



**National Bank
of the Kyrgyz Republic**

THE FINANCIAL SECTOR STABILITY REPORT OF THE KYRGYZ REPUBLIC

June 2019

Bishkek

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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 of the general assessment on the stability and sustainability of the financial system of the Kyrgyz Republic.

Financial stability in this publication means smooth and continuous functioning of financial institutions, financial markets and 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 NBKR 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.

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MAJOR CONCLUSIONS¹

At the end of 2018, the results of macroprudential analysis and financial forecasting indicated at the sustainability of the financial sector.

A decrease in the economic growth of the Kyrgyz Republic was observed in the first half of 2018 considering weak diversification and significant dependence of the economy in Kyrgyzstan on external factors, however this trend was characterized by the upward trend in the second half of the year.

Despite moderate economic growth, there is an improvement in the quality of the loan portfolio and an increase in the banking sector profitability in the Kyrgyz Republic.

Country risk remains moderate for the banking sector. The potential deterioration of the macroeconomic environment in the countries-major trading partners of the Kyrgyz Republic may indirectly influence the banking sector due to the potential deterioration of the financial performance of the banks' clients in the Kyrgyz Republic.

Concentration and currency risks are the main risks for the banking sector; however the values of these risks do not pose a threat to the banking system stability.

In the reporting period, the banking sector of the Kyrgyz Republic indicated its soundness to macroeconomic shocks despite the volatility of the national currency exchange rate. It should be noted that if volatility of the national currency exchange rate is high, some banks may become more vulnerable to currency risk due to possible deterioration in the financial condition of borrowers to service loans in foreign currency. This may affect the increased vulnerability of the banking sector in the future.

The banking sector of the Kyrgyz Republic still retains the financial strength. The results of econometric modeling and financial forecasting, as well as "reverse" stress tests still indicate the availability of financial safety buffer at the end of 2018 and the ability to withstand certain macroeconomic shocks.

According to the results of 2018, the payment systems of the Kyrgyz Republic operated normally. The level of risks in payment systems was minimum being ensured by sufficient liquidity of the payment systems participants and adoption of a set of measures aimed at ensuring uninterrupted operation of the system.

¹ The data of periodic regulatory bank reporting are used in this publication taking into account adjustments introduced by the banks for the previous periods.

I. MACROECONOMIC AND FINANCIAL ENVIRONMENT

1.1. Macroeconomic Conditions and Risks

At the end of 2018, low inflation rates were due to significant food supply in the domestic market and sufficient import supplies. Additionally, this dynamic was supported by the favorable situation in the world food market.

The economic activity in the Kyrgyz Republic decreased in the first half of the year, and recovered to the positive growth rates in the second half of the year. There are macroeconomic risks from the low diversification of the sales markets and a high degree of integration with the external environment of the trading partner countries.

The balanced fiscal policy of the Government of the Kyrgyz Republic has reduced the state budget deficit, while maintaining the social orientation of the public expenses.

External Conditions

In 2018, the key macroeconomic indicators of the trading partner countries were slightly lower compared to the previous year, thereby confirming the assumptions of the international financial institutions. Trade negotiations, price fluctuations in the world food and energy markets remain the main risks for business activity.

In 2018, in Kazakhstan, the base rate was reduced from 10.25 percent at the beginning of the year to 9.00 percent; however in October 2018, amid increased pro-inflation risks, the rate was increased up to 9.25 percent, remaining at this level until the end of the year. The pro-inflation risks have grown amid increased volatility in the foreign exchange market of Kazakhstan due to weakening of the Russian ruble, resulted from tightening of the US sanctions against Russia in September 2018. Meanwhile, at the end of the year, the inflation rate remained within the target corridor of the National Bank of the Republic of Kazakhstan, and economic growth was in the positive zone.

Generally, the economic growth of China slowed down slightly in 2018. In 2018, the GDP growth rate constituted 6.6 percent, having decreased from 6.8 percent in 2017. The slowdown in the growth rate of the key macroeconomic indicators in the second half of the year was due to restrained investments and consumption, as well as trade uncertainties with the USD. Expectations of economic slowdown still exist. According to the forecasts of the international and financial institutions, uncertain foreign trade between China and the USA and reduced investments condition the risks of restrained economic activity in 2019.

Economic growth in Russia was rather high. The situation in the financial market was relatively stable, despite tightening of sanctions by the USA and weakening of the developing countries' currencies against which there was a significant outflow of capital from Russia. In September, the Bank of Russia raised the key rate to stabilize the situation in the financial market and restrict inflation risks. Until the end of the reporting year, the inflation risks were at an increased level and the Bank of Russia raised the key rate from 7.50 to 7.75 percent for the second time to restrict them in the short term. There are risks of the inflation rate exceeding its target amid the increase in VAT in 2019, however, the policy conducted by the Bank of Russia will contribute to reducing the inflation risks and fixing the inflation rate close to the target in 2020. The situation in the countries with the emerging markets and concerns about imposing new US sanctions remain the dominant factors for Russia.

Internal Conditions

Gross Domestic Product

According to the preliminary data of the National Statistical Committee of the Kyrgyz Republic, in 2018, the economy in the country grew by 3.5 percent (in 2017 – by 4.7 percent). In 2018, the economic growth was supported by growth of domestic demand due to an increase in the net inflow of remittances and growth in income and real wages of the population with relatively low inflation rates. Excluding the enterprises for the development of gold mining “Kumtor”, GDP grew by 3.5 percent (in 2017, by 5.7 percent). The deflator decreased by 4.8 p.p. compared to 2017 and was formed at 1.5 percent.

In the sectoral breakdown, the industrial sector (1.0 p.p.), trade (0.9 p.p.), construction (0.7 p.p.) and agriculture (0.3 p.p.) made the main positive contribution to economic growth, meanwhile the information and communication sector (-0.2 p.p.) made a negative contribution.

The growth in the industrial sector by 5.5 percent was due to the increase in the production of basis metals and finished metal products, food products (including beverages) and tobacco products, rubber and plastic products, other non-metallic mineral products, refined petroleum products, textiles, clothes and footwear, leather and other leather goods, mining, as well as providing (supply) electric energy, gas and steam.

Growth by 2.7 percent (in 2017 – growth of 2.2 percent) in agriculture was due to an increase in production of crop growing (by 3.4 percent) and livestock sectors (by 2.2 percent) amid prevailing favorable weather conditions.

Growth in gross construction output by 7.8 percent was due to an increase of investments in fixed capital by 3.3 percent. The investments in fixed capital financed from internal sources increased by 24.0 percent, and the investment financed from external sources, on the contrary, decreased by 27.8 percent. Growth of investments in fixed capital was observed almost in all sectors, except for construction of mining facilities, provision (supply) of electric energy, gas and steam, water supply, cleaning, waste treatment and management, information and communication, education, art, entertainment and rest.

Increase by 2.1 percent in the service sector was mainly due to growth in the volume of trade (by 5.1 percent) and transport activities (by 3.9 percent). Meanwhile, decrease was still observed in the information and communication sphere (by 7.5 percent) due to decline in the communication services, caused by the substitution trend of some services by others.

Table 1.1.1. Contribution of Individual Activities in GDP

	2017			2018		
	Share, percent	Growth rate, percent	Contribution in growth, p.p.	Share, percent	Growth rate, percent	Contribution in growth, p.p.
GDP	100	4.7	4.7	100	3.5	3.5
Agriculture, forestry and fishery	12.5	2.2	0.3	11.6	2.7	0.3
Industry	18.7	8.9	1.6	18.6	5.5	1.0
Mining	1.0	58.4	0.4	1.0	8.1	0.1
Processing sectors (Processing industry)	15.0	6.7	1.0	15.2	5.0	0.8
Provision (supply) of electric energy, gas, steam and conditioned air	2.5	10.1	0.2	2.2	5.0	0.1
Water supply, waste treatment and processing, receipt of recyclable materials	0.3	5.3	0.01	0.3	27.7	0.1
Construction	8.6	7.9	0.7	8.8	7.8	0.7
Services	47.1	3.3	1.6	46.8	2.1	1.0
Wholesale and retail trade; repair of cars and motor-cycles	17.8	7.1	1.3	18.2	5.1	0.9
Transportation activity and storage of cargo	3.9	9.4	0.4	4.0	3.9	0.2
Information and communication	3.1	-16.7	-0.6	3.0	-7.5	-0.2
Other	22.3	2.3	0.5	21.7	0.6	0.1
Net (exclusive of subsidies) taxes on products	13.1	4.7	0.6	14.1	3.5	0.5

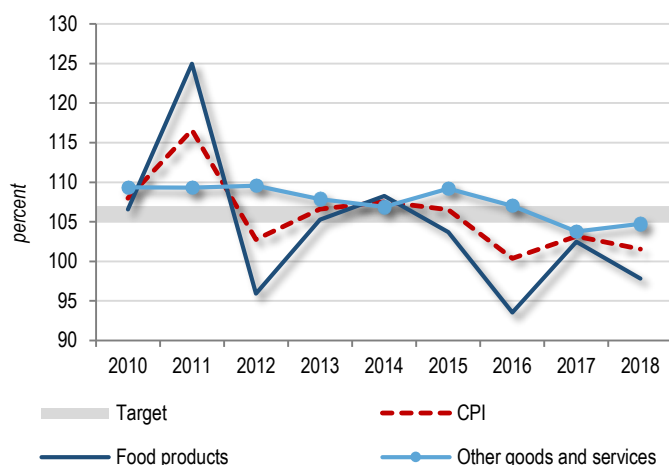
Source: NSC KR

Inflation

In 2018, low inflation was generally observed in the Kyrgyz Republic. Inflation was formed mainly under the influence of low prices for vegetables and fruits due to sufficient domestic production and import supplies, which leveled the rise in prices for fuel and lubricants, as well as the increase in prices for tobacco products resulted from increased excise rates at the beginning of 2018. The inflation remained stable due to favorable situation in the world food market thereby creating conditions for the National Bank to conduct monetary policy focused on preserving and maintaining economic activity in the country. In the second half of the year, the growth rate of market inflation slowed down slightly and constituted 2.4 percent. The growth of price index for the non-food product group and for paid services maintained moderate in the main commodity items.

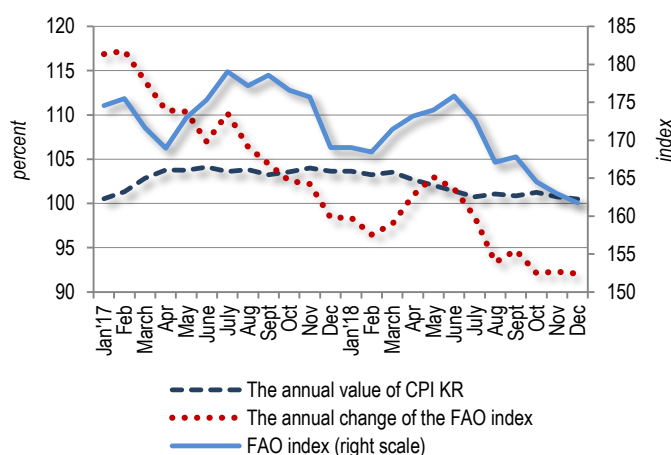
The steady growth of wages, general incomes and expenditures of the population also contributed to supporting the prices for consumer goods. The indices of retail sales demonstrated continuous growth in the consumer markets. According to the NSC KR, in 2018, an increase in retail turnover, including the turnover of catering enterprises, was due to an increase in the sales turnover of food products.

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



Source: NSC KR

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



Source: NSC KR, www.fao.org

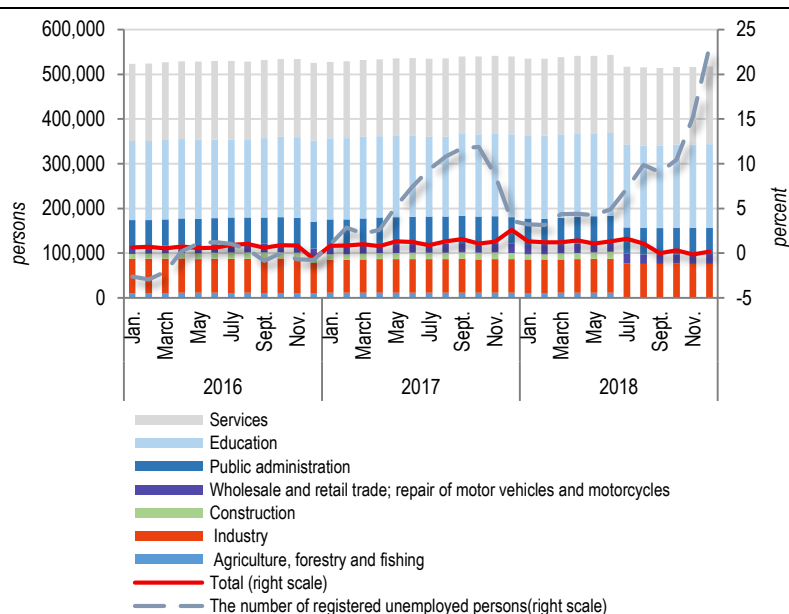
Given the current dynamics of the CPI in 2018, it can be noted that the risks of food security did not affect the country in the reporting period. The formation of prices for consumer goods and services, excluding food products, is relatively stable and is close to the National Bank's target of 5–7 percent. In this regard, the risks of the CPI deviation from the targets mainly result from the potential influence of weather conditions on the agricultural production indicators and the possible change in the price level for the main imported food products in the world markets.

In 2018, the FAO Food Price Index, reflecting price dynamics in the world food markets, was slightly lower compared to 2017. During the reporting period, the FAO index was formed under the influence of decrease in prices for sugar, vegetable oils, meat and dairy products compared to 2017, as well as rise in prices for main crops. The news background on food stocks and yields, global demand for products, and tensions in the international trade relations contributed to volatility in price formation in the reporting period.

In 2018, the conjuncture in the external food markets did not have a significantly effect on the prices in the Kyrgyz Republic.

Labor Market and Wages

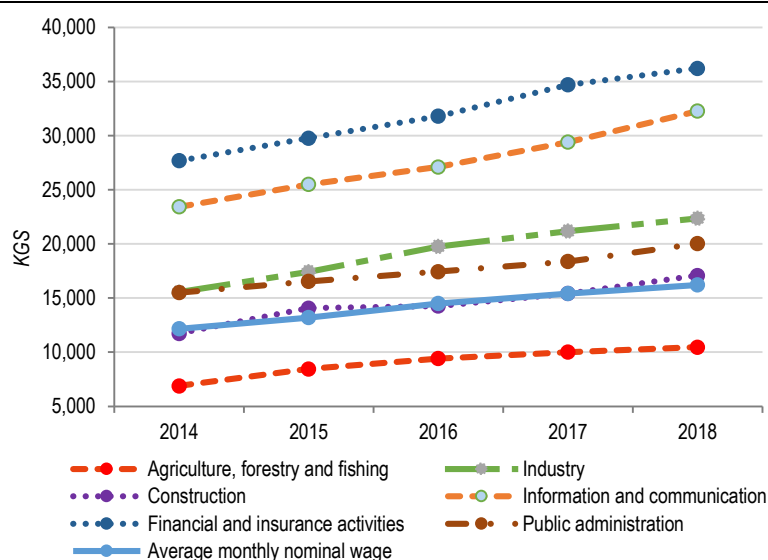
Chart 1.1.3. Number of Officially Employed and Unemployed People



Source: NSC KR

Education (34.6 percent), services (32.1 percent), industry (14.0 percent) and public administration (11.0 percent) remain the main employment sectors of the able-bodied population. It can be noted that in general, the number of employed population has not significantly changed over the past three years.

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



Source: NSC KR

According to the Ministry of Labor and Social Development of the Kyrgyz Republic, as of January 1, 2019, the number of unoccupied people in search of work registered at the state employment service increased by 11.6 percent compared to the same date in 2018 and constituted 89.6 thousand people. In the reporting period, the number of registered unemployed people increased by 23.1 percent compared to January 1, 2018, and constituted 70.9 thousand persons. The registered unemployment rate made 2.8 percent of the economically active population.

In the reporting period, there was a steady growth of wages in the Kyrgyz Republic. At the end of 2018, the average monthly nominal wage per an employee² increased by 5.4 percent compared to 2017 and amounted to KGS 16,218. The highest increase in the average monthly wage growth rate was observed in construction (11.0 percent), information and communication (9.8 percent), and public administration (9.2 percent).

² Exclusive of small enterprises.

State Budget

At the end of 2018, there was an improvement in the indicators of the main parameters of the state budget. More tough fiscal policy was conducted due to a significant reduction in capital and public procurement expenditures amid positive growth rates in tax revenues. Budget expenditures are still socially oriented. Finally, the level of the budget deficit was lower than last year's values and amounted to KGS 6.2 billion or 1.1 percent to GDP (in 2017, the budget deficit made KGS 16.5 billion or 3.1 percent to GDP). The primary budget surplus amounted to KGS 0.8 billion or 0.1 percent to GDP.

At the end of the reporting period, the public debt decreased by 0.2 percent compared to the end of the previous year (in 2017, KGS 312.5 billion or 58.9 percent to GDP) and amounted to KGS 311.8 billion or 56.0 percent to GDP. There was a downward trend in the external debt and an increase of the internal debt in the structure of total debt. The funds raised from placement of the government securities are the main sources of domestic financing of the budget deficit. Thus, the policy to increase the issue of government securities is still implemented, in particular long-term government securities, with the issue of the current year significantly exceeding that of the last year.

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

	2017		2018	
	billions of KGS	% to GDP	billions of KGS	% to GDP
Total incomes (including sales of non-financial assets)	149.5	28.2	151.5	27.2
including incomes from operational activity	149.5	28.2	151.5	27.2
sale of non-financial assets	0.0	0.0	0.1	0.0
Total expenditures (including purchase of non-financial assets)	166.0	31.3	157.9	28.3
including expenditures for operational activity	124.9	23.5	129.1	23.2
purchase of non-financial assets	41.1	7.8	28.8	5.2
Deficit(-) / Profit (+)	-16.5	-3.1	-6.4	-1.1
Primary deficit (-) / profit (+)	-10.6	-2.0	0.8	0.1
Budget financing	22.8	4.3	13.4	2.4
External financing	17.6	3.4	2.0	0.4
Internal financing	5.2	1.0	11.4	2.0

Source: MF KR

Macroeconomic Risks

In general, in 2018, the current economic growth was conditioned by the positive contribution of all main sectors of the economy, except for information and communication. At the same time, low growth rate was observed for nine months in the "industry" sector; however, it made a positive contribution to GDP formation only at the end of the year. Such dynamics of industry indicators was mainly conditioned by the production indicators at gold mining "Kumtor". GDP, excluding Kumtor, being regarded as an indicator of economic activity for the purposes of monetary policy, demonstrated growth due to stimulating monetary policy of the National Bank and a positive inflow of remittances. At the same time, macroeconomic risks were still observed due to existing structural problems in the economy and ambiguous situation in the global economy.

