



**National Bank  
of the Kyrgyz Republic**

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# **THE FINANCIAL SECTOR STABILITY REPORT OF THE KYRGYZ REPUBLIC**

**December 2018**

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**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 CONCLUSIONS<sup>1</sup>

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

In the first half of 2018, there was a weak economic growth, as well as due to changes in the seasonal structure of production output at the largest enterprises of the country. Moderate economic activity remained in such sectors of the economy as trade, agriculture, transport services and cargo traffic.

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

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

**Concentration risk is one of the main risks in the banking sector.** Potential default of the largest borrowers and a sudden outflow of major funding sources (including public sector bodies and public enterprises) can negatively affect certain banks.

**The banking sector of the Kyrgyz Republic indicated its soundness to macroeconomic shocks.** It should be noted that if volatility of the national currency exchange rate is high, some banks may become more vulnerable to indirect currency risk due to a 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.

**On the background of the low level of interbank lending “contagion” risk remains insignificant.** This is also due to the presence of collateral in case of interbank lending and weak interlinkages between the commercial banks of the Kyrgyz Republic.

**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 the first half of 2018 and the ability to withstand certain macroeconomic shocks.

**According to the results of the first half of 2018, the payments 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.

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<sup>1</sup> 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

***The current favorable situation in the world food markets and the pricing policy in the domestic food market conditioned low inflation rate in the first half of 2018. The National Bank continued its interest rate policy to ease monetary conditions.***

***Slowdown was still observed in the economic growth rates of the Kyrgyz Republic, however, there was a slight growth in the reporting period. The substantial integration of trade with the external environment remains the main channel for transmission of external macroeconomic shocks.***

***Although the fiscal policy demonstrates consolidation, the public expenses — mainly directed for consumption — carry the risks for inflation and for the public debt sustainability in the medium term.***

#### **External Conditions**

In the first half of 2018, the global economy was still improving; however, the assessments of the international and financial institutions evidence the existence of possible downward trends. Economic conditions, including credit conditions, in developed economies may be more attractive to result in changed investment transfer from developing to developed economies in the medium term. A possible significant escalation of trade relations carries the risk of shrinking business activity and global trade slowdown. The growth rates of China and Russia have improved in the regional economy. In particular, stable economic growth with expectations for its further expansion was observed in Russia, as the main source of remittances.

In the first half of 2018 in Kazakhstan, the base rate was reduced four times amid an increase in economic activity and a slowdown in the annual inflation rate within the target interest rate corridor of the National Bank of Kazakhstan: from 10.25 percent at the beginning of the year to 9.00 percent in June. Meanwhile, during the reporting period, the situation in the foreign exchange market of the country in early April of the current year slightly deteriorated amid introduction of the first wave of US sanctions against Russia thereby revealing an indirect risk for the economy of Kazakhstan in the form of a significant weakening of the Kazakh tenge exchange rate under the conditions of further tightening in the aforementioned sanctions against Russia.

The economic situation in China was characterized by steady and rather high rates of economic growth. The forecasts of the large international and financial institutions demonstrate slowdown of economic activity in the country during the years to come. The authorities of the country conduct the policy of transition from high growth rates to more stable and reliable growth in the long term being set in the domestic consumer market. There are certain risks related to high indebtedness of the enterprises and the shadow banking sector in the Chinese economy, meanwhile measures are being taken to reduce such risks.

In the first half of 2018, the financial market indicators remained stable in Russia despite the surge in market volatility upon sanctions toughening by the United States. Meanwhile, during the reporting period, capital outflows in Russia increased by more than 20 percent (up to USD 17.3 billion), with the increased demand for foreign assets and the decline in non-resident investments in the Russian economy to determine the dynamics of such outflows. Therefore, the demand for foreign currency exceeded the supply thereof in the foreign exchange market of Russia, thereby determining the trend of the Russian ruble weakening, as well as the fall in the stock prices of securities. The Bank of Russia conducted a “cautious” policy to reduce the key rate due to the increased risks. Despite deteriorated market conditions in the first half of the year, the economic situation in Russia as a whole remained stable: economic growth was supported by the expansion of domestic demand, the inflation rate slowed down, and the state of the federal budget was stable.



## **Internal Conditions**

### **Gross Domestic Product**

According to the preliminary data of the National Statistical Committee of the Kyrgyz Republic, the economy in the country grew by 0.1 percent at the end of the first half of 2018 (in the first half of 2017 – by 5.6 percent). Slowdown in economic growth was mainly conditioned by decreased production output at the enterprises for the development of gold mining “Kumtor”. Meanwhile, the economic growth was supported by growth of domestic demand due to an increase in the inflow of remittances and growth in real wages and income of the population with low inflation rates. Excluding the enterprises for the development of gold mining “Kumtor”, GDP grew by 2.1 percent (in the first half of 2017 – by 2.0 percent). The deflator increased by 1.2 p.p. compared to January-June 2017 and was formed at 4.4 percent.

In the sectoral breakdown, the trade sector (0.7 p.p.), construction (0.4 p.p.), transport (0.2 p.p.), and agriculture (0.1 p.p.) made a positive contribution to economic growth, meanwhile, the industrial sector (-1.2 p.p.) and the spheres of information and communication (-0.3 p.p.) made a significant negative contribution.

The decline in the industrial sector by 5.7 percent was mainly due to the reduction in the production of basic metals (mainly extracted at gold mine “Kumtor”), extraction of metal ores, production of vehicles, machinery and equipment.

Growth by 2.1 percent (in January-June 2017 – growth by 1.3 percent) in agriculture was due to an increase in production of the livestock sector.

Growth in the construction sector made 6.3 percent; this process was accompanied by increase in fixed capital investments by 5.0 percent. Growth of investments in fixed capital was observed almost in all sectors, except for construction of facilities for provision (supply) of electric energy, gas, steam and conditioned air, hotels and restaurants, information and communications, as well as art, entertainment and recreation. There was an increase in the volume of investments financed from internal sources by 11.0 percent, the investment financed from external sources decreased by 11.6 percent.

Increase of 1.5 percent in the service sector was mainly due to growth in transport activity (by 4.7 percent) and trade (by 4.3 percent). Meanwhile, decrease was still observed in the information and communication sphere (by 7.2 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

	January-June 2017			January-June 2018		
	Share, percent	Growth rate, percent	Contribution in growth, p.p.	Share, percent	Growth rate, percent	Contribution in growth, p.p.
GDP	100.0	5.6	5.6	100.0	0.1	0.1
Agriculture, forestry and fishery	8.6	1.3	0.1	8.3	1.6	0.1
Industry	20.6	29.9	5.2	20.8	-5.7	-1.2
Mining	1.1	77.6	0.5	0.7	-23.3	-0.3
Processing sectors (Processing industry)	16.6	31.4	4.5	17.2	-6.1	-1.0
Provision (supply) of electric energy, gas, steam and conditioned air	2.6	12.1	0.3	2.6	3.0	0.1
Water supply, waste treatment and processing, receipt of recyclable materials	0.3	3.39	0.01	0.3	10.7	0.03
Construction Services	6.2	-7.4	-0.5	6.3	6.3	0.4
Construction Services	50.0	-0.1	-0.1	47.5	1.5	0.8
Wholesale and retail trade; repair of cars and motor-cycles	15.9	3.0	0.5	16.3	4.3	0.7
Transportation activity and storage of cargo	4.1	5.7	0.2	4.3	4.7	0.2
Information and communication	3.5	-24.9	-1.1	3.4	-7.2	-0.3
Other	26.5	1.1	0.3	23.5	0.6	0.1
Net (exclusive of subsidies) taxes on products	14.7	5.6	0.9	17.1	0.1	0.01

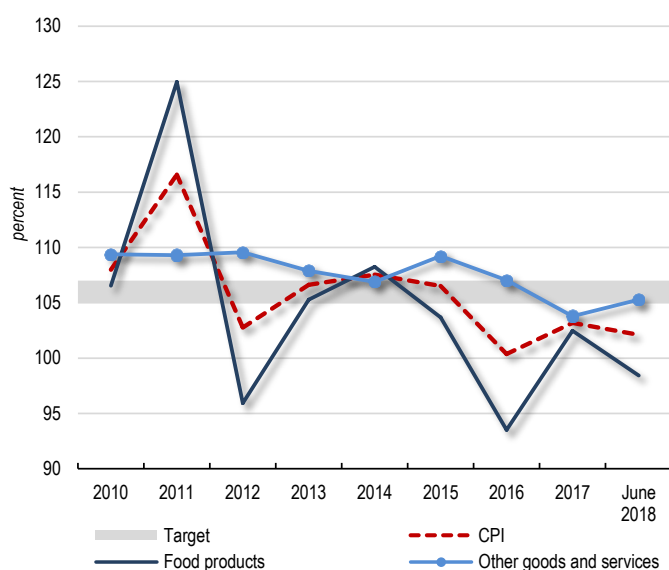
Source: NSC KR

### Inflation

Since the beginning of 2018, a downward trend was observed in the inflation rate to decrease from 3.2 percent in January to 0.8 percent in June. Price dynamics was determined by a decrease in food inflation resulted from low prices for vegetables and fruits due to their high supply conditioned by an increase in their domestic production and an expansion of their import supplies. Meanwhile, the rise in prices for tobacco products due to increased excise rates conditioned an increase in excise prices and had an upward effect on inflation at the beginning of the year. Growth rate of market inflation remained steady and constituted 5.1 percent in June, in general, being within the framework of the National Bank's target of 5-7 percent. The growth of price index for the non-food product group and for paid services remained moderate in the main commodity items.

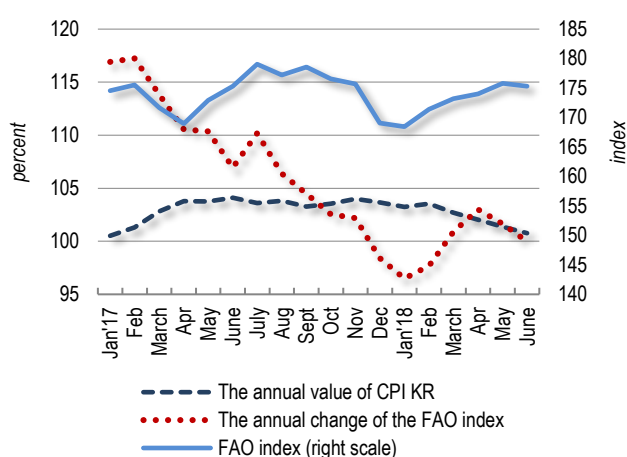
During the current year, the wages, general incomes and expenditures of the population still demonstrated steady growth to have a supporting impact on the prices for consumer goods. The indices of retail sales demonstrated continuous growth in the consumer markets with slight slowdown in retail sales growth from the end of 2017.

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



Source: NSC KR, [www.fao.org](http://www.fao.org)

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



Source: NSC KR, [www.fao.org](http://www.fao.org)

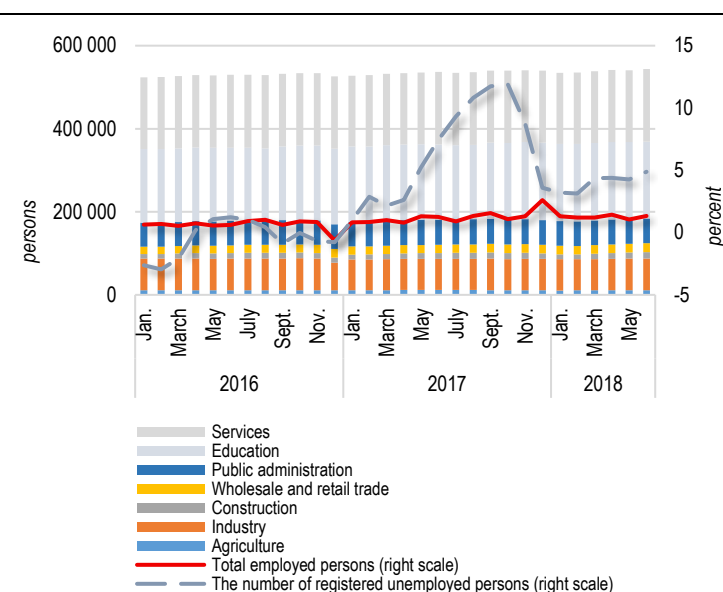
Food products occupy about half of the CPI consumer basket, while the dynamics of their prices is subject to significant fluctuations being formed on the basis of the agricultural production output and the conjuncture in the world food markets. The dynamics of prices for consumer goods and services, exclusive of food products, is relatively stable. 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 in the republic and the possible change in the price level for the main imported food products in the world markets.

In the first half of 2018, the FAO index (Food Price Index), reflecting price dynamics in the world food markets, had not changed compared to the same period of 2017. During the reporting period, an increase in the FAO index was observed due to a rise in prices for crops in the world food market in the first months of this year. The downward trend in prices for sugar since the beginning of the year, as well as rising tensions in the international trade relations, have been a downward driver in the last months of the reporting period.

In the reporting period, development of conjuncture in the external food markets did not have a significant upward pressure on prices in the Kyrgyz Republic.

### Labor Market and Wages

**Chart 1.1.3. Number of Officially Employed and Unemployed People**

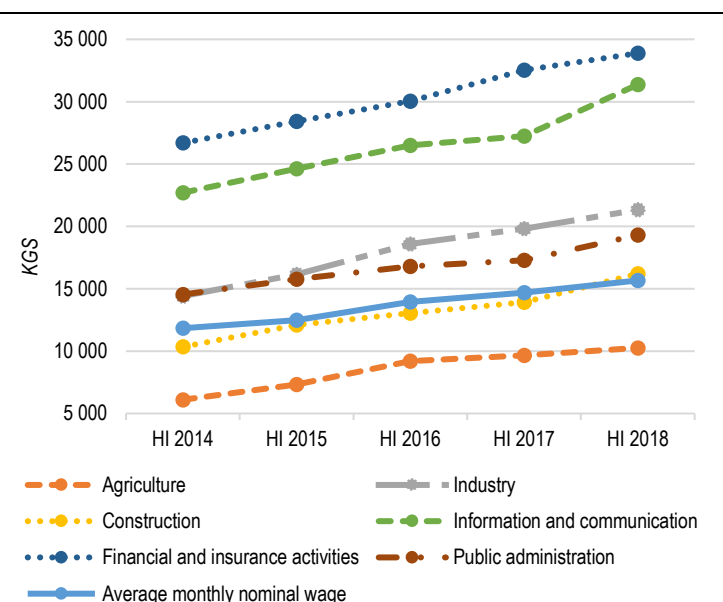


Source: NSC KR

According to the Ministry of Labor and Social Development of the Kyrgyz Republic, as of July 1, 2018, the number of unoccupied people in search of work registered at the state employment service decreased by 3.6 percent compared to the same date in 2017 and constituted 86.6 thousand people, however, the number of registered unemployed people increased by 4.9 percent and constituted 65.1 thousand persons. The registered unemployment rate increased by 0.2 percentage points and made 2.6 percent of the economically active population.

Education (34.7 percent), services (32.1 percent), industry (14.0 percent) and public administration (11.0 percent) remain the main employment sectors<sup>1</sup> 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

In the reporting period, there was a steady growth of wages in the Kyrgyz Republic. In January-June 2018, the average monthly nominal wage per an employee<sup>2</sup> increased by 6.6 percent compared to the same period in 2017 and amounted to KGS 15,665. The highest increase in the average monthly wage growth rate was observed in construction (16.3 percent), information and communication (15.1 percent), public administration (11.7 percent) and industry (7.6 percent).

In January-June 2018, real wages increased by 4.2 percent compared to January-June 2017 (in January-June 2017, the increase was 3.2 percent).

<sup>2</sup> Exclusive of small enterprises.

## State Budget

At the end of the first half of 2018, there was an improvement in the indicators of the main parameters of the state budget. Favorable external economic conditions, improved administration of tax revenues and the growth of customs revenues were the main reasons for an increase in budget revenues. Meanwhile, the reduction in non-tax revenues, as well as official transfers, had a restraining effect on the growth rates of total revenues. State budget expenditures decreased, mainly due to a significant reduction in capital expenditures (the cost of buildings and structures purchase, roads repair, etc.). Finally, the level of the budget deficit was lower than last year's values and amounted to KGS 0.4 billion or 0.2 percent to GDP.

