National Bank
of the Kyrgyz Republic

# THE FINANCIAL SECTOR STABILITY REPORT OF THE KYRGYZ REPUBLIC

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## Content

# 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 activity 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 main directions formulations of the NBKR monetary policy, regulating the banking activity and development of the strategy for financial and credit institutions 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 issues of financial stability.

## List of Boxes

# MAJOR CONCLUSIONS

**At the end of the first half of 2016, the results of macroprudential analysis, econometric modeling, financial projections modeling, and "reverse" stress tests indicated to the sustainability of the financial sector of the Kyrgyz Republic and the financial strength. Significant decrease in dollarization of the banking sector is noticed thus making positive impact on its sustainability.**

**Against the background of weak diversification and dependence of the Kyrgyz Republic's economy on external factors, the recorded decrease in economic activity has deteriorated the quality of total loan portfolio in the KR banking sector.** At the same time, the country risk for the banking sector still remains moderate. At the end of the first half of 2016, the banking sector faced an increase in the share of placed banks assets of non-residents (from 19.8 percent to 13.3 percent of total banks assets) and decrease in obligations to non-residents (from 20.8 percent to 19.8 percent) compared to 2015 results.

**Concentration risk is one of the major risks in the banking sector.** Concentration risk still remains significant for the banking sector. Potential default of the largest borrowers and a sudden outflow of major funding sources (including Government authorities and state-owned enterprises) may negatively affect certain banks.

**Despite volatility of the national currency exchange rate in the reporting period, the banking sector of the Kyrgyz Republic remained stable to macroeconomic shocks.** Results of macroprudential analysis indicate that weakening of the national currency, besides the change in the level of dollarization, did not affect significantly the sustainability of the banking sector in the Kyrgyz Republic. At the same time, the stress tests indicate that some banks have become more vulnerable to indirect exchange rate risk due to the possible insolvency of borrowers to serve loans in foreign currency. The long-lasting current trend can further result in increased vulnerability of the banking sector.

**As before, the banking sector of the Kyrgyz Republic still retains the financial strength.** The results of econometric modelling, financial projections modeling and outcomes of reverse stress-testing still show the availability of financial safety margins at the end of H1 2016 compared to the same period of 2015 and the sector's capability to sustain certain macroeconomic shocks. It must be noted here that some banks became more vulnerable to the combined macroeconomic shocks.

**At the end of the first half of 2016, the payments systems of the Kyrgyz Republic operated normally,** the level of system risks in the financial infrastructure was assessed as moderate.

**The decline in residential real estate prices was observed in the real estate market.** The results of stress tests of the commercial banks indicate that the banking sector of the Kyrgyz Republic is likely to suffer losses in case of decline in real estate prices by more than 31 percent. Potentially, large banks can sustain losses in case of decrease in real estate prices by more than 32 percent.

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# I. MACROECONOMIC AND FINANCIAL ENVIRONMENT

## 1.1. Macroeconomic Conditions and Risks

***In the reporting period, the major macroeconomic risks were related to negative dynamics in GDP and increased state budget deficiency.***

***Monetary policy measures in combination with low price indices on world food and enegry markets, as well as reduction of domestic consumer index have determined low dynamics in inflation rate of the Kyrgyz Republic.***

***Business activity in the countries-major trading partners is still rather ambiguous, therefore the terms of recovery of external demand for domestic products remain uncertain as well.***

*Gross Domestic Product (GDP)*

During the first half of 2016, the economic growth slowed down. At the same time, slowdown in the 2nd quarter was less compared to the 1st quarter of 2016. As a result, GDP[1] fell by 2.3 percent as compared to the same period of 2015, when GDP growth was 6.8 percent. Excluding enterprises involved in the development of Kumtor gold mine, GDP increased by 1.2 percent (3.7 percent in the first half of 2015). Slowdown was conditioned generally by negative dynamics in the industrial sector (-3.6 p.p.). The economy was slightly supported by positive contribution of all main sectors of the economy: services (1.1 p.p.), agriculture (0.3 p.p.), construction (0.2 p.p.). Deflator fell to 3.8 percent (in January-June 2015 it was 5.7 percent).

The slowdown in the industrial sector by 19.0 percent in January-June 2016 compared to the same period of 2015 was conditioned generally by reduction in processing industries (-24.1 percent) due to decline faced by enterprises involved in the development of Kumtor gold mine (-35.6 percent). Significant decline was noticed also in textile manufacture (by 33.6 percent), clothing manufacture (24.2 percent), production of other non-metal goods (14.4 percent).

Growth in the sector of agriculture made 2.9 percent compared to 1.2 percent in the first half of 2015. Growth was conditioned generally by production increase in livestock breeding and crops production.

Growth in the sector of construction made 3.6 percent and was accompanied by a 2.0 percent increase of investments in fixed capital. Construction growth was conditioned by increased volumes of subcontracting and other capital works and expenses, as well as overhaul and current repairs of buildings and structures. In the reporting period, the volume of investments being financed from domestic sources increased by 7.8 percent, while investments from external sources decreased by 17.5 percent.

A 2.1 percent increase in the services sector was reached due to a 5.1 percent growth in the trade sector.

[1] Preliminary data.

**Box 1.1.1. Contribution of certain activities in GDP**
*(percent)*

| | January-June | | | | | |
|---|---|---|---|---|---|---|
| | 2015 | | | 2016 | | |
| | Share, *percent* | Growth rate, *percent* | Contribution in growth, *perc. points* | Share, *percent* | Growth rate, *percent* | Contribution in growth, *perc. points* |
| **GDP** | **100** | **6.8** | **6.8** | **100** | **-2.3** | **-2.3** |
| Agriculture, forestry and fishery | 9.7 | 1.2 | 0.1 | 9.7 | 2.9 | 0.3 |
| Industry | 18.8 | 23.5 | 4.0 | 16.3 | -19.0 | -3.6 |
| *Mining* | 1.0 | 104.3 | 0.6 | 1.1 | 29.9 | 0.3 |
| *Processing sectors (Processing industry)* | 14.9 | 26.1 | 3.5 | 12.3 | -24.1 | -3.6 |
| *Provision (supply) of electric energy, gas, steam and conditioned air* | 2.7 | -6.8 | -0.2 | 2.6 | -12.0 | -0.3 |
| *Water supply, waste treatment and processing, receipt of recyclable materials* | 0.3 | 7.2 | 0.02 | 0.3 | 8.6 | 0.02 |
| Construction | 6.3 | 2.3 | 0.2 | 6.6 | 3.6 | 0.2 |
| Services | 52.1 | 3.1 | 1.6 | 55.0 | 2.1 | 1.1 |
| *Wholesale and retail trade; repair of cars and motor-cycles* | 16.6 | 5.2 | 0.9 | 17.0 | 5.1 | 0.8 |
| *Transportation activity and storage of cargo* | 4.3 | 4.0 | 0.2 | 4.7 | -2.6 | -0.1 |
| *Information and communication* | 4.9 | 5.6 | 0.3 | 4.9 | 0.1 | 0.01 |
| *Activity of hotels and restaurants* | 1.6 | 6.2 | 0.1 | 1.7 | 6.1 | 0.1 |
| *Financial intermediation and insurance* | 0.7 | 0.9 | 0.01 | 0.6 | 1.3 | 0.01 |
| *Operations with real estate* | 2.9 | 0.1 | 0.002 | 3.1 | -1.5 | -0.04 |
| *Professional. scientific and technical activity* | 2.5 | 0.3 | 0.01 | 2.5 | 0.7 | 0.02 |
| *Administrative and auxiliary activity* | 0.5 | -0.9 | -0.01 | 0.5 | -1.6 | -0.01 |
| *State administration and defence; obligatory social security* | 6.4 | -0.2 | -0.01 | 6.8 | 0.9 | 0.1 |
| *Education* | 6.4 | 1.2 | 0.1 | 7.7 | 2.8 | 0.2 |
| *Healthcare and social servicing of population* | 3.5 | 1.2 | 0.04 | 3.6 | 1.4 | 0.05 |
| *Art, entertainment and rest* | 0.6 | 2.8 | 0.01 | 0.7 | 1.4 | 0.01 |
| *Other servicing activity* | 1.1 | 1.3 | 0.02 | 1.2 | -1.6 | -0.02 |
| Net (exclusive of subsidies) taxes on products | 13.0 | 6.8 | 1.0 | 12.3 | -2.3 | -0.3 |

*Source: NSC KR*

Economic growth rates of Kyrgyzstan still remain negative mainly because of reduction in gold production and decline in external and domestic demand.

### *Inflation*

Low inflation was observed in Kyrgyzstan during the first half of 2016. This price situation was mainly conditioned by food products offers caused by agricultural production growth in 2015 and first half of 2016, favorable situation in crops regional market and majority of world's food markets as well as relatively weak external and domestic demand. Against the background of these factors, the consumer price index in June 2016 reduced by 5.6 percent compared to June 2015, which, given the high share of foodstuff in the consumer basket, has produced a significant restraining effect on the inflation. According to the NSC KR, annual inflation rate reached 1.3 percent in June 2016, while the CPI growth gain in January-June 2016 was recorded at the level of 0.8 percent as compared to January-June 2015.

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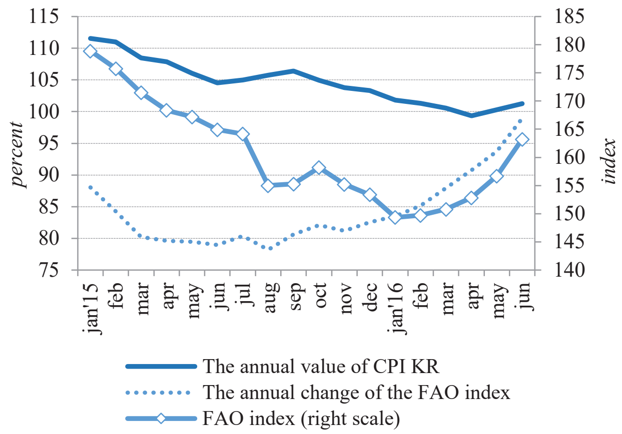
**Chart 1.1.1. Dynamics of CPI KR and the FAO Index**




*Source: NSC KR, www.fao.org*

FAO Food Price Index, as aggregated indicator of price trend for foodstuff on world markets, had showed upward trend in the first half 2016, however its average value was 10.1 percent lower as compared to January-June 2015. During the first half of 2016, sugar prices significantly increased due to negative influence of weather conditions on harvests in Asian countries and Brazil. Price index for meat products, vegetable oils and crops were moderately going up in the first half of the year.

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### *State Budget*

In the first half of 2016 the situation in the state finance sector was complicated. The state budget execution in the beginning of Q2 changed from surplus to deficit. According to the preliminary data of the Central Treasury of the Ministry of Finance of the Kyrgyz Republic, at the end of the first half of 2016, the state budget was executed with a deficit of KGS 12.4 billion, or 7.0 percent of GDP, meanwhile in the same period of 2015, the budget was executed with a surplus of KGS 4.7 billion, or 2.7 percent to GDP. Total funding of the budget from internal sources amounted to KGS 11.4 billion (6.5 percent to GDP), while funding from external sources made KGS 9.1 billion (5.2 percent to GDP).

