COVID-19. The Resolution withdrew the norms on suspension of the implementation of the requirement for monitoring movable property and borrowers' loans, relief in terms of the degree of weighting the credit risk on loans in foreign currency, and liquidity ratios, as well as the deadlines for submitting reports to the National Bank.
- 2. The Board of the National Bank adopted the Resolution "On introduction of amendments into some regulatory legal acts of the National Bank of the Kyrgyz Republic" No. 2021-P-12/14-5-(NLA) on March 31, 2021 in order to clarify the possibilities for provision of the banking services through the use of e-documents in its activities, namely: the practice of using the documents in electronic format received through the information systems of the state bodies of the Kyrgyz Republic for provision of the banking services on lending and opening bank accounts (deposits). According to introduced amendments, the amount of a loan issued through a remote service channel should not exceed KGS 100,000 (equivalent in foreign currency) under an agreement signed with a simple e-signature, and KGS 200,000 (equivalent in foreign currency) under an agreement signed with an enhanced e-signature.
- 3. Amendments were introduced into some regulatory legal acts of the National Bank by the Resolution of the Board of the National Bank No. 2021-P-12/25-3-(NLA) dated May 19, 2021 in order to stimulate the commercial banks to accept guarantees of the guarantee fund, as well as to improve the requirements for classification of some loans secured by the guarantee fund's guarantee. According to introduced amendments, the commercial banks can classify a part of an asset secured by a guarantee fund's guarantee licensed and regulated in accordance with the legislation of the Kyrgyz Republic, as a "normal asset", while observing the conditions specified in the Resolution.
- 4. The Resolution of the Board of the National Bank No. 2021-P-12/25-2-(NLA) dated May 19, 2021 introduced amendments into the Temporary rules for assets classification and implementation of the corresponding deductions to the reserves to cover potential losses by the commercial banks and separate financial-credit organizations aimed at mitigating the consequences of the crisis for the banking system due to the spread of coronavirus infection. According to the amendments, requirements were established for the third restructuring of assets, the quality of which has deteriorated or deteriorates due to the circumstances of the coronavirus infection spread, that is, for existing loans. The amendments will also allow the commercial banks to mobilize their resources and support the business activity of the country's population.
- 5. The Resolution No. 2021-P-12/36-3-(NLA) was adopted by the Board of the National Bank on June 30, 2021 in order to create an equal legal environment for the financial-credit organizations conducting operations in accordance with the principles of Islamic finance.

This Resolution amended the regulatory legal acts of the National Bank concerning the requirements for the banks to manage credit risk and classify assets and create appropriate deductions to the reserve to cover potential losses when conducting operations in accordance with the principles of Islamic finance.

GLOSSARY AND ABBREVIATIONS

A bank deposit is the amount of money, accepted by a financial-credit organization under contract from another person on the terms of repayment, payment and maturity. Deposits can be time and demand. Demand deposits are made without specifying the shelf life, and time deposits are made for a certain period.

A bank loan is money provided by a bank for a fixed period under the terms of re-payment and payment of loan interest.

A foreign exchange market is a market in which the purchase/sale of foreign currencies is made. By the economic content, it is a sector of the money market, where supply and demand for a specific product such as currency are balanced. According to its purpose and form of organization, it is a set of specific institutions and mechanisms that in concert provide an opportunity to freely sell and/or buy domestic and foreign currency on the basis of supply and demand.

A money market is a market in which there is the giving and receiving of funds in the form of loans and securities for a short term within the range of participants.

Return on securities is the ratio of the annual return on the security to its market price; the rate of return received by the owner of the security.

The housing affordability index is an indicator of the state of the housing market in terms of the possibility of acquiring apartments by the people. Calculated as the ratio of the average market value of a standard apartment (total area of 54 sq. m.) to the average annual income of a family of three (two adults and a child).

The payment system affordability index is a measure of the availability of the system as access to services and information for users of the system on their demand. Downtime of the system due to technical failures, power outages, late opening or early closing of the trading day of the system reduce the time to access the system.

The liquidity ratio of payment systems characterizes sufficiency of liquid funds in the accounts of the participants of the system for the payments and settlements.

Macroprudential analysis is an assessment and monitoring of strong sides and vulnerable spots of the financial system taken as a whole.

Minimum consumer budget is the cost of a set of minimum benefits and services to the subsistence minimum.

A securities market is organized exchanges and structures (securities depository companies, accounting and clearing houses), as well as other companies that provide services related to the activities of the exchange. This category includes depositories and electronic clearing systems, the activity of which is ensured by financial corporations and national self-regulatory organizations of oversight over the activities of stock exchanges and related institutional units or their regulation.

Stress tests are methods used for assessment of portfolios vulnerability with respect to significant changes in the macroeconomic situation or exceptional but possible events.

An unemployment rate is the percentage of the actual number of unemployed to the total economically active population.

Financial assets include equity instruments and units/shares of investment funds, debt instruments, derivatives, stock options for employees and monetary gold.

LIST OF ABBREVIATIONS

CAR - Capital Adequacy Ratio

CB - Commercial Bank

COVID-19 (COronaVIrus Disease 2019) is the coronavirus infection of 2019

CPI – Consumer Price Index

DTI (debt-to-income) is the ratio of the amount of the borrowers' payments on loans (including the amount of principal and interest payments for the reporting period) to the main annual income of the borrower declared at the time of issuing a loan

EAEU - Eurasian Economic Union

FAO - Food Agriculture Organization of the United Nations

FCO – Financial-Credit Organization

GDP - Gross Domestic Product

ICN – Interbank Communication Network

K3.1. – Economic Liquidity Ratio

K3.2. – Short-term Liquidity Ratio

K3.3. – Instant Liquidity Ratio

KR - Kyrgyz Republic

LLP - Loan Loss Provisions

LTV (loan-to-value ratio) is the ratio of issued loans to the value of collateral

MF KR – Ministry of Finance of the Kyrgyz Republic

MFO - Microfinance Organization

M2 – Money Supply

NBFCOs - Non-banking Financial-Credit Organizations

NBKR – National Bank of the Kyrgyz Republic

NLA – Normative Legal Acts

NSC KR – National Statistical Committee of the Kyrgyz Republic

NTC - Net Total Capital

OCP - Open Currency Position

OECD - Organization for Economic Cooperation and Development

OJSC - Open Joint-Stock Company

p.p. – percentage points

PRBR - Periodic Regulatory Bank Reporting

R – Refinery

RLA - Regulatory and legal acts

ROA – Return on Assets

ROE – Return on Equity

POL – Petroleum, oil, lubricants

RTGS – Real Time Gross Settlement System

SALR GKR - State Agency for Land Resources at the Government of the Kyrgyz Republic

SBC – System of Batch Clearing

SFCO – Specialized Financial-Credit Organization

SFSS (State Financial Supervision Service) - State Service for Regulation and Supervision of Financial

Markets at the Ministry of Economy and Finance of the Kyrgyz Republic

SIPC - Single Inter-bank Processing Center

ST-Bills - State Treasury Bills

ST-Bonds – State Treasury Bonds

USA - United States of America

VaR – Interest Rate Risk