At the end of the reporting period, the public debt decreased compared to the end of last year. 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**

	Jan-June 2017		Jan-June 2018	
	billions of KGS	% to GDP	billions of KGS	billions of KGS
<b>Total incomes (including sales of non-financial assets)</b>	69.9	34.2	70.6	33.1
including incomes from operational activity	69.8	34.2	70.6	33.0
sale of non-financial assets	0.0	0.0	0.0	0.0
<b>Total expenditures (including purchase of non-financial assets)</b>	73.8	36.1	71.0	33.2
including expenditures for operational activity	59.3	29.0	62.3	29.1
purchase of non-financial assets	14.6	7.1	8.7	4.1
<b>Deficit(-) / Profit (+)</b>	-4.0	-1.9	-0.4	-0.2
<b>Primary deficit (-) / profit (+)</b>	-1.1	-0.5	3.0	1.4
<b>Budget financing</b>	11.7	5.7	11.0	5.2
External financing	6.3	3.1	-0.9	-0.4
Internal financing	5.4	2.6	11.9	5.6

Source: MF KR

## Macroeconomic Risks

Despite the near-zero growth in total GDP at the end of the first half of 2018, which is mainly due to the reduction in production output at the enterprises for the development of 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. Meanwhile, macroeconomic risks were still observed due to existing structural problems in the economy.

In general, the risk of inflation rate deviation from the target values is not expected given the current dynamics of inflation. At the same time, since food products occupy almost half of the consumer basket (46 percent), and since imported goods occupy a significant share, 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.

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)

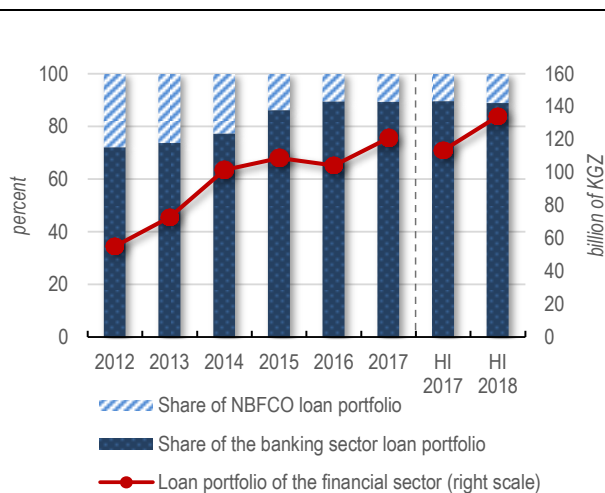
Financial institutions	2014	2015	2016	2017	HI 2017	HI 2018
<b>Commercial banks</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>
<b>Other financial companies, including:</b>	<b>689</b>	<b>656</b>	<b>704</b>	<b>688</b>	<b>690</b>	<b>686</b>
<b>Non-banking financial-credit organizations (NBFCO), including:</b>	<b>660</b>	<b>627</b>	<b>673</b>	<b>657</b>	<b>659</b>	<b>655</b>
Microfinance organizations, including:	215	172	162	150	159	148
microcredit companies	154	109	103	96	101	98
microcredit agencies	56	57	53	47	52	42
microfinance companies	5	6	6	7	6	8
"FC CU" OJSC	1	1	1	1	1	1
Credit unions	135	125	116	110	114	108
Exchange offices	309	329	394	396	385	398
<b>Insurance companies</b>	<b>17</b>	<b>17</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>
<b>Investment funds</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>
<b>Stock exchanges</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Pension funds</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>

Source: NBKR, NSC KR

As of the end of the first half of 2018, assets of the banks and the NBFCOs constituted KGS 229.1 billion or 44.6 percent to GDP.

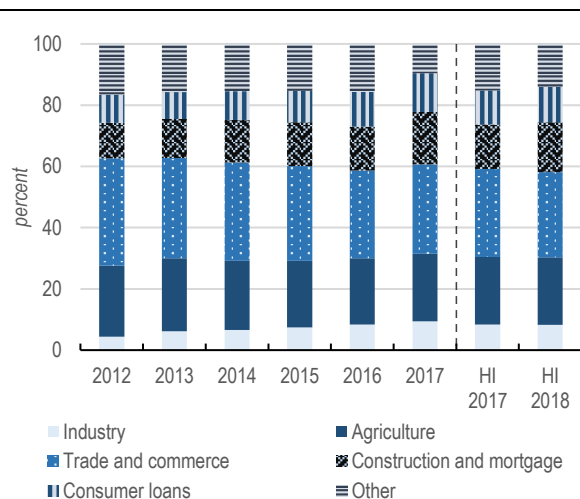
In the first half of 2018, the total loan portfolio of the banks and the NBFCOs constituted KGS 134.3 billion or 26.2 percent of GDP. The share of the banks' loans in the loan portfolio of the financial sector decreased by 0.7 p.p. and at the end of the first half of 2018 made 89.0 percent (Chart 1.2.1).

**Chart 1.2.1. Structure of the Loan Portfolio**



Source: NBKR

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



Source: NBKR

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 the first half of 2018 constituted 49.9 percent of total issued loans and amounted to KGS 65.6 billion (Chart 1.2.2).

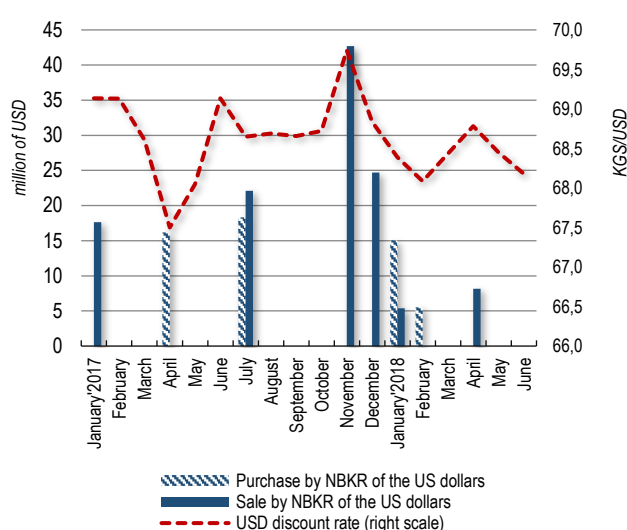
### 1.3. Financial Markets

*In the first half of 2018, the situation in the domestic foreign exchange market was relatively stable. Interbank borrowings, mainly repo transaction, were actively conducted in the money market to support the short-term liquidity. The market participants were provided with an opportunity to increase their investment portfolios due to the high issuing activity of the Ministry of Finance of the Kyrgyz Republic (especially in terms of issuing the ST-Bonds) and existing of a consistently high level of excess liquidity in the system. The National Bank held regular auctions for the notes placement to absorb excess liquidity.*

#### 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**



In the first half of 2018, the USD/KGS exchange rate dynamics was determined by seasonal factors and the effects of external shocks. Significant exchange rate fluctuations were leveled by the interventions conducted by the National Bank of the Kyrgyz Republic. Generally, operations on purchase of foreign currency prevailed; the volume of these operation increased by 27.2 percent compared to the same period of 2017 and amounted to USD 20.6 million. The volume of sold foreign currency amounted to USD 13.6 million (-23.2 percent compared to the first half of 2017). Finally, net purchase of foreign currency by the National Bank amounted to USD 7.0 million and resulted in balance of supply and demand during the reporting period. The supply of foreign exchange in the market was also supported by a steady inflow of remittances into the country.

During the reporting period, the official exchange rate of the US dollar against the Kyrgyz som varied in a narrow range from KGS 67.9355 to KGS 69.4396/USD 1. At the end of the first half of 2018, the official exchange rate of the US dollar against the Kyrgyz som decreased by 1.0 percent year-to-date, from KGS 68.8395 to KGS 68.1800/USD 1 (during the same period of 2017, the official exchange rate of the US dollar decreased by 0.1 percent, down to KGS 69.1367/USD 1).

During the reporting period, the total volume of operations on purchase and sale of foreign currency by the foreign exchange market participants increased by 47.3 percent compared to the same period of 2017 and amounted to KGS 310.7 billion. Most foreign currency operations in the foreign exchange market were conducted in US dollars (57.4 percent). The interest of the market participants in operations with the Russian ruble increased by 54.2 percent, in the euro – by 32.5 percent, in the Kazakh tenge – by 47.5 percent. Meanwhile, these operations were mainly presented by the cash operations conducted by the commercial banks and the exchange bureaus.

##### Money Market

In general, the money market was stable and ensured the redistribution of liquidity between participants. The money market remained one of the key segments of the financial market. The likelihood of insufficient liquidity among the financial-credit organizations was low due to an increase in the bank portfolio of liquid and reliable government securities of the Government of the Kyrgyz Republic, the notes of the National Bank and existing availability of refinancing operations conducted by the National Bank.

In the reporting period, there was a significant increase in the volume of interbank loans in the domestic market, up to KGS 22.5 billion (by 9.8 times compared to the same period of the previous year), mainly due to an increase in



repo operations. Therefore, the average weighted rate on the interbank credit resources increased from 1.87 percent in the first half of 2017 to 2.57 percent in the first half of 2018. Meanwhile, in the reporting period, the volatility of the average weighted interest rates in the interbank credit market significantly decreased amid a decrease in the average weighted maturities.

The volume of repo operations in the structure of interbank loans amounted to KGS 22.4 billion (having increased by 12.8 times), the share thereof formed at 99.7 percent. The average weighted rate on repo operations increased from 1.53 percent in the first half of 2017 to 2.61 percent in the reporting period. The volume of standard operations in the national currency was insignificant and amounted to KGS 65.7 million (-87.3 percent), meanwhile, the standard operations in foreign currency were not conducted (in the same period of the previous year, the volume of operations amounted to KGS 34.1 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 492.0 billion (-60.5 percent compared to the value in the first half of 2017).

### 1.3.2. Securities Market

The Ministry of Finance of the Kyrgyz Republic continued to carry out regular borrowings by placing 12-month ST-Bills and ST-Bond of all maturities in the primary market for government securities. The investors had a sufficient level of excess liquidity to increase the investment portfolio.

In the reporting period, only the auctions on placement of 12-month securities were held in the ST-Bills market. The supply of 12-month ST-Bills increased by 27.4 percent and amounted to KGS 2.0 billion; however, the volume of demand for 12-month securities decreased by 14.5 percent, down to KGS 3.0 billion compared to the first half of 2017. As a result, the average weighted rate of 12-month ST-Bills increased from 5.75 percent to 6.26 percent in the first half of 2018. The volume of placement of these assets increased by 6.9 percent compared to the same period of 2017, up to KGS 1.8 billion. In the first half of 2018, the total volume of the ST-Bills portfolio decreased by 3.8 percent year-to-date, down to KGS 2.8 billion. The operations on purchase/sale of ST-Bills were not conducted in the secondary market during the reporting period.

The market share of ST-Bonds continued growing in the reporting period. At the end of the first half of 2018, the ST-Bonds portfolio<sup>3</sup> in circulation increased by 42.7 percent, up to KGS 33.9 billion. The ST-Bonds portfolio, denominated in foreign currency, amounted to USD 49.4 million, having not changed since the first auction.

The ST-Bonds market, taking into account those denominated in foreign currency, as before, was characterized by a high degree of concentration (0.26), which corresponded to the presence of four main participants (mainly institutional investors) in the market. In the reporting period, the total demand for ST-Bonds increased by 1.9 times (up to KGS 21.3 billion), meanwhile the Ministry of Finance of the Kyrgyz Republic increased the volume of supply by 1.8 times (up to KGS 8.9 billion). As a result, the sales volume, taking into account the additional placement in the primary market, increased by 2.1 times and amounted to KGS 13.1 billion. During the reporting period, there was a downward trend in ST-Bonds yields in all maturities. As a result, the total average weighted rate on ST-Bonds decreased by 1.05 p.p. compared to the same period in 2017, up to 12.42 percent.

Given the high liquidity of ST-Bonds, the volume of their sales in the secondary market amounted to KGS 784.9 million.

Within the framework of its monetary policy, the National Bank of the Kyrgyz Republic continued conducting auctions on sale of the National Bank notes adjusting the volume of their offer, to withdraw excess liquidity from the banking system. The volume of notes proposed by the National Bank in the reporting period increased by 16.7 percent compared to the same period in 2017, up to KGS 74.1 billion. Demand for the National Bank notes increased by 5.7 percent and amounted to KGS 77.4 billion. Therefore, the sales of the National Bank notes increased by 25.6 percent and amounted to KGS 63.1 billion.

<sup>3</sup> Exclusive of the ST-Bonds denominated in foreign currency.

In the reporting period, according to the results of the auctions held on placement of the National Bank notes, the total average weighted yield increased by 2.0 p.p. compared to the same period of 2017, up to 3.1 percent. The yield grew due to sale of the 91-day National Bank notes; the yield of these securities was relatively higher than the yield of 7 - and 28-day securities (there were no auctions on placement of the 91-day National Bank notes during the same period of 2017).

The total volume of the National Bank's notes portfolio in the banking system increased by 67.8 percent year-to-date, up to KGS 8.8 billion.

## 1.4. Real Estate Market

**There is a positive trend in growth of prices and the transactions made on purchase and sale in the real estate market of the Kyrgyz Republic.**

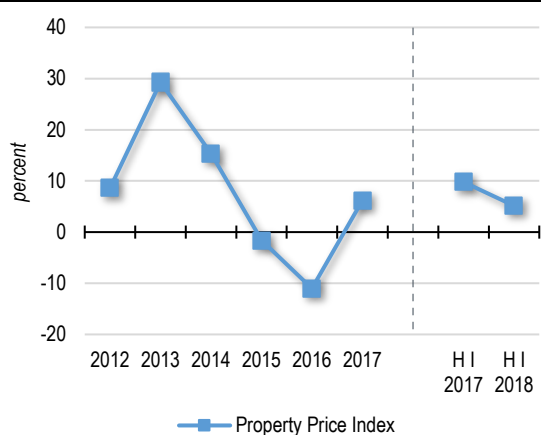
**At the end of the first half of 2018, the price index<sup>4</sup> in the real estate market of the Kyrgyz Republic was 5.2 percent, the volume of transactions on the real estate purchase and sale increased by 38.6 percent during the same period.**

**Increase in the level of the average wage positively influenced the housing affordability index indicating improvement of the situation with real estate affordability.**

**Risks to the financial sector from the real estate market remain moderate, which was conditioned by insignificant share of the mortgage loans<sup>5</sup> in the total loan portfolio of the banks.**

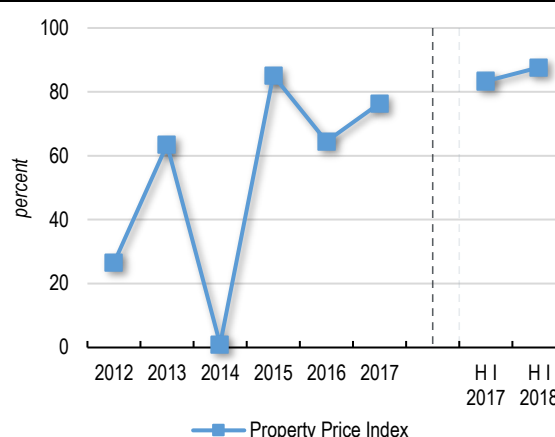
At the end of the first half of 2018, decrease in property price index compared to the same period of 2016 was observed in the Kyrgyz Republic (Chart 1.4.1 and Chart 1.4.2).

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



Source: SRS GKR

**Chart 1.4.2. Basis Price Index Growth Rate in the Real Estate Market<sup>6</sup>**



Source: SRS GKR, NBKR calculations

As of June 30, 2018, the average price for 1 square meter of housing (apartments) in Bishkek increased by 1.0 percent and in Osh – by 16.4 percent compared to the first half of 2017 (Chart 1.4.3). The average price for 1 square meter of individual houses in Bishkek increased by 13.5 percent and in Osh decreased by 14.6 percent (Chart 1.4.4).

In the first half of 2018, the number of transactions of the real estate purchase and sale increased by 38.6 percent and amounted to 18,122. The transactions on purchase and sale of the apartments and houses increased by 41.6 percent and 34.0 percent compared to the same period of the previous year and amounted to 11,137 and 6,985, accordingly.