**Box 1.1.2. Main Parameters of the State Budget of the Kyrgyz Republic**

| | **Jan-June 2015** | | **Jan-June 2016** | |
|---|---|---|---|---|
| | ***billions of KGS*** | ***% to GDP*** | ***billions of KGS*** | ***% to GDP*** |
| **Total incomes (including sales of non-financial assets)** | 59.9 | 34.5 | 61.8 | 35.1 |
| including incomes from operational activity | 59.9 | 34.5 | 61.8 | 35.1 |
| sale of non-financial assets | 0.0 | 0.0 | 0.1 | 0.0 |
| **Total expenditures (including purchase of nonfinancial assets)** | 55.2 | 31.8 | 74.2 | 42.2 |
| including expenditures for operational activity | 48.7 | 28.0 | 56.4 | 32.1 |
| purchase of non-financial assets | 6.6 | 3.8 | 17.8 | 10.1 |
| **Deficit(-) / Surplus (+)** | 4.7 | 2.7 | -12.4 | -7.0 |
| **Budget financing** | 10.1 | 5.8 | 20.5 | 11.7 |
| External financing | 0.3 | 0.2 | 9.1 | 5.2 |
| Internal financing | 9.7 | 5.6 | 11.4 | 6.5 |

*Source: MF KR*

In the first half of 2016, the revenue side of the republican budget (tax revenues+non-tax revenues+official transfers) was executed by 109.4 percent, which was conditioned by over-achievement of the non-tax revenue collection target by 34.1 percent and official transfer receipts by 8.4 times. Tax revenue collection target was over-achieved by 97.9 percent. Tax collection plan of the State Tax Service was fulfilled by 94.7 percent, while the State Customs Service of the Kyrgyz Republic over-achieved its target by 104.3 percent. According to the results of the first half of 2016, the expenditure side of the republican budget was executed by 78.1 percent. The plan for protected items expenditures was executed by 81.3 percent, while that for unprotected items was executed only by 62.6 percent.

***Macroeconomic Risks***

The trend of slowdown in economic decline and occasional growth in business activity in the countries-major trading partners points to the positive impact and thus potential growth of the country's economy by the end of 2016. In addition, GDP, not including performance figures of Kumtor Gold Company, has increased, which speaks more for itself. Meanwhile, structural problems in the national economy and ambiguous situation in the world economy still cause risks. As for internal factors, despite the positive figures of money transfers in the first half of 2016, domestic demand still remains negative. In addition, GDP indicator still depends on the operating performance of Kumtor Gold Company.

Potential risks for price stability closely connected with foodstuff offer due to its high portion in consumer basket structure (about 47 percent). Reduction of harvests in Kyrgyzstan agriculture or low production volume of crops imported to foreign markets can raise prices inside the country. In addition, high share of import in the national structure of consumption stipulates the dependence of inflation on the stability of the national currency exchange rate.

The state budget is in great need of fiscal consolidation for maintaining the budget deficit at the level of 4.5 percent to GDP specified in the Law of the Kyrgyz Republic "On the Republican Budget of the Kyrgyz Republic for 2016 and 2017-2018 Projections". Amid the current trend of increasing state expenditures, there is a pressing need to raise funds for their financing and sequestering of non-priority expenditures.

These trends are prerequisites for possible risk of inflation growth and threat to the country's price stability as a result of budget revenue shortfall and sharp growth of budget deficit.

CONTENT

## 1.2. Structure of the Financial Sector

Institutional structure of the financial sector in Kyrgyzstan is represented by commercial banks and other financial institutions (non-bank financial institutions, insurance companies, investments and pension funds, stock exchanges).

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

| Financial institutions | 2013 | 2014 | 2015 | H1 2015 | H1 2016 |
|---|---|---|---|---|---|
| **Commercial banks** | **24** | **23** | **24** | **23** | **25** |
| **Other financial companies, including:** | **794** | **689** | **656** | **620** | **662** |
| ***Non-banking financial institutions (NBFI), including:*** | ***765*** | ***660*** | ***627*** | ***591*** | ***633*** |
| Micro-financial organizations, including: | 277 | 215 | 172 | 176 | 168 |
| microcredit companies | 208 | 154 | 109 | 115 | 106 |
| microcredit agencies | 65 | 56 | 57 | 56 | 56 |
| microfinancial companies | 4 | 5 | 6 | 5 | 6 |
| "FCCU" OJSC | 1 | 1 | 1 | 1 | 1 |
| Credit unions | 153 | 135 | 125 | 127 | 119 |
| Exchange offices | 334 | 309 | 329 | 287 | 345 |
| ***Insurance companies*** | ***18*** | ***17*** | ***17*** | ***17*** | ***17*** |
| ***Investments funds*** | ***8*** | ***9*** | ***9*** | ***9*** | ***9*** |
| ***Stock exchanges*** | ***1*** | ***1*** | ***1*** | ***1*** | ***1*** |
| ***Pension funds*** | ***2*** | ***2*** | ***2*** | ***2*** | ***2*** |

*Source: NBKR, NSK KR*

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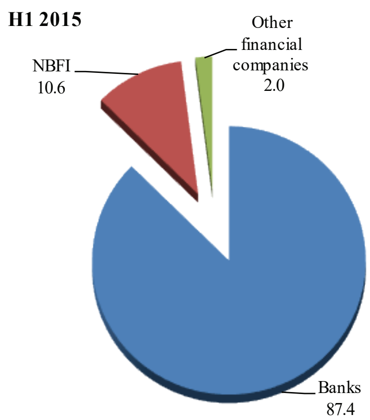
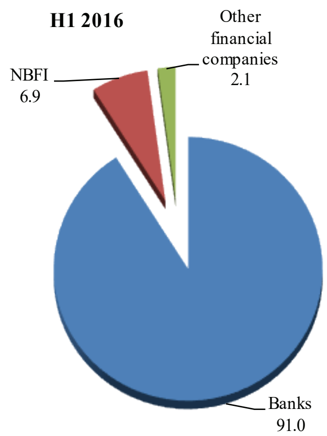
At the end of the first half of 2016, assets of the financial sector amounted to KGS 192.0 billion, or 45.1 percent of GDP, having increased by KGS 13.3 billion compared to the same period of 2015.

The banking sector's share in the total assets of the financial sector amounted to 91.0 percent. The share of NBFI and other financial companies accounted for 6.9 percent and 2.1 percent, respectively (Chart 1.2.1). The increased share of banking sector and reduced share of NBFI were mainly conditioned by Financial Group Companion CJSC separation from NBFI and its transformation into Companion Bank CJSC.

**Chart 1.2.1. Institutional Structure of the Financial Sector Assets of Kyrgyzstan**
*percent*

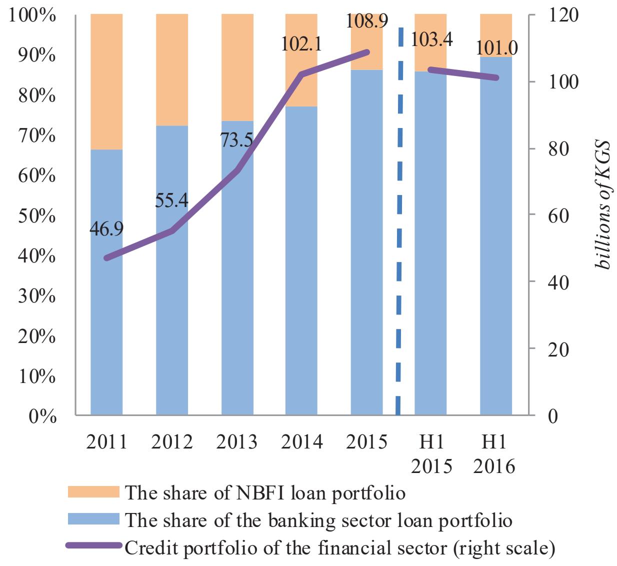



*Source: NBKR*

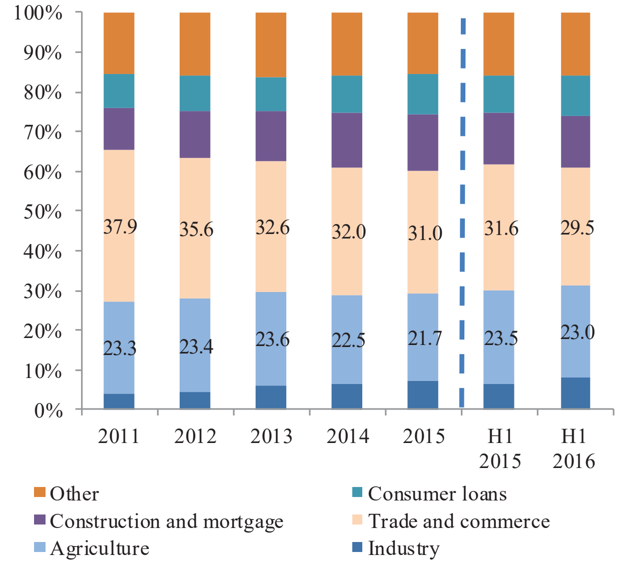
In the first half of 2016, the consolidated loan portfolio of banks and NBFI amounted to KGS 101.0 billion, or 23.7 percent to GDP. The share of bank loans in total loan portfolio of the financial sector increased by 3.8 p.p. and as of the end of the first half of 2016 amounted to 89.6 percent (Chart 1.2.2).

**Chart 1.2.2. Structure of the Loan Portfolio**




*Source: NBKR*

**Chart 1.2.3. Structure of the Loan Portfolio by Sector**




*Source: NBKR*

Within the sectoral structure of the financial sector's loan portfolio, high concentration was still observed in the trading industry (banks) and agriculture (NBFI). At the end of the first half of 2016, the consolidated share of the financial sector's loan portfolio in the above-listed sectors of the economy amounted to 52.5 percent of total issued loans, having totaled KGS 53.0 billion (Chart 1.2.3).

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## 1.3. Status of the Financial Markets

***In the reviewed period, the situation in the domestic foreign exchange market was still characterized by increased pressure on the exchange rate and situation in foreign exchange markets in countries-major trade partners was still impacting.***

***The NBKR still carried out foreign exchange market interventions on sale and purchase of foreign currency in order to smooth out sharp fluctuation of the exchange rate.***

***The market of interbank borrowings was characterized by reduced volume of repo operations with increased volume of operations in national currency at the same time. The rates in the market of the state treasury bills and bonds demonstrated downward trend.***

### *1.3.1. Status of the Currency and Money Market*

#### *Currency Market*

In the first half of 2016, dynamics of the foreign currency exchange rate as well as US dollar in the domestic market of the Kyrgyz Republic was conditioned by the impact of fundamental factor – weakening of the US dollar in the world as well as the US FRS decision to restrain accounting rate, on the one hand; reduced pressure over exchange rate and reduced demand for foreign currency, on the other hand.