Increased sanctions pressure on Russia may result in a decrease of the Russian projects investment attractiveness, which will condition weakening of the Russian ruble exchange rate and slowdown of economic activity in Russia. Such consequences will correspondingly affect the economies of the countries-trading partners of Russia, including the economy of the Kyrgyz Republic.

Taking into account the results of 2018 in the first half of the current year, the inflation rate will be moderate, then it will gradually begin accelerating by the end of the year, however it will not exceed the targets of 5-7 percent. The inflation risks due to increase in prices for regulated goods and a gradual increase of the food inflation rate in 2019 amid low base of 2018 are expected in 2019.

In general, the risk of inflation rate deviation from the target values is not expected given the current dynamics of inflation. The risks of price fluctuations in the world food market and the influence of weather conditions on food prices, which can have significant inflationary or deflationary pressures on the overall level of prices in the country, are still observed to a certain extent.

Despite the reduction of imbalances in the fiscal sphere, there are risks related to public finance sustainability, however, they are moderate. The public debt is expected to be stable in the medium term, while to be sensitive to changes in GDP real growth, exchange rate and primary budget deficit.

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)

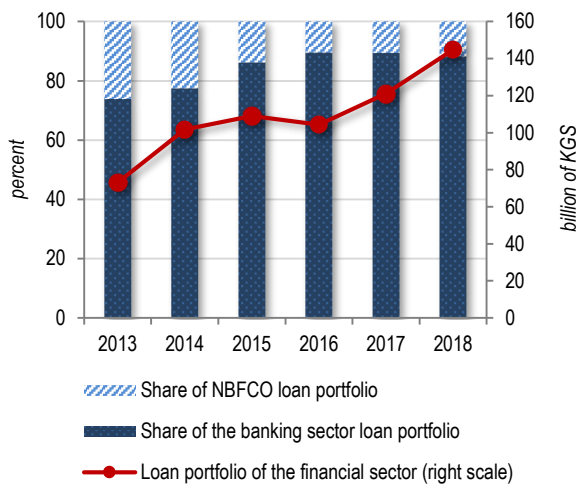
Financial institutions	2015	2016	2017	2018
Commercial banks	24	25	25	25
Other financial companies, including:	656	704	688	693
Non-banking financial-credit organizations (NBFCO), including:	627	673	657	662
Microfinance organizations, including:	172	162	150	142
microcredit companies	109	103	96	95
microcredit agencies	57	53	47	39
microfinance companies	6	6	7	8
"FC CU" OJSC	1	1	1	1
Credit unions	125	116	110	106
Exchange offices	329	394	396	413
Insurance companies	17	19	19	19
Investment funds	9	9	9	9
Stock exchanges	1	1	1	1
Pension funds	2	2	2	2

Source: KB, NBFCO, NSC KR

As of the end of 2018, assets of the banks and the NBFCOs constituted KGS 242.8 billion or 43.6 percent to GDP.

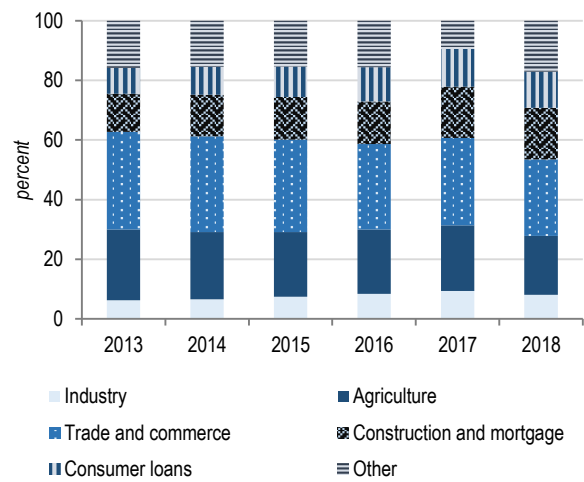
In 2018, the total loan portfolio of the banks and the NBFCOs constituted KGS 144.8 billion or 26.0 percent of GDP. The share of the banks' loans in the loan portfolio of the financial sector decreased by 1.2 p.p. and at the end of 2018 made 88.3 percent (Chart 1.2.1).

Chart 1.2.1. Structure of the Loan Portfolio



Source: KB and NBFCO

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



Source: KB and NBFCO

The high concentration 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 2018 constituted 45.4 percent of total issued loans and amounted to KGS 65.8 billion (Chart 1.2.2).

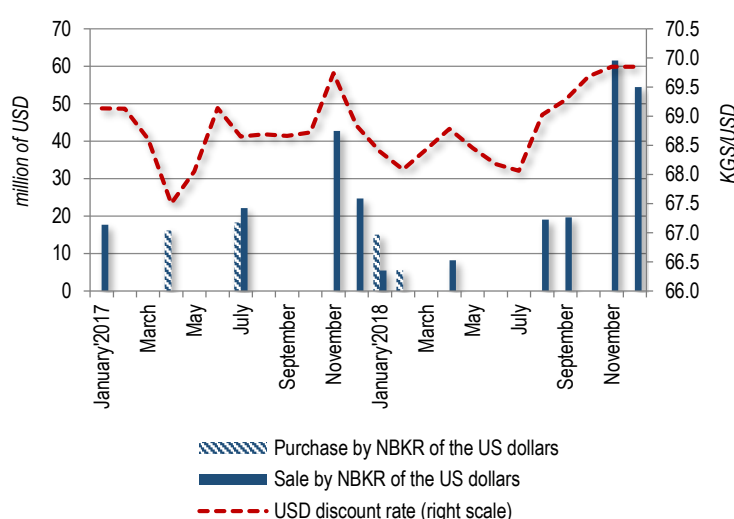
1.3. Financial Markets

The situation in the domestic foreign exchange market was relatively stable, sharp short-term fluctuations of the exchange rate due to internal and external factors were leveled by the currency interventions of the National Bank. The volume of operations in the money market increased compared to 2017 mainly due to growth in the volume of repo operations. The participants of the securities market, including external investors, actively purchased securities of all maturities. During the reporting period, the National Bank actively used notes as a tool to withdraw excess liquidity from the banking system.

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



Source: NBKR

In 2018, the situation in the domestic foreign exchange market was relatively stable. The national currency demonstrated slight weakening despite negative external background and high volatility in the global financial markets. Thus, during the reporting period, the exchange rate of the US dollar against the Kyrgyz som increased by 1.5 percent, from KGS 68.8395 to KGS 69.8500/USD 1.

The negative situation in the financial markets of developing countries and the monetary conditions tightened by the developed countries put pressure on the exchange rate, which generally resulted in an excess of demand for foreign currency over supply thereof.

The National Bank conducted foreign exchange interventions on sale and purchase of foreign currency to prevent significant fluctuations in the exchange rate. Generally, operations on purchase of foreign currency prevailed; the volume of these operations increased by 57.0 percent compared to 2017 and amounted to USD 168.3 million. The volume of purchased foreign currency amounted to USD 20.6 million (-40.4 percent). Finally, net sales on these operations amounted to USD 147.7 million (in 2017 – USD 72.7 million).

During the reporting period, the total volume of operations on purchase and sale of foreign currency in the foreign exchange market (including operations with non-residents) increased by 30.5 percent and amounted to KGS 738.6 billion. The increase in the volume of operations was observed on all currencies.

Most operations was conducted in the cash segment of the foreign exchange market, in 2018, their share was 93.1 percent in the total volume of operations. A significant volume of operations on purchase and sale of foreign currency in cash was concluded in exchange bureaus (50.3 percent), and their growth rates were significantly higher compared to the commercial banks. The operations were mainly conducted in US dollars in the non-cash segment of the foreign exchange market, the volume of these operations increased mainly due to growth of the operations on purchase/sale of US dollars conducted by the commercial banks by 9.7 percent.

Money Market

The reliable and stable operation of the money market still met the borrowers' needs for short-term liquid funds, meanwhile, the lenders were given an opportunity to make a profit from investment of their excess reserves. The activity in the money market was rather high, the interest rates in the money market were among the factors of the interest rates formation in the capital market.

In 2018, the volume of operations in the interbank credit market of the country increased significantly and amounted to KGS 31.4 billion, which is by 2.8 times higher compared to 2017. The overall level of lending has increased in the interbank market due to growth in the volume of repo operations with the prevailing share in the total volume of loans in the amount of KGS 31.3 billion. Therefore, the average weighted rate on the interbank credit resources increased from 2.07 percent in 2017 to 2.38 percent in 2018. The volatility of the average weighted interest rates in the interbank credit market decreased in 2018 compared to the previous year amid a decrease in the average weighted maturities from 22 days to 5 days.

The volume of repo operations in the structure of interbank loans amounted to KGS 31.3 billion (3.0 times), the share thereof formed at 99.8 percent. The weighted average rate on repo operations increased from 1.85 percent in 2017 to 2.40 percent in the reporting period. The standard operations in the national currency were not in demand, the volume thereof amounted to KGS 65.7 million (-91.2 percent). Meanwhile, the standard operations in foreign currency were not conducted at all (in 2017, the volume of operations amounted to KGS 116.9 million).

In the reporting period, the volume of overnight loans provided by the National Bank to support the short-term liquidity of the banks amounted to KGS 18.1 billion. Moreover, the volume of funds placed by the commercial banks on overnight deposits amounted to KGS 956.3 billion (-49.7 percent compared to the value in 2017).

1.3.2. Securities Market

In 2018, the conjuncture of the securities market was relatively favorable. The investors, having a sufficient level of excess liquidity, actively increased their investment portfolios. The Ministry of Finance of the Kyrgyz Republic continued to carry out regular borrowings by placing 12-month ST-Bills and 2-, 3-, 5-, 7-, and 10-year ST-Bonds in the primary market of government securities. The Ministry of Finance of the Kyrgyz Republic has increased the required volume of government securities sales (ST-Bonds and ST-Bills including additional placement) from KGS 17.3 billion in 2017 to KGS 22.1 billion in 2018. In this market in 2018, unlike in the previous year, there was a demand for ST-Bonds from the non-residents. Thus, at the end of the reporting year, the volume of ST-Bonds in circulation among non-residents amounted to KGS 6.0 billion.

In the reporting period, the total volume of ST-Bills proposed by the Ministry of Finance of the Kyrgyz Republic decreased by 38.2 percent, down to KGS 3.1 billion. During the reporting period, only 12-month securities were issued in the ST-Bills market in accordance with the joint policy of the Ministry of Finance of the Kyrgyz Republic and the National Bank of the Kyrgyz Republic to coordinate actions in the primary market of government securities. Therefore, there was a reorientation of some active market participants (commercial banks) to the relatively short-term market of the National Bank notes, as well as to the market of more long-term financial instruments. As a result, the ST-Bills investment portfolio of the commercial banks decreased from KGS 2.3 billion at the end of 2017 down to KGS 1.5 billion at the end of 2018. At the same time, there was an increase of the institutional investors' activity in the ST-Bills market, where their investment portfolio has grown from KGS 616.3 million up to KGS 1.1 billion over the year.

Total demand for ST-Bills decreased by 48.6 percent compared to the previous year and amounted to KGS 4.5 billion. As a result of the auctions, the sales volume amounted to KGS 2.6 billion (-36.7 percent). The total weighted average yield increased by 0.6 p.p., up to 5.6 percent due to declined competition in this segment. The commercial banks conducted operations on ST-Bills purchase/sale in the amount of KGS 14.7 million at a weighted average rate of 5.0 percent in the secondary market.

In the reporting period, the Ministry of Finance of the Kyrgyz Republic continued to actively increase the volume of ST-Bonds issues. There was also a high demand for ST-Bonds from the investors; it exceeded the volume of supply by 2 times. As a result, a decrease in the average weighted yield was observed in all ST-Bonds maturities, which was generally formed at 11.8 percent (-1.2 p.p.). In the reporting period, the total demand for ST-Bonds increased by 76.9 percent (up to KGS 30.1 billion), meanwhile the Ministry of Finance of the Kyrgyz Republic increased the

volume of supply by 63.9 percent (up to KGS 15.2 billion). As a result, the sales volume, taking into account the additional placement in the primary market, increased by 48.6 percent over the year and amounted to KGS 19.5 billion.

Given the growth of sales at the end of the reporting year, the volume of ST-Bonds³ in circulation grew by 58.5 percent, up to KGS 37.6 billion, mainly due to the increase of ST-Bonds by the institutional investors and non-resident legal entities. The ST-Bonds portfolio denominated in foreign currency amounted to USD 49.4 million, having not changed since the beginning of the year.

The participants were more active in ST-Bonds purchasing/selling in the secondary market. In the reporting period, the amount of their sales amounted to KGS 784.9 million at the average weighted rate of 10.3 percent.

In 2018, the National Bank placed 7-, 28-, 91-day notes, and, since August – 182-day, and since December – 14-day notes. The National Bank continued to use notes actively as a tool to absorb excess liquidity, adjusting the volume of their supply depending on the objectives of monetary policy. The volume of notes proposed by the National Bank in the reporting period increased by 13.2 percent compared to the same period in 2017, up to KGS 128.5 billion.

The sales of the National Bank's notes increased by 28.4 percent compared to the previous year, up to KGS 109.1 billion, where the main sales volume fell to 7-day notes (KGS 64.9 billion). As a result, the total volume of the National Bank's notes portfolio in circulation increased by 53.9 percent year-to-date, up to KGS 8.0 billion.

According to the results of auctions conducted on placement of the National Bank's notes, the total weighted average yield of this asset in the reporting period increased by 1.0 p.p. compared to the same period in 2017, up to 3.0 percent.

³ Exclusive of the ST-Bonds denominated in foreign currency.

1.4. Real Estate Market

The was a slight increase of the price index⁴ in the real estate market of the Kyrgyz Republic due to the increase in prices for apartments and individual houses. Meanwhile, the housing affordability index almost remained at the level of 2017 (the index value increased from 6.0 to 6.1 years).

Risks to the financial sector from the real estate market remain moderate, which was conditioned by insignificant share of the mortgage loans⁵ in the total loan portfolio of the banks.

At the end of 2018, an increase in property price index from 6.2 percent to 6.6 percent, as well as the property basis price index from 76.4 percent to 87.8 percent was observed in the Kyrgyz Republic due to growth in prices for apartments by 7.1 p.p., as well as for individual houses - by 5.7 p.p. compared to 2017. The growth rate of loans issued for mortgage during 2018 slightly slowed down (by 8.3 percent compared to 2017).

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

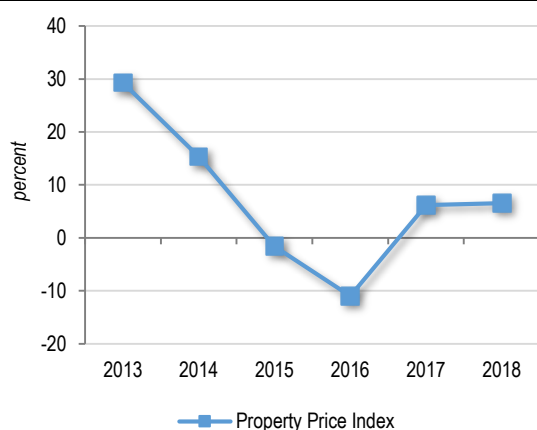


Chart 1.4.2. Basis Price Index Growth Rate in the Real Estate Market⁶



Source: SRS GKR

Source: SRS GKR, NBKR

As of December 31, 2018, the average price for 1 square meter of housing (apartments) in Bishkek increased by 7.3 percent (up to KGS 50.4 thousand) and in Osh – by 6.5 percent (up to KGS 31.5 thousand) compared to 2017. The average price for 1 square meter of individual houses in Bishkek increased by 9.9 percent and in Osh decreased by 6.4 percent.

In the reporting period, the number of transactions of the real estate purchase and sale increased by 10.6 percent and amounted to 38,049. The transactions on purchase and sale of the apartments and houses increased by 8.2 percent and 14.4 percent compared to the same period of the previous year and amounted to 23,197 and 14,852, accordingly.

⁴ The Laspeyres index method was used in developing price index for the real estate. In general, the Laspeyres index is computed as follows:

$$L = (\sum_{i=1}^K Q_{oi}P_{ti} / \sum_{i=1}^K Q_{oi}P_{oi}) * 100,$$

where K – number of types of real estate;

Q_{oi} – number of real estate of type i in the base period;

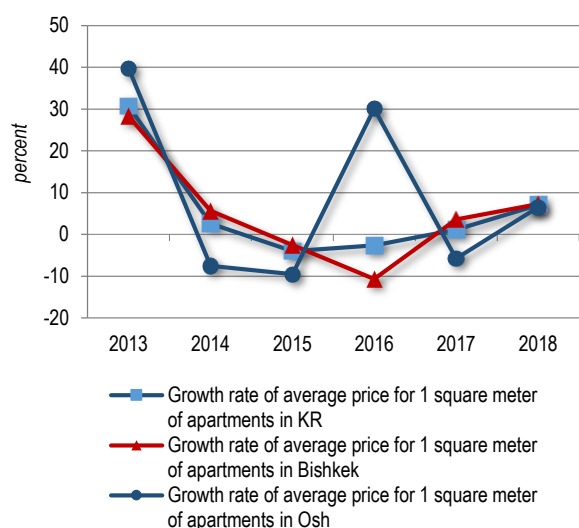
P_{oi} – price of real estate of type i in the base period;

P_{ti} – price of the real estate of type i in the current period.

⁵ Currently, a mortgage loan is usually a long-term loan extended on security of the title to real estate in the Kyrgyz Republic.

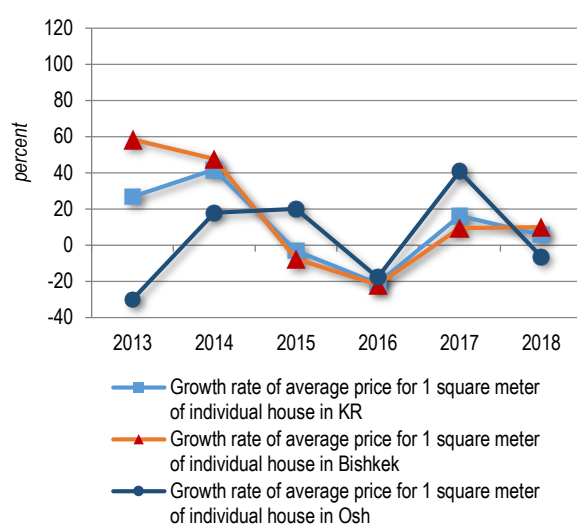
⁶ The year 2010 was taken as the base period.