<sup>4</sup> The Laspeyres index method was used in developing price index for the real estate.

In general, the Laspeyres index is computed as follows:

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

where  $K$  = number of types of real estate;

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

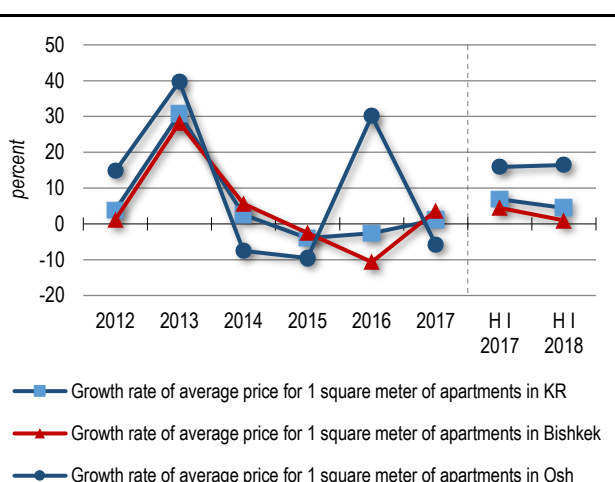
$P_{oi}$  = price of real estate of type  $i$  in the base period;

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

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

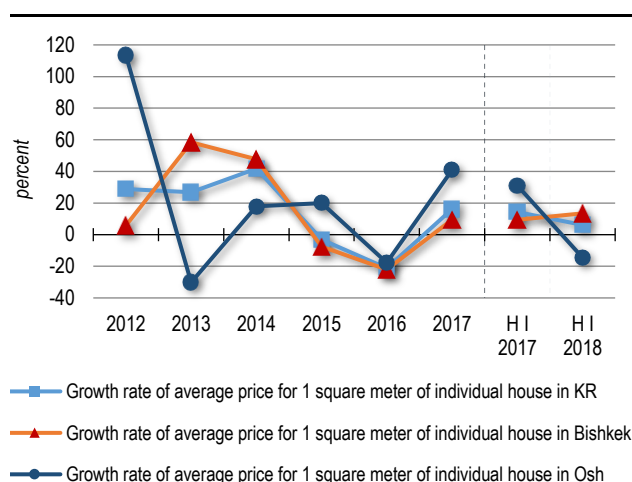
<sup>6</sup> The year 2010 was taken as the base period.

**Chart 1.4.3. Dynamics of Price Changes for Apartments**



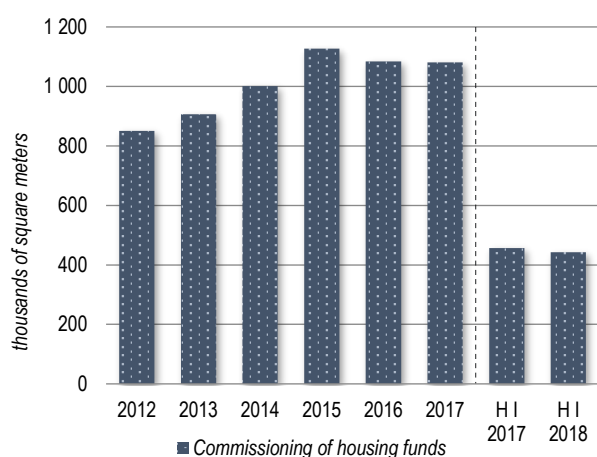
Source: SRS GKR, NSC KR, NBKR calculations

**Chart 1.4.4. Dynamics of Price Changes for Individual Houses**



Source: SRS GKR, NSC KR, NBKR calculations

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



Source: SRS GKR, NSC KR, NBKR calculations

Note: data for the reporting period

At the end of the first half of 2018, the decrease in the aggregate level of commissioning of housing funds constituted 3.0 percent compared to the same period of the previous year (Chart 1.4.5). The main share of commissioned housing still accounted for Bishkek city and Chui oblast, Osh city and Osh oblast (Table 1.4.1).

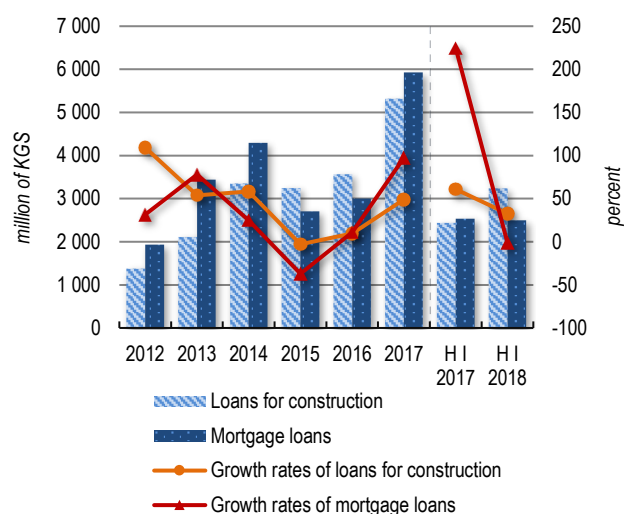
**Table 1.4.1. Geographic Structure of Commissioned Housing**

	H I 2017		H I 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	187.4	41.0	160.3	36.2
Osh city and Osh region	99.2	21.7	96.0	21.7
Other regions of KR	170.0	37.2	186.5	42.1
<b>Total</b>	<b>456.6</b>	<b>100.0</b>	<b>442.8</b>	<b>100.0</b>

Source: NSC KR

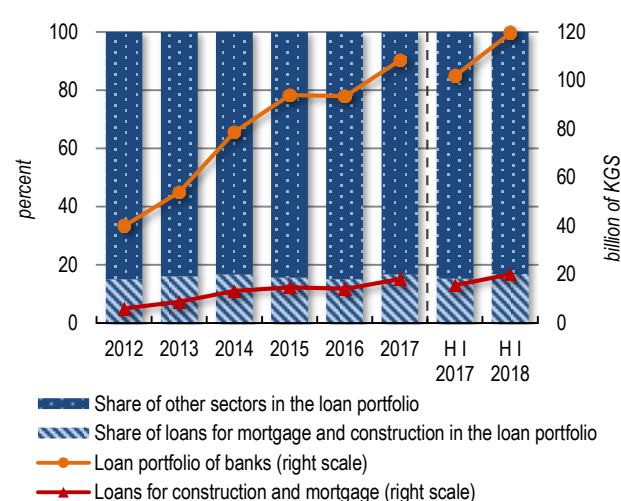
At the end of the first half of 2018, there was an increase in the volume of loans issued to finance the construction and there was a decrease in extended mortgage loans compared to the same period of the previous year. The total mortgage loans and loans issued to finance the construction amounted to KGS 5.7 billion (Chart 1.4.6).

**Chart 1.4.6. Loans Extended for Construction and Mortgage for the Reporting Period**



Source: NBKR  
Note: data for the reporting period

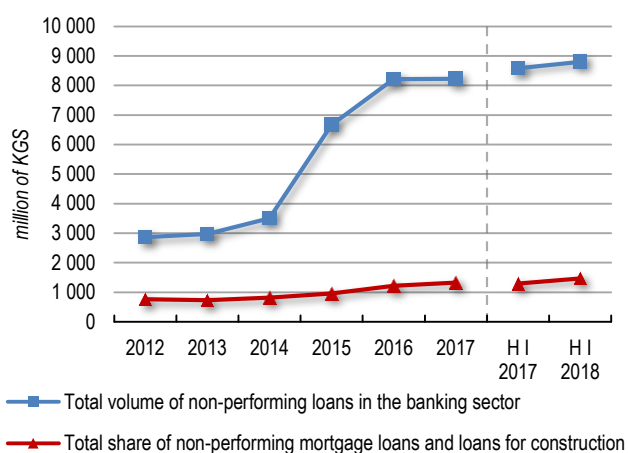
**Chart 1.4.7. Total Share of Loans for Mortgage and Construction in the Loan Portfolio of Commercial Banks**



Source: NBKR  
Note: data for the end of the reporting period

As of June 30, 2017, total loans of the commercial banks for mortgage and construction increased by 29.1 percent compared to the first half of 2017 and amounted to KGS 20.1 billion. Meanwhile, the total share of loans for construction and mortgage in the loan portfolio of the commercial banks increased by 1.5 p. p. compared to the first half of 2017 and constituted 16.8 percent (Chart 1.4.7).

**Chart 1.4.8. Dynamics of Non-performing Loans**



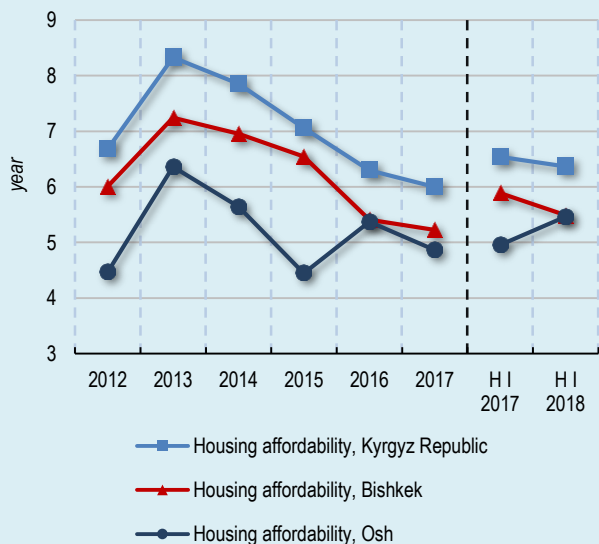
Source: NBKR

At the end of the first half of 2018, the total volume of non-performing loans for mortgage and construction amounted to KGS 1,473.9 million (Chart 1.4.8).

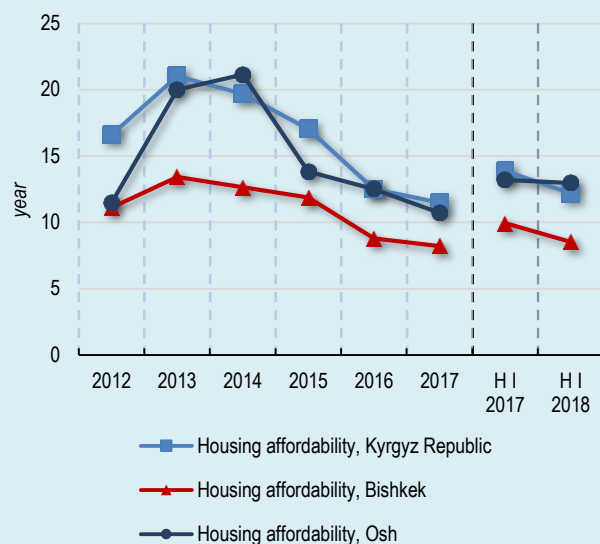
### Box 1. Housing Affordability Index

As of June 30, 2018, the situation with the housing affordability in the Kyrgyz Republic improved slightly (index value decreased by 0.1 years) compared to the first half of 2017. This is due to the increase of the average wage in the Kyrgyz Republic (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 the first half of 2018, to purchase an apartment of 54 square meters in the Kyrgyz Republic one should save all wages for 6.4 years.

According to the results of the reporting period, a family in the Kyrgyz Republic with the minimum consumer budget of KGS 14,698.6 (47.7 percent of total family income) will need 12.2 years in order to purchase housing (Chart 2).

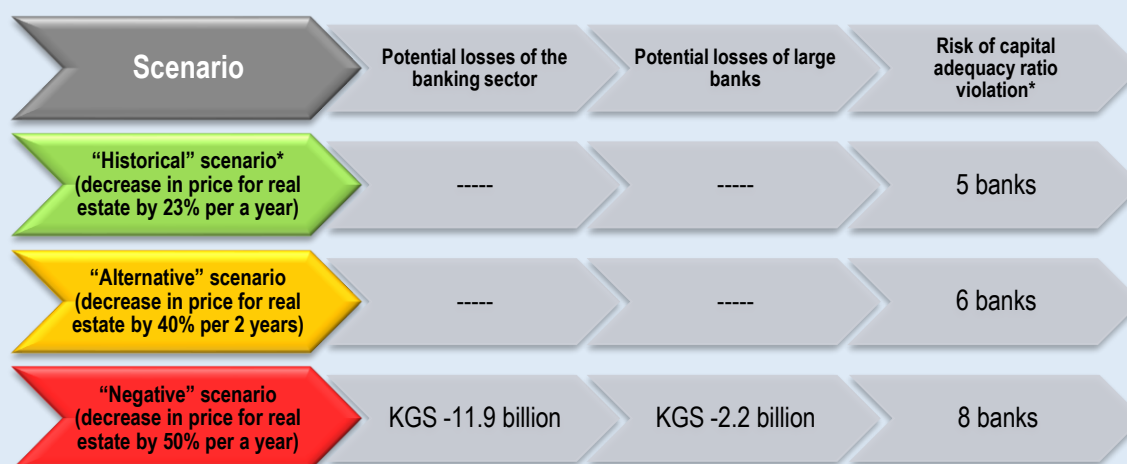
## Box 2. Stress Testing of Impact from Price Changes in the Real Estate Market on the Banking Sector<sup>7</sup>

As of June 30, 2018, the share of loans, secured by pledged real estate, constituted 70.1 percent of the total volume of loans in the loan portfolio of the banks.

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<sup>8</sup> 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



\* 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 35 percent.

### Scheme 2. Comparative Analysis of the Results of Stress Test with the Stress Test Conducted on June 30, 2018.

	Stress test as of December 31, 2017	Stress test as of June 30, 2018
<b>Banking sector</b>	Scenario 1: ----- Scenario 2: ----- Scenario 3: KGS -20.2 billion	Scenario 1: ----- Scenario 2: ----- Scenario 3: KGS -11.9 billion
<b>Large banks</b>	Scenario 1: ----- Scenario 2: ----- Scenario 3: KGS -10.0 billion	Scenario 1: ----- Scenario 2: ----- Scenario 3: KGS -2.1 billion
Banks subjected to credit risk most of all in case of decrease in prices	<u>5 banks</u>	<u>5 banks</u>
The level of decrease in prices, when losses occur	<u>in the banking sector: 28%</u>	<u>in the banking sector: 35%</u>
The level of decrease in prices, when the risk of capital adequacy ratio violation occurs	<u>in the banking sector: 49%</u>	<u>in the banking sector: 56%</u>

Banks policies were not taken into account in calculations of the stress test; according to these policies banks can underestimate the value of pledged real estate to the amount, which constitute 20% of its market value. Taking into account aforementioned facts, the threshold level of decline in prices for real estate can increase by 20 percent.

<sup>7</sup> Stress test was conducted on the basis of the commercial banks' data provided in the course of the survey as of June 30, 2018.

<sup>8</sup> According to the data provided in the course of the commercial banks' survey.

## II. BANKING SECTOR

**Growth of the main indicators of the banking sector: assets, loan portfolio and resource base was observed in the first half of 2018 compared to the first half of 2017. Growth of financial intermediation on the part of the commercial banks remained amid the main indicators of the banking sector outrunning the rates of economic growth.**

**At the end of the first half 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.**

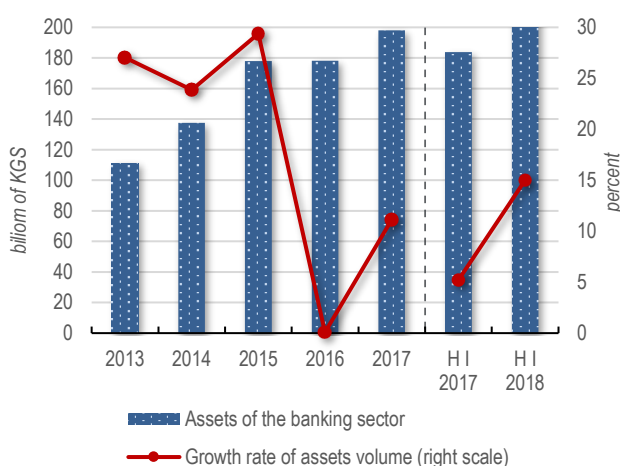
### 2.1. Major Trends

As of June 30, 2018<sup>9</sup> 25 commercial banks (including the Bishkek branch of the National Bank of Pakistan) and 320 of their branches worked in the territory of the Kyrgyz Republic, among which there were 18 banks with foreign participation in the capital, including 15 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 the first half of 2018 amounted to KGS 211.4 billion, having increased by 15.0 percent compared to the first half of 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 17.3 percent or KGS 17.6 billion;
- the securities by 44.2 percent or KGS 6.7 billion;
- the cash and correspondent accounts by 11.8 percent or KGS 5.1 billion.