In the first half-year of 2016, the official USD exchange rate decreased by 11.1 percent from KGS 75.8993 to 67.4860 per dollar.

In the reporting period, the effect of external shocks and speculative pressure was regulated by foreign exchange market interventions and other measures on behalf of NBKR, which were focused on smoothing sharp fluctuations of the national currency exchange rate. The National Bank carried out foreign exchange market interventions on sale (USD 91.7 million) and purchase of US dollars (USD 139.5 million).

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#### *Money Market*

The commercial banks' activity slightly reduced in the interbank market. In particular, the volume of repo transactions decreased by 85.4 percent compared to the same figure of 2015. But the volumes of standard inter-bank credit transactions in the national currency increased by 7.1 times.

Overnight loans issued by the National Bank of the Kyrgyz Republic in the first half of 2016 amounted to KGS 2.0 billion, having decreased by 89.1 percent as compared to 2015, because of high level of excess liquidity in commercial banks. Total amount of allocations under overnight deposit conditions reached KGS 740.4 billion (6-time increase).

### *1.3.2. Status of the Securities Market*

The market of the state treasury bills and bonds issued by the Ministry of Finance is characterized by increased volumes of emissions.

In the state treasury bills market, including 3, 6 and 12 month securities, the total volume of supply increased to KGS 3.1 billion (+1.9 percent), the volume of primary placements (including additional allocations) – up to KGS 3.4 billion (+79.3 percent). The weighted average revenue of these securities increased by 0.5 percent points up to 13.0 percent.

In the reporting period, 2, 3 and 5-year state treasury bonds were issued. The total volume of announced ST-Bonds issue within auctions was KGS 2.8 billion, having increased by 11.3 percent compared to the same period of 2015. However, in fact, ST-Bonds were placed to the amount of KGS 3.0 billion (considering additional allocations), having increased by 77.8 percent compared to the same period of the previous year. The total weighted average revenue increased by 1.8 percentage point, up to 17.4 percent.

In accordance with the monetary policy, in the reporting period the amount of 7- and 14-day NBKR notes offered for placement reached KGS 60.0 billion, having decreased by 11.8 percent compared to the same period of the previous year. Gross sales volume, on the contrary, increased by 1.9 times, up to KGS 55 billion. Based on the results of auctions held, the total weighted average profitability rate in the first half of 2016 was 4.8 percent (-5.8 p.p.).

## 1.4. Real Estate Market

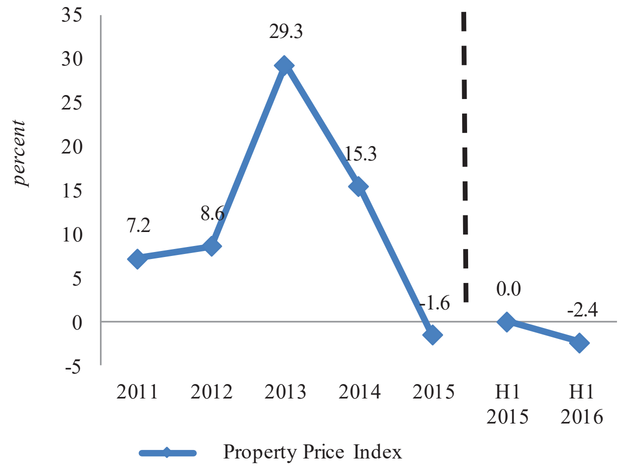
***The real estate market of the Kyrgyz Republic experienced slowdown of the price index[2] growth rates. This is due to the apartment price decline (prices decreased by 2.9 percentage points during the reviewed period), as well as falling house prices (1.2 percentage points decrease) compared to the same period of 2015.***

***Decreased level of prices for real estate and increased average wage favorably influenced the housing affordability index, indicating the improvement of the situation in this sector.***

***Risks to the financial sector from the real estate market remain moderate due to underdeveloped mortgage credit[3] lending in total banking loan portfolio.***

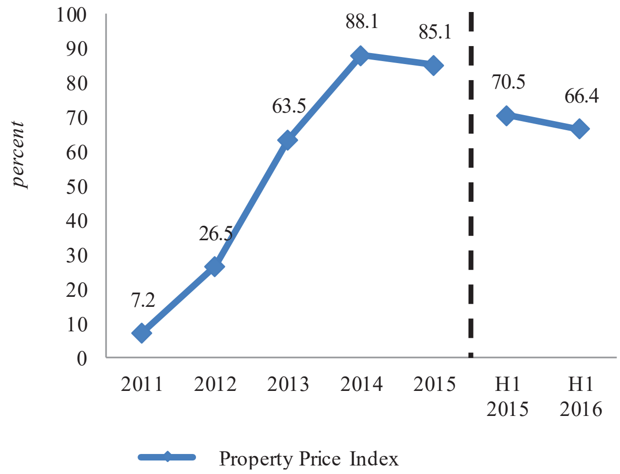
As of the first half of 2016, decrease in residential property prices index compared to the same period of 2015 was observed in Kyrgyzstan (Chart 1.4.1, Chart 1.4.2).

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




*Source: SRS KR*

**Chart 1.4.2. Price Index Growth Rate in the Housing Market***




*Source: SRS KR, NBKR calculations*
** 2010 is taken as the basis period*

As of June 30, 2016, the average price for 1 square meter of residential property (apartments) in Bishkek almost did not change; in Osh, it decreased by 12.2 percent compared to the same period of 2015 (Chart 1.4.3). The average price for 1 square meter of detached houses in Bishkek grew by 5.5 percent, while in Osh the price decreased by 20.2 (Chart 1.4.4).

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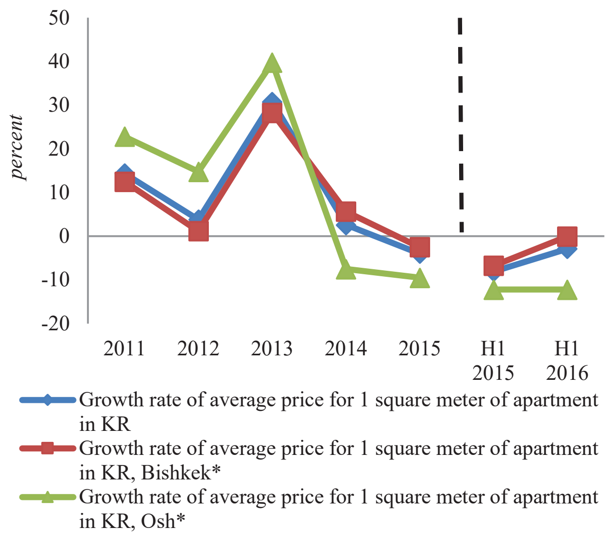
[2] The Laspeyres index methodology was used to create index price for property.
Generally, the Laspeyres index is determined in the following way:

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

*where K* = number of property types;
*Qoi* = number of 'i' type property object of in a basis period;
*Poi* = price of 'i' type property object in a basis period;
*Pti* = price of 'i' type property object in a current period.

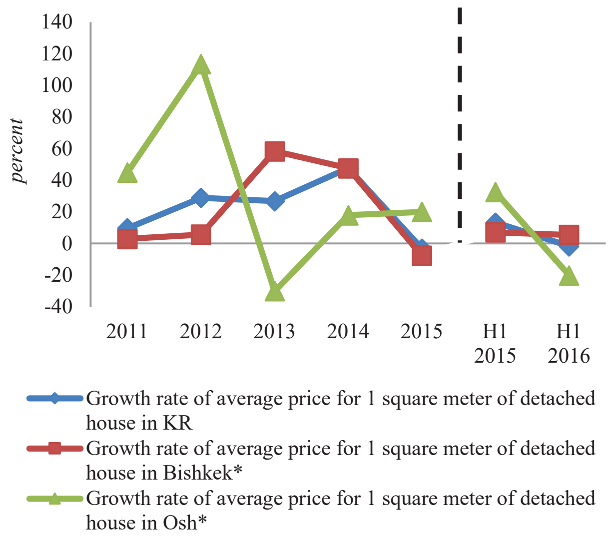
[3] In terms of the Kyrgyz Republic, at present time, mortgage credit means, as a rule, a long-term credit provided under a pledge of property rights to real estate.

**Chart 1.4.3. Dynamics of Change in Prices for Flats**



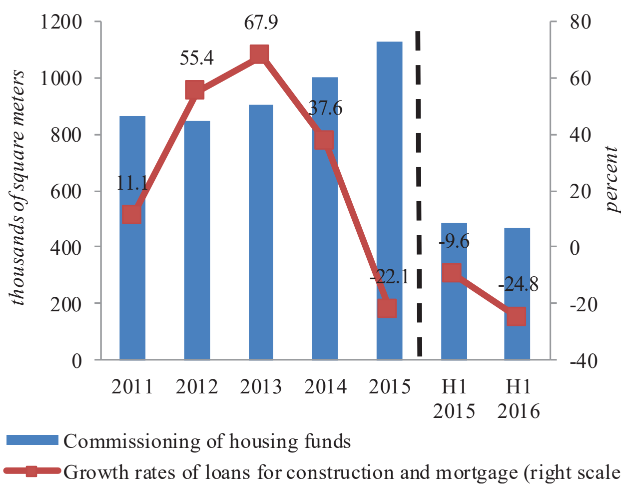

*Source: SRS KR. NBKR calculations*

**Chart 1.4.4. Dynamics of Change in Prices for Houses**




*Source: SRS KR, NBKR calculations*

**Chart 1.4.5. Dynamics of Housing Commissioning and Provided Loans for Construction and Mortgage**




*Source: SRS KR, NBKR calculations*
*Comment: period data*

Following the results of the first half of 2016, the aggregative index of commissioning of housing properties decreased by 3.7 percent compared to the same period of 2015 (Chart 1.4.5). The major share of commissioned housing, as before, was accounted for Bishkek city and Chui oblast, as well as Osh city and Osh oblast (Table 1.4.1).