Chart 1.4.3. Dynamics of Price Changes for Apartments



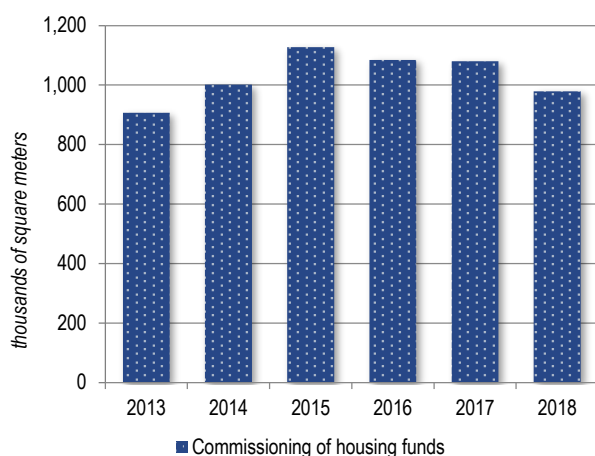
Source: SRS GKR, NSC KR, NBKR

Chart 1.4.4. Dynamics of Price Changes for Individual Houses



Source: SRS GKR, NSC KR, NBKR

Chart 1.4.5. Dynamics of Housing Commissioning and Loan Extended for Construction and Mortgage⁷



Source: SRS GKR, NSC KR, NBKR calculations

There was a decrease in the level of commissioning of housing funds. At the end of 2018, the decrease in the aggregate level of commissioning of housing funds constituted 9.4 percent compared to 2017 mainly due to the decline in the level of housing funds commissioning in Bishkek city (Table 1.4.1).

⁷ Data for the period.

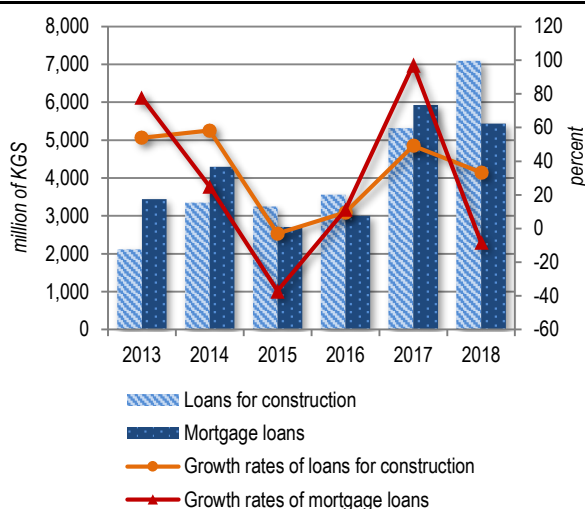
Table 1.4.1. Geographic Structure of Commissioned Housing

	2017		2018	
	Total commissioned area thous. sq.m	Share of total area, %	Total commissioned area thous. sq.m	Share of total area, %
Bishkek city and Chui region	496.8	46.0	343.9	35.1
Osh city and Osh region	228.2	21.1	242.9	24.8
Other regions of KR	355.5	32.9	391.8	40.0
Total	1,080.5	100.0	978.6	100.0

Source: NSC KR

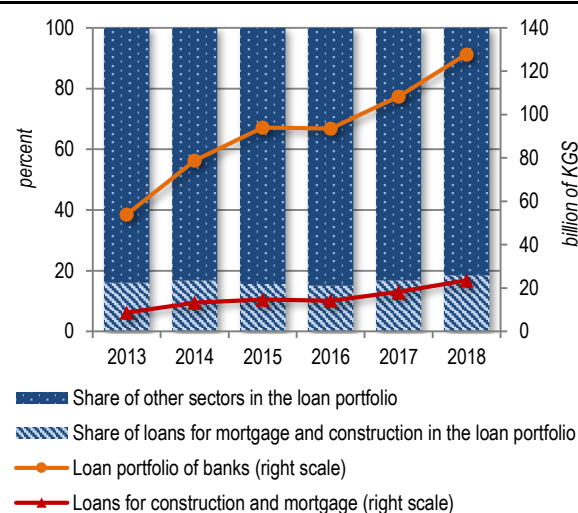
At the end December 31, 2018, there was an increase in the volume of loans issued to finance the construction and there was a decrease in extended mortgage loans compared to 2017. Annual growth in the volume of loans extended for construction in the amount of KGS 1.8 billion is observed over the past two years mainly due to the loans extended in foreign currency (an increase of KGS 1.5 billion). There is an opposite situation with mortgage loans, where the increase in the volume of lending in 2017 mainly due to the growth of financing in the national currency was replaced by a downward trend in the volume of extended loans in the reporting year. The reduction in the volume of mortgage loans by approximately KGS 0.5 billion was mainly conditioned by a decrease in the volume of loans extended in foreign currency. The volume of mortgage loans reduced partly due to a decrease in the level of housing funds commissioning in Bishkek. Meanwhile, despite the decline in the volume of newly issued mortgage loans compared to 2017, the share of loans in this sector in the total loan portfolio remained unchanged at 9.6 percent.

Chart 1.4.6. Loans Extended for Construction and Mortgage⁸



Source: KB, NBKR

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

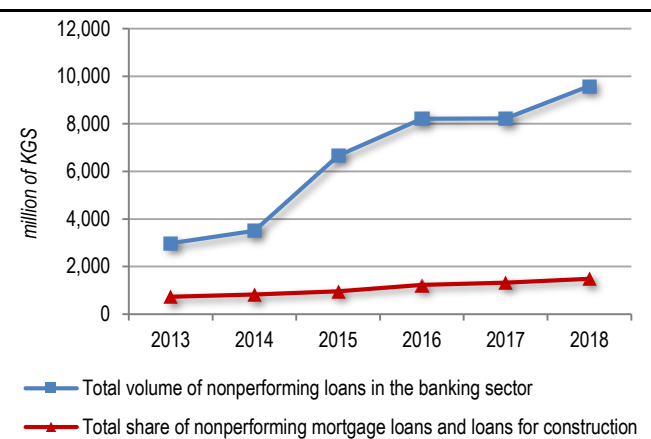


Source: KB, NBKR

⁸ Data for the period.

⁹ Data as of the end of period.

Chart 1.4.8. Dynamics of Non-performing Loans



Source: KB

Moreover, in the reporting period, the total volume of non-performing loans for mortgage and construction decreased by 0.6 p.p. and amounted to 15.5 percent of the total volume of non-performing loans in the banking sector (Chart 1.4.8).

Residential houses are generally constructed and commissioned at the expense of the population (92.7 percent of the total commissioning)¹⁰.

As of the end of December 31, 2018, the share of loans for construction and mortgage increased (by 1.6 p.p. compared to 2017) and constituted 18.4 percent (Chart 1.4.7) in the total loan portfolio of the commercial banks.

The total volume of non-performing loans for mortgage and construction increased by 12.0 percent and amounted to KGS 1,483.9 million; meanwhile, the volume of non-performing loans for mortgage and construction in foreign currency increased by 5.2 percent and amounted to KGS 981.1 million.

¹⁰ Social and economic situation of the Kyrgyz Republic January-December 2018 // National Statistical Committee of the Kyrgyz Republic – Bishkek - P. 98

Box 1. Housing Affordability Index

As of December 31, 2018, the situation with the housing affordability in the Kyrgyz Republic remained almost at the level of 2017 (index value increased from 6.0 to 6.1 years). This is due to the growth rates of real estate prices (growth by 6.6 percent) outrunning the growth rates of the average monthly nominal wages (growth by 5.4 percent) (Chart 1).

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

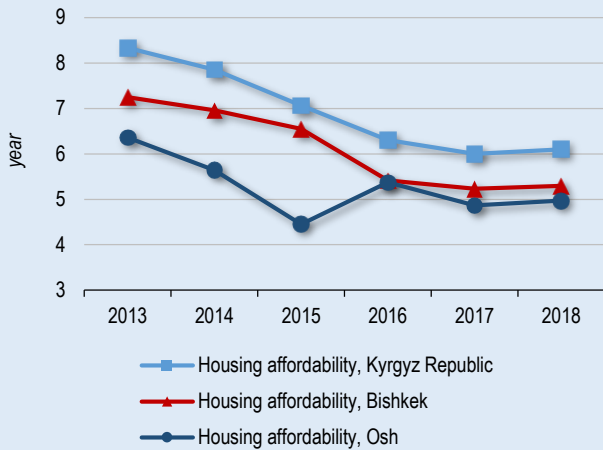
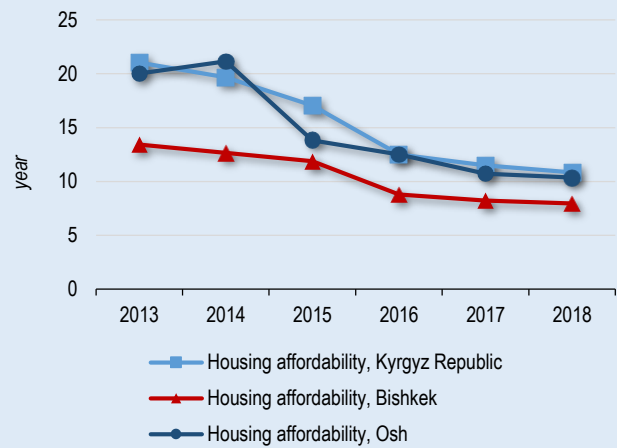


Chart 2. Housing (Apartments) Affordability Index including Minimal Consumer Budget



According to the results of 2018, 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 received by two people, for 6.1 years with other conditions being equal.

According to the results of 2018, a family of three people in the Kyrgyz Republic with the minimum consumer budget of KGS 14,193.0 (43.8 percent of total family income) will need 10.8 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 Sector¹¹

As of December 31, 2018, the share of loans, secured by pledged real estate, constituted 44.8 percent of the total volume of loans in the loan portfolio of the banks. The volume of pledged real estate (at pledge value) amounted to 75.8 percent of the total collateral of the loan portfolio.

Credit risks of the banking sector are conditioned by decrease in the value of pledged real estate below the loan repayment balance and further potential refusal of a 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 loss of the banking sector	Potential losses of large banks	Risk of capital adequacy ratio violation
"Historical" scenario* (decrease in price for real estate by 23% per a year)	----	----	4 banks
"Alternative" scenario (decrease in price for real estate by 40% per 2 years)	KGS -0.4 billion	----	8 banks
"Negative" scenario (decrease in price for real estate by 50% per a year)	KGS -13.6 billion	KGS -3.3 billion	10 banks

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

In addition to stress test, threshold level of decrease in prices for real estate, when banks potentially suffer losses, was calculated. The banking sector potentially suffers losses if prices for the real estate decrease by 40.0 percent, large banks – by 45.9 percent. The risk of violation of the capital adequacy ratio by the banking sector, as well as by the large banks, arises when real estate prices decrease by 54.0 percent and 54.8 percent accordingly.

The possible difference in the estimated value of pledged real estate, which may be less than the market value by approximately 20 percent, was not taken into account by the banks 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.

¹¹ Stress test was conducted on the basis of the commercial banks' data as of December 31, 2018.

II. BANKING SECTOR

Growth of the main indicators of the banking sector: assets, loan portfolio, deposits, capital, liquidity, profitability and financial intermediation indicators was observed in 2018 compared to 2017.

At the end of 2018, 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.

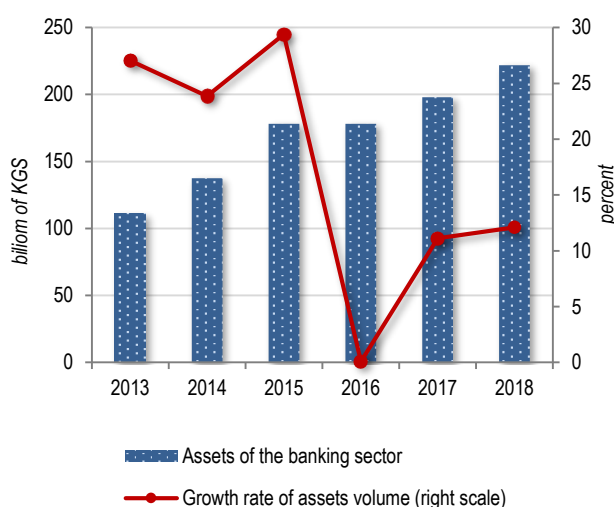
2.1. Major Trends

As of December 31, 2018¹² 25 commercial banks (including the Bishkek branch of the National Bank of Pakistan) and 321 of their branches worked in the territory of the Kyrgyz Republic, among which there were 18 banks with foreign participation in the capital, including 14 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 reporting period. Assets of the banking sector at the end of 2018 amounted to KGS 222.0 billion, having increased by 12.1 percent compared to 2017 (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 18.1 percent or KGS 19.6 billion;
- the securities by 22.0 percent or KGS 4.0 billion;
- the cash and correspondent accounts by 7.4 percent or KGS 3.7 billion.

The share of loan portfolio in the structure of assets constituted 57.6 percent, having increased by 1.0 p.p. compared to the same period of 2017.

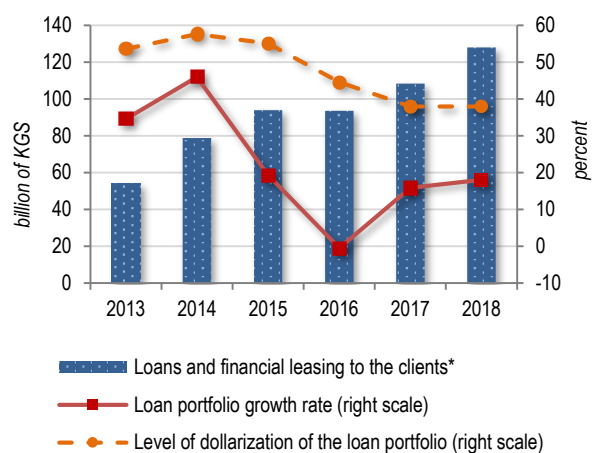
¹² The data are submitted according to periodic regulatory reporting of the commercial banks (PRBR).

Loan Portfolio

In 2018, growth of the loan portfolio was observed in many sectors of economy.

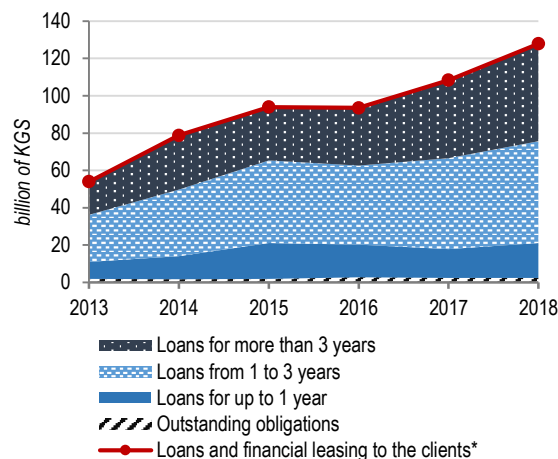
At the end of 2018, the level of dollarization of the loan portfolio in the banking sector decreased by 0.1 p.p. compared to 2017 and amounted to 37.9 percent (Chart 2.1.2).

Chart 2.1.2. Dynamics of Loan Portfolio in the Banking Sector



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

Chart 2.1.3. Structure of Loan Portfolio by Maturity



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

The major share was accounted for medium-term loans issued for 1 to 3 years, which constituted 42.6 percent or KGS 52.7 billion, and for long-term loans issued for more than 3 years – 40.9 percent or KGS 52.3 billion in the structure of loan portfolio by maturity (Chart 2.1.3).

Liabilities

At the end of 2018, liabilities of the banking sector of the Kyrgyz Republic amounted to KGS 186.6 billion, having increased by 12.6 percent compared to 2017.

At the end of 2018, deposits of individuals and non-financial enterprises increased by 9.5 percent and amounted to KGS 133.1 billion (Chart 2.1.4). The share of individuals' and non-financial enterprises' deposits in the banks' liabilities decreased by 2.0 percentage points and amounted to 71.3 percent.

The share of liabilities in foreign currency in the total volume of attracted funds decreased by 2.8 percentage points and amounted to 42.7 percent or KGS 79.6 billion (Chart 2.1.5).

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

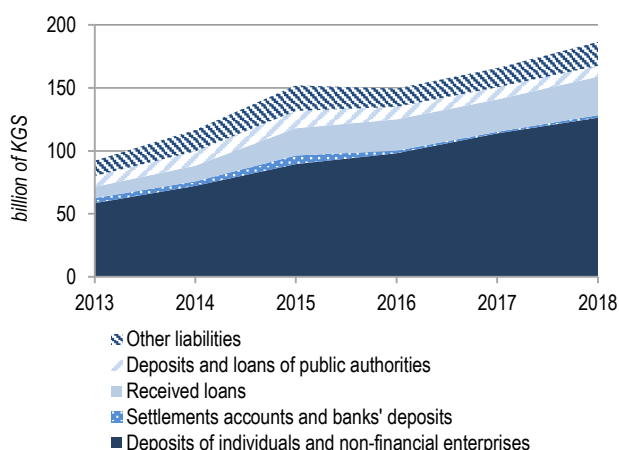
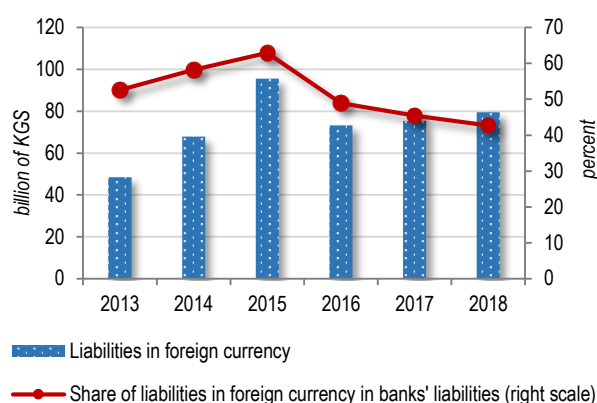
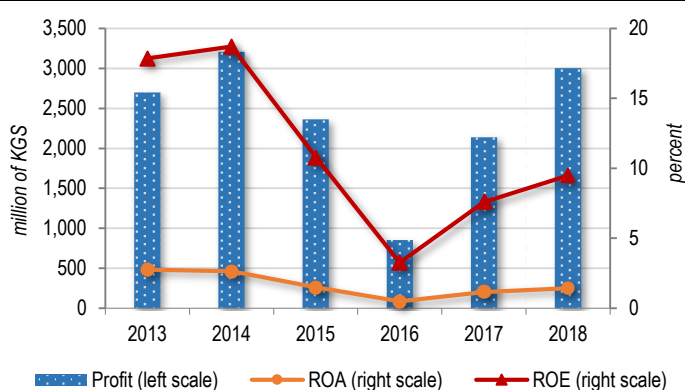


Chart 2.1.5. Banks' Liabilities in Foreign Currency



Financial Results

Chart 2.1.6. Profitability Indicators of the Banking Sector



The improvement of profitability indicators in the banking sector at the end of 2018 was observed compared to 2017:

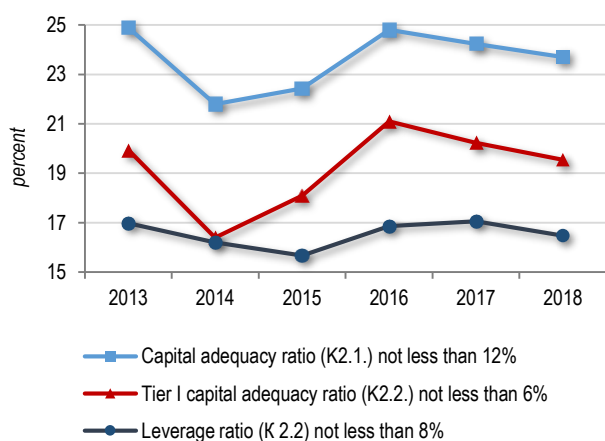
- ROA constituted 1.4 percent;
- ROE formed at 9.5 percent.