The share of loan portfolio in the structure of assets constituted 56.6 percent, having increased by 1.1 p.p. compared to the same period of 2017.

<sup>9</sup> The data are submitted according to periodic regulatory reporting of the commercial banks (PRBR).

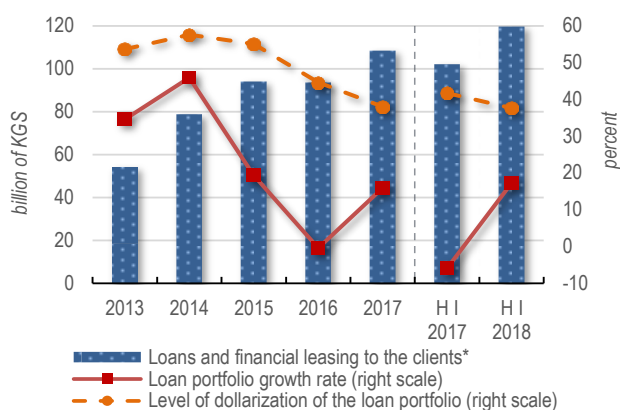


### Loan Portfolio

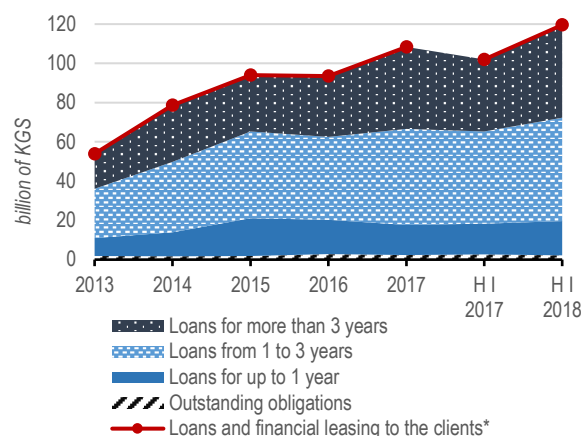
In the first half of 2018, growth of the loan portfolio was observed in all sectors of economy.

At the end of the first half of 2018, the level of dollarization of the loan portfolio in the banking sector decreased by 4.0 p.p. compared to the first half of 2017 and amounted to 37.6 percent (Chart 2.1.2).

**Chart 2.1.2. Dynamics of Loan Portfolio in the Banking Sector**



**Chart 2.1.3. Structure of Loan Portfolio by Maturity**



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

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

The major share was accounted for medium-term loans from 1 to 3 years in the structure of loan portfolio by maturity, which constituted 44.1 percent or KGS 52.7 billion at end of the first half of 2018 (Chart 2.1.3).

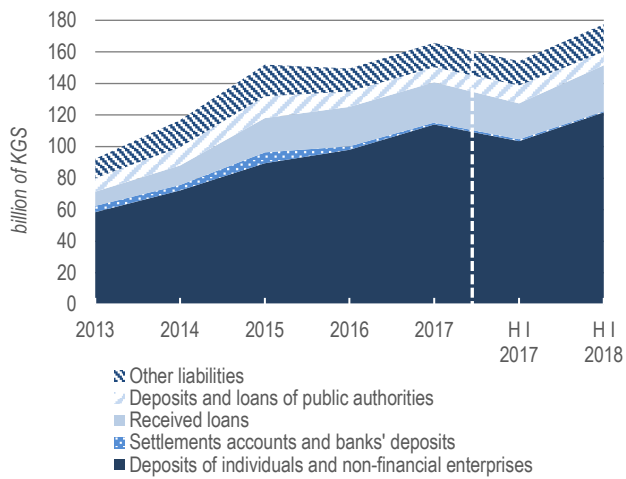
### Liabilities

At the end of the first half of 2018, liabilities of the banking sector of the Kyrgyz Republic amounted to KGS 177.5 billion, having increased by 15.2 percent compared to the first half of 2017.

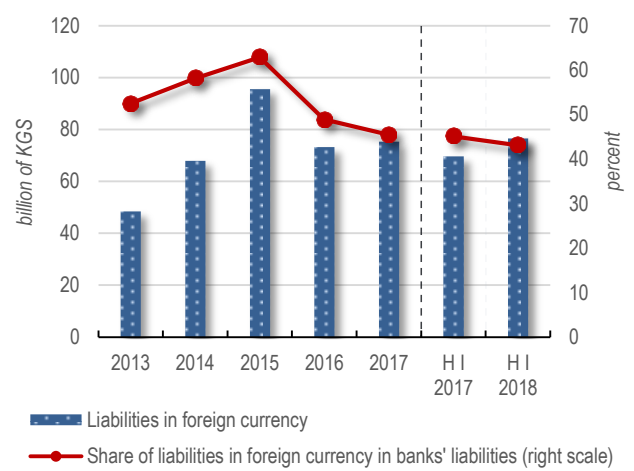
At the end of the first half of 2018, deposits of individuals and non-financial enterprises increased by 17.7 percent and amounted to KGS 121.7 billion (Chart 2.1.4). The share of individuals' and non-financial enterprises' deposits in the banks' liabilities increased by 1.4 percentage points and amounted to 68.5 percent.

The share of liabilities in foreign currency in the total volume of attracted funds decreased by 2.0 percentage points and amounted to 43.2 percent or KGS 76.6 billion (Chart 2.1.5).

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

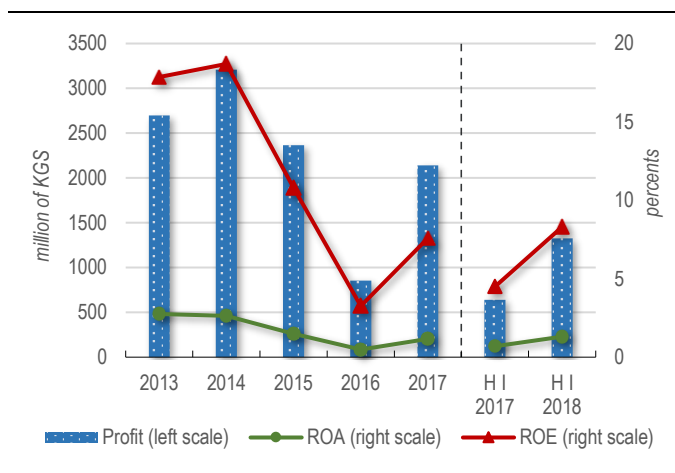


**Chart 2.1.5. Banks' Liabilities in Foreign Currency**



## Financial Results

**Chart 2.1.6. Profitability Indicators of the Banking Sector**



The improvement of profitability indicators in the banking sector<sup>10</sup> at the end of the first half of 2018 was observed compared with the first half of 2017:

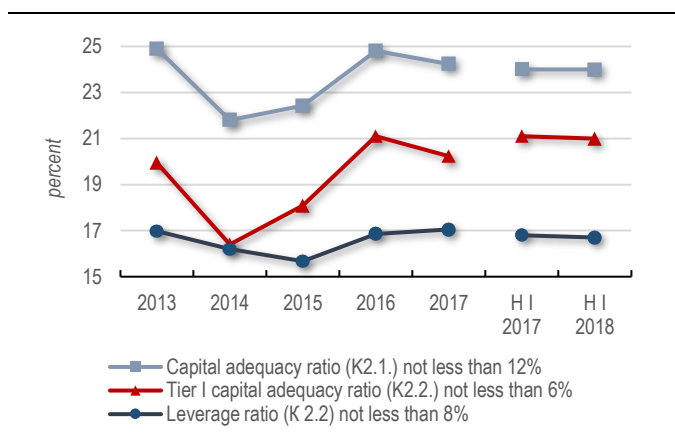
- ROA constituted 1.3 percent;
- ROE formed at 8.3 percent.

Net profit of the banking sector amounted to KGS 1,326.1 million (Chart 2.1.6).

### Capital Adequacy

With statutory minimum capital adequacy at 12.0 percent, at the end of the first half of 2018, this figure amounted to 24.0 percent (Chart 2.1.7), having not changed compared to the first half of 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 the first half 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.

<sup>10</sup> ROA, ROE indicators are presented in annual terms.

## 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 decreased from 8.4 percent to 7.4 percent compared with the first half of 2017 (Chart 2.2.2).

Chart 2.2.1. Dynamics of Loan Portfolio

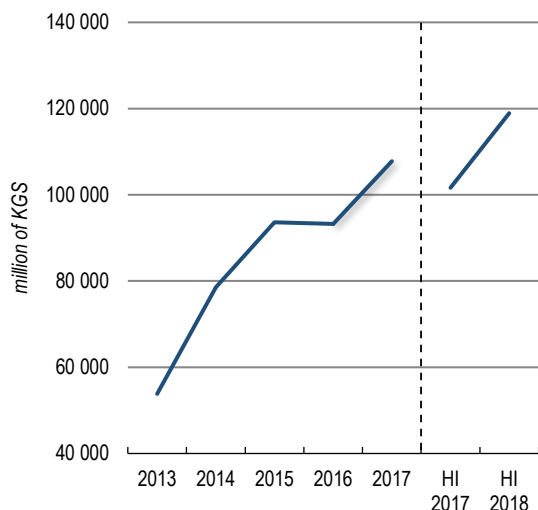
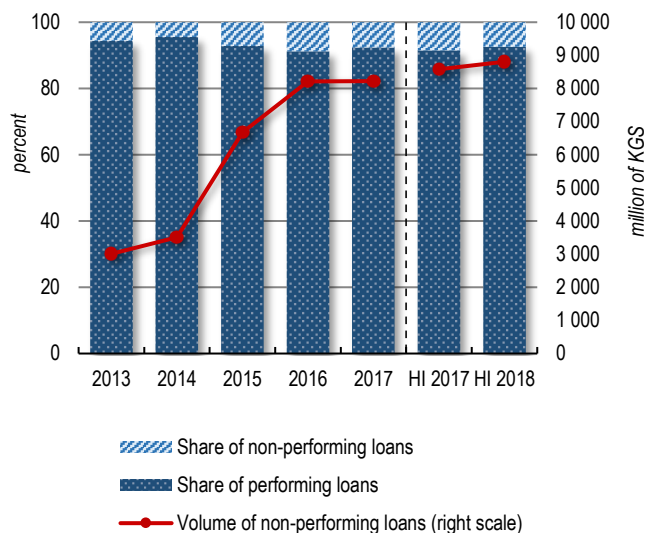


Chart 2.2.2. Loan Portfolio Quality

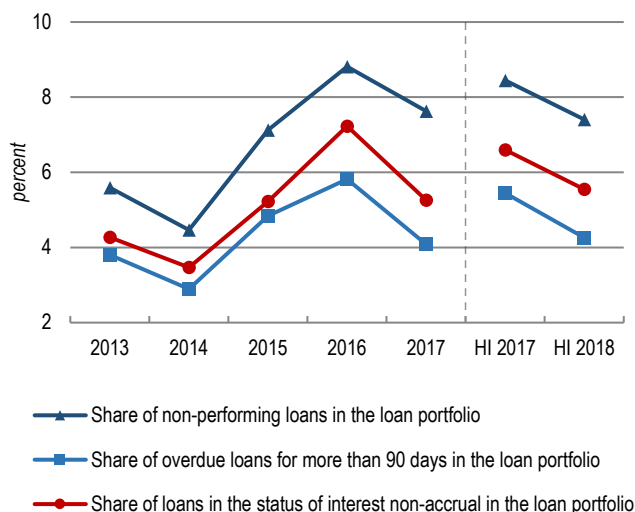


In order to assess the quality of the loan portfolio, the commercial banks use a loan classification system<sup>11</sup>, which contributes to determining the possible level of potential losses from bad loans and compensating them in time through creation of appropriate reserves (Chart 2.2.3).

At the end of the first half of 2018, the indicator of the risk of default on assets (the ratio of special loan loss provisions and loan portfolio) constituted 4.1 percent.

<sup>11</sup> In order to assess the quality of the loan portfolio, 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 "non-performing". 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 constituted 6.7 percent of the total loan portfolio (as of June 30, 2017 this index constituted 7.2 percent). Meanwhile, the share of special loan loss provision in the reporting period constituted 61.5 percent of the total reserves (Chart 2.2.4).

Chart 2.2.4. Total and Special Reserves

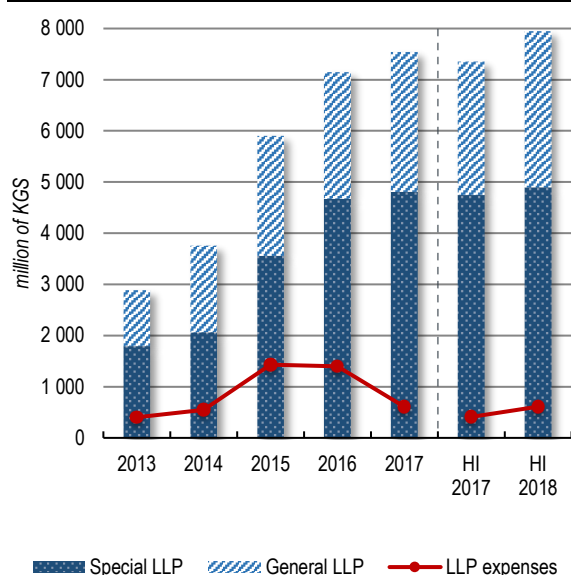
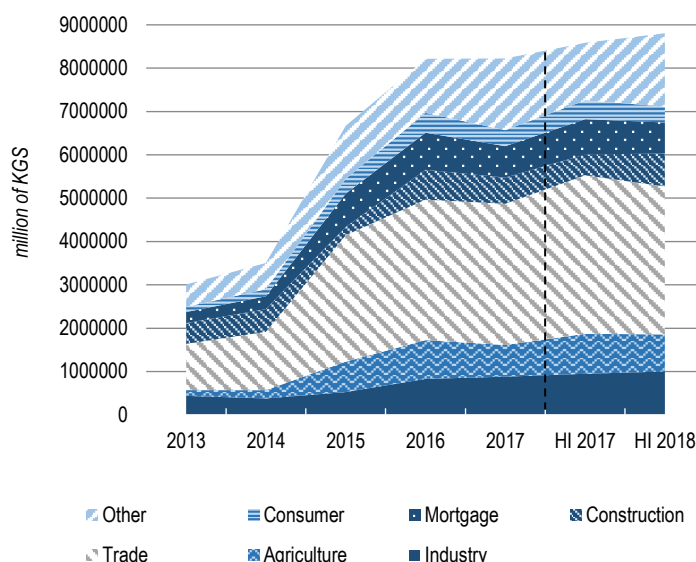


Chart 2.2.5. Volume of Non-performing Loans by Sectors of Economy



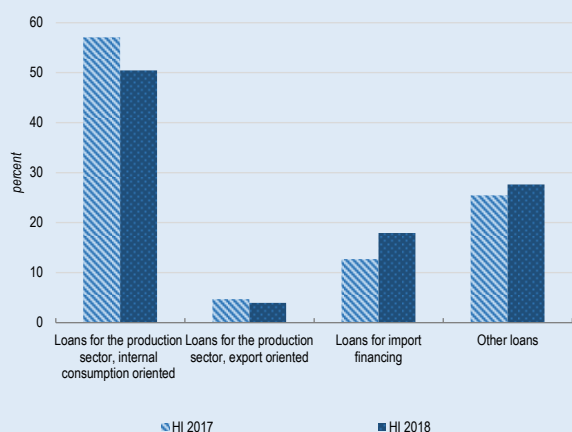
CONTENT

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

### Box 3. The Survey Results of the Commercial Banks Clients

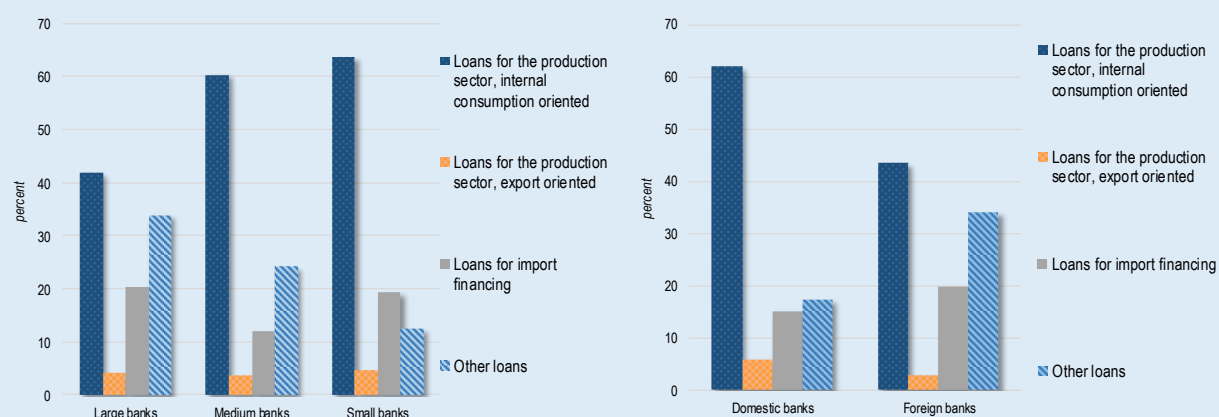
At the end of the first half of 2018, a significant share of loans (50.5 percent of total borrowers' loans) extended to the borrowers was still concentrated in the production sector of the economy<sup>12</sup>, thereby reflecting contribution of the banking sector in creation of the country's GDP, meanwhile, 17.9 percent of issued loans were forwarded for financing of imports (Chart 1).