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

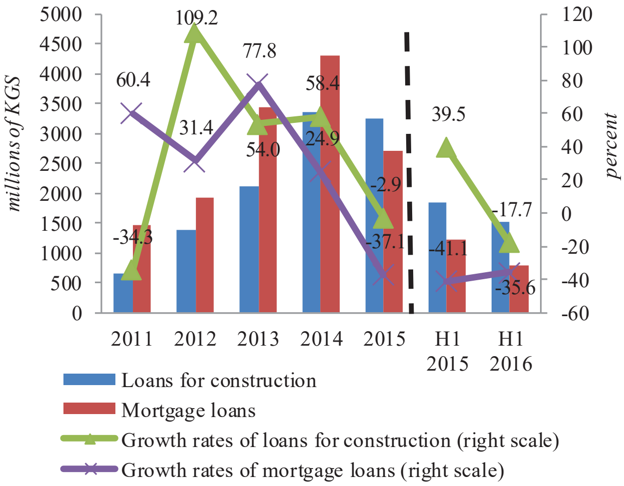
| | H1 2015 | | H1 2016 | |
|---|---|---|---|---|
| | *Total commissioned area, thous. sq. m.* | *Share of total area, %* | *Total commissioned area, thous. sq. m.* | *Share of total area, %* |
| Bishkek city and Chui oblast | 236.4 | 48.6 | 242.3 | 51.7 |
| Osh city and Osh oblast | 108.6 | 22.3 | 85.4 | 18.2 |
| Other oblasts of KR | 141.7 | 29.1 | 141.1 | 30.1 |
| **Total** | **486.7** | **100.0** | **468.8** | **100.0** |

*Source: NSC KR*

CONTENT

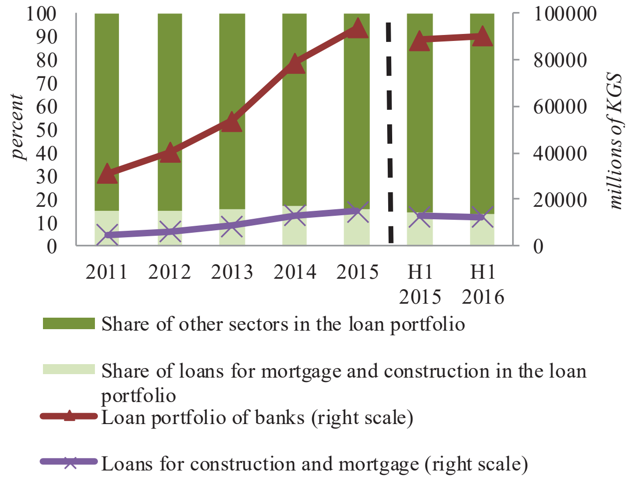
In the reporting period, the volume of mortgage loans and construction loans decreased compared to the first half of 2015. The total volume of issued mortgage and construction loans amounted to KGS 2.3 billion (Chart 1.4.6).

**Chart 1.4.6. Loans Provided for Construction and Mortgage**




*Source: NBKR*
*Note: data for the reporting period*

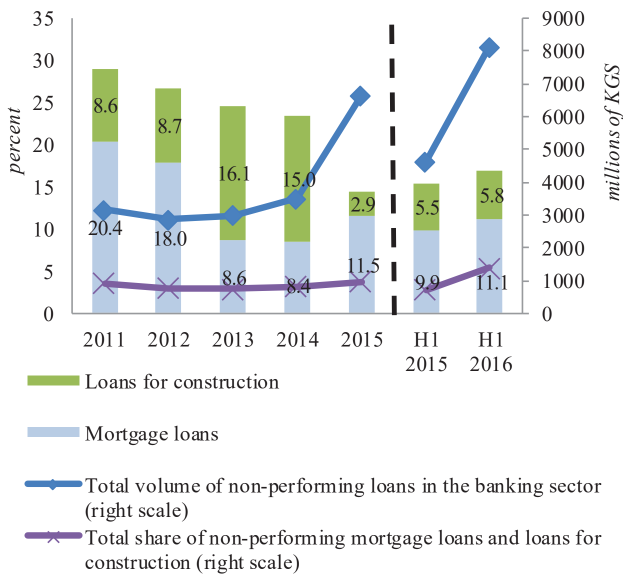
**Chart 1.4.7. Total Share of Loans for Mortgage and Construction in the Loan Portfolio of Commercial Banks**




*Source: NBKR*
*Note: data for the reporting period*

As of June 30, 2016, the total mortgage and construction loan portfolio of commercial banks amounted to KGS 12.5 billion, having decreased by 3.4 percent compared to the same period of 2015. At the same time, the total share of mortgage and construction loans in the loan portfolio of commercial banks was 13.8 percent, which is 0.8 p.p. lower than that in the same period of 2015 (Chart 1.4.7).

**Chart 1.4.8. Dynamics of Non-performing Loans for Mortgage and Financing of Construction**



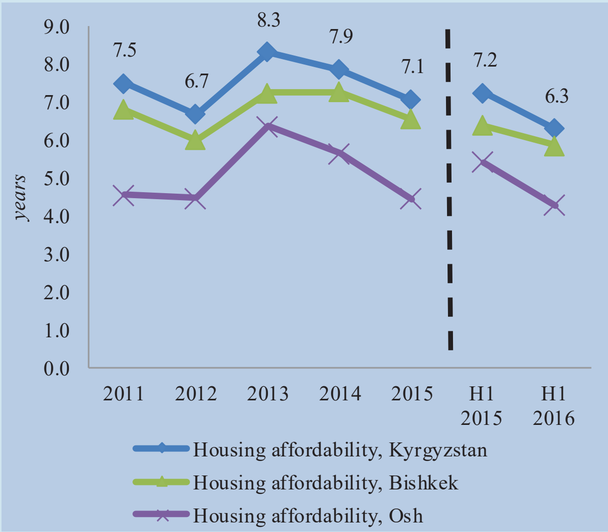

*Source: NBKR*

As of June 30, 2016, the total volume of non-performing mortgage and construction loans was KGS 1, 374.9 million. (Chart 1.4.8). The aggregate share of non-performing mortgage and construction loans reached 16.9 percent of total amount of troubled loans in the banking sector.

## Box 1. Housing Affordability Index

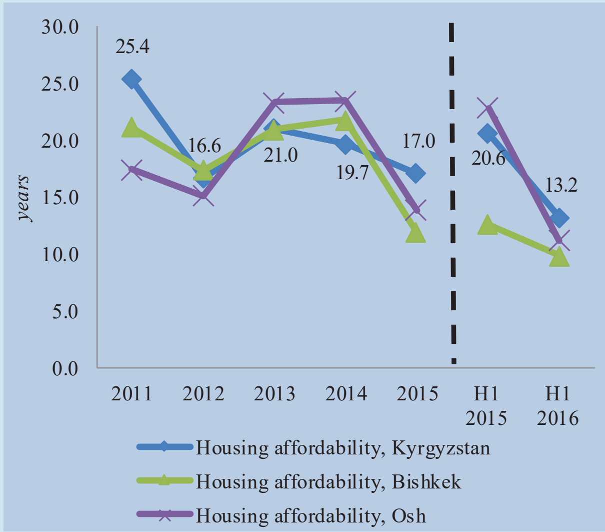
As of June 30, 2016, the situation with housing affordability in the Kyrgyz Republic improved slightly (index value decreased by 0.9 years) compared to the same period of 2015. This is due to decrease in prices for apartments in the real estate market of the Kyrgyz Republic (Chart 1.4.9).

**Chart 1.4.9. Housing (Apartments) Affordability Index Without Minimal Consumer Budget**




*Source: NSC, SRS, NBKR calculations*

**Chart 1.4.10. Housing (Apartments) Affordability Index Without Minimal Consumer Budget**




*Source: NSC, SRS, NBKR calculations*

According to the results of six months of 2016, to purchase a 54 sq. m apartment in Kyrgyzstan one should save all wages for 6.3 years.

By the end of the reporting period, a family in Kyrgyzstan with the minimum consumer budget of KGS 14575.0 (52.3 of total family income) will need 13.2 years (Chart 1.4.10) in order to purchase a housing.

CONTENT

## Box 2. Stress Testing of Impact from Change in Prices in the Real Estate Market on the Banking Sector[4]

As of June 30, 2016, the loans secured by real estate collaterals reached 57.1 percent of the loan portfolio of banks (not including "FINCA Bank" CJSC and "Companion Bank" CJSC).

Credit risks for banking sector are conditioned by possible decrease in the value of pledged real estate below the loan[5] repayment balance and further potential refusal of a borrower from loan repayment.

Stress testing[6] is focused on quantitative assessment of possible losses from outstanding loans and identification of the most vulnerable banks (groups of banks).

**Scheme 1. Loans Issued by the Banks and Secured by Pledged Real Estate as of June 30, 2016**

| | |
|---|---|
| **88,374.3 mln KGS** | • Loan repayment balance, by pledged real estate |
| **158,933.1 mln KGS** | • Total volume of pledged real estate, including: |
| **103,304.1 mln KGS** | • Residential |
| **55,629.0 mln KGS** | • Non-residential |

**Scheme 2. Results of Stress Testing of Impact from Change in Prices in the Real Estate Market on the Level of Credit Risk of the Banking Sector**

| Scenario | Potential losses of banking sector | Potential losses of large banks | Risk of violating of capital adequacy regulation* |
|---|---|---|---|
| "Historical"* (price decrease for real estate by 23% for year) | ----- | ----- | ----- |
| "Alternative" (price decrease for real estate by 40% for 2 year) | -0.6 bln KGS | ----- | 1 bank |
| "Negative" (price decrease for real estate by 50% for year) | -17.7 bln KGS | -7.4 bln KGS | 12 banks |

** According to 2008 real estate prices decreased by 23 percent.*

In addition to stress test, marginal level of decrease in prices for real estate, when banks suffer losses, was calculated. The banking sector suffers losses if prices for real estate decrease by 31 percent, large banks – by 32 percent. Risk of the capital ratio violation by the banking sector occurs when the real estate price declines by 48 percent.

[4] Stress testing was conducted on the basis of commercial banks provided through polling as of June 30, 2016.
[5] Fixed loan sum and percent.
[6] By polling data of commercial banks.

CONTENT

**Scheme 3. Comparative Analysis of the Results of Conducted Stress Tests**

| | ***Stress-testing as of 31.12.2015*** | ***Stress-testing as of 30.06.2016*** |
|---|---|---|
| **Banking Sector** | Scenario 1: ---------<br>Scenario 2: ---------<br>Scenario 3: -3,7 bln KGS; | Scenario 1: ---------<br>Scenario 2: -0,6 bln KGS;<br>Scenario 3: -17,7 bln KGS |
| **Large Banks** | *Scenario 1 & 2: -----------*<br>*Scenario 3: -2.6 bln KGS* | *Scenario 1 & 2: -----------*<br>*Scenario 3: -7.4 bln KGS* |
| The most vulnerable to loan risk banks in case of price dropdown | *5 banks* | *5 banks* |
| Threshold price drop for real estate | *In banking sector: **47%*** | *In banking sector: **31%*** |
| Price drop level causing risk of capital ratio breakage | *In banking sector: **58%*** | *In banking sector: **48%*** |

Bank's 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 up to 20% percent of its market value. Taking into account the aforementioned facts, the threshold level of decline in prices for real estate can increase by 20 percent.