Net profit of the banking sector increased by 41.0 percent and amounted to KGS 3.0 billion. (Chart 2.1.6).

Capital Adequacy

With statutory minimum capital adequacy at 12.0 percent, at the end of 2018, this figure amounted to 23.7 percent (Chart 2.1.7), having decreased by 0.5 p.p. compared to 2017.

Chart 2.1.7. Dynamics of Capital Adequacy Ratios



At the same time, the actual level of capital adequacy in the banking sector, generally formed according to the results of 2018, 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.

The share of non-performing loans in the loan portfolio of banks remained actually at the level of 2017 and constituted 7.5 percent, but with a slight change downward (by 0.1 p.p.) (Chart 2.2.2).

Chart 2.2.1. Dynamics of Loan Portfolio

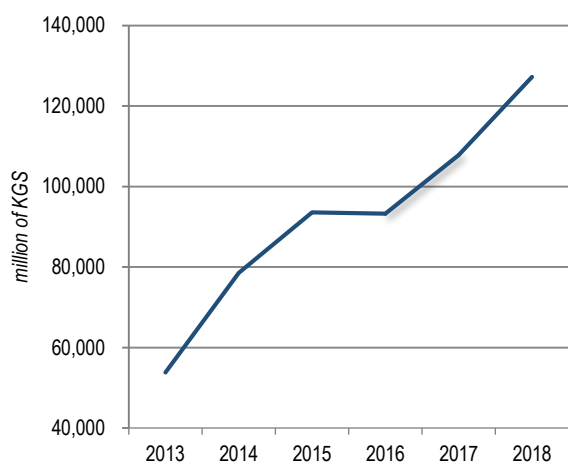
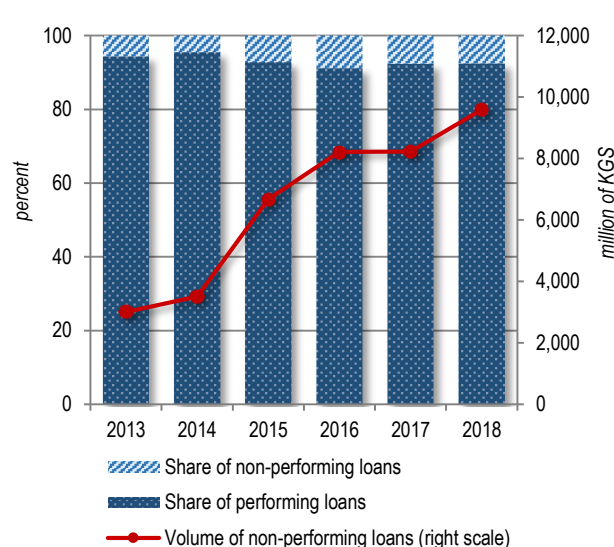


Chart 2.2.2. Loan Portfolio Quality

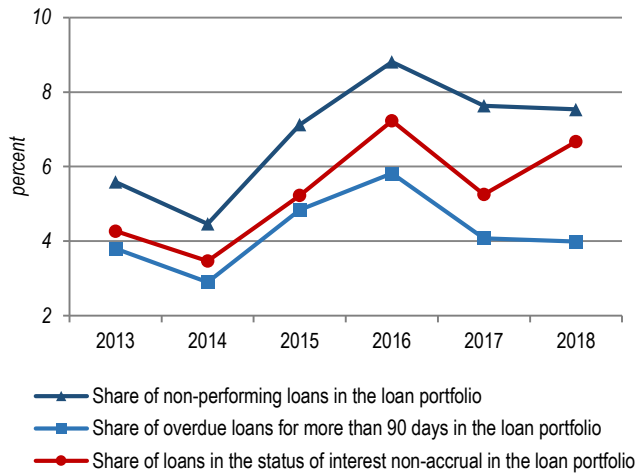


In order to assess the quality of the loan portfolio, the commercial banks use a loan classification system¹³, which contributes to determining the possible level of potential losses from bad loans and compensating them in time through creation of appropriate reserves (Chart 2.2.3).

The indicator of the risk of default on assets (the ratio of special loan loss provisions and loan portfolio) decreased by 0.4 p.p. compared to the previous year and constituted 4.1 percent.

¹³ In loan portfolio classification all loans are usually divided into six categories, depending on the client's current capacity to fulfill the obligations to the bank (listed in declining order of classification): normal, satisfactory, under supervision, substandard, doubtful and losses. Loans of last three categories, as having the most negative characteristics in terms of return of loans, are usually attributed to the "nonperforming". For each of six categories, the bank has to create a reserve corresponding to this category defined as a percentage of loans issued.

Chart 2.2.3. Indicators of the Loan Portfolio Quality



Aggregate reserves created by the commercial banks decreased by 0.3 percent compared to 2017 and constituted 6.7 percent of the total loan portfolio. Meanwhile, the share of special loan loss provision in the reporting period constituted 61.0 percent of the total reserves (Chart 2.2.4).

Chart 2.2.4. Total and Special Reserves

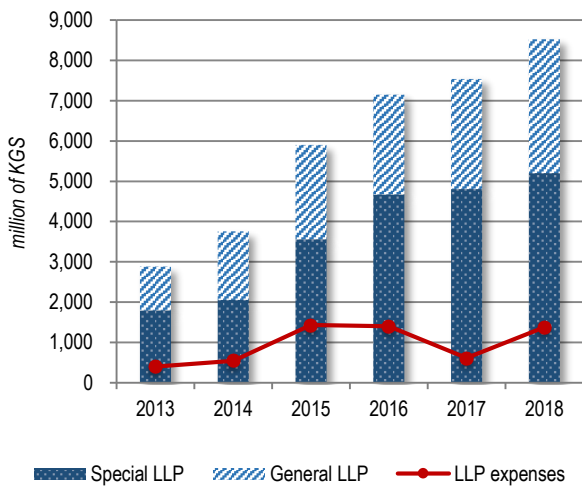
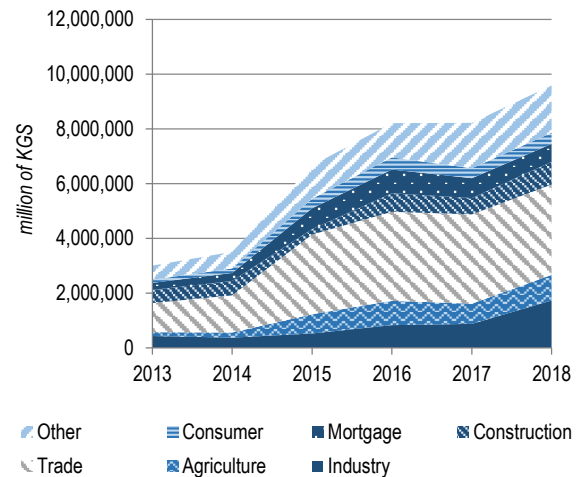


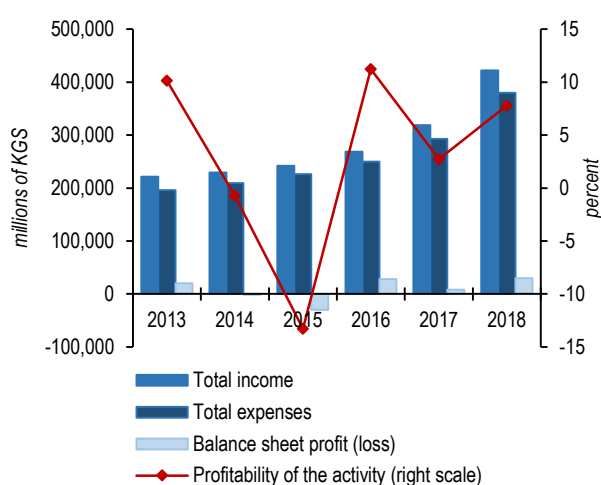
Chart 2.2.5. Volume of Non-performing Loans by Sectors of Economy



As of the end of 2018, the highest concentration of credit risks was still observed in the trade sector of economy (Chart 2.2.5).

Financial Status of Medium and Large Enterprises¹⁴

Chart 2.2.6. Results of Financial and Business Activity of the Enterprises



Source: NSC KR, NBKR

At the end of 2018, as compared to 2017, the balance sheet income and profitability of enterprises was increasing amid the decreasing corporate debt in the sector as a whole.

Following the results of the reporting period, the following financial performance of enterprises was observed in the corporate sector (Chart 2.2.6):

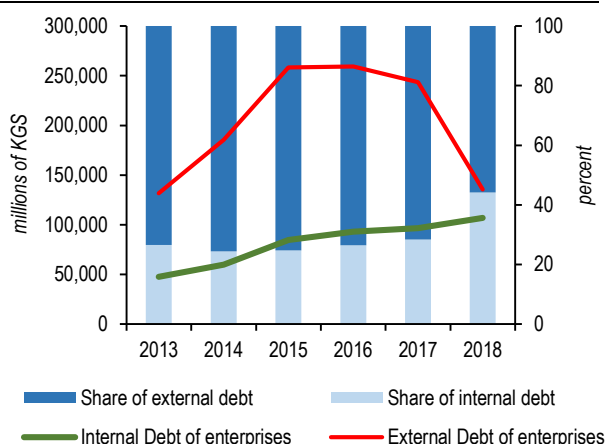
- gross profit increased by 32.3 percent and amounted to KGS 422.3 billion;
- gross expenditures increased by 29.7 percent and amounted to KGS 380.0 billion;
- balance sheet profit formed in the amount of KGS 29.6 billion;
- profitability of enterprises operation constituted 7.8 percent.

At the end of 2018, the gross debt of enterprises of the corporate sector decreased by 28.7 percent compared to 2017 and amounted to KGS 242.5 billion, or 43.5 percent of GDP.

At the end of 2018, the external debt of the corporate sector decreased by 44.4 percent compared to 2017 and amounted to KGS 135.5 billion, or 24.3 percent of GDP (Charts 2.2.7 and 2.2.8).

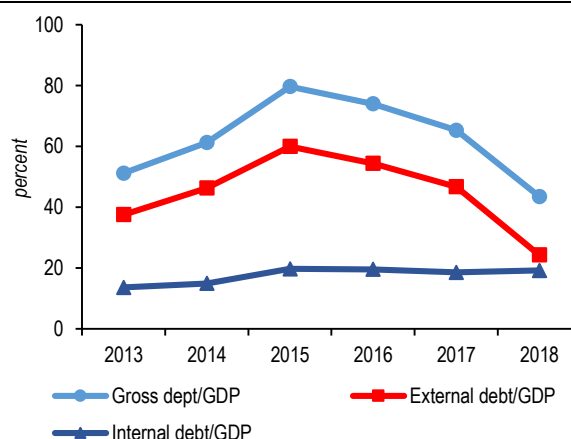
At the end of 2018, the internal debt of enterprises of the corporate sector increased by 10.7 percent compared to the previous year and amounted to KGS 107.0 billion, or 19.2 percent of GDP.

Chart 2.2.7. Dynamics of External and Internal Debt in the Corporate Sector



Source: NSC KR, NBKR

Chart 2.2.8. Indicators of Debt Soundness of the Corporate Sector



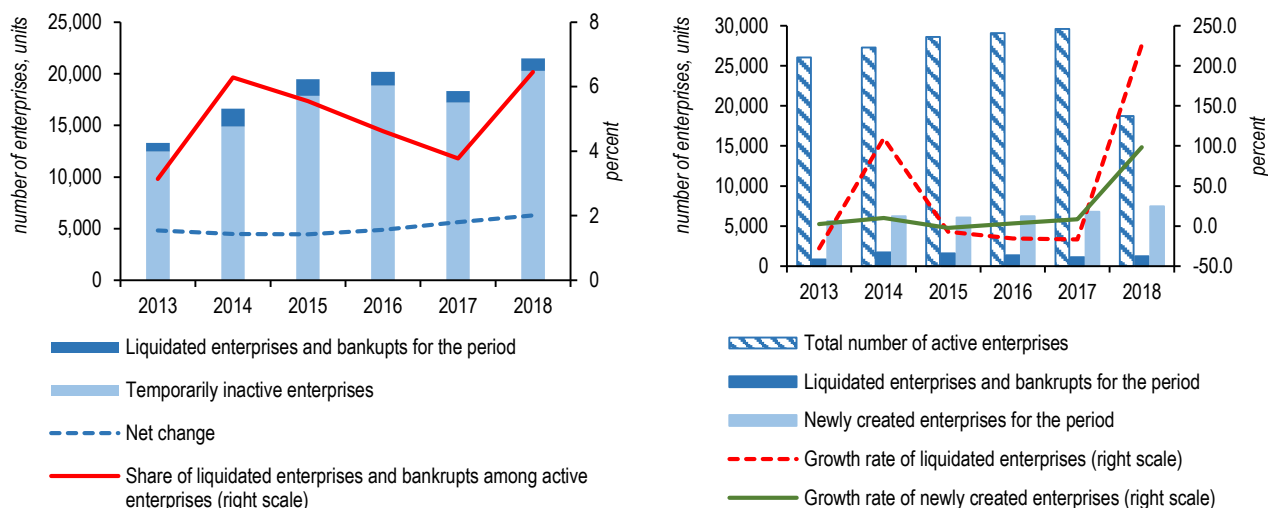
Source: NSC KR, NBKR

¹⁴ Including the enterprises for the development of gold mining "Kumtor".

Business Activity of the Corporate Sector

In the reporting period, a slight growth of the business activity was observed in the corporate sector, due to an increase in the profitability of enterprises (by 5.1 p.p. compared to 2017) and in the number of newly created enterprises (by 10.6 percent compared to 2017), despite an increase in the number of temporarily inactive (idle) enterprises (by 17.9 percent compared to 2017).

Chart 2.2.9. Business Activity of the Corporate Sector

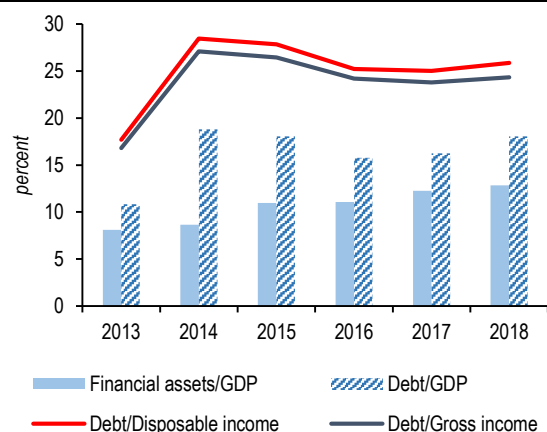


Source: NSC KR, NBKR

Financial Status of Households¹⁵

In the reporting period, finally, the financial sustainability indicators of households decreased because the growth of population debt to the financial sector outran the growth of their incomes (Chart 2.2.10). As of December 31, 2016, the households' debt ratio to GDP increased from 16.2 percent to 18.0 percent compared to 2017.

Chart 2.2.10. Indicators of Financial Soundness of the Households Indicators



Sources: NSC KR, NBKR

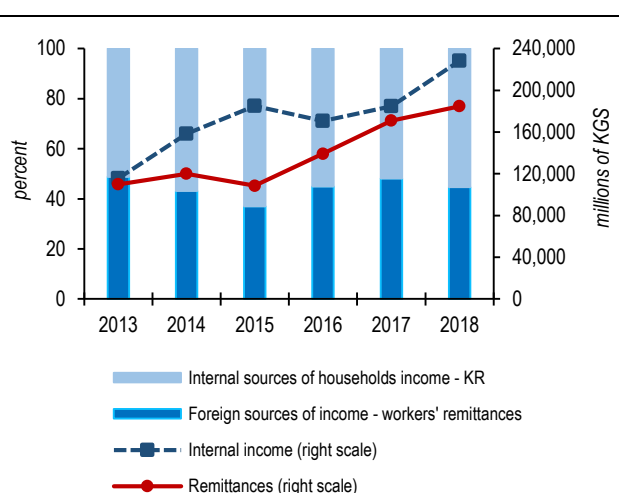
Chart 2.2.11. Factors of the Financial Soundness of the Population Balance



Source: NSC KR, NBKR

¹⁵ According to the official statistics data of NSC KR based on the random sampling method of households' survey.