**Chart 1 Sectoral Structure of Loans as of June 30, 2018**



Domestic banks forward 61.9 percent of the loan portfolio to the production sector (GDP) and 15.0 percent – to finance imports. Generally, foreign banks also provided loans to the production sector of economy (43.4 percent). In the reporting period, the share of loans forwarded to finance imports constituted 19.7 percent of the loan portfolio (Chart 2).

**Chart 2. Sectoral Structure of Loans by the Groups of Banks as of June 30, 2018**



Source: data received as a result of the commercial banks survey

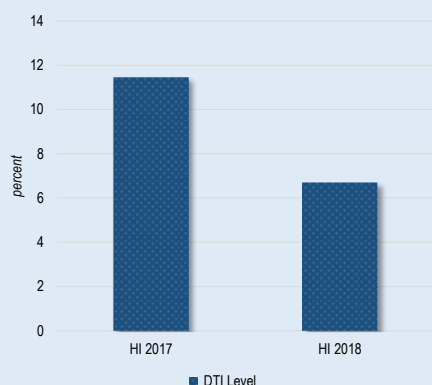
<sup>12</sup> The production sector means the activity of the bank clients connected with the production of goods and services (construction, communication and automobile repair shop services, transport services, real estate leasing, hotels, restaurants, etc.).

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

#### Borrowers solvency

At the end of the first half of 2018, the level of debt burden of 15 banks' largest clients calculated through DTI index<sup>13</sup>, constituted 6.7 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 **small banks** (7.8 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 **large banks**.

**Table 1. Debt Burden of the Banks Clients at the end of the first half of 2018\***

	Banking sector	Large banks	Medium banks	Small banks
Loan balance, <i>billions of KGS</i>	26.7	16.1	3.3	7.3
Share of loans in 15 largest borrowers in the total volume of loan portfolio in the banking sector, <i>in %</i>	22.4	23.8	11.1	33.9
Ratio of expenses for loan debt servicing to the borrowers' total income, <i>in %</i>	6.7	6.0	7.0	7.8

Source: Data of the commercial banks, NBKR calculations

\* data on 15 largest borrowers of each commercial bank

The level of debt burden in the foreign banks was higher than in the domestic banks (Table 2).

**Table 2. Debt Burden in the Domestic and Foreign Banks at the End of the First Half of 2018\***

	Domestic banks	Foreign banks
Loan balance, <i>billions of KGS</i>	8.2	18.5
Share of loans in 15 largest borrowers in the total volume of loan portfolio in the banking sector, <i>in %</i>	18.0	25.2
Ratio of expenses for loan debt servicing to the borrowers' total income, <i>in %</i>	4.3	9.0

Source: Data of the commercial banks, NBKR calculations

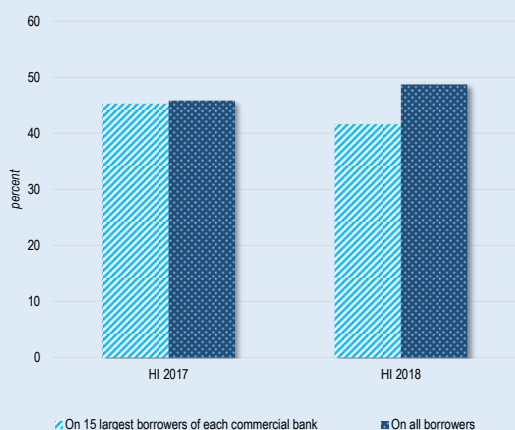
\* data on 15 largest borrowers of each commercial bank

<sup>13</sup> DTI (debt-to-income) is the ratio of the amount of the borrowers' payments on loans (including the amount of principal and interest payments for the reporting period) to the main annual income of the borrower declared at the time of issuing a loan.

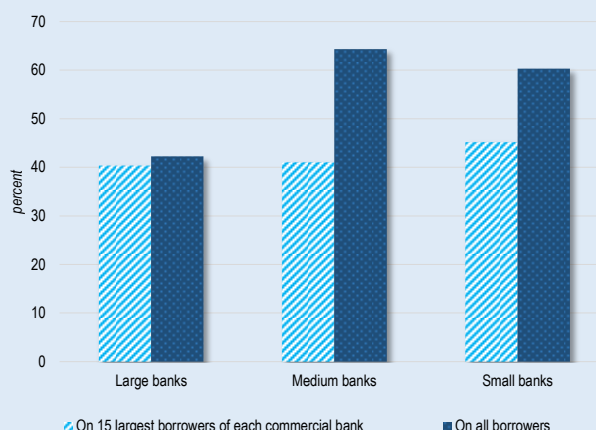
### Security of the borrowers' loans

At the end of the first half of 2018, the LTV actual level<sup>14</sup> in the banking sector amounted to 48.7 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 June 30, 2018**



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

<sup>14</sup> LTV (loan-to-value ratio) is the ratio of issued loans to the value of collateral.

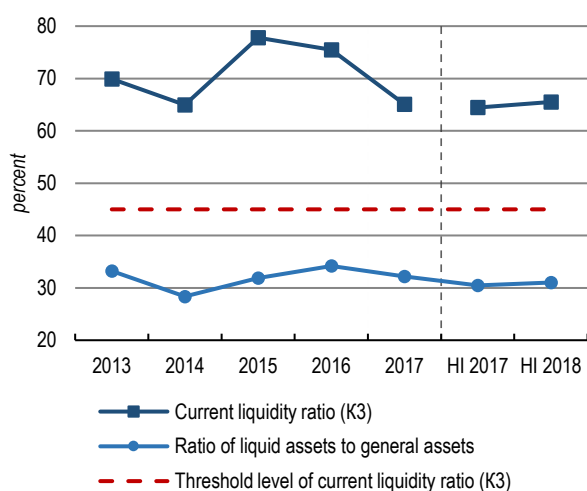


## 2.2.2. Liquidity Risk

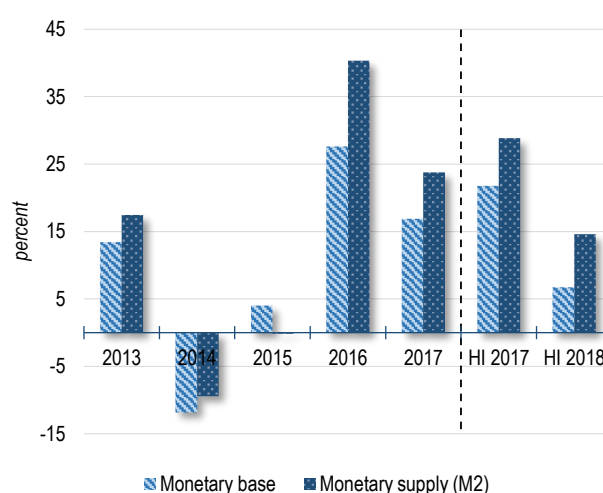
Public confidence in the banking sector depends on the timely implementation of obligations by the banks, which suggests availability of sufficient liquidity in the banks. For regulatory purposes, liquidity risk is assessed using economic current liquidity ratio<sup>15</sup>.

At the end of the first half of 2018, current liquidity ratio increased from 64.4 percent (as of the end of the first half of 2017) to 65.5 percent (Chart 2.2.11).

**Chart 2.2.11. Liquidity Indicators in the Banking Sector**



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



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 June 30, 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	68,520	13,887	12,512	19,775	102,703	217,397
including loans and financial leasing to the clients	5,192	5,358	7,916	16,654	83,808	118,927
Total financial liabilities	93,111	8,401	18,006	17,729	34,788	172,035
including deposits of individuals and time deposits of legal entities	36,715	6,283	8,058	13,937	13,802	78,795
Gap	-24,591	5,486	-5,494	2,046	67,914	45,361
Including on loans and deposits	-31,523	-925	-142	2,716	70,005	40,132

<sup>15</sup> 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

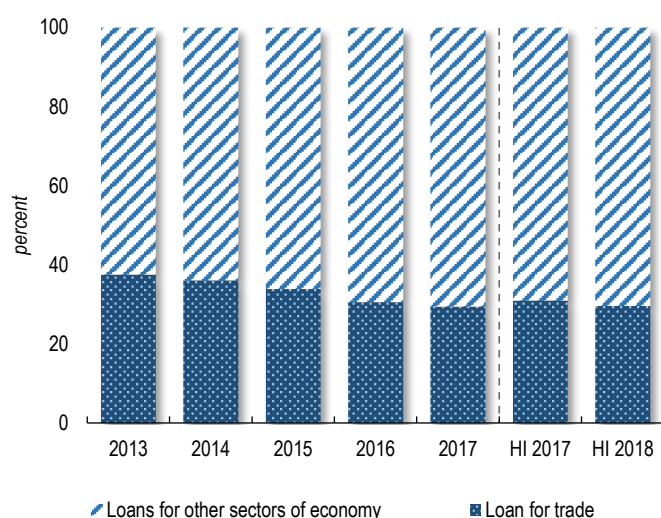
#### Concentration of the Largest Sources of Financing

The results of “reverse” stress testing show that some banks could not withstand the shock related to outflow from one to five largest sources of financing<sup>16</sup> (liquidity ratio decreases below the threshold level of 45 percent).

#### Loan Concentration

Potential default from one to five largest borrowers<sup>17</sup> in separate banks may decrease regulatory capital below economic standard of the NBKR.

Chart 2.2.13. 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 the first half of 2018, the share of loans for trade decreased from 31.0 percent to 29.5 percent (Chart 2.2.21).

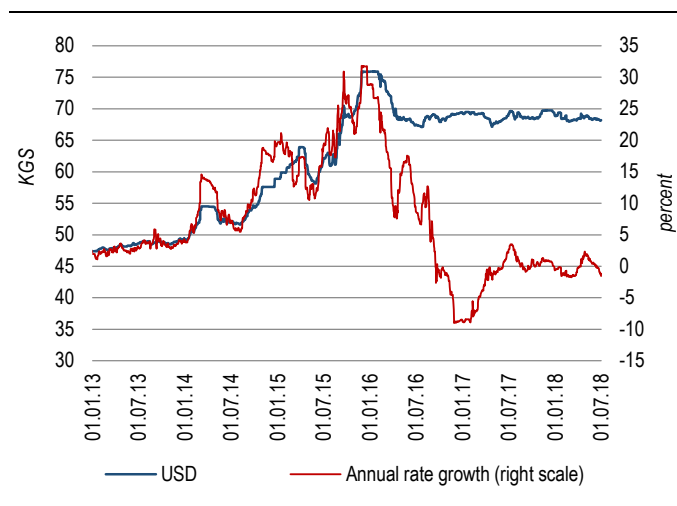
<sup>16</sup> The largest sources of financing (LSF) are the funds of creditors and depositors (received loans, settlement accounts, demand deposits and fixed deposits).

<sup>17</sup> Total debt of five largest borrowers of the bank is meant.

### 2.2.4. Currency Risk

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

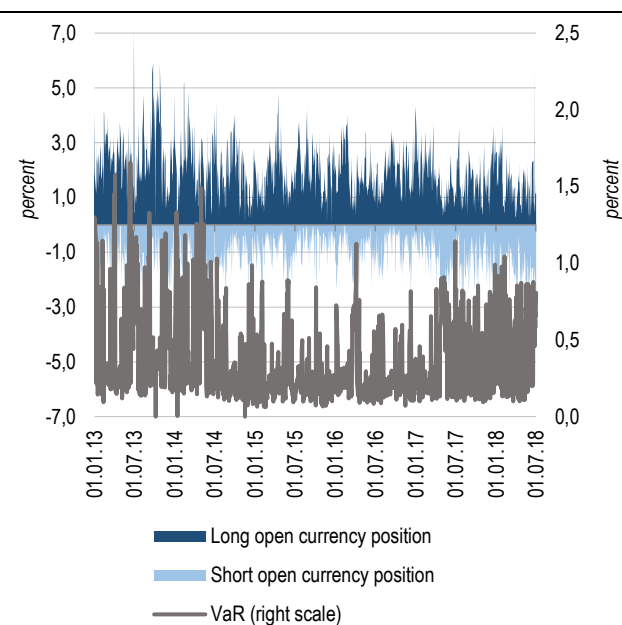
**Chart 2.2.14. Dynamics of USD/KGS Nominal Exchange Rate**



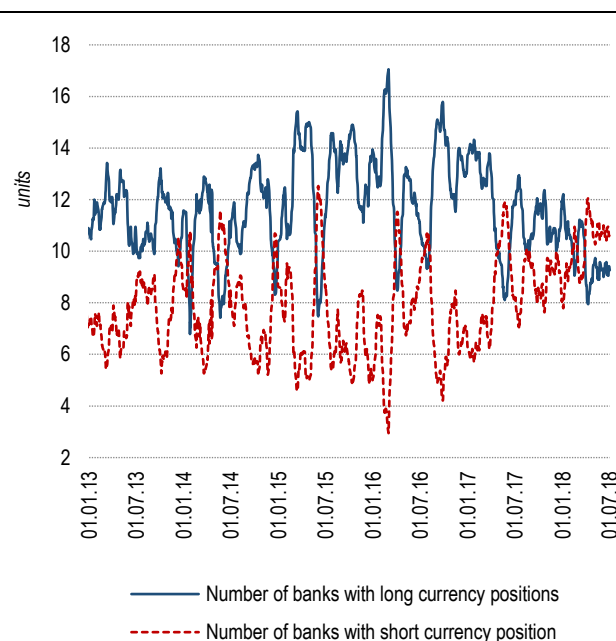
In general, the banks kept open currency positions of assets and liabilities within the limits of prudential standards of the National Bank of the Kyrgyz Republic.

In the first half of 2018, the risk of currency position overestimation in the banking sector was minimum (VaR: 0.1–1.0 percent of the net total capital, Chart 2.2.15).

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



**Chart 2.2.16. Currency Position of the Banks**



CONTENT

### Box 5. Credit Risk Through Indirect Currency Risk

At the end of the first half of 2018, 24.6 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 risk through exposure to currency risk (so-called indirect currency risk).

Indirect confirmation of 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 – 13.7 percent, basic incomes of the borrower are generated in the national currency, and the loans are repaid in foreign currency;
- Group 2 – 5.4 percent, basic incomes and loans payable by the borrower, are in the same currency;

Group 3 – 2.5 percent, basic incomes of the borrower are generated in foreign currency, and the loans are repaid in the national currency.