CONTENT

# II. BANKING SECTOR

***Generally, development of the banking sector was characterized by growth in lending volume against some diversification of the loan portfolio. Growth of major indicators of the banking sector (assets, loan portfolio and resource base) was observed against the background of the decreasing net profit.***

***Level of banks financial intermediation kept on raising, while the banking sector's indicators outran the indicators of economic growth.***

***The results of stress testing point to the moderate level of risks in the banking sector.***

## 2.1. Major Trends

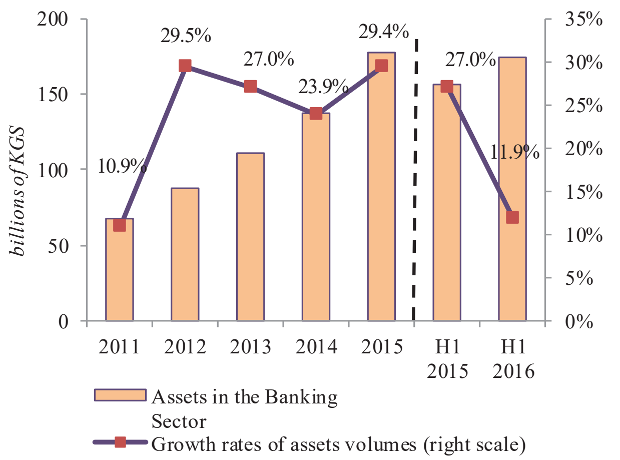
As of June 30, 2016[7], 25 commercial banks (including the Bishkek branch of the National Bank of Pakistan) and 325 branches operated in the territory of the Kyrgyz Republic. Of them, 18 were banks with foreign participation in the capital, including 12 banks with 50% share of foreign investment. All banking institutions of the country are universal by the type of business activity.

In the first half of 2016, "MFC Financial Group Companion" CJSC[8] was transformed into "Companion Bank" CJSC and received new license for banking business.

### *Assets*

Generally, following the results of the reporting period, the banking sector faced growth in all the types of assets. At the end of the first half of 2016, assets of the banking sector amounted to KGS 174.8 billion, having increased by 11.9 percent compared to the first half of 2015 (Chart 2.1.1).

**Chart 2.1.1. Dynamics of Assets in the Banking Sector**




Growth of assets was mainly provided by the increase of:

- Securities by 113.9 percent, or KGS 6.9 billion;
- correspondent accounts and cash by 14.2 percent, or KGS 5.9 billion;
- other assets by 26.3 percent, or 4.5 KGS billion.

The share of loan portfolio in the assets structure reached 51.7 percent, having increased by 5.0 p.p. compared to the first half of 2015.

### *Loan Portfolio*

Growth of banks' loan portfolio in the first half of 2016 was primarily due to increase in the volume of industrial, agricultural and consumer lending.

At the end of the first half of 2016, the level of dollarization of the loan portfolio in the banking sector increased by 8.6 p.p. compared to the same period of 2015 and amounted to 44.2 percent (Chart 2.1.2).

[7] Data are presented according to Periodic regulative reports of commercial banks.
[8] On 11.01.2016 based on the resolution of the Executive Board of NBKR No.61/1 dated 07.10.2015 licenses No. 053 and 053/1 were issued to "Companion Bank" CJSC to conduct banking operations in foreign and national currency, respectively.



CONTENT

**Chart 2.1.2. Dynamics of Loan Portfolio in Banking Sector**
*billions of KGS*

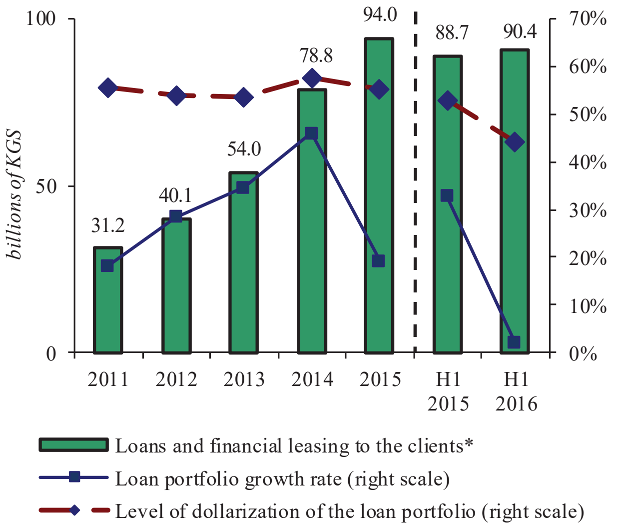
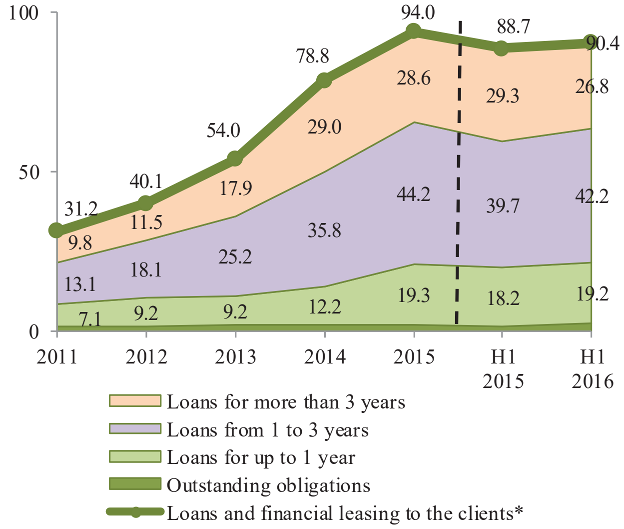



**Chart 2.1.3. Structure of Loan Portfolio by Maturity**
*billions of KGS*



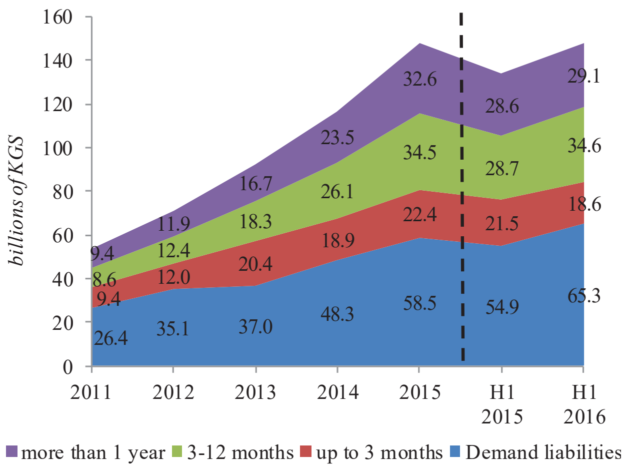

** excluding loans provided by FCI and special LLP*

The major share was accounted for medium-term loans from 1 to 3 years in the structure of loan portfolio by maturity, having constituted 46.6 percent, or KGS 42.2 billion at end of the first half of 2016 (Chart 2.1.3).

### *Liabilities*

At the end of the first half of 2016, liabilities of the banking sector amounted to KGS 147.6 billion, having increased by 13.9 percent compared to the same period of 2015.

**Chart 2.1.4. Structure of the Banking Sector Liabilities by Maturity**
*billions of KGS*




As of June 30, 2016, demand liabilities amounted to KGS 65.3 billion (the share of demand liabilities increased from 41.1 percent as of the end of the first half of 2015 to 44.2 percent). Liabilities with maturity of more than 1 year increased by KGS 0.5 billion in the reporting period, having amounted to KGS 32.6 billion, while their share decreased by 1.7 p.p., down to 19.7 percent (Chart 2.1.4).

The share of liabilities in foreign currency in the total volume of attracted funds decreased by 8.0 p.p. and amounted to 51.1 percent or KGS 75.4 billion (Chart 2.1.5).

CONTENT

**Chart 2.1.5. Banks' Liabilities in Foreign Currency**
*billions of KGS*

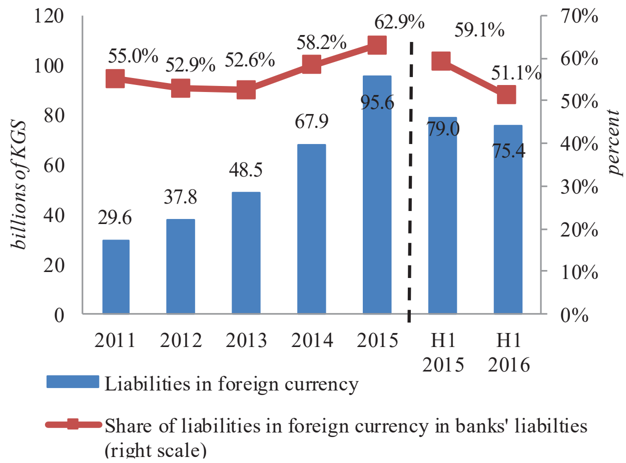
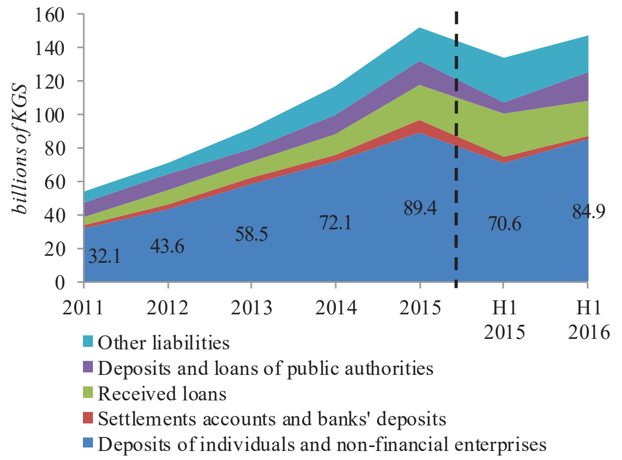



**Chart 2.1.6. Structure of Banks' Liabilities by the Reserve Sources**
*billions of KGS*




Deposits of individuals and non-financial enterprises increased by 20.3 percent at the end of the first half of 2016 and amounted to KGS 84.9 billion (Chart 2.1.6). The share of deposits of individuals and non-financial enterprises in banks' liabilities decreased by 4.7 p.p. and constituted 57.5 percent.

CONTENT

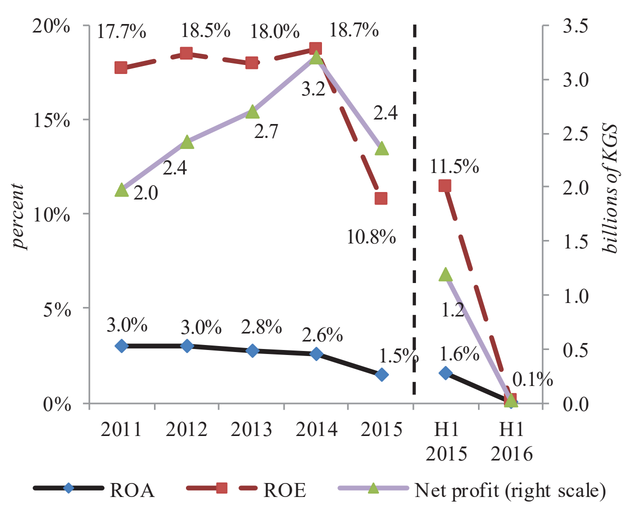
### *Financial Results*[9]

Following the results of the first half of 2016, profitability indicators[10] changed compared to the same period of 2015 (Chart 2.1.7):

– ROA decreased by 1.6 p.p. and constituted 0.0 percent;

– ROE decreased by 11.4 p.p. and constituted 0.1 percent.