Chart 2.2.12. Structure of Households' Income by Sources



Sources: NSC KR and NBKR

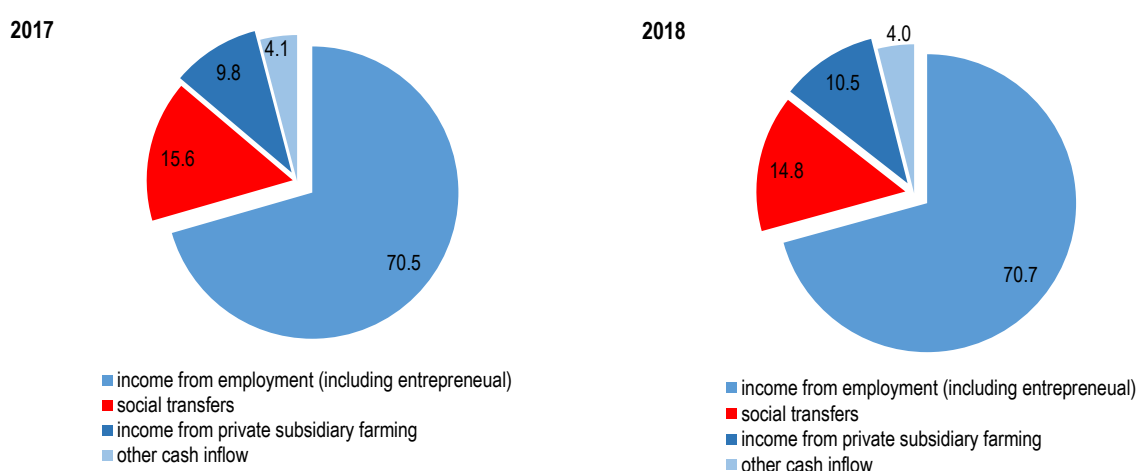
At the end of 2018, the share of remittances decreased by 3.3 percentage points, down to 44.7 percent of the population gross incomes (Chart 2.2.12). Meanwhile, remittances of migrant workers were still a significant source of household income.

At the end of 2018, in the structure of households' income, the major share was accounted for labor income, which constituted 70.7 percent of the population gross incomes (Chart 2.2.13).

In the structure of household expenditures, the main share fell on consumption (Chart 2.2.14).

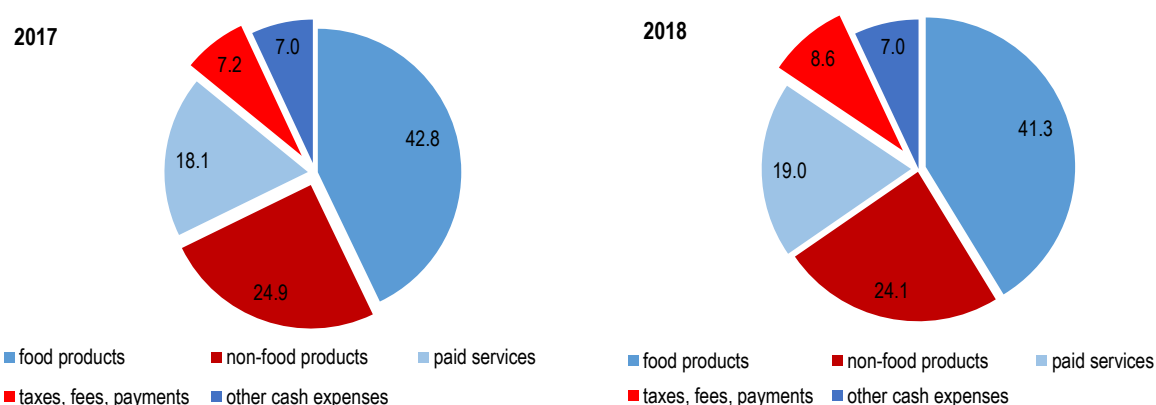
A significant share of consumer expenditures, that constituted 84.4 percent of total expenditure at the end of 2018, may affect the ability of households to meet their obligations in case of revenue reduction.

Chart 2.2.13. Structure of Households' Income, in percent



Source: NSC KR

Chart 2.2.14. Structure of Households' Expenses, in percent

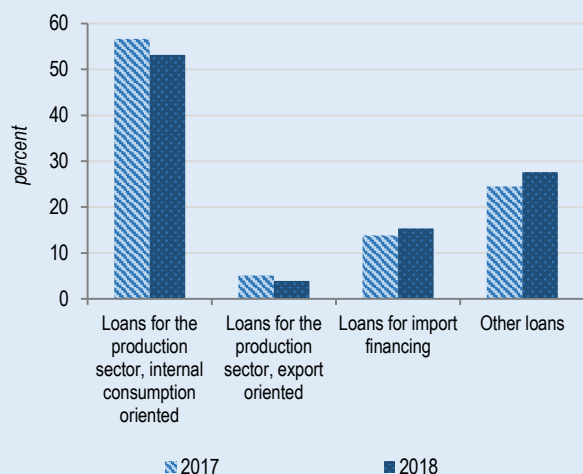


Source: NSC KR

Box 3. The Survey Results of the Commercial Banks Clients

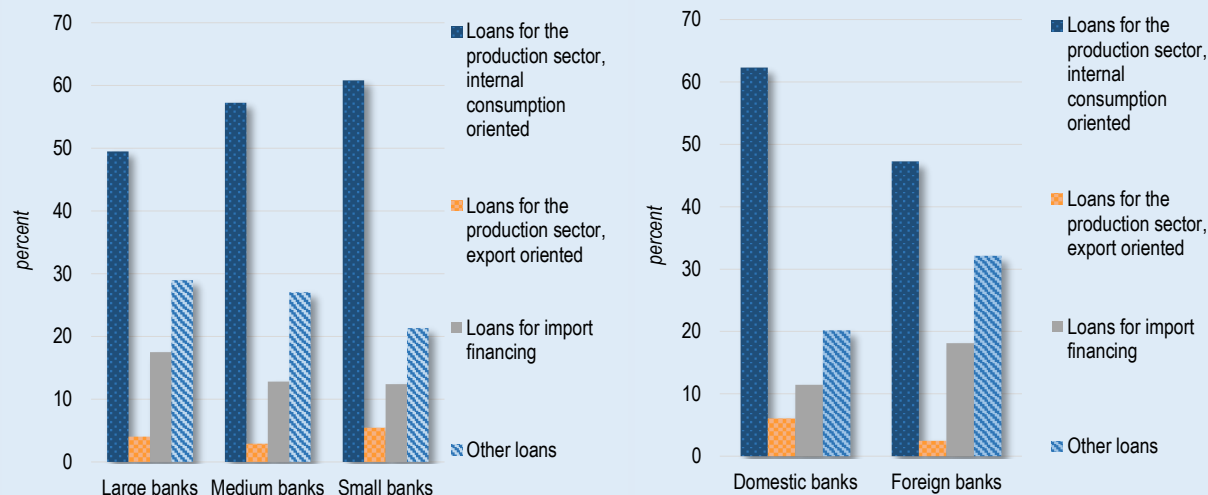
At the end of 2018, a significant share of loans (53.2 percent of total borrowers' loans) extended to the borrowers was still concentrated in the production sector of the economy¹⁶, thereby reflecting contribution of the banking sector in creation of the country's GDP, meanwhile, 17.9 percent of issued loans were forwarded for financing of imports (Chart 1).

Chart 1 Sectoral Structure of Loans as of December 31, 2018



Domestic banks forwarded 53.2 percent of the loan portfolio to the production sector (GDP) and 15.3 percent – to finance imports. Generally, foreign banks also provided loans to the production sector of economy (47.3 percent). In the reporting period, the share of loans forwarded to finance imports constituted 18.2 percent of the loan portfolio (Chart 2).

Chart 2. Sectoral Structure of Loans by the Groups of Banks as of December 31, 2018



Source: commercial banks

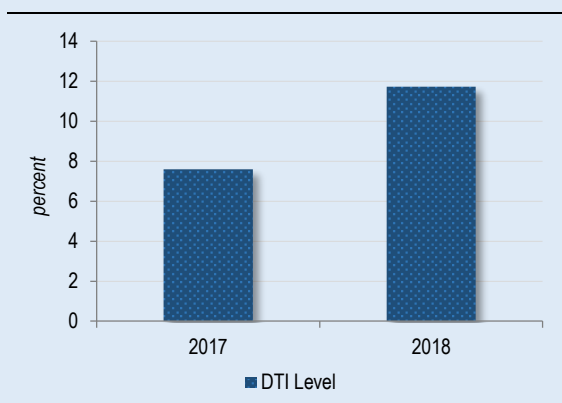
¹⁶ The production sector means the activity of the bank clients connected with the production of goods and services (construction, communication and automobile repair shop services, transport services, real estate leasing, hotels, restaurants, etc.).

Box 4. Results of the Survey of the Commercial Banks' Largest Clients

Borrowers solvency

At the end of 2018, the level of debt burden of 15 banks' largest clients calculated through DTI index¹⁷, increased by 4.1 percent compared to the same period of 2017 and constituted 11.7 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** (22.1 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 **small banks**.

Table 1. Debt Burden of the Banks Largest Borrowers at the end of 2018

	Banking sector	Large banks	Medium banks	Small banks
Loan balance, <i>billions of KGS</i>	28.9	18.8	4.1	6.0
Share of loans in 15 largest borrowers in the total volume of loan portfolio in the banking sector, <i>in %</i>	24.3	27.8	12.2	33.6
Ratio of expenses for loan debt servicing to the borrowers' total income, <i>in %</i>	11.7	21.1	6.0	5.0

Source: commercial banks, NBKR

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 2018.

	Domestic banks	Foreign banks
Loan balance, <i>billions of KGS</i>	11.1	17.8
Share of loans in 15 largest borrowers in the total volume of loan portfolio in the banking sector, <i>in %</i>	22.5	25.6
Ratio of expenses for loan debt servicing to the borrowers' total income, <i>in %</i>	4.9	17.9

Source: commercial banks, NBKR

¹⁷ 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 2018, the LTV actual level¹⁸ in the banking sector amounted to 45.1 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

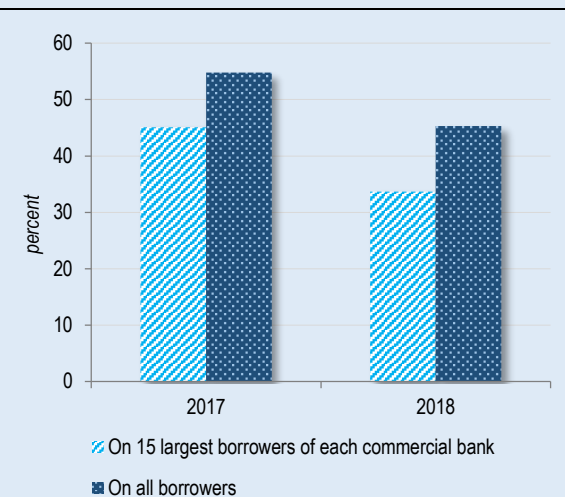
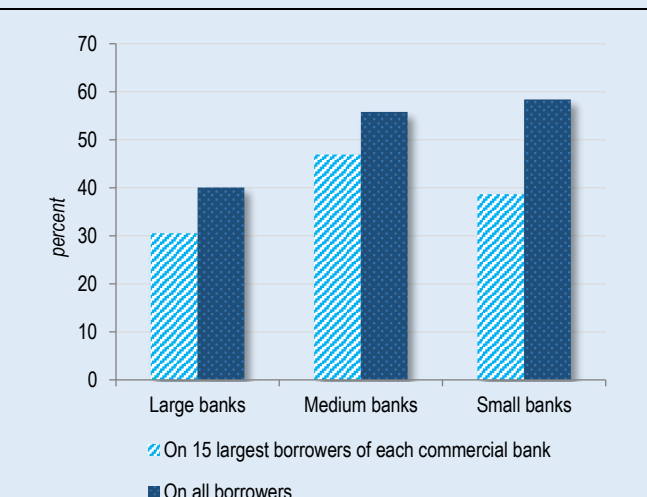


Chart 3. LTV Level on All Borrowers and on 15 Largest Borrowers by the Banks' Groups as of December 31, 2018



Meanwhile, the LTV value in the large banks is lower than in the small and medium banks (Chart 3).

¹⁸ LTV (loan-to-value ratio) is the ratio of issued loans to the value of collateral.

2.2.2. Liquidity Risk

Public confidence in the banking sector depends on the timely implementation of obligations by the banks, which suggests availability of sufficient liquidity in the banks. For regulatory purposes, liquidity risk is assessed using economic current liquidity ratio¹⁹.

Current liquidity ratio increased from 65.1 percent in 2017 to 67.0 percent by the end of 2018 (Chart 2.2.15).

Chart 2.2.15. Liquidity Indicators in the Banking Sector

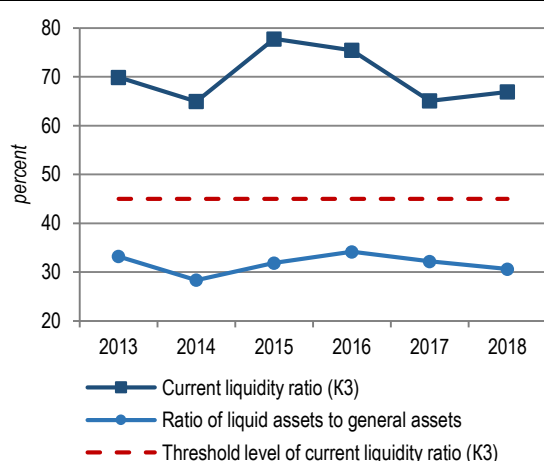
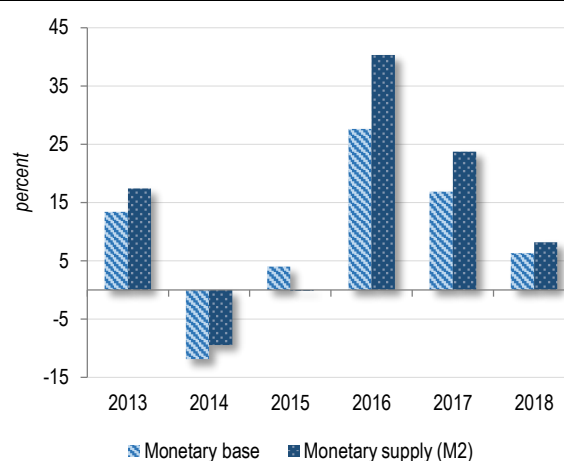


Chart 2.2.16. Growth Rates of Money Supply (M2) and Monetary Base



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

Table 2.2.1. Maturity of Financial Assets and Liabilities

as of December 31, 2018, millions of KGS

Name	Maturity					Total
	up to 1 month	1-3 months	3-6 months	6-12 months	more than 12 months	
Total financial assets	71,796	11,249	16,931	19,216	110,372	229,563
including loans and financial leasing to the clients	6,146	5,662	9,438	16,960	89,026	127,232
Total financial liabilities	93,213	8,810	18,058	21,139	40,747	181,966
including deposits of individuals and time deposits of legal entities	35,793	5,135	9,841	16,532	16,098	83,398
Gap	-21,417	2,439	-1,127	-1,924	69,625	47,598
including on loans and deposits	-29,646	527	-403	428	72,928	43,834

¹⁹ Economic current liquidity ratio is one of the mandatory standards for the bank established by the NBKR, according to which the liquid assets (for calculation of this indicator including funds of banks in cash and correspondent accounts) must be at least 45 percent of short-term liabilities.

2.2.3. Concentration Risk

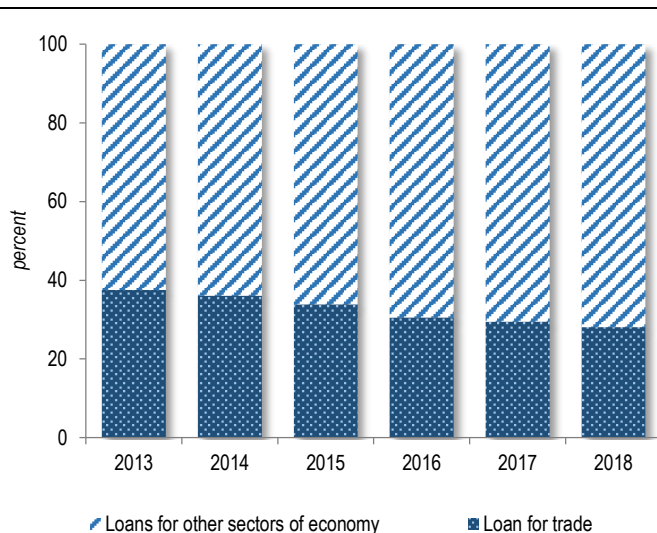
Concentration of the Largest Sources of Financing

The results of “reverse” stress testing show that some banks could not withstand the shock related to outflow from one to four largest sources of financing²⁰, when the liquidity ratio decreases below the threshold level of 45 percent.

Loan Concentration

Potential default from one to five largest borrowers²¹ in separate banks may decrease regulatory capital below economic standard of the NBKR.

Chart 2.2.17. Sectoral Concentration of the Loan Portfolio



Decrease 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 2018, the share of loans for trade slightly decreased from 29.4 percent to 28.0 percent (Chart 2.2.17).

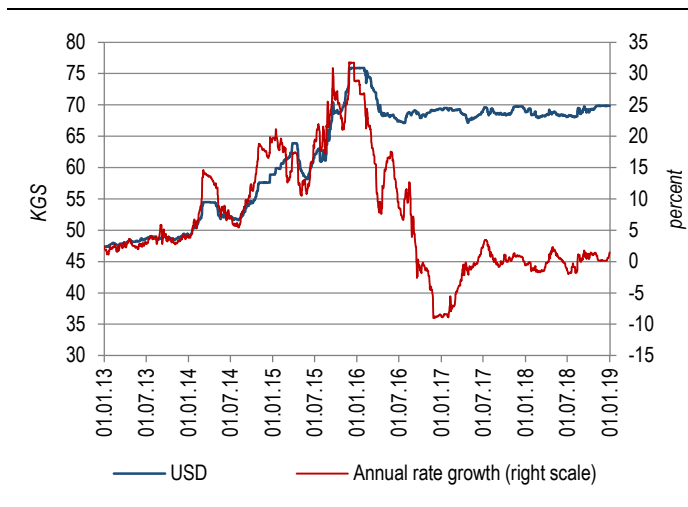
²⁰ The largest sources of financing (LSF) are the funds of creditors and depositors (received loans, settlement accounts, demand deposits and time deposits).

²¹ Total debt of five largest borrowers of the bank is meant.

2.2.4. Currency Risk

At the end of 2018, the annual average level of *currency risk* in the banking sector was at a moderate level.

Chart 2.2.18. Dynamics of USD/KGS Nominal Exchange Rate



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

In 2018, the risk of currency position overestimation in the banking sector was minimum (VaR: 0.1–1.2 percent of the net total capital, Chart 2.2.19).