Chart 1. Loan Portfolio by Groups of Loans\*

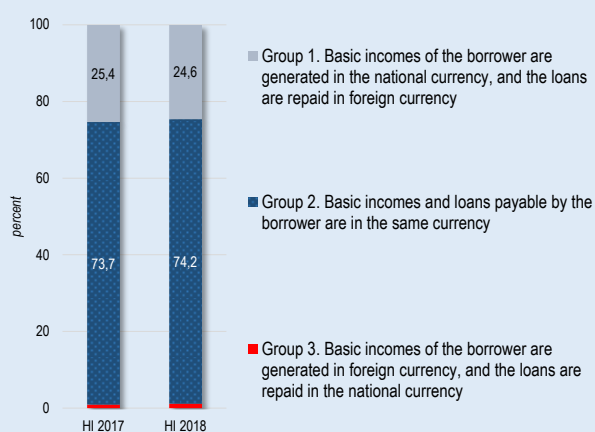
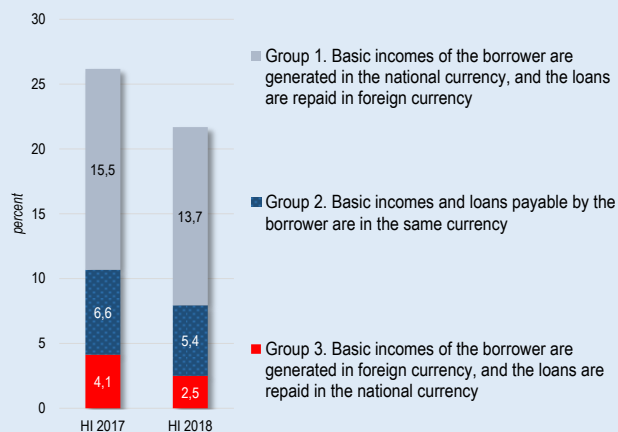


Chart 2. Share of Non-performing Loans by Groups of Loans\*\*



Source: data are calculated based on section 37 of the PRBR, the volume of loan portfolio is specified exclusive of overdraft loans.

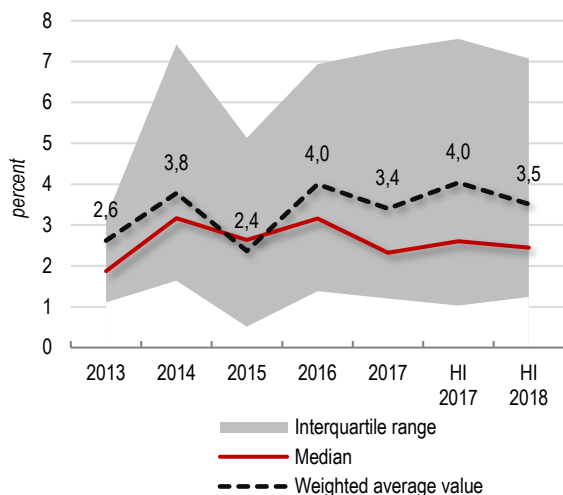
\* Breaking of loans into group is presented in this chart. For example, the volume of loans for Group 1 as of the reporting date amounted to KGS 29.0 billion or 29.6 percent of the total loan portfolio (KGS 118.0 billion).

\*\* 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 4.0 billion or 13.7 percent of the total loan portfolio for Group 1 (KGS 29.0 billion).

### 2.2.5. Interest Rate Risk

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

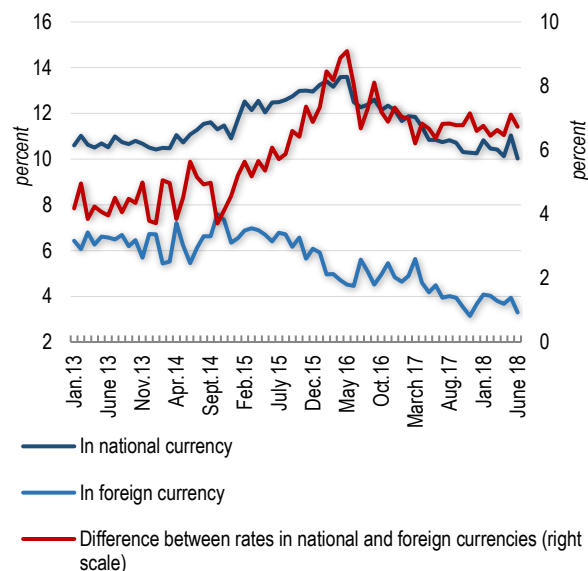
**Chart 2.2.17. Dynamics of Interest Rate Risk (VaR) in percent of NTC**



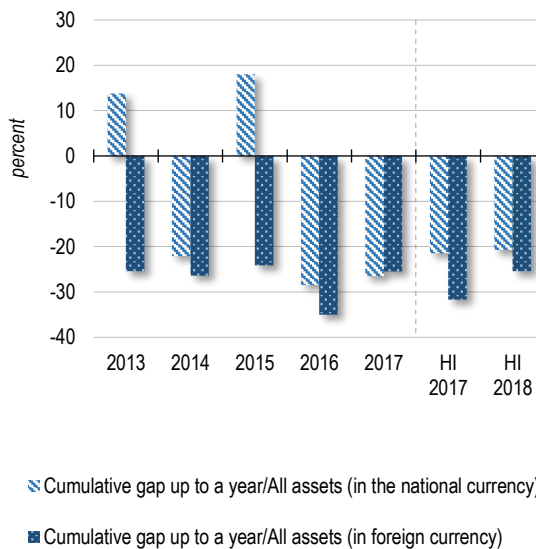
Slight decrease of interest rate risk (VaR) from 4.0 percent to 3.5 percent of net total capital was resulted from decrease of gaps by maturities between financial assets and liabilities vulnerable to interest rates dynamics.

Average value of interest rate risk during the period of 2013 – first half of 2018 was within accessible limits (2-4 percent of net total capital).

**Chart 2.2.18. Dynamics of Average Weighted Interest Rate of Individuals' Time Deposits**



**Chart 2.2.19. Cumulative Gap of Assets and Liabilities Exposed to Interest Rate Risk**



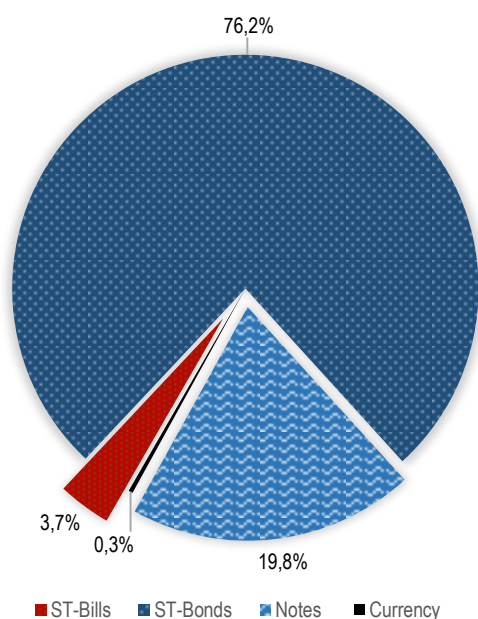
CONTENT

### 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 the first half of 2018, the volume of transactions in the interbank market made between the resident banks amounted to KGS 22.5 billion<sup>18</sup>, having increased by 9.8 times compared with the same period of 2017.

**Chart 2.2.20. Distribution of Interbank Loan Transactions Made during the First Half of 2018 between Resident Banks, Depending on Collateral**



The loans in the interbank market are generally covered by collateral in the form of highly liquid government securities (Chart 2.2.20) in the banking sector of Kyrgyzstan.

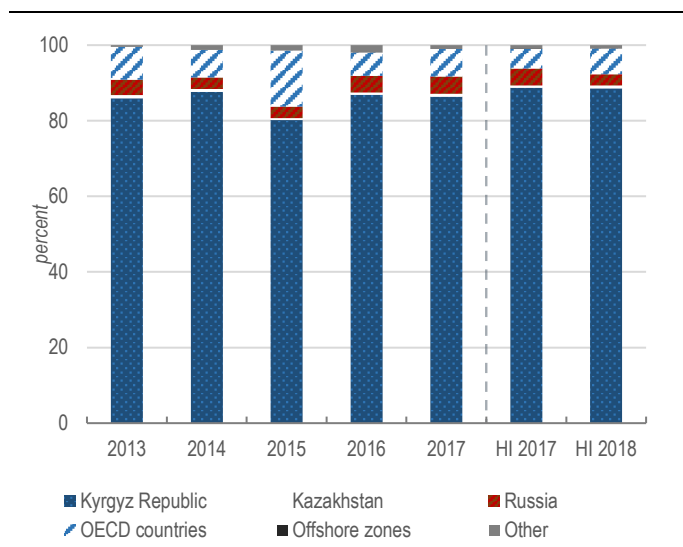
In general, the probability of the “contagion” risk materialization in the interbank credit market of the Kyrgyz Republic is minimal, which is caused by highly liquid collateral.

<sup>18</sup> The total volume of transactions made between the resident banks during the first half of 2018 is meant here.

## 2.2.7. Country Risk<sup>19</sup>

In general, the volume of disposed assets of non-residents constituted KGS 25.1 billion or 11.5 percent of total banking sector assets. The highest concentration of placement was observed in the OECD countries<sup>20</sup> – 6.8 percent (or KGS 15.0 billion) of total assets in the banking sector of the Kyrgyz Republic.

Chart 2.2.21. Geographic Structure of Assets



The main share of the assets placed abroad was focused on correspondent or deposit accounts and constituted KGS 21.5 billion or 85.5 percent of total placed assets of non-residents.

At the end of the first half of 2018, banks' liabilities to non-residents of the Kyrgyz Republic totaled KGS 23.8 billion or 13.8 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 22.7 billion or 95.3 percent of the total liabilities to non-residents. 9.7 percent of the total liabilities in the banking sector were accounted for the OECD countries, 1.1 and 0.8 percent – for Russia and Kazakhstan, accordingly (Chart 2.2.22).

Chart 2.2.22. Geographic Structure of Liabilities

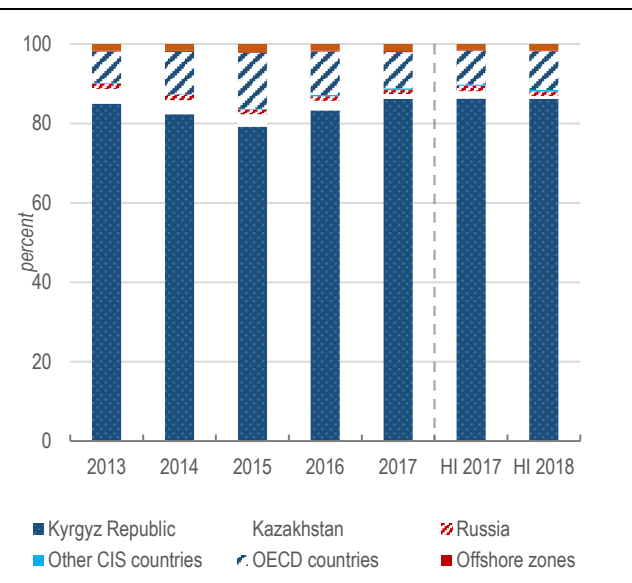
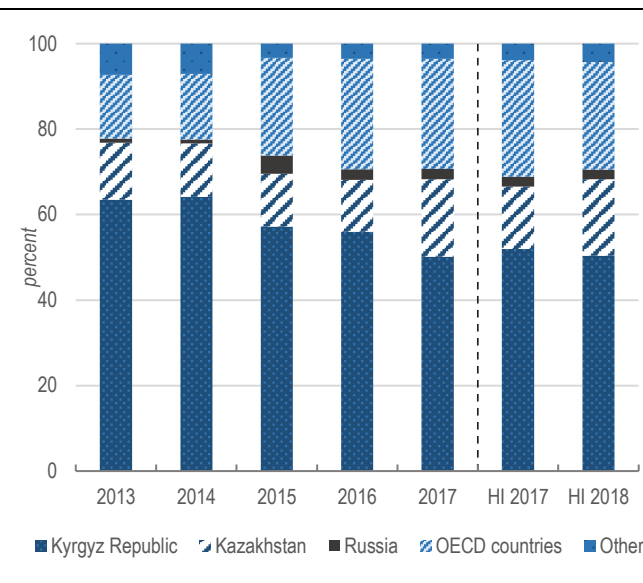


Chart 2.2.23. Authorized Capital by Countries



At the end of the first half of 2018, foreign capital amounted to KGS 11.4 billion or 49.6 percent of the total authorized capital of the banking sector (KGS 23.0 billion). The main share of foreign capital is distributed among (Chart 2.2.23):

- residents of the OECD countries – 25.1 percent;
- residents of Kazakhstan – 17.9 percent;
- residents of Russia – 2.3 percent.

<sup>19</sup> Data are given of the basis of section 1 of the PRBR.

<sup>20</sup> Organization for Economic Cooperation and Development.

## 2.3. “Reverse” Stress Testing of the Banking Sector

### 2.3.1. “Reverse” Stress Testing of Credit Risk<sup>21</sup>

Maximum allowable share of “performing” loans<sup>22</sup> 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.

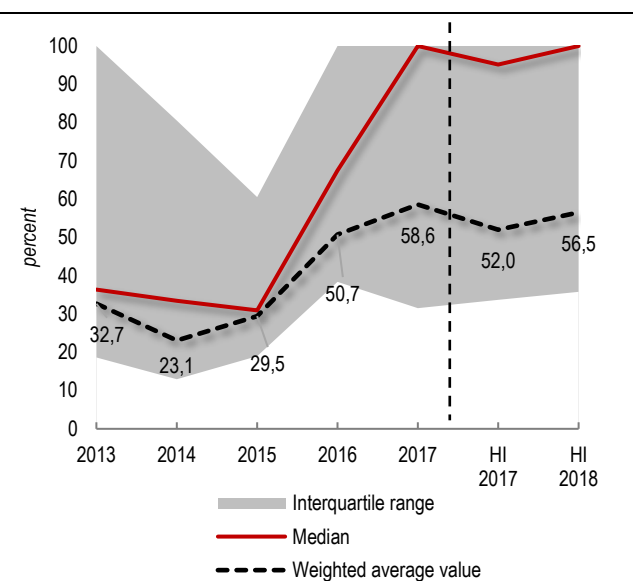
This method allows detecting a buffer stock of capital (net total capital) of banks, which can cover the additional allocations to LLP in connection with the transformation of “performing” loans into the category of “non-performing” loans<sup>23</sup>.

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.

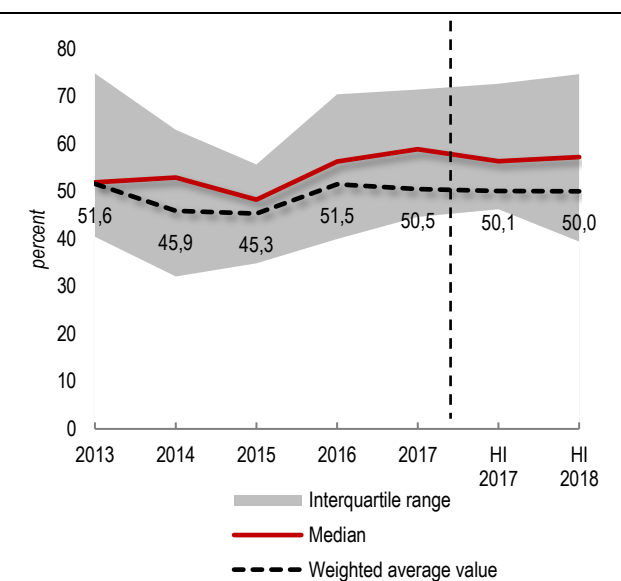
Based on the results of the “reverse” stress testing of the banking sector as of June 30, 2018, the maximum allowable share of “performing” loans, transferring to the category of “non-performing” in the banking sector, amounted to approximately 56.5 percent (Chart 2.3.1). The upward trend of this indicator observed since 2014 demonstrates an improvement in the structure of the loan portfolio.

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 50.0 percent of net total capital (Chart 2.3.2).

**Chart 2.3.1. Maximum Possible Share of “Performing”<sup>24</sup> Loans that May Become “Non-performing” Loans<sup>25</sup>**  
percent of performing loans



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



<sup>21</sup> Exclusive of troubled banks.

<sup>22</sup> Exclusive of “normal” loan category, which are risk free.

<sup>23</sup> Herewith, transition of “performing” loans to the category of “non-performing” loans is fulfilled smoothly by three categories (“substandard”, “doubtful” and “losses”).