**Chart 2.1.7. Indices of the Banking Sector Profitability for the Period**



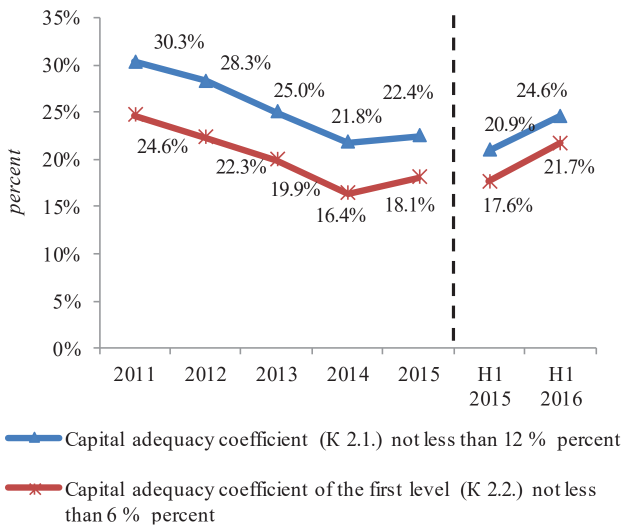

Meanwhile, net profit of the banking sector decreased by KGS 1.2 billion and amounted to KGS 0.0 billion compared to the first half of 2015.

[9] For the purposes of this document, major benefit indicator of banks is return on assets (ROA) determined as a ratio of revenue to average level of assets and return on equity (ROE) determined as a ratio of revenue to average volume of regulative capital of the 1st level.

[10] ROA and ROE indicators are presented are annualized.

### Capital Adequacy

**Chart 2.1.8. Dynamics of Capital Adequacy Ratios**
*percent*



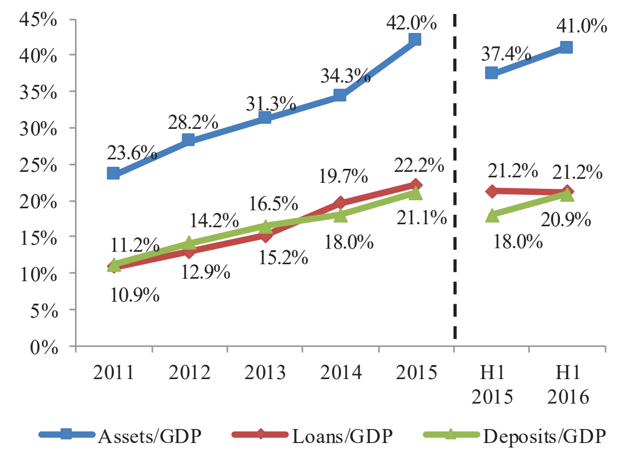

With statutory minimum capital adequacy at 12.0 percent, at the end of the first half of 2016, this figure amounted to 24.6 percent (Chart 2.1.8), having increased by 3.7 p.p compared to the same period of 2015.

Increase of the capital adequacy was due to the growth of total net capital (+19.6 percent) outrunning the growth of assets weighted by risk and off-balance liabilities (+1.8 percent). 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 2016 can further increase the volume of risky and earning assets by 2 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 operation in future.

### Financial Intermediation of the Banking Sector

**Chart 2.1.9. Indicators of Financial Intermediation**




The role of the banking sector as a financial intermediary, accumulating financial resources for their further redistribution among creditworthy borrowers and sectors of the economy, directly depends on the level of development and efficiency of banks operation.

Growth of financial intermediation was still observed at the end of the first half of 2016 (Chart 2.1.9). However, growth rates of major indicators in the banking sector outstrip economic growth indicators. Dynamic growth in the amount of borrowers and depositors was observed in the banking sector of the Kyrgyz Republic.

At the end of the first half of 2016, increase of financial intermediation indicators in the banking sector of the Kyrgyz Republic compared to the same period of 2015 was the following:

– Assets to GDP – from 37.4 percent to 41.0 percent;
– Loans to GDP unchanged – 21.2 percent;
– Deposits to GDP – from 18.0 percent to 20.9 percent.

CONTENT

## 2.2. Banking Sector Risks

### 2.2.1. Credit Risk

A *credit risk* is one of the main risks that accompany banking operation. At the end of the first half of 2016 the total loan portfolio in the banking sector increased comparing to the same period of 2015 (Chart 2.2.1).

The share of non-performing loans in the loan portfolio of banks increased from 5.2 percent to 9.0 percentage points, compared to the first half of 2015 (Chart 2.2.2).

**Chart 2.2.1. Structure of Risk Weighted Assets**
*millions of KGS*

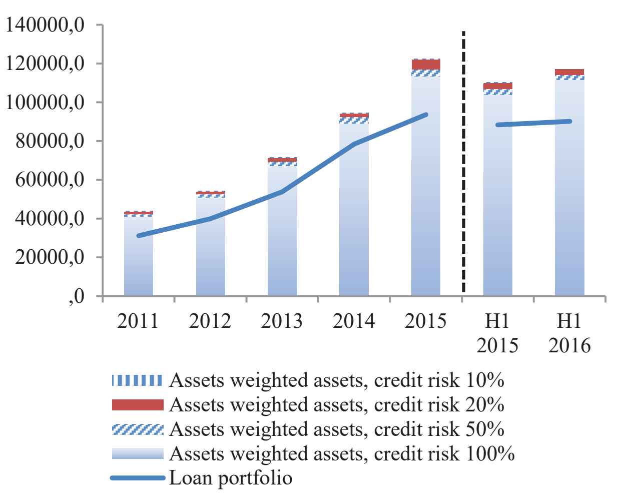
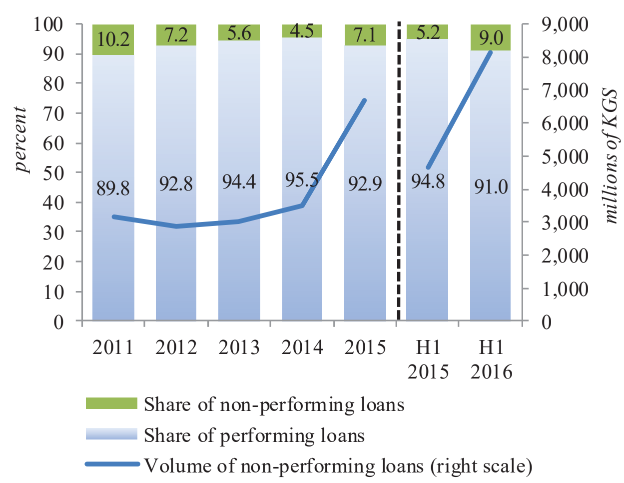



**Chart 2.2.2. Loan Portfolio Quality**



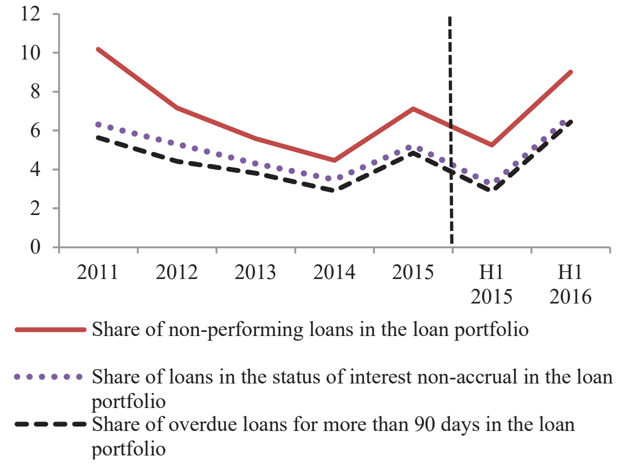

CONTENT

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

At the end of the first half of 2016, the indicator of the risk of default on assets (the ratio of special loss provisions and loan portfolio) constituted 4.9 percent.

[11] 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-operating" or "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,** *percent*




Aggregate reserves created by commercial banks was 7.5 percent of total loan portfolio (as of June 30, 2016, it was 5.1 percent). Meanwhile, as of June 30, 2016, the share of special loan loss provisions was 65.3 percent of total reserves (Chart 2.2.4).

**Chart 2.2.4. Total and Special Reserves**
*millions of KGS*

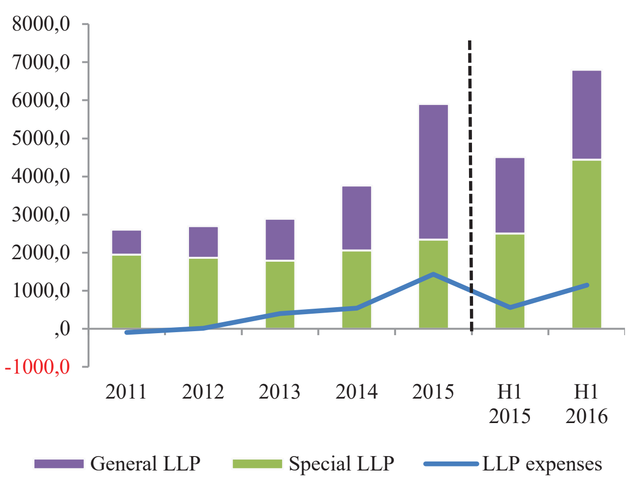
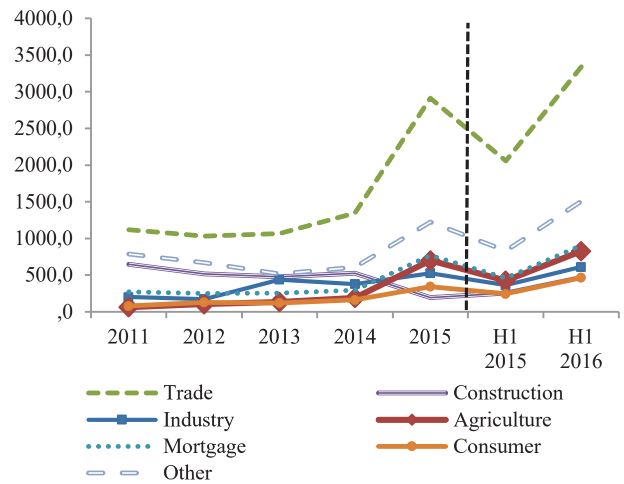



**Chart 2.2.5. Volume of Non-performing Loans by Sectors of Economy**
*millions of KGS*

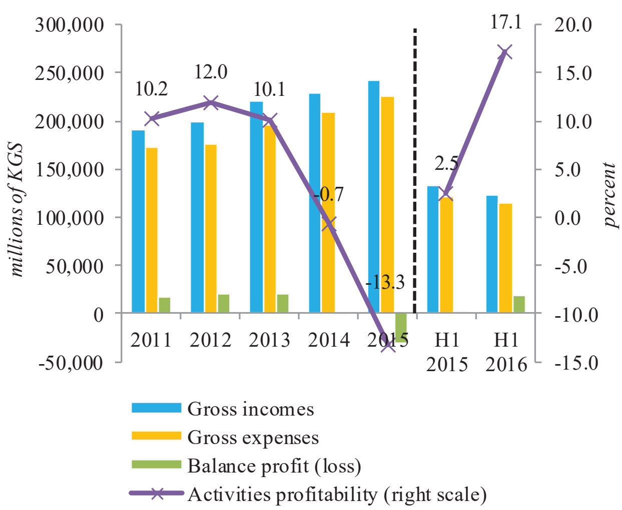



At the end of H1 2016, the highest loan risk concentration rate was observed in trade industry (Chart 2.2.5).