Chart 2.2.19. Dynamics of Open Currency Position (OCP) and Revaluation Risk (VaR) in percent of NTC

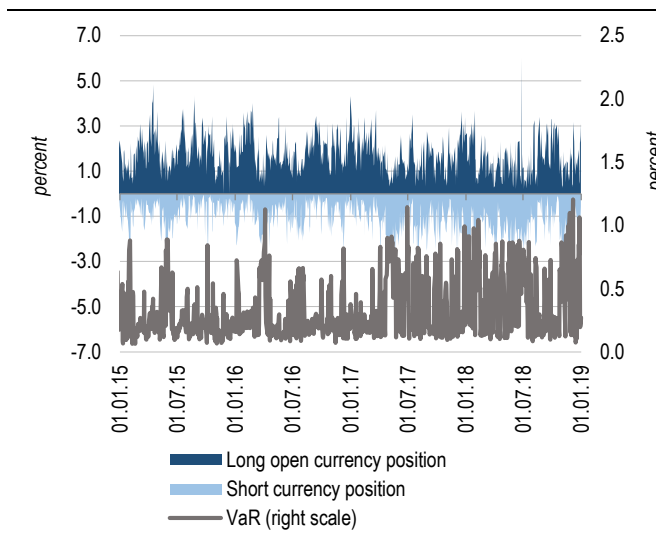
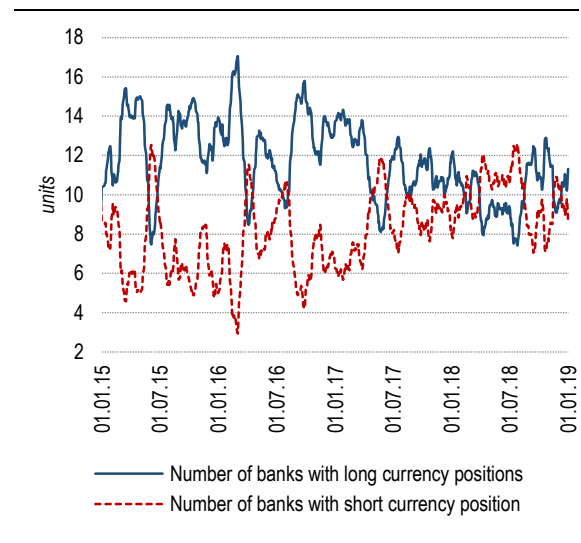


Chart 2.2.20. Currency Position of the Banks



CONTENT

Box 5. Credit and Currency Risks

At the end of 2018, 25.0 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 – 13.4 percent, where basic incomes of the borrower are generated in the national currency, and the loans are repaid in foreign currency;
- Group 2 – 5.4 percent, where basic incomes and loans payable by the borrower, are in the same currency;
- Group 3 – 2.9 percent, where 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 Loans²²

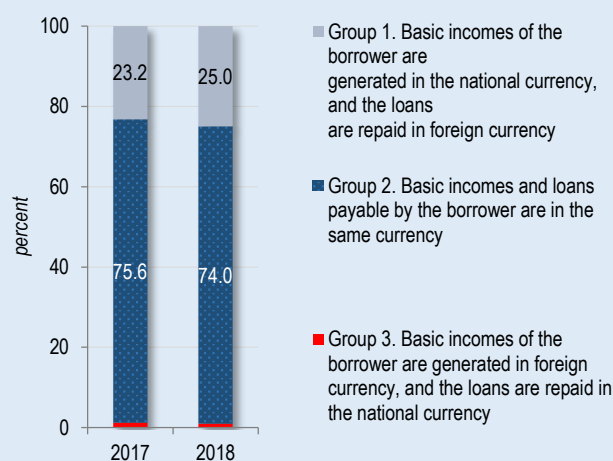
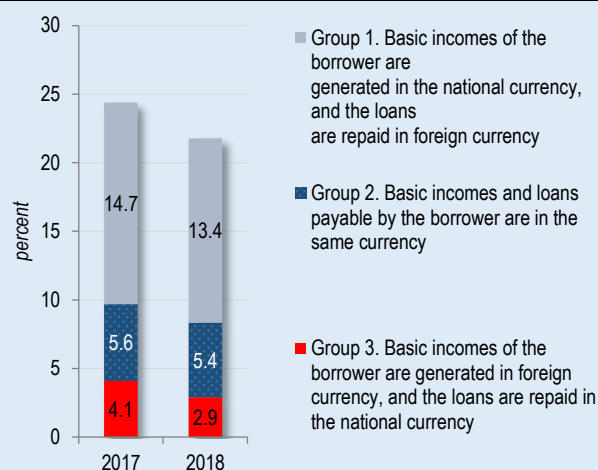


Chart 2. Share of Non-performing Loans by Groups of Loans²³



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

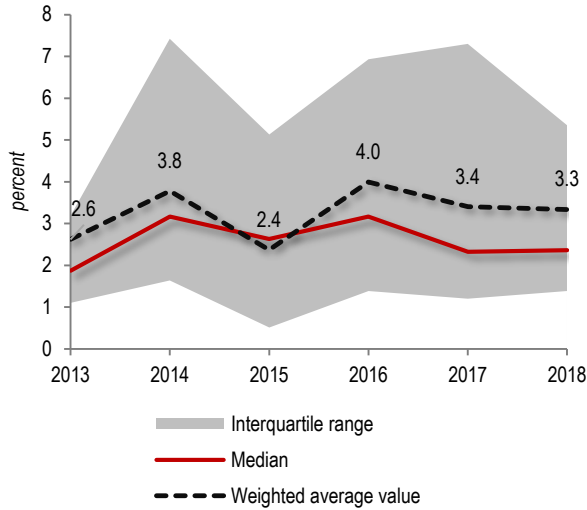
²² Breaking of loans into groups is presented in this chart. For example, the volume of loans for Group 1 as of the reporting date amounted to KGS 31.6 billion or 25.0 percent of the total loan portfolio (KGS 126.4 billion).

²³ 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 the reporting date amounted to KGS 4.2 billion or 13.4 percent of the total loan portfolio for Group 1 (KGS 31.6 billion).

2.2.5. Interest Rate Risk

At the end of 2018, interest rate risk was moderate.

Chart 2.2.21. Dynamics of Interest Rate Risk (VaR) in percent of NTC



Slight decrease of interest rate risk (VaR) from 3.4 percent to 3.3 percent of net total capital was resulted from decrease of gaps by maturities between financial assets and liabilities vulnerable to interest rates dynamics.

Average value of interest rate risk during the period of 2013 – 2018 was within accessible limits (2.5-4.0 percent of net total capital).

Chart 2.2.22. Dynamics of Average Weighted Interest Rate of Individuals' Time Deposits

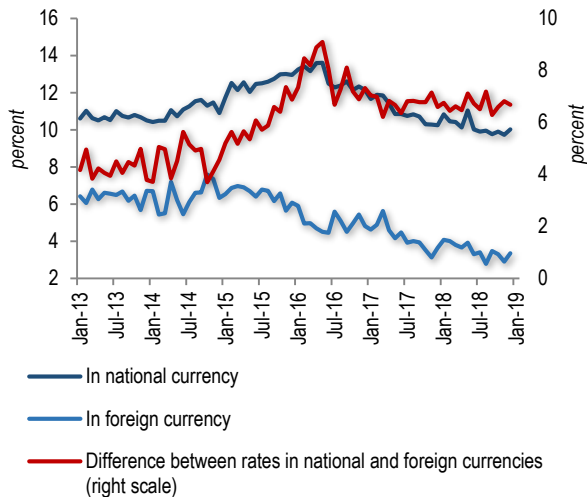
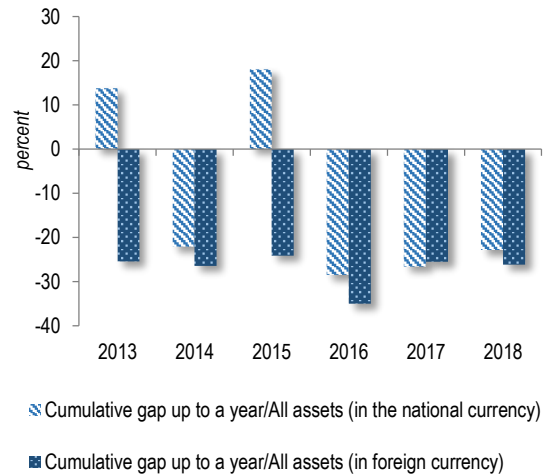


Chart 2.2.23. Cumulative Gap of Assets and Liabilities Exposed to Interest Rate Risk

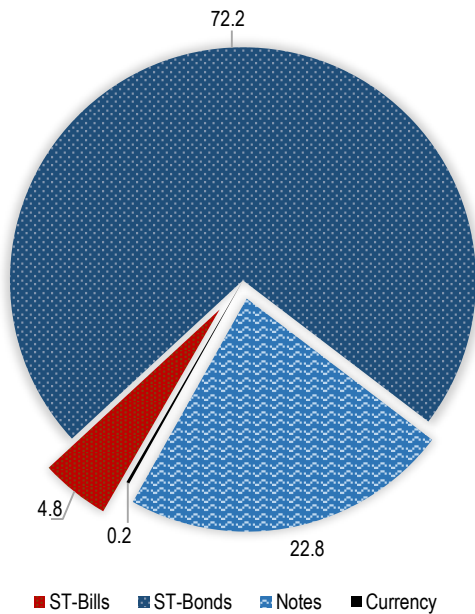


2.2.6. "Contagion" Risk

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.

At the end of 2018, the volume of interbank transactions amounted to KGS 31.4 billion²⁴.

Chart 2.2.24. Distribution of Interbank Loan Transactions Made during between Resident Banks, Depending on Collateral, in percent



The loans in the interbank market are generally covered by collateral in the form of highly liquid government securities (Chart 2.2.24) in the banking sector of the Kyrgyz Republic.

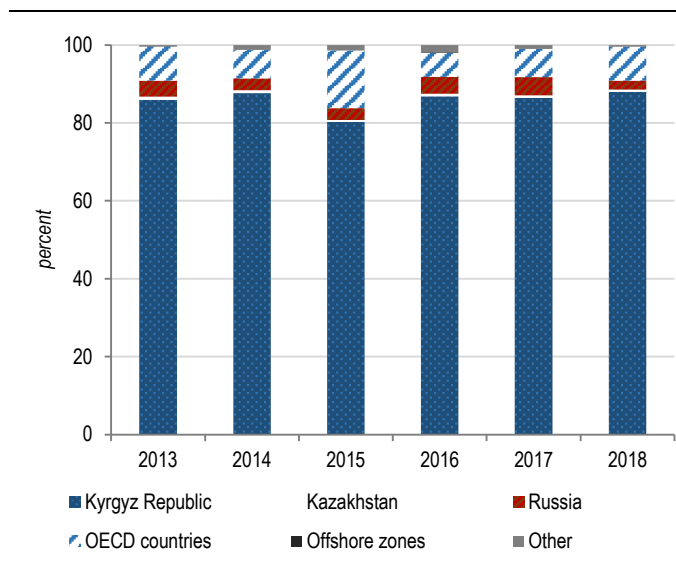
In general, the probability of the "contagion" risk materialization in the interbank credit market of the Kyrgyz Republic is minimal, which is caused by highly liquid collateral.

²⁴ The total volume of transactions made between the resident banks during 2018 is meant here.

2.2.7. Country Risk²⁵

In general, the volume of disposed assets of non-residents as of December 31, 2018 constituted KGS 27.8 billion or 12.0 percent of total banking sector assets. The highest concentration of placement was observed in the OECD countries²⁶ – 8.7 percent (or KGS 20.2 billion) of total assets in the banking sector of the Kyrgyz Republic.

Chart 2.2.25. Geographic Structure of Assets



The main share of the assets placed abroad was focused on correspondent or deposit accounts and constituted KGS 24.0 billion or 86.5 percent of total placed assets of non-residents.

At the end of 2018, banks' liabilities to non-residents of the Kyrgyz Republic totaled KGS 27.1 billion or 14.9 percent of the total liabilities of the banking sector. Main volume of the resources was drawn from non-resident banks in the form of loans and deposits, which amounted to KGS 25.2 billion or 93.2 percent of the total liabilities to non-residents. 9.9 percent of the total liabilities in the banking sector were accounted for the OECD countries, 1.4 and 1.4 percent – for Russia and Kazakhstan, accordingly (Chart 2.2.26).

Chart 2.2.26. Geographic Structure of Liabilities

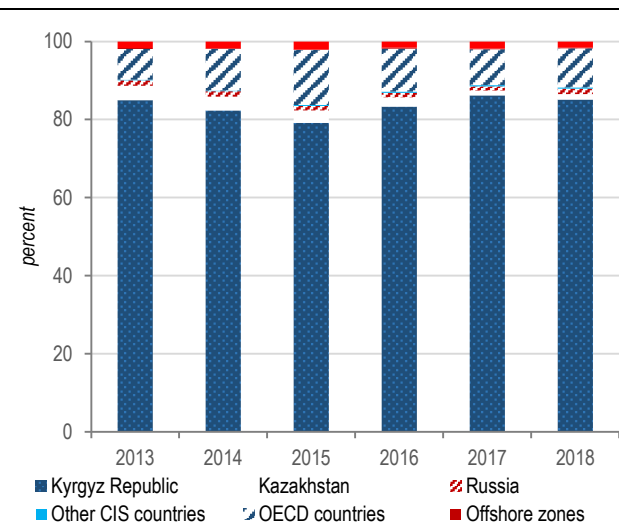
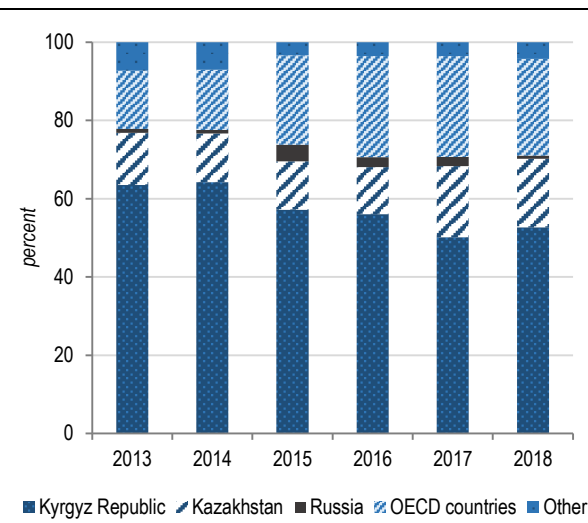


Chart 2.2.27. Authorized Capital by Countries



At the end of 2018, foreign capital amounted to KGS 11.1 billion or 47.3 percent of the total authorized capital of the banking sector (KGS 23.5 billion). The main share of foreign capital is distributed among (Chart 2.2.27):

- residents of the OECD countries – 24.7 percent;
- residents of Kazakhstan – 17.5 percent;
- residents of Russia – 0.8 percent.

²⁵ Data given by the commercial banks.

²⁶ Organization for Economic Cooperation and Development (OECD) is an international economic organization of developed countries recognizing the principles of representative democracy and free market economy.

2.3. “Reverse” Stress Testing of the Banking Sector

2.3.1. “Reverse” Stress Testing of Credit Risk²⁷

Maximum allowable share of “performing” loans²⁸ 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, was 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” loans²⁹.

Moreover, the maximum growth rate of “non-performing” loans, where capital adequacy (K 2.1) 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 December 31, 2018, the maximum allowable share of “performing” loans, transferring to the category of “non-performing” in the banking sector, amounted to approximately 54.1 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 49.4 percent of net total capital (Chart 2.3.2).

Chart 2.3.1. Maximum Possible Share of “Performing”³⁰ Loans that May Become “Non-performing” Loans³¹
percent of performing loans

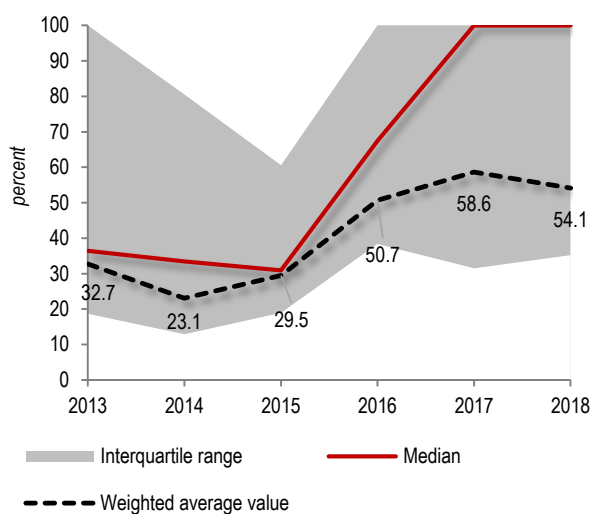
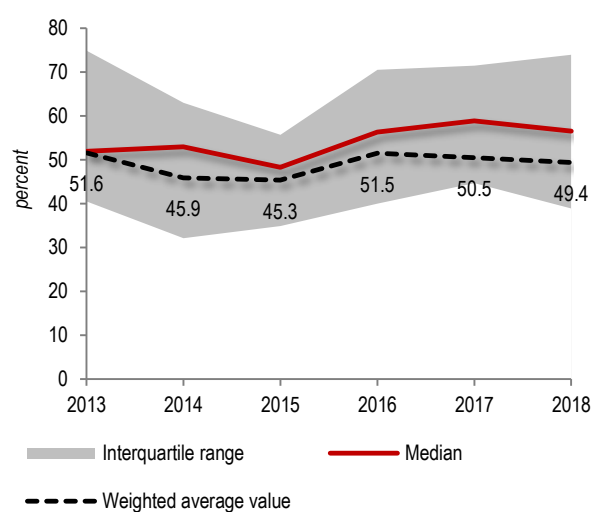


Chart 2.3.2. Additional LLP, in Creating thereof CAR Decreases to 12 Percent
percent of NTC



²⁷ Exclusive of troubled banks.

²⁸ Exclusive of “normal” loan category, which are risk free.

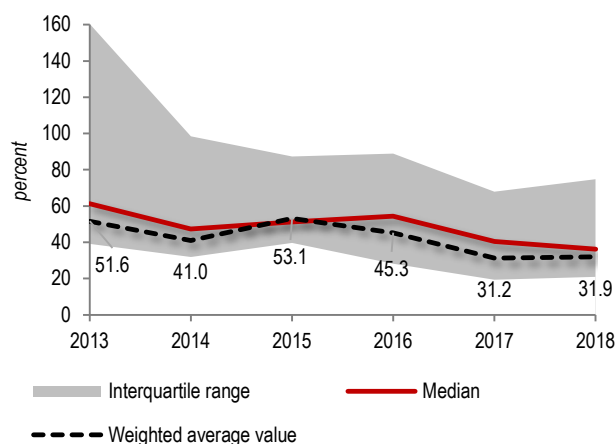
²⁹ Herewith, transition of “performing” loans to the category of “non-performing” loans is fulfilled smoothly by three categories (“substandard”, “doubtful” and “losses”).