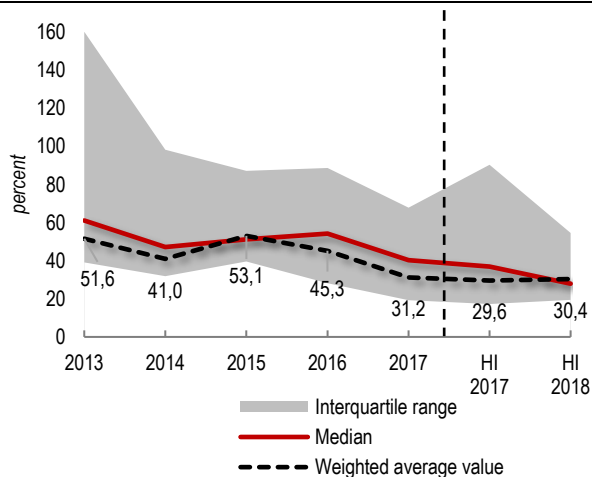
<sup>24</sup> Exclusive of “normal” loan category.

<sup>25</sup> 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 the first half of 2018 the actual amount of liquid assets of the banking sector was able to cover the outflow of an average of 30.4 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 the first half of 2018 has little sensitivity to the direct interest rate and currency risks.

#### Interest Rate Risk

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

The results of the “reverse” stress testing indicate little sensitivity of the banking sector to the direct interest rate risk. Decrease of the average interest rates on loans by 15.7 p.p. can reduce the level of capital adequacy ratio to 12 percent (Table 2.3.1).

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

#### Currency Risk (Revaluation Risk)

Maximum increase/decrease level of the U.S. dollar 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/decrease level of the USD/KGS 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/decrease level of the USD/KGS 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 June 30, 2018**

		Banking sector
<b>Credit risk</b>		
Scenario 1	Share of performing loans transferring to the category of "non-performing" loans, <i>in percent</i>	56.5
<b>Interest rate risk</b>		
Scenario 1	Decrease of weighted average interest rate on loans, when CAR declines to 12%, <i>in percentage points</i>	15.7
<b>Currency risk</b>		
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 for more than 100 percent), exclusive of one bank
Scenario 2	Growth rate of USD/ KGS ( $\pm$ ) exchange rate, when net profit decreases to zero level, <i>in percent</i>	
<b>Liquidity risk</b>		
Scenario 1	Outflow of clients' deposit share of the total deposits, when current liquidity ratio declines to 45%, <i>in percent</i>	30.4

### 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.*

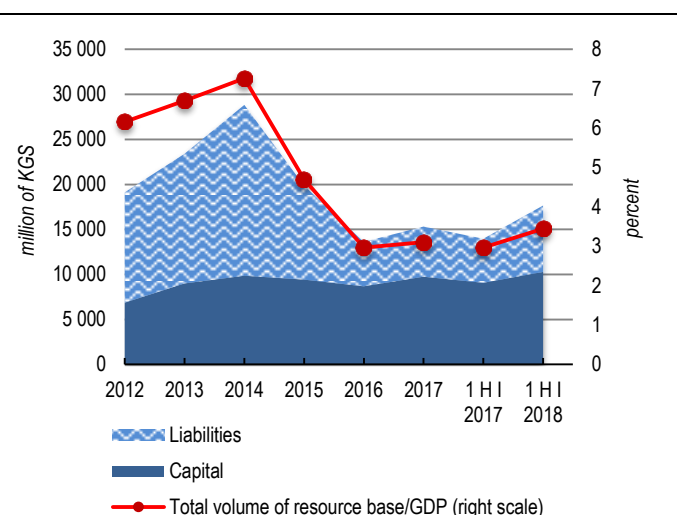
*The weighted average interest rates on loans of the microfinance organizations and credit unions decreased compared to the same period of the previous year.*

#### 3.1. Main Trends

The system of non-banking financial-credit organizations subjected to licensing and regulation by the National Bank as of June 30, 2018 in the Kyrgyz Republic included: the specialized financial-credit organization – “FCCU” OJSC; 108 credit unions; 148 microfinance organizations (including 8 microfinance companies, 98 microcredit companies and 42 microcredit agencies) and 398 exchange offices.

#### Resources

**Chart 3.1.1. Dynamics of NBFCOs Liabilities and Capital**

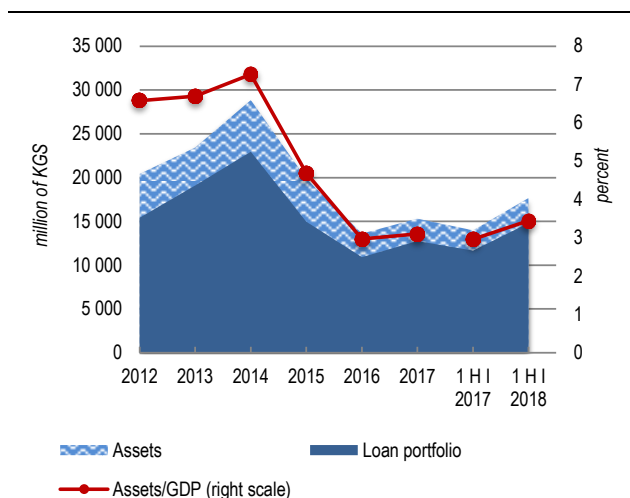


At the end of the first half of 2018, NBFCOs liabilities increased by 50.5 percent compared to the first half of 2017 and were formed in the amount of KGS 7,387.7 million. As of June 30, 2018, NBFCOs capital increased by 13.4 percent and totaled KGS 10,275.5 million (Chart 3.1.1).

Source: NBKR

## Assets

**Chart 3.1.2. Dynamics of NBFCOs Assets and Loans**



Source: NBKR

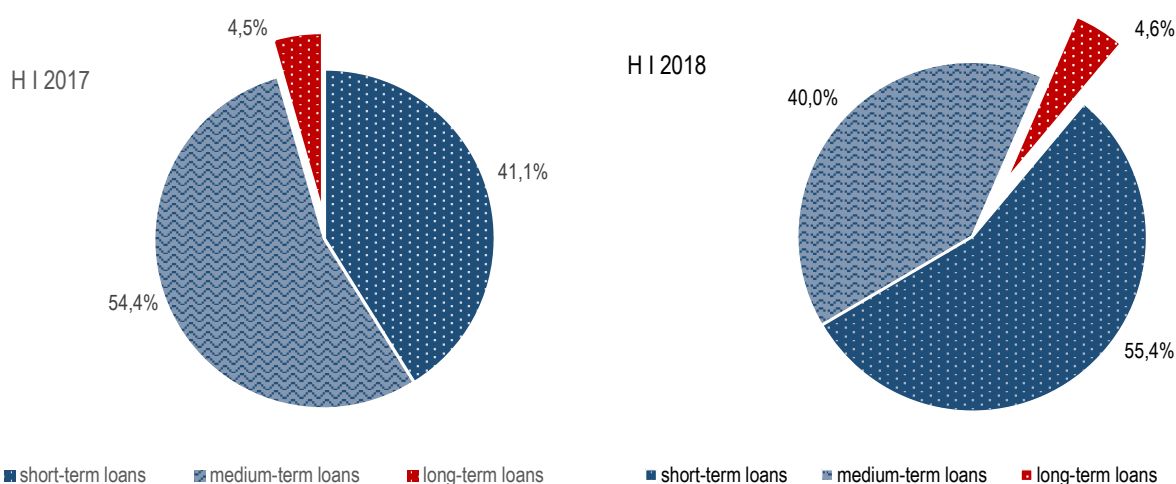
According to periodic regulatory reporting, the total assets of NBFCOs in the first half of 2018 increased by 26.4 percent and amounted to KGS 17,663.2 million<sup>26</sup>. This increase was due to growth in the loan portfolio of NBFCOs (Chart 3.1.2).

The main activity of NBFCOs remains lending. As of June 30, 2018, the loan portfolio of NBFCOs increased by 26.9 percent and was formed in the amount of KGS 14,779.4 million.

As of June 30, 2018, the number of borrowers increased by 33.2 percent compared to the first half of 2017 and amounted to 317,979 borrowers.

In the first half of 2018, there was an increase in the share of short-term credit resources within the structure of the loan maturity provided by NBFCOs, 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**



Source: NBKR

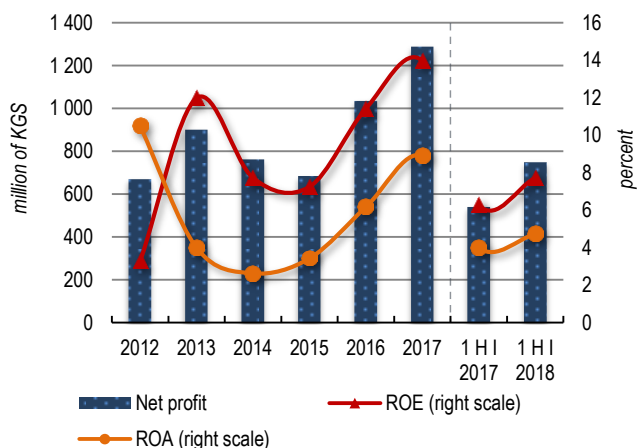
Note: data for the period

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.

<sup>26</sup> Exclusive of "FCCU" OJSC.

Revenue Position<sup>27</sup>

Chart 3.1.4. Dynamics of NBFCOs Revenue Position\*



At the end of the first half of 2018 net profit of NBFCOs increased by 38.7 percent compared to the same period of the previous year and amounted to KGS 749.3 million. As of June 30, 2018, ROA increased by 0.8 p.p. and amounted to 4.7 percent. ROE increased by 1.5 p.p. and constituted 7.7 percent (Chart 3.1.4).

Source: NBKR

\*Exclusive of "FCCU" OJSC

<sup>27</sup> ROA and ROE indices are provided in annual terms.

### 3.2. Risks of Non-banking Financial-Credit Organizations

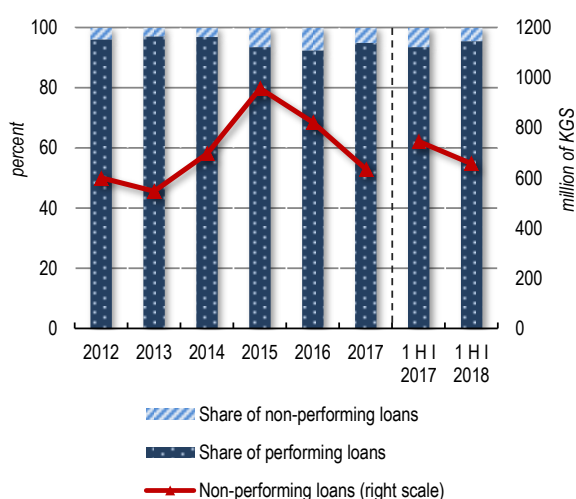
Major risk factors of the activities of NBFCOs are the quality of the loan portfolio, sectoral and institutional concentration, as well as status of the NBFCOs external debt.

#### Quality of the NBFCOs Loan Portfolio

As of June 30, 2018, the share of non-performing loans in the loan portfolio of NBFCOs constituted 4.4 percent, meanwhile, their nominal volume decreased slightly by KGS 88.6 million or 11.9 percent compared to the first half of 2017 (Chart 3.2.1).

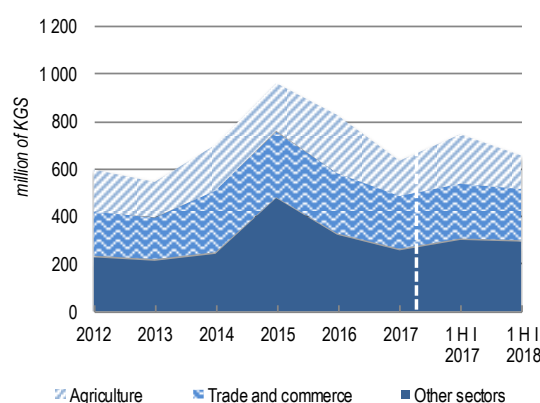
At the end of the first half of 2018, the structure of NBFCOs non-performing loans demonstrated decrease in the share of defaulting loans issued to agriculture (by 6.4 p.p. compared to the first half of 2017). The share of defaulting loans in the total non-performing loans of NBFCOs constituted 21.3 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

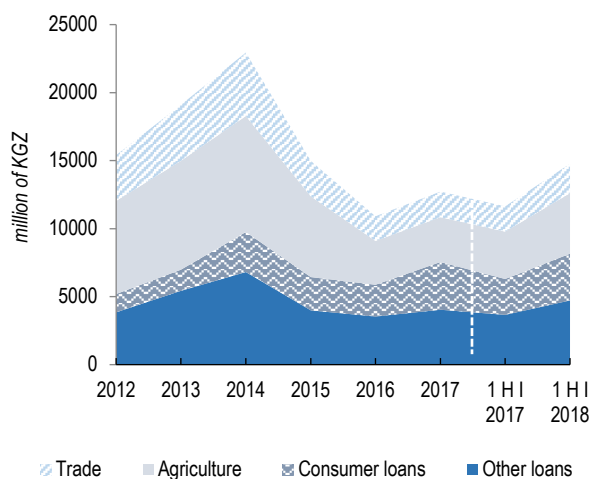
#### Sectoral Concentration

NBFCOs loan portfolio is concentrated in the sphere of agriculture (30.0 percent of NBFCOs total loans), as well as consumer loans and trade (23.3 percent and 14.7 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

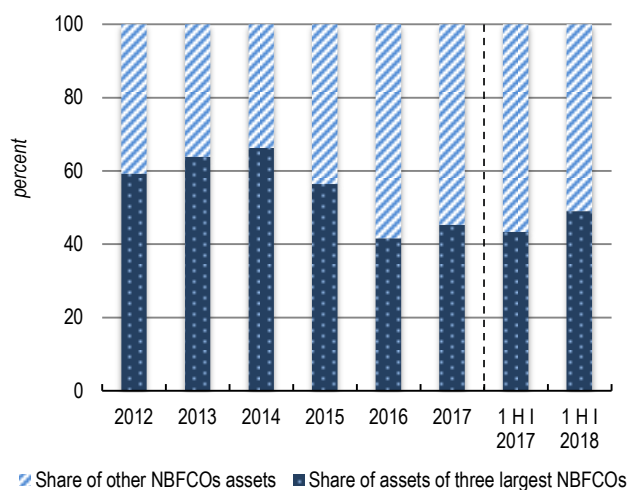
As of June 30, 2018, the share of assets of the three largest NBFCOs increased by 5.7 p.p. compared to the same period of 2017 and amounted to 49.0 percent of the total assets of NBFCOs system (Chart 3.2.4).

**Chart 3.2.3. Sectoral Structure of NBFCOs Loan Portfolio**



Source: NBKR

**Chart 3.2.4. Institutional Structure of NBFCOs Assets**



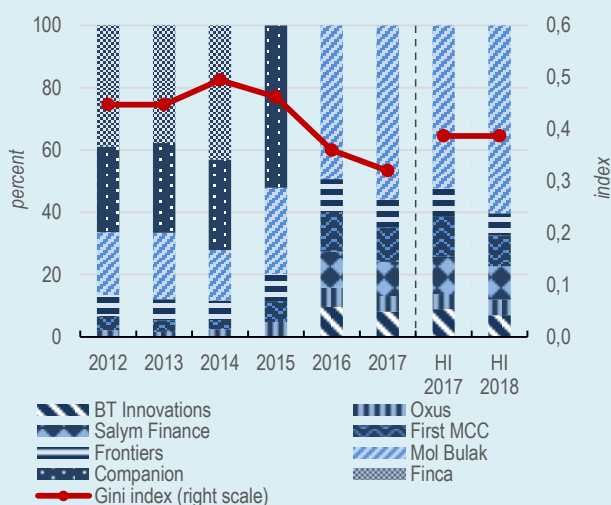
Source: NBKR

### Box 6. Concentration Indices based Assessment of NBFCOs System Activity<sup>28</sup>

#### The Herfindahl-Hirschman Index

Herfindahl-Hirschman index was calculated for the purposes of concentration risk analysis in the NBFCOs system<sup>29</sup>. As of June 30, 2018, Herfindahl-Hirschman index for the NBFCOs system constituted 1,459.2 points. According to the rule of thumb<sup>30</sup>, resulting value indicates availability of moderate concentration of NBFCOs assets or moderate concentration of microfinance market.