CONTENT

## Financial Status of Medium and Large Enterprises

**Chart 2.2.6. Results of Financial and Economic Activity of Enterprises**




*Source: NSC KR, NBKR calculations*

In the first half of 2016, as compared to the same period of 2015, the balance sheet income and profitability of enterprises was increasing amid the growing corporate debt in the sector as a whole.

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

- gross profit decreased by 7.2 percent and amounted to KGS 123.6 billion;
- gross expenditures increased by 4.7 percent and amounted KGS 115.2 billion;
- balance sheet profit increased by 6.5 percent and formed at the rate of KGS 19.7 billion;
- profitability of enterprises operation increased by 14.6 percentage points, up to 17.1 percent.

In the first half of 2016, the gross debt of enterprises of the corporate sector increased by 30.4 percent compared to the same period of 2015 and amounted to KGS 322.1 billion, or 75.6 percent of GDP.

In the first half of 2016, *the external debt* of the corporate sector increased by 38.1 percent compared to the same period of 2015 and constituted KGS 249.1 billion, or 58.5 percent of GDP (Chart 2.2.7 and 2.2.8).

At the end of the first half of 2016, *the internal debt* of enterprises of the corporate sector increased by 9.0 percent compared to the same period of the last year and amounted to KGS 73.0 billion, or 17.1 percent of GDP.

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

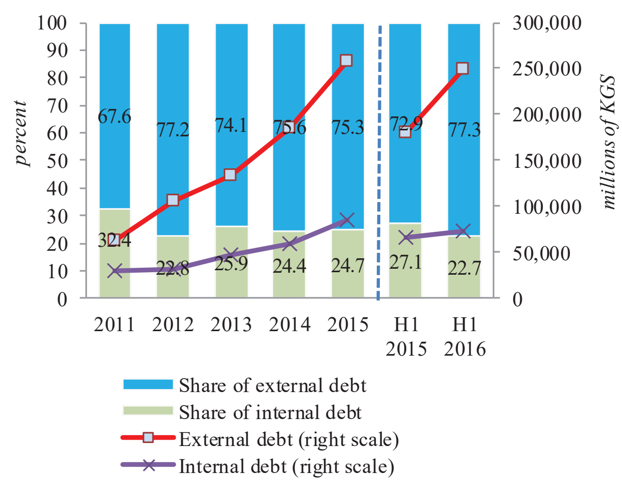
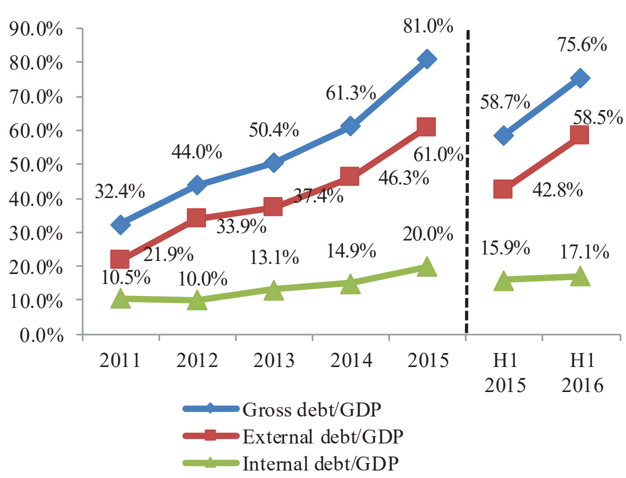



**Chart 2.2.8. Indicators of Debt Sustainability in the Corporate Sector**




*Source: NSC KR, NBKR calculations*

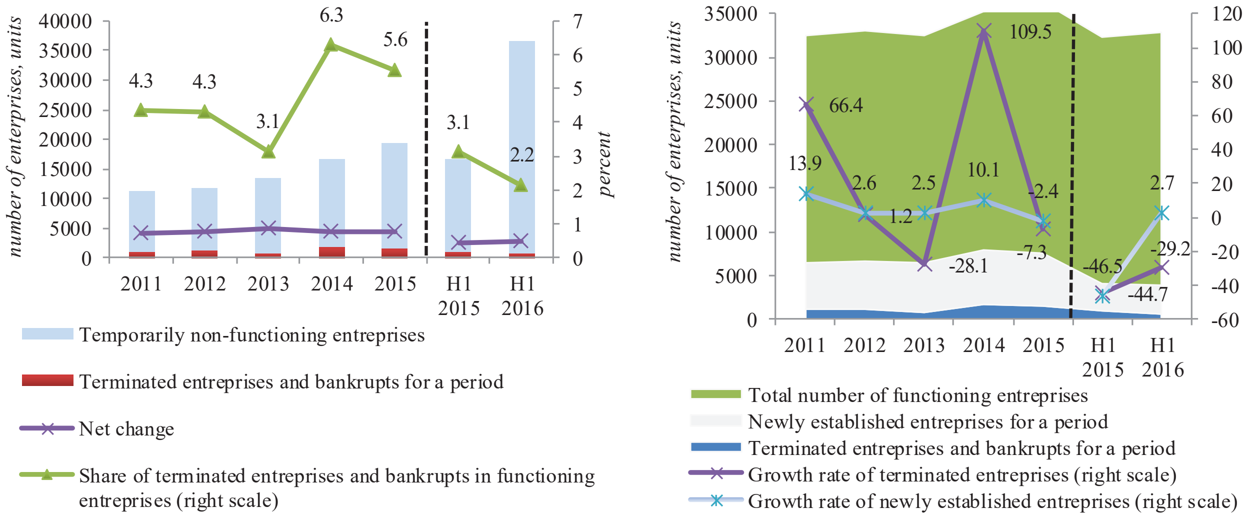


CONTENT

### *Business Activity of the Corporate Sector*

In the reported period, a slight slowdown of the business activity was observed in the corporate sector. In particular, there was an increase in the number of temporarily inactive (idle) enterprises (by 2.3 times compared to the first half of 2015); also, there was an increase in the number of newly created enterprises (by 2.7 percent compared to the first half of 2015).

**Chart 2.2.9. Business Activity of the Corporate Sector**



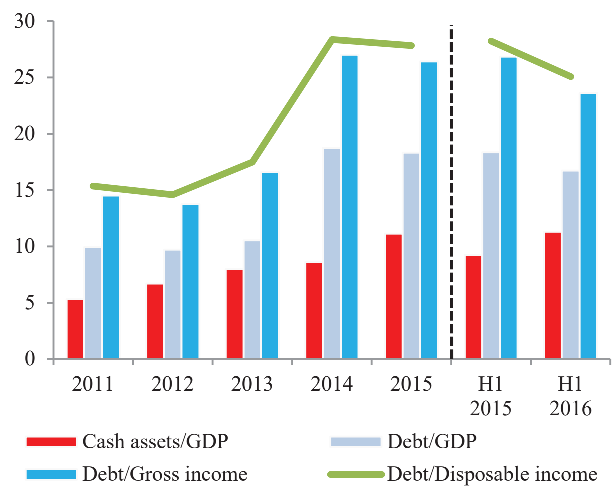

*Source: NSC KR, NBKR calculations*

### *Financial Status of Households*[12]

In the reporting period, the financial sustainability performance of households slightly improved because the population income growth outran the growth of their debts to the financial sector.

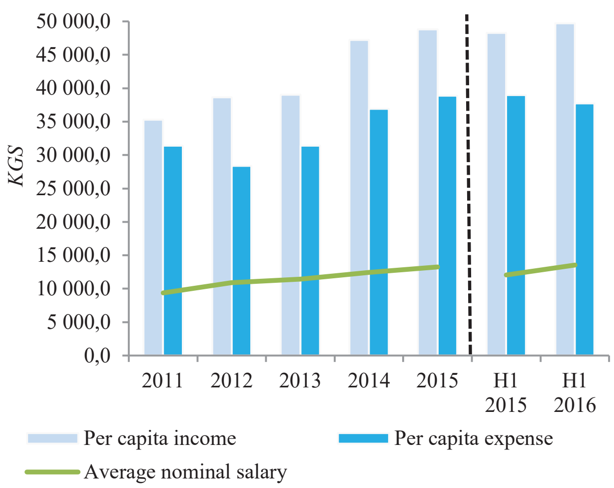
Decrease of debt sustainability indicators at the end of the reporting period was due to decreased number of loans issued to the population by the banks and NBFIs (Chart 2.2.10). As of June 30, 2016, the households' debt ratio to GDP decreased from 18.4 percent to 16.7 percent compared to the same period of 2015.

**Chart 2.2.10. Financial Sustainability Indicators**




*Sources: NSC KR, NBKR calculations*

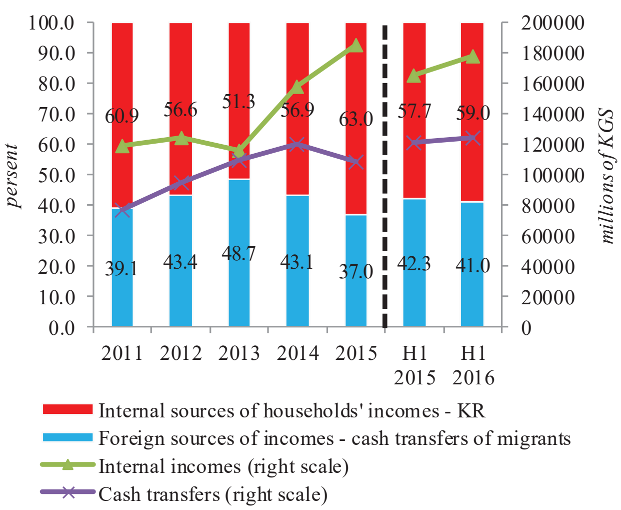
**Chart 2.2.11. Factors of Financial Balance**




*Source: NSC KR*

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

**Chart 2.2.12. Structure of Households' Income by Sources**




*Sources: NSC KR and NBKR*

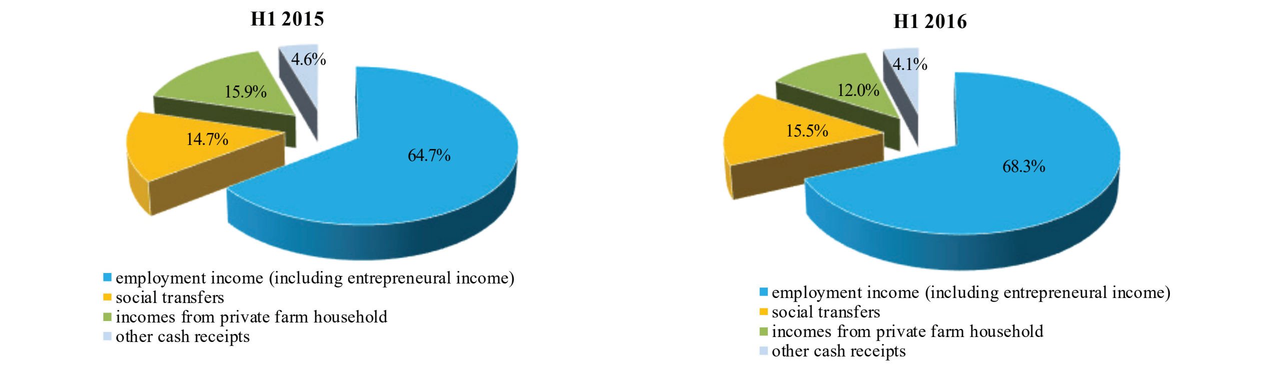
At the end of the first half of 2016, the share of remittances decreased by 1.3 percentage points, to 41.0 percent of the population gross incomes (Chart 2.2.12). Meanwhile, remittances of migrant workers were still a significant source of household income.