³⁰ Exclusive of “normal” loan category, which are risk free.

³¹ 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



The reserve of liquid assets, which can cover a massive outflow of deposits of the population and non-financial enterprises, 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 2018 the actual amount of liquid assets of the banking sector was able to cover the outflow of an average of 31.9 percent of total deposits of population and non-financial enterprises (Table 2.3.1).

2.3.3. “Reverse” Stress Testing of Market Risk

In general, the results of the “reverse” stress testing of the market risk indicate that the banking sector as of the end of 2018 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 interest rate risk. Decrease of the average interest rates on loans by 15.3 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 decrease level of the KGS/USD exchange rate, which will influence capital adequacy and net profit, was 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 direct 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 direct foreign exchange rate (Table 2.3.1).

Table 2.3.1. General Results of the “Reverse” Stress Tests as of December 31, 2018

		Banking sector
Credit risk		
Scenario 1	Share of performing loans transferring to the category of "non-performing" loans, <i>in percent</i>	54.1
Interest rate risk		
Scenario 1	Decrease of weighted average interest rate on loans, when CAR declines to 12%, <i>in percentage points</i>	15.3
Currency risk		
Scenario 1	Growth rate of USD/KGS (\pm) exchange rate, when CAR decreases to 12%, <i>in percent</i>	Commercial banks overcome the effect of the direct currency risk (i.e. change of currency rate by more than 100 percent)
Scenario 2	Growth rate of USD/ KGS (\pm) exchange rate, when net profit decreases to zero level, <i>in percent</i>	
Liquidity risk		
Scenario 1	Outflow of clients' deposit and received loans share of the total deposits and loans, when current liquidity ratio declines to 45%, <i>in percent</i>	31.9

III. NON-BANKING FINANCIAL-CREDIT ORGANIZATIONS

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

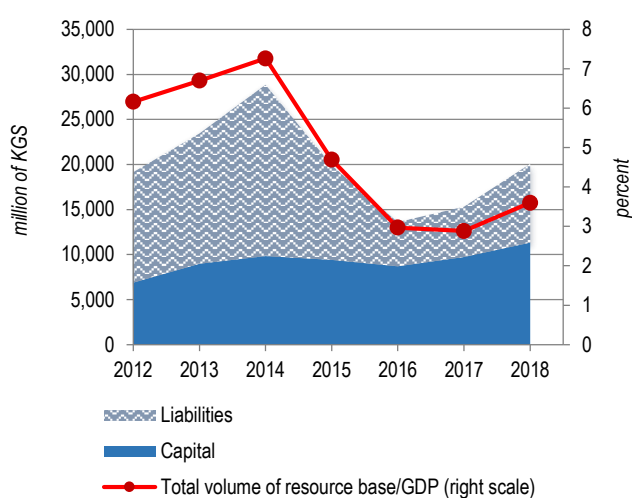
The weighted average interest rates on loans of the microfinance organizations and credit unions decreased compared to the same period of the previous year.

3.1. Main Trends

The system of non-banking financial-credit organizations subjected to licensing and regulation by the National Bank as of the end of 2018 in the Kyrgyz Republic included: the specialized financial-credit organization – “FCCU” OJSC; 106 credit unions; 142 microfinance organizations (including 8 microfinance companies, 95 microcredit companies and 39 microcredit agencies) and 413 exchange offices.

Resources

Chart 3.1.1. Dynamics of NBFCOs Liabilities and Capital

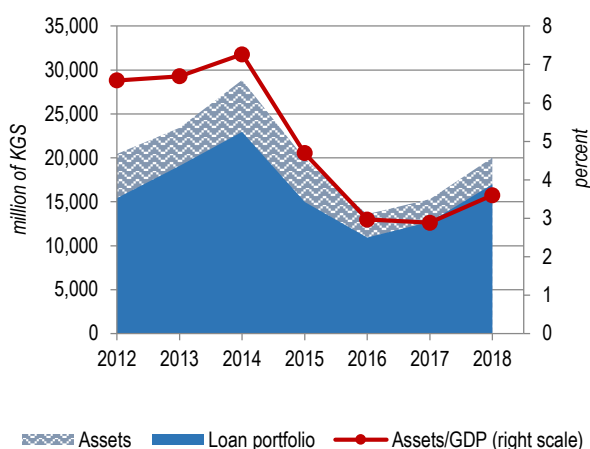


At the end of 2018, NBFCOs liabilities increased by 56.8 percent compared to 2017 and were formed in the amount of KGS 8.7 billion. As of December 31, 2018, NBFCOs capital increased by 16.4 percent and totaled KGS 11.3 billion (Chart 3.1.1).

Source: NBKR

Assets

Chart 3.1.2. Dynamics of NBFCOs Assets and Loans



Source NBKR

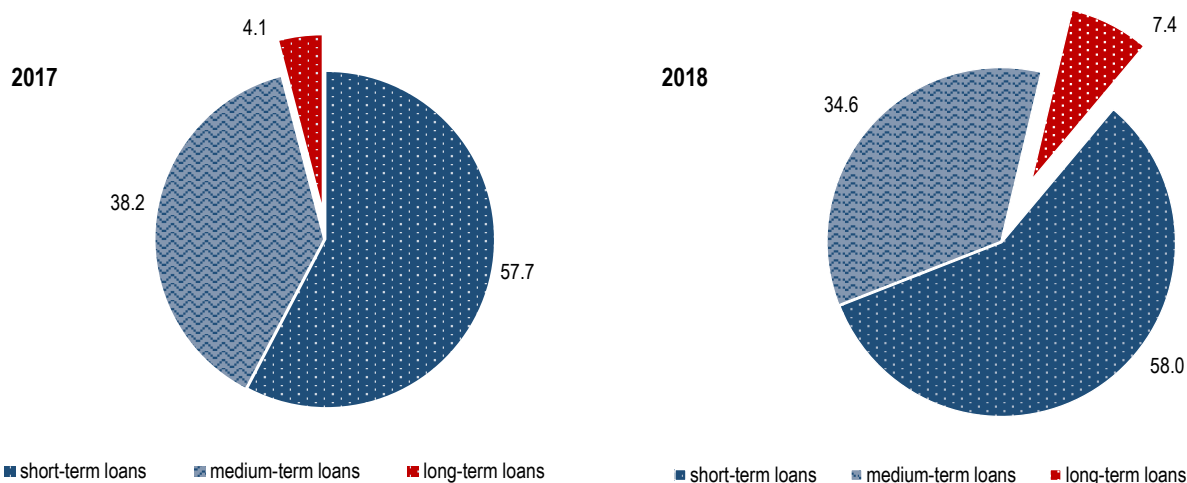
According to periodic regulatory reporting, the total assets of NBFCOs in 2018 increased by 31.0 percent and amounted to KGS 20.1 billion³². This increase was due to growth in the loan portfolio of NBFCOs (Chart 3.1.2).

The main activity of NBFCOs remains lending. As of the end of 2018, the loan portfolio of NBFCOs increased by 33.3 percent and was formed in the amount of KGS 17.0 billion.

As of December 31, 2018, the number of borrowers increased by 33.2 percent compared to 2017 and amounted to 364,142 borrowers.

There was an increase in the share of short-term credit resources within the structure of the loan maturity provided by NBFCOs in 2018, as well as a decrease was observed in the share of medium-term and long-term loans (Chart 3.1.3).

Chart 3.1.3. Structure of the NBFCOs Loan Portfolio by Maturity, in percent³³



Source: NBKR

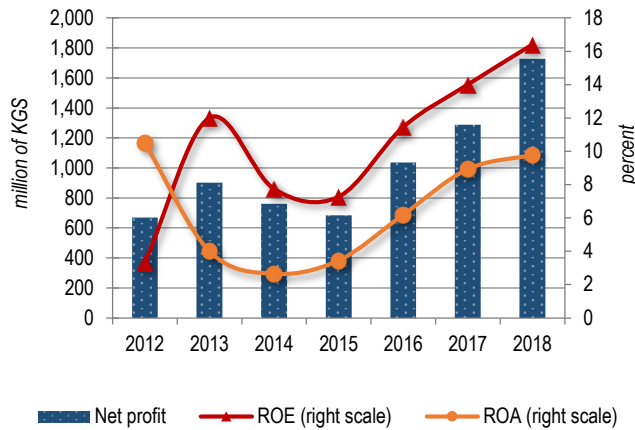
The main oblasts where the major share of NBFCOs loan portfolio is concentrated (68.6 percent of the total loan portfolio) are Bishkek city, Chui, Osh and Jalal-Abad oblasts, which is due to the highest level of business activity in these oblasts of the republic.

³² Exclusive of "FCCU" OJSC.

³³ Data for the period.

Revenue Position³⁴

Chart 3.1.4. Dynamics of NBFCOs Revenue Position³⁵



At the end of 2018 net profit of NBFCOs increased by 34.1 percent compared to the same period of the previous year and amounted to KGS 1.7 billion. At the end of 2018, ROA increased by 0.9 p.p. and amounted to 9.8 percent. ROE increased by 2.4 p.p. and constituted 16.4 percent (Chart 3.1.4).

Source: NBKR

³⁴ ROA and ROE indices are provided in annual terms.

³⁵ Exclusive of "FCCU" OJSC.

3.2. Risks of Non-banking Financial-Credit Organizations

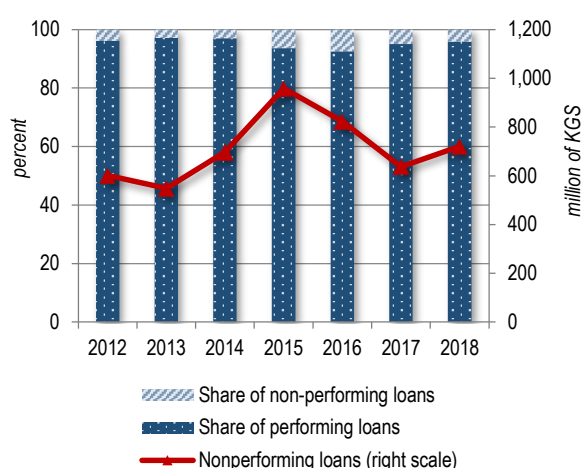
Major risk factors of the activities of NBFCOs are the quality of the loan portfolio, sectoral and institutional concentration, as well as status of the NBFCOs external debt.

Quality of the NBFCOs Loan Portfolio

As of December 31, 2018, the share of non-performing loans in the loan portfolio of NBFCOs constituted 4.2 percent, meanwhile, their nominal volume decreased slightly by KGS 83.7 million or 13.1 percent compared to 2017 (Chart 3.2.1).

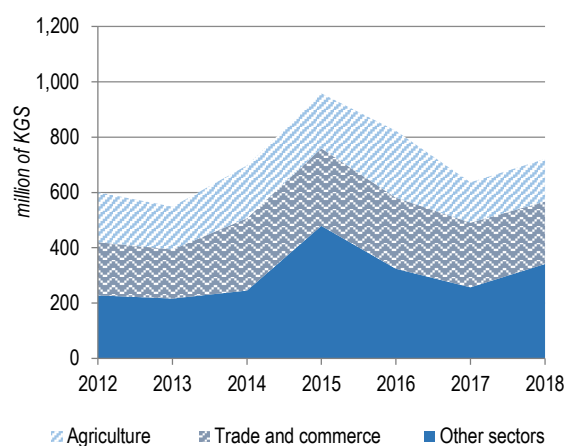
At the end of 2018, the structure of NBFCOs non-performing loans demonstrated decrease in the share of defaulting loans issued to agriculture (by 1.8 p.p. compared to 2017). The share of defaulting loans in the total non-performing loans of NBFCOs constituted 21.2 percent (Chart 3.2.2).

Chart 3.2.1. Quality of NBFCOs Loan Portfolio



Source: NBKR

Chart 3.2.2. Structure of NBFCOs Non-performing Loans by Sectors of Economy



Source: NBKR

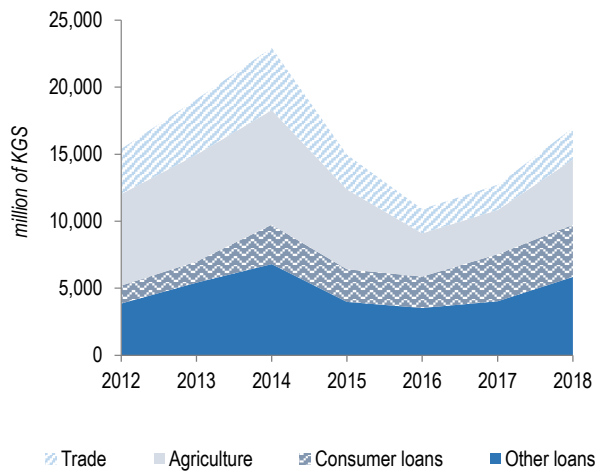
Sectoral Concentration

NBFCOs loan portfolio is concentrated in the sphere of agriculture (28.7 percent of NBFCOs total loans), as well as consumer loans and trade (22.9 percent and 13.9 percent of the total loan portfolio, accordingly, Chart 3.2.3). Lending of agriculture is associated with a high risk because of their dependence of climate conditions.

Institutional Concentration

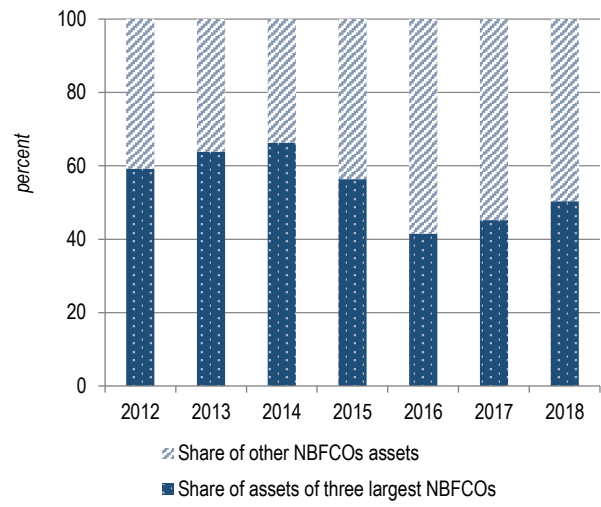
As of December 31, 2018, the share of assets of the three largest NBFCOs increased by 5.1 p.p. compared to the same period of 2017 and amounted to 50.3 percent of the total assets of NBFCOs system (Chart 3.2.4).

Chart 3.2.3. Sectoral Structure of NBFCOs Loan Portfolio



Source: NBKR

Chart 3.2.4. Institutional Structure of NBFCOs Assets



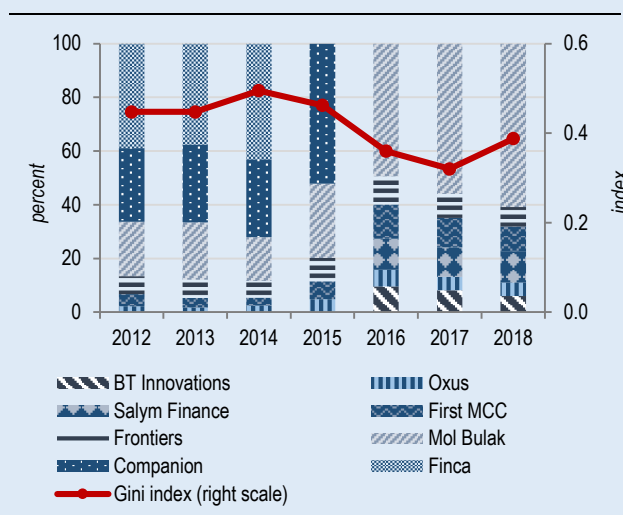
Source: NBKR

Box 6. Concentration Indices based Assessment of NBFCOs System Activity³⁶

The Herfindahl-Hirschman Index

Herfindahl-Hirschman index³⁷ was calculated for the purposes of concentration risk analysis in the NBFCOs system. As of December 31, 2018, Herfindahl-Hirschman index for the NBFCOs system constituted 1,534.2 points. According to the rule of thumb³⁸, 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



Source: NBKR

The Gini Index

The Gini index was calculated for estimating the uniformity of the NBFCOs assets distribution. As of December 31, 2018, the index value constituted 0.497, which reflected the moderate distribution of assets among the largest microfinance institutions. Meanwhile, decrease of concentration level was observed in 2018 (Chart 1).

External Debt Status of NBFCOs

As of December 31, 2018, the external debt of NBFCOs amounted to USD 64.0 million. Major part of the external debt of NBFCOs are loans provided by the foreign commercial financial-credit organizations (99.6 percent of total external debt of NBFCOs), and the rest are loans of the international financial institutions (0.4 percent of total external debt of NBFCOs).

At the end of 2018, external debt of the largest NBFCOs increased by 101.7 percent compared to 2017 and amounted to USD 56.8 million.

³⁶ Concentration indices are calculated on the basis of data submitted by 6 largest NBFCOs.

³⁷ $H = \sum_{i=1}^n (share_i)^2$.

³⁸ 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.

3.3. Stress Testing of NBFCOs System

Stress Testing of the NBFCOs Credit Risk

Stress testing, in which the effect of deterioration of the loan portfolio quality on the NBFCOs system as a whole is calculated, was conducted.

Three scenarios were considered when conducting stress testing:

Scenario 1: 50% of loans transition from one category to another;

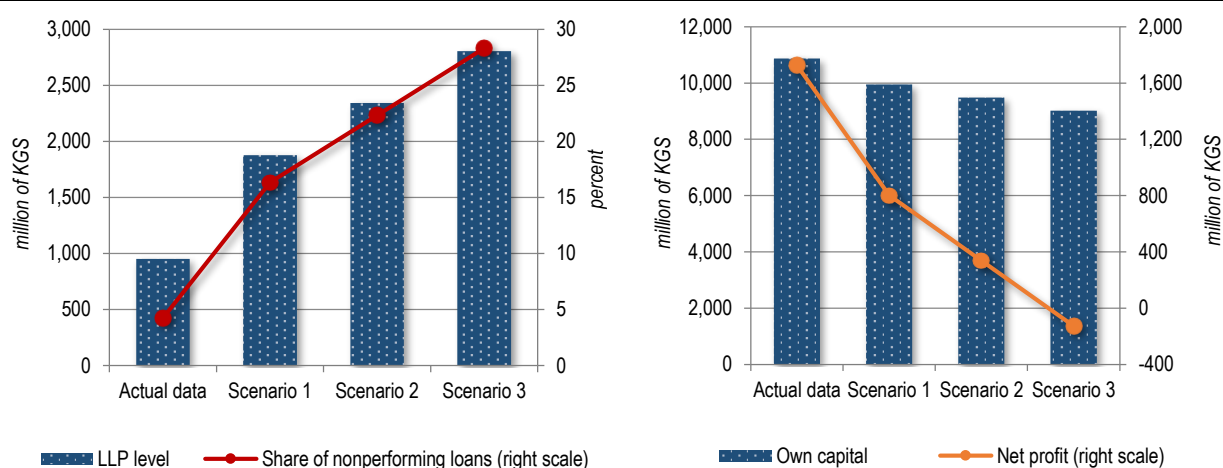
Scenario 2: 75% of loans transition from one category to another;

Scenario 3: 100% of loans transition from one category to another.