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



#### The Gini Index

The Gini index was calculated for estimating the uniformity of the NBFCOs assets distribution. As of June 30, 2018, the index value constituted 0.109, which reflected the moderate distribution of assets among the largest microfinance institutions. Meanwhile, decrease of concentration level was observed in the first half of 2018 (Chart 1).

Source: NBKR

<sup>28</sup> Concentration indices are calculated on the basis of data submitted by 6 largest NBFCOs.

<sup>29</sup>  $H = \sum_{i=1}^n (share_i)^2$ .

<sup>30</sup> The following rule of thumb was used for determining the level of market concentration:

- index value is below 0.1 (or 1,000) – insignificant market concentration,
- index value is from 0.1 to 0.18 (or from 1,000 to 1,800) – average market concentration,
- index value is above 0.18 (or 1,800) – high market concentration.



### ***External Debt Status of NBFCOs***

As of June 30, 2018, the external debt of NBFCOs amounted to USD 51.6 million. Major part of the external debt of NBFCOs are loans provided by the foreign commercial financial-credit organizations (98.0 percent of total external debt of NBFCOs), and the rest are loans of the international financial institutions (2.0 percent of total external debt of NBFCOs).

At the end of the first half of 2018, external debt of the largest NBFCOs increased by 162.3 percent compared to the first half of 2017 and amounted to USD 46.5 million.

### 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;

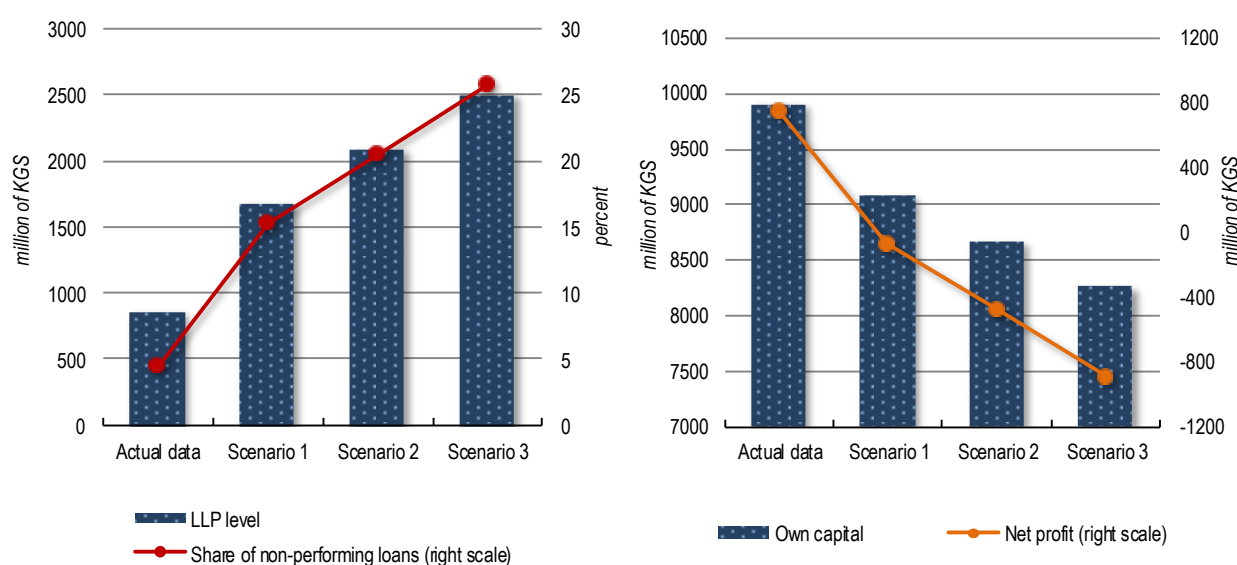
*Scenario 2:* 75% of loans transition from one category to another;

*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 provisions<sup>31</sup> in the loan portfolio of NBFCOs increased from 94.7 to 189.4 percent, depending on the scenario in conducting this stress testing (Chart 3.3.1).

Chart 3.3.1. Results of Stress Testing of the Credit Risk as of June 30, 2018



Source: NBKR, NBKR calculations

It should be noted that the deterioration of the loan portfolio quality entails a gradual decline in equity and net profit of NBFCOs. In case of the first, second and third scenario implementation, the NBFCOs will experience losses in the amount of KGS 71.2, 481.2 and 891.6 million, accordingly (Chart 3.3.1).

<sup>31</sup> 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
<b>Scenario 1:</b> transition of 50% of loans from one category to another	15.3
<b>Scenario 2:</b> transition of 75% of loans from one category to another	20.6
<b>Scenario 3:</b> transition of 100% of loans from one category to another	25.8

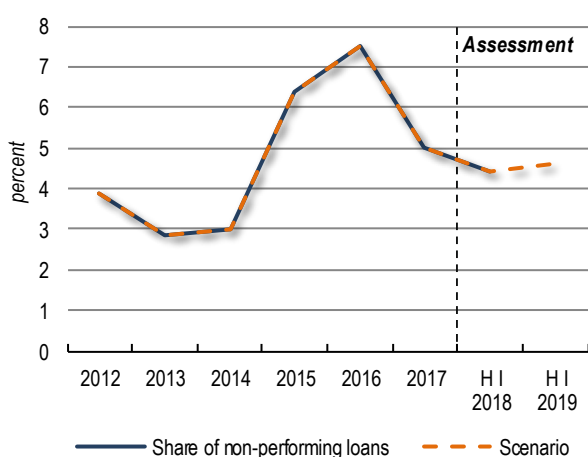
Source: NBKR, NBKR calculations

Implementation of the first scenario may result in an increase in the share of non-performing loans in the loan portfolio of NBFCOs by 10.9 p.p., to the level of 15.3 percent. In the case of the second scenario, non-performing loans may increase by 16.2 p.p., to the level of 20.6 percent, and in the implementation of the third scenario – by 21.4 p.p. and may reach the level of 25.8 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**



Source: NBKR

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 0.2 p.p., up to the level of 4.6 percent may occur in the process of this scenario implementation.

## IV. PAYMENT SYSTEMS

*In the reporting period, adopted set of measures aimed at minimizing financial and operational risks in the significant payment systems, ensuring uninterrupted operation of the system by monitoring the operation of the payment infrastructure, allowed to minimize the impact of risks on the stability of the financial sector.*

*In general, the level of risks in systemically important payment systems was minimal and was conditioned by the existing sufficient liquidity level.*

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

As of June 30, 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 (RTGS).

2. Systems of Retail Payments: the System of Batch Clearing of Small Retail and Regular Payments (SBC), Systems of Payment Cards Settlement, Money Transfer Systems.

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

The RTGS functioned normally during the first half of 2018.

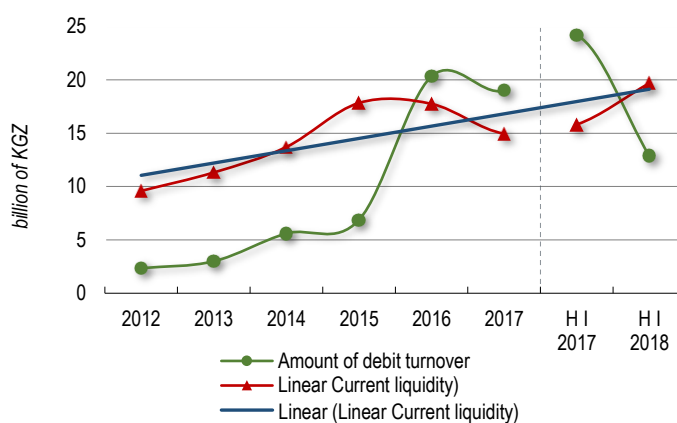
The level of financial risks in the RTGS remained low due to high level of liquid funds on the participants' accounts in relation to the turnovers in the system (liquidity ratio was 1.5 and the turnover ratio was 0.7). Average daily volume of liquid assets of participants showed increase by 24.5 percent (compared to the same period of 2017) and amounted to KGS 19.7 billion (Chart 4.1).

During the first half of 2018, the RTGS affordability ratio remained high and constituted 99.9 percent; meanwhile, the level of operational risk, taking into account prolongation of the transaction day, was 3.7 percent.

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

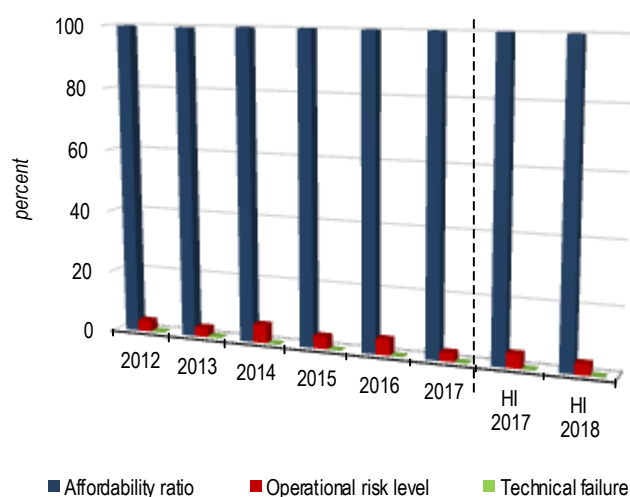
In functioning of the SBC the level of financial risks in the reporting period was also low. Reserves exhibited by the participants to

**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**

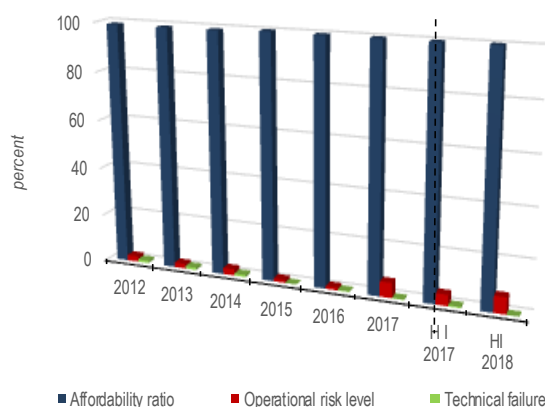


	2012	2013	2014	2015	2016	2017	1st half of 2017	1st half of 2018
Technical failure, in percent	0,2	0,4	0,0	0,0	0,0	0,0	0,0	0,1
Affordability ratio, in percent	99,8	99,6	100,0	100,0	100,0	100,0	100,0	99,9
Operational risk level, in percent	3,6	3,1	5,9	4,1	5,2	2,9	4,6	3,7

Source: NBKR

cover a debit net position were 4 times higher than the required level. According to the results of the SBC operation monitoring, the system affordability ratio remained high and amounted to 100.0 percent during the reporting period (in the first half of 2017 - 99.8 percent). Meanwhile, the level of operational risk was 6.9 percent (Chart 4.3) due to extending the operating procedure upon request of the system participants and minor failures.

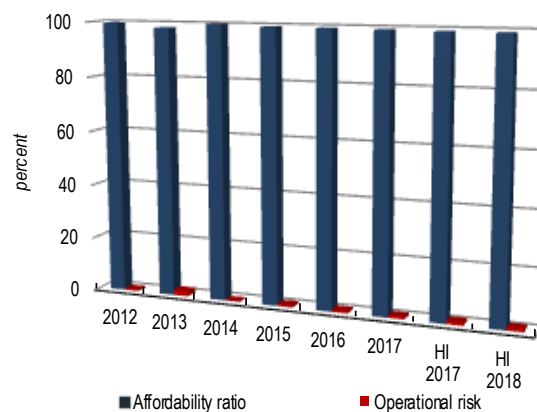
**Chart 4.3. Ratio of Affordability Index and Operational Risks in the SBC**



	2012	2013	2014	2015	2016	2017	1st half of 2017	1st half of 2018
Technical failure, in percent	1,03	1,04	0,90	0,03	0,28	0,19	0,49	0,04
Affordability ratio, in percent	98,97	98,96	99,10	99,97	99,72	99,81	99,80	100,00
Operational risk level, in percent	2,30	1,97	2,63	1,23	1,17	6,24	4,62	6,86

Source: NBKR

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



	2012	2013	2014	2015	2016	2017	1st half of 2017	1st half of 2018
Affordability ratio, in percent	99,58	98,16	99,88	99,28	99,24	99,13	98,94	99,09
Operational risk, in percent	0,42	1,84	0,12	0,72	0,76	0,87	1,06	0,91

Source: NBKR

**Systems of Bank Payment Cards Settlements.** As of July 1, 2018, five international payment card systems and the national system “Elcart”, including co-badged cards “Elcart-UPI”, operated in the Kyrgyz Republic<sup>32</sup>.

In the reporting period, 25 commercial banks worked with the national system “Elcart”. The results of operation monitoring and analysis indicated that the system affordability ratio was 98.9 percent, and the level of operational risks in the system, taking into account technical failures, was 1.1 percent (Chart 4.4).

**Money transfer systems.** During the first half of 2018, receipt and transfer of international remittances without opening an account in the commercial banks was carried out by means of 14 international money transfer systems (Table 4.1.).

<sup>32</sup> 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 volume, in %	Share of the total number, in %
Zolotaya Korona	73.6	68.8	86.7	84.9
Unistream	11.1	14.9	3.2	7.2
CONTACT	7.8	7.3	3.8	2.0
Western Union	4.9	5.1	4.8	4.8
Money Gram	1.0	1.6	1.0	1.0
Other	1.6	2.2	0.5	0.2
Total	100.0	100.0	100.0	100.0

Source: NBKR

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

At the end of the first half 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 93.6 percent of the total number and 97.9 percent of the total volume of payments).

The results of monitoring over the functioning of the Kyrgyz Republic payment system during the first half of 2018 show 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, as part of developing the regulatory and legal framework governing the activities of the financial-credit organizations, special attention was paid to reducing the risks in the activities of the financial-credit organizations, including those conducting operations in accordance with the principles of Islamic banking and finance, as well as improving supervision over the commercial banks' activities.***

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

This Regulation provides the commercial banks with the opportunity to place funds in foreign currency on the deposit accounts opened with the National Bank, subject to the requirements established in the Regulation, the procedure and terms for placing funds in foreign currency on the deposit accounts opened with the National Bank.

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

3. In accordance with the international best practice, some regulatory and legal acts of the National Bank on assets classification were amended and added by the Resolution of the Board of the National Bank No. 2018-R-12/20-2-(NBFCO) dated May 30, 2018 to bring the regulatory and legal acts of the National Bank governing the activities of the microfinance organizations that are not entitled to accept deposits from the individuals, legal entities and credit unions.

4. The Board of the National Bank of the Kyrgyz Republic adopted the resolutions concerning approval of the Instruction “On implementation of banking supervision”, as well as introduction of amendments and additions to some regulatory legal acts on risk management in the commercial banks on June 20, 2018 due to introduction of risk-based supervision over the commercial banks.

The Instruction “On implementation of banking supervision” provides for the requirements for conducting inspections in accordance with the National Bank’s policy for implementation of the risk-oriented supervision, description of external supervision as an element of banking supervision, and other amendments. The Resolution of the Board of the National Bank “On introducing amendments and additions to some resolutions of the Board of the National Bank of the Kyrgyz Republic” provides for improving the risk management requirements in the commercial banks, including those related to risk appetite, in particular, defining the risk appetite policies and processes, measuring, setting, and managing risk limits and other amendments.

### ***Principles of Islamic Finance***

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.

Thus, the Resolution of the Board of the National Bank No. 2018-R-12/4-6-(BS) dated January 31, 2018 made amendments and additions to some regulatory acts of the National Bank, according to this Resolution the maximum aggregate amount of financing was increased and the restrictions on attracting funds from the legal entities that are not founders (shareholders), as well as from the individuals and legal entities - founders (shareholders) of microfinance organizations, were excluded.

Some regulatory and legal acts of the National Bank were amended by the Resolution of the Board of the National Bank No. 2018-R-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.

Amendments were introduced into the regulatory and legal acts on assets classification and periodic regulatory reports of the microfinance organizations and the credit unions according to the Resolution of the Board of the National Bank No. 2018-R-12/20-2-(NBFCO) dated May 30, 2018 to exclude the concept of “prolongation” and change the terms of loan restructuring/financing.

## GLOSSARY AND ABBREVIATIONS

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

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

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

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

*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.

*Macprudential 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.

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  
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  
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

R - Resolution

RTGS – Real Time Gross Settlement

RF – Russian Federation

RK – Republic of Kazakhstan

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