At the end of the first half of 2016, in the structure of households' income, the major share was accounted for labor income, which constituted 68.3 percent of the population gross incomes. (Chart 2.2.13).

In the structure of household expenditures, the main share fell on consumption (Chart 2.2.14), which restricted the growth of savings and expenditures for investment purposes.

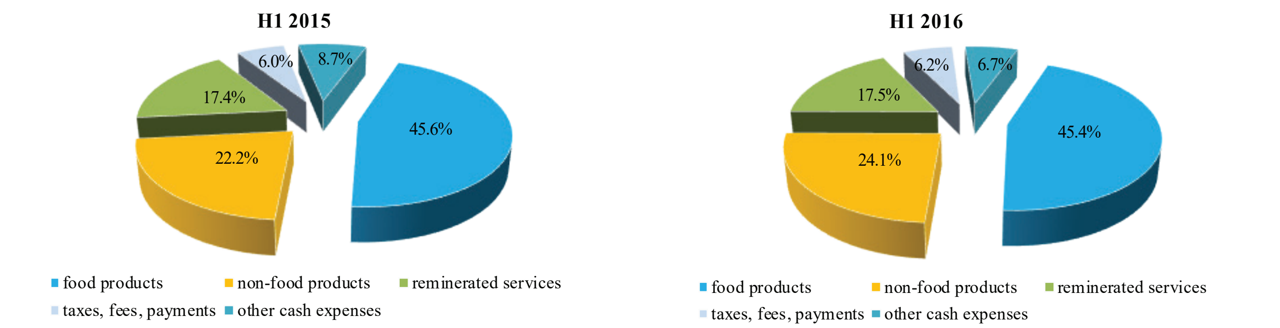
A significant share of consumer spending, that constituted 87.1 percent of total expenditure in the first half of 2016, may affect the ability of households to meet their obligations in case of revenue reduction.

**Chart 2.2.13. Structure of Households' Income**




*Source: NSC KR*

**Chart 2.2.14. Structure of Households' Expenditures**




*Source: NSC KR*

## Box 3. Results of the Survey of Clients of Commercial Banks on Loan Services

At the end of the first half of 2016, a significant portion of loans (59.7 percent of total loan value of borrowers) given to borrowers was still concentrated in the manufacturing sector of economy[13], thereby reflecting the banking sector's contribution to the creation of the country's GDP; less than 1/5 of issued loans (18.1 percent) were channeled to financing of imports.

**Chart 2.2.15. Sectoral Structure of Loans as of June 30, 2016**

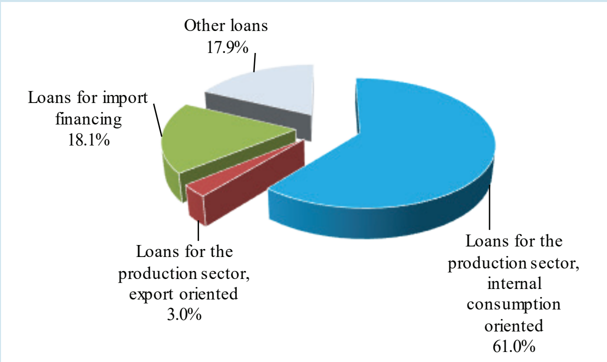
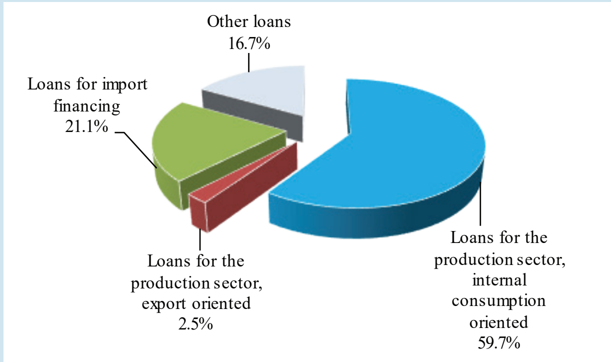
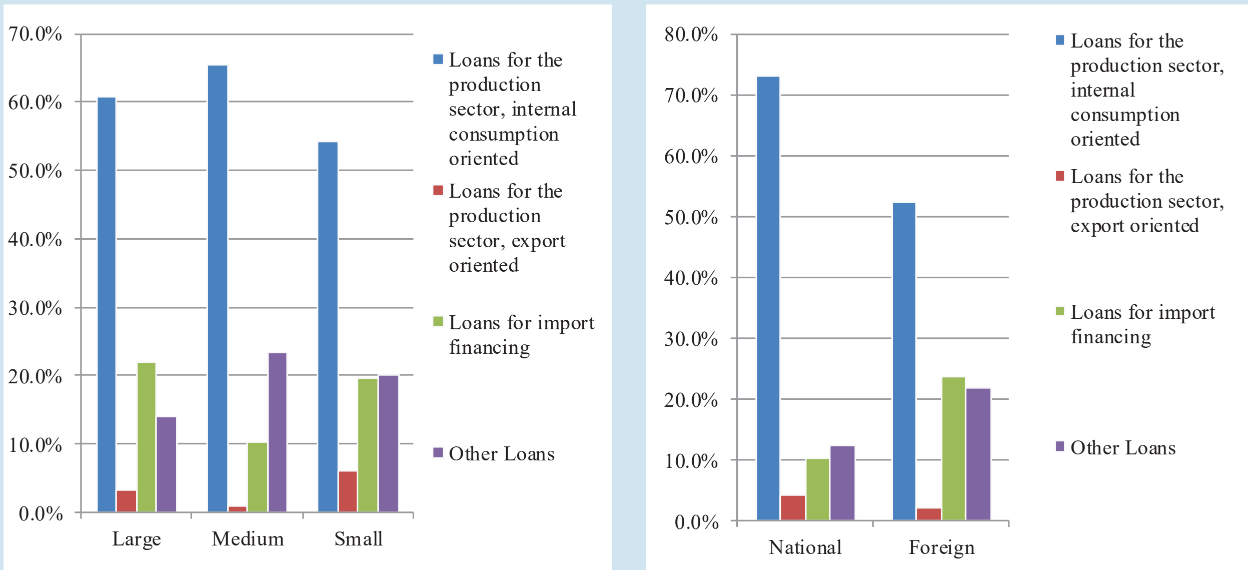



**Chart 2.2.16. Sectoral Structure of Loans as of June 30, 2015**




Domestic banks channeled 73.1 percent of the loan portfolio to the manufacturing sector (GDP) and 10.3 percent – to finance imports. Generally, foreign banks also provided loans to the manufacturing sector of economy (52.4 percent). During the period under review, the share of loans channeled to finance imports constituted 23.5 percent of the loan portfolio (Chart 2.2.17).

**Chart 2.2.17. Sectoral Structure of Loans by Groups of Banks and Forms of Ownership as of June 30, 2016**




*Source: data received from commercial banks' survey*

CONTENT

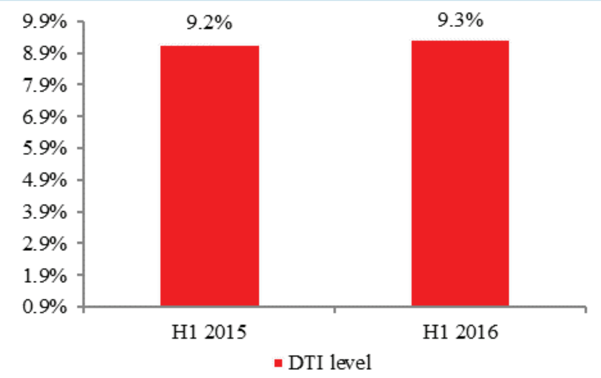
[13] The production sector means the activity of the bank clients connected with the production of goods and services (construction, communication and automobile repair shop services, transport services, real estate leasing, hotels, restaurants, etc.).

**Box 4. Results of DTI and LTV Survey of Commercial Bank Clients**

*Financial Solvency of Borrowers*

At the end of the first half of 2016, the level of debt burden of 15 large bank clients calculated using a DTI indicator reached 9.3 percent.

**Chart 2.2.18. Level of DTI on 15 large banks' borrowers**




By groups of banks, the maximal debt burden was observed among the largest borrowers of small banks (9.9 percent of borrowers' primary income) (Table 2.2.1). At the same time, the lowest level of debt burden was recorded among the largest borrowers of ***medium banks.***

**Table 2.2.1. Debt burden of banks' clients* at the end of the first half of 2016**

| | Banking sector | Large banks | Medium banks | Small banks |
|---|---|---|---|---|
| *Loans' balance, in millions of KGS* | 20,984.2 | 11,888.9 | 3,978.2 | 5,117.1 |
| Relative share of credits of 15 largest borrowers in total volume of loan portfolio in banking sector, in % | 23.3% | 25.3% | 14.6% | 32.0% |
| Expenses proportion for accounts payable maintenance by credits to the total income of borrowers, in % | 9.3% | 9.6% | 6.7% | 9.9% |

*Source: Data of commercial banks, NBKR calculations*

** data by 15 largest borrowers of each commercial bank*

The level of the debt burden in the national banks was higher than that in the foreign banks (Table 2.2.2).

**Table 2.2.2. Debt burden in the national and foreign banks at the end of the first half of 2016**

| | National banks | Foreign banks |
|---|---|---|
| Loans' balance, in millions of KGS | 11,447.2 | 9,537.0 |
| Relative share of credits of 15 largest borrowers in total volume of loan portfolio in banking sector, in % | 24.3% | 22.2% |
| Expenses proportion for accounts payable maintenance by credits to the total income of borrowers, in % | 10.2% | 8.4% |

*Source: Data of commercial banks, NBKR calculations*

** data by 15 largest borrowers of each commercial bank*

*Borrowers' Loan Security*

At the end of the first half of 2016, an actual LTV level in the banking sector reached 47.8 percent. The current level of collateralization suggests relatively high level of loan security (Chart 2.2.19).



CONTENT

**Chart 2.2.19. LTV level by all borrowers of the banking sector**