The transition of loans from one category to another occurs uniformly by the following categories: “standard”, “under supervision”, “substandard”, “doubtful” and “losses”.

The level of loan loss provisions³⁹ in the loan portfolio of NBFCOs increased from 94.7 to 194.9 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 December 31, 2018



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 and second scenario implementation, the NBFCOs sector will remain profitable, however the level of profit decreased down to KGS 801.4 million and 338.0 million, accordingly. Losses in the amount of KGS 125.3 million can be the result of the third scenario implementation (Chart 3.3.1).

³⁹ 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 - from 0% to 5%;
- Assets under supervision - 10%;
- Substandard - 25%;
- Doubtful - 50%;
- Losses - 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	16.3
Scenario 2: transition of 75% of loans from one category to another	22.3
Scenario 3: transition of 100% of loans from one category to another	28.3

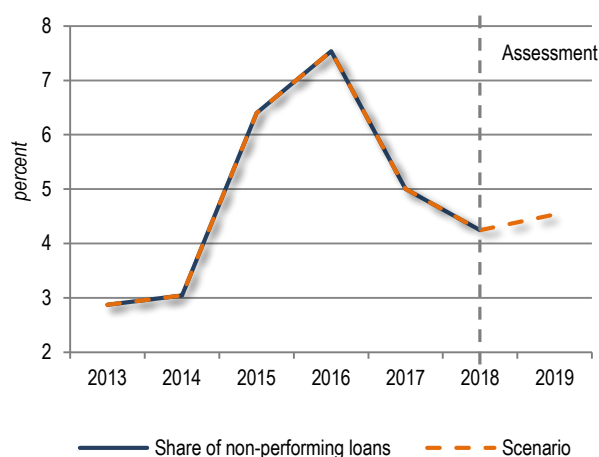
Source: NBKR

Implementation of the first scenario may result in an increase in the share of non-performing loans in the loan portfolio of NBFCOs by 12.1 p.p., to the level of 16.3 percent. In the case of the second scenario, non-performing loans may increase by 18.1 p.p., to the level of 22.3 percent, and in the implementation of the third scenario – by 24.1 p.p. and may reach the level of 28.3 percent.

Stress Testing of the Credit Risk of NBFCOs Based on the Econometric Model

This stress testing was carried out on the basis of an econometric model, which characterizes the dependence of NBFCOs non-performing loans on macroeconomic factors.

Chart 3.3.2. Dynamics of NBFCOs Non-performing Loans



In order to assess the impact of macroeconomic shock on the dynamics of the NBFCOs non-performing loans share the following scenario was considered “reducing the rate of GDP growth by 10 percent”.

An increase in the share of non-performing loans in the loan portfolio by 0.3 p.p., up to the level of 4.5 percent may occur in the process of this scenario implementation.

Source: NBKR

IV. PAYMENT SYSTEMS

In the reporting period, the level of financial risks in the systemically important payment systems was minimal and was conditioned by the risk management mechanisms used in the systems and existing high liquidity level in the correspondent accounts of the participants in the National Bank. Measures taken were aimed at minimizing operational risks in the payment infrastructure and retail 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 December 31, 2018, the following components of the payment system were operating in the Kyrgyz Republic:

1. Large Value Payment System of the National Bank – Real Time Gross Settlement System (RTGS).

2. Retail Payments Systems: the Bulk Clearing System (BCS), Cards Payment Systems, Money Transfer Systems.

3. Financial Messages Routing Infrastructure (SWIFT Multi-User Node, Interbank Communication Network).

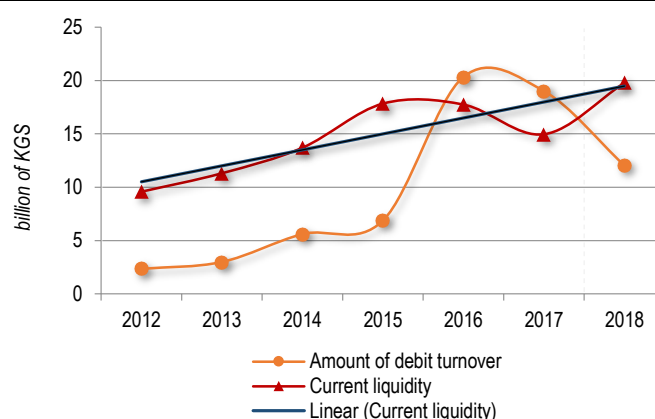
The **RTGS** normally functioned during the 2018.

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 increase by 32.1 percent (compared to 2017) and amounted to KGS 19.8 billion (Chart 4.1).

During 2018, 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 4.1 percent (Chart 4.2).

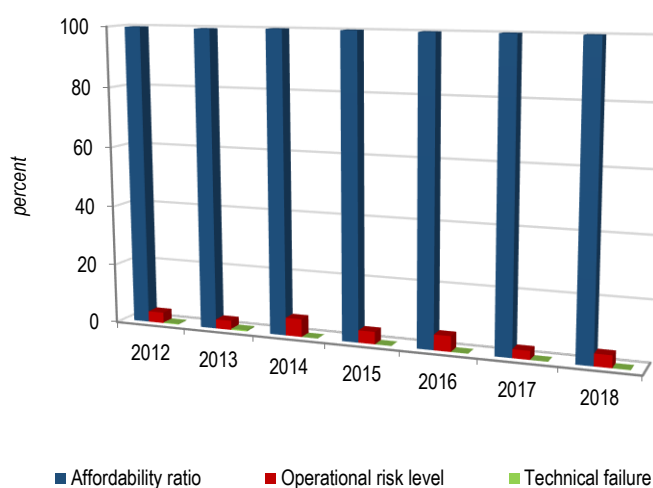
The RTGS is a systemically important payment system, failures thereof can cause serious shocks for the banking system and the whole financial system.

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, percent

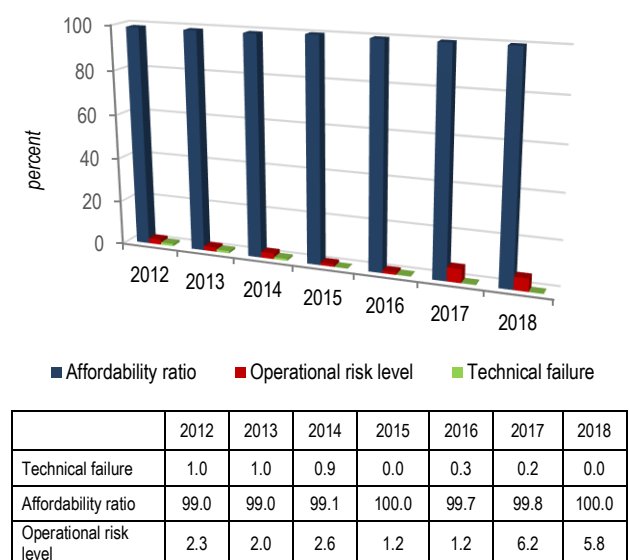


	2012	2013	2014	2015	2016	2017	2018
Technical failure	0.2	0.4	0.0	0.0	0.0	0.0	0.0
Affordability ratio	99.8	99.6	100.0	100.0	100.0	100.0	100.0
Operational risk level	3.6	3.1	5.9	4.1	5.2	2.9	4.1

Source: National bank

In functioning of the **BCS** the level of financial risks in the reporting period was also low. Reserves exhibited by the participants to cover a debit net position were 4.2 times higher than the required level. According to the results of the BCS operation monitoring, the system affordability ratio remained high and amounted to 100.0 percent during the reporting period (in 2017 – 99.8 percent). Meanwhile, the level of operational risk was 5.8 percent (Chart 4.3) due to extending the operating procedure upon request of the system participants and minor failures.

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



Source: NBKR

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



Source: NBKR

Cards Payment Systems. As of January 1, 2019, five international card payment systems and the national system “Elcart”, including co-badged cards “Elcart-UPI”, operated in the Kyrgyz Republic⁴⁰.

In the reporting period, 15 commercial banks worked with the international cards payment systems, and 25 commercial banks worked with the national system “Elcart”. The results of operation monitoring and analysis indicated that the system affordability ratio was 99.2 percent, and the level of operational risks in the system, taking into account technical failures, was 0.8 percent (Chart 4.4).

Money transfer systems. During 2018, receipt and transfer of international remittances without opening an account in the commercial banks was carried out by means of 10 international money transfer systems (Table 4.1.).

⁴⁰ According to the Regulation “On Bank Payment Cards in the Kyrgyz Republic”, a co-badged card is a card issued within the framework of two payment systems. Thus, “Elcart-UPI” is served according to the rules of the “Elcart” system in the territory of the Kyrgyz Republic, and outside the country – according to the rules of the “Union Pay” system.

Table 4.1. Distribution of Flows among International Money Transfer Systems

Money transfer system	Incoming		Outgoing	
	Share of the total number, in %	Share of the total volume, in %	Share of the total number, in %	Share of the total volume, in %
Zolotaya Korona	75.9	71.1	86.8	85.8
Unistream	11.1	13.8	2.7	6.0
Western Union	4.5	5.0	4.8	4.6
CONTACT	6.3	6.3	4.4	2.4
Money Gram	0.9	1.6	0.9	1.0
Other	1.3	2.2	0.3	0.1
Total	100.0	100.0	100.0	100.0

Source: NBKR

Regarding **local remittances**, relatively even distribution among 15 local money transfer systems is currently observed, the banks of the Kyrgyz Republic are operators thereof.

At the end of 2018, the exchange of cross-border financial messages was carried out through the SWIFT network, bank-client services. However, the main flow of financial messages accounted for SWIFT telecommunication network (the average value of incoming and outgoing payments made 94.2 percent of the total number and 98.1 percent of the total volume of payments).

The results of monitoring over the functioning of the Kyrgyz Republic payment system during 2018 showed that all significant payment systems functioned normally and did not cause any systemic risk for the financial system of the country.

V. IMPROVEMENT OF THE FINANCIAL SECTOR REGULATION

In the reporting period, development of the regulatory legal framework governing the activities of the commercial banks, including those conducting operations in accordance with the principles of Islamic banking and finance, was aimed at reducing risks, bringing in compliance with the legislation of the Kyrgyz Republic and international standards for banking regulation, as well as improving supervision over the activities of the commercial banks.

Licensing of Banks Activities

1) Amendments and additions were adopted in the Regulation “On licensing banks activities” by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/44-3-(NLA) on October 24, 2018. Amendments and additions introduced into this regulatory legal act provide for additional requirements for the shareholders of the banks, bank officials being subject to mandatory agreement with the National Bank. The requirements for submission of the documents on the origin of sources of funds, information about related and affiliated entities, drawing up schemes for the bank owners to determine the ultimate owners (beneficiaries) were established.

In addition, the banks were given the opportunity to open additional offices of client service to provide consulting services and receive applications. In order to improve licensing procedures, amendments were introduced in the procedure for obtaining permit to conduct additional banking operations. The rules on harmonization of amendments and additions to the charter of the banks were also revised.

Prudential Standards and Requirements

2) Amendments and additions were introduced into some regulatory legal acts of the National Bank on the issue of the capital adequacy ratios by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/33-6-(NLA) dated 15 August 2018 to introduce certain elements of Basel III international standards developed by the Basel Committee on Banking Supervision, and to prepare the banking sector for competitiveness as part of building a common financial market for the Eurasian Economic Union, reducing the dollarization of the economy and interest rates on loans. Adopted amendments are focused, among other things, on stimulating the participation of the commercial banks in government programs related to the financing of agriculture and export-oriented and import-substituting enterprises.

3) Amendments to the Regulation “On prudential standards and requirements mandatory for the commercial banks of the Kyrgyz Republic” were approved by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/7-8-(NLA) dated February 28, 2018 to change the procedure for calculating the liquidity ratio, including short-term and instant liquidity. Amendments also relate to the volume of loans issued to the joint liability group.

Risk Management

4) Amendments and additions to a number of regulatory legal acts on risk management in the commercial banks, relating to determining the policies and processes related to the banks’ risk appetite, as well as the measurement, establishment, management of risk limits, were adopted by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/24-2 dated June 20, 2018 as part of measures taken to implement risk-based supervision.

Moreover, the Instruction on conducting banking supervision was approved, it provides for the requirements for conducting inspections in accordance with the policy of the National Bank for implementation of the risk-oriented supervision.

5) The Regulation “On procedure for the commercial banks to place foreign currency in cash on the deposit accounts opened with the National Bank of the Kyrgyz Republic” was approved by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/7-7-(NLA) dated February 28, 2018.

In accordance with this Regulation, the commercial banks are given an opportunity to place funds in foreign currency on the deposit accounts opened with the National Bank, subject to the procedure and conditions for placing funds set by the regulator.

6) Amendments and additions to a number of regulatory legal acts on the bank accounts management, operational risk management, prudential standards and requirements, pre-trial settlement of disputes between the National Bank of the Kyrgyz Republic and the commercial banks were adopted by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/43-2-(NLA) dated October 17, 2018 to reduce the risks in the banks' activities, as well as to bring them in compliance with the regulatory legal acts of the Kyrgyz Republic.

7) Amendments to some regulatory legal acts on lending and pledge recovery issues were approved the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/58-10-(NLA) dated December 26, 2018 as part of bringing into compliance with the legislation of the Kyrgyz Republic.

Enforcement Actions

8) Amendments and additions to the Regulation "On enforcement actions applied to the banks and certain financial-credit organizations licensed by the National Bank of the Kyrgyz Republic", which establishes the procedure for applying enforcement actions to the banks that violate the requirements for timely formation of the minimum authorized capital and/or the prudential standard for their own (regulatory) capital were introduced by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/43-3-(BS) dated October 17, 2018.

9) The Instruction for consideration of cases on violations was approved by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/55-6-(NLA) dated December 19, 2018 to bring into compliance with the requirements of the Code of the Kyrgyz Republic on Violations.

Islamic principles of financing The National Bank of the Kyrgyz Republic is working on developing the principles of Islamic banking and finance to expand the range of banking services provided to the population and to develop competition in the banking market.

Some regulatory and legal acts of the National Bank were amended by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/10-6-(BS) dated March 28, 2018 to expand the list of operations that comply with the principles of Islamic banking and finance with the "commodity murabaha" transaction.

A new version of the Regulation "On minimum requirements for risk management in the banks operating in accordance with the principles of Islamic banking and finance" was adopted by the Resolution of the Board of the National Bank of the Kyrgyz Republic No.2018-P-12/30-3-(BS) dated July 18, 2018 as part of improving the risk management system in the banks.

GLOSSARY

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.

Deposit institutions are financial corporations, except the central bank, the main activity of which is to accept deposits and subsequently place these funds on their behalf.

Household is an individual or a group of individuals who live together, run a joint household, combine all or part of their income and property and who consume certain types of goods and services (mainly, housing and food). Households may exercise any economic activity, including the production.

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.

Duration is the weighted average term to maturity of the instrument. It can be used as a measure of the sensitivity of the cost of financial assets to interest rate changes, but not as maturity as such.

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.

Living wage is the valuation of the minimum set of benefits and services that are equal to the value of the minimum consumer basket, necessary for the preservation of human life and his/her health, and the amount of required payments and fees.

Disposable income is income that goes to private consumption and is free from tax. Personal disposable income is the difference between personal income and the amount of taxes or, appropriately, is the sum of consumption and the amount of savings.

A *real interest rate* is the nominal interest rate adjusted for inflation.

A *securities market* is organized exchanges and structures such as 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 profiles 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.

A *financial market* is defined as a market in which economic actors sell and purchase financial claims in accordance with the established rules of behavior of participants.

VaR (Value at Risk) is maximum possible losses in monetary terms within a certain period of time.

LIST OF ABBREVIATIONS

ADB	– Asian Development Bank
BS	– Banking System
CAR	– Capital Adequacy Ratio
CB	– commercial bank
CBRF	– Central Bank of the Russian Federation
CIS	– Commonwealth of Independent States
CJSC	– Closed Joint-Stock Company
CPI	– Consumer Price Index
DTI (Debt-to-Income)	– ratio of the amount repaid by a borrower on the loan (including the amount of the principal debt and interest rate payments for the reporting period) to the main annual income of a borrower declared (announced) at the moment of the loan issue
EAEU	– Eurasian Economic Union
FAO	– Food Agriculture Organization of the United Nations
FCCU (“FCCU” OJSC)	– “Financial Company of Credit Unions” OJSC
FCO	– Financial-Credit Organization
FRS	– Federal Reserve System
GDP	– Gross Domestic Product
GS	– Government Securities
HUS	– Housing and Utilities Sector
IMF	– International Monetary Fund
KR	– Kyrgyz Republic
KSE	– Kyrgyz Stock Exchange
LLP	– Loan Loss Provisions
LTV (Loan-to-Value Ratio)	– ratio of the volume of issued loans to the value of collateral
LSF	– large sources of financing
MCC	– Microcredit Company
MFC	– Microfinance Company
MF KR	– Ministry of Finance of the Kyrgyz Republic
MFO	– Microfinance Organization
MUN (Multi-User node) SWIFT	– Financial Messages Exchange Infrastructure
MY	– Marketing Year
NBFCOs	– Non-banking Financial-Credit Organizations
NBKR	– National Bank of the Kyrgyz Republic
NBRK	– National Bank of the Republic of Kazakhstan
NGS	– Non-Government Securities
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
POL	– Petroleum, oil, lubricants
p.p.	– percentage points
PRBR	– Periodic Regulatory Bank Reporting
PRC	– People’s Republic of China
RF	– Russian Federation
RK	– Republic of Kazakhstan

RTGS – Real Time Gross Settlement System

SBC – System of Batch Clearing

SRS GKR – State Registration Service under the Government of the Kyrgyz Republic

ST-Bills – State Treasury Bills

ST-Bonds – State Treasury Bonds

S – Securities

USA – United States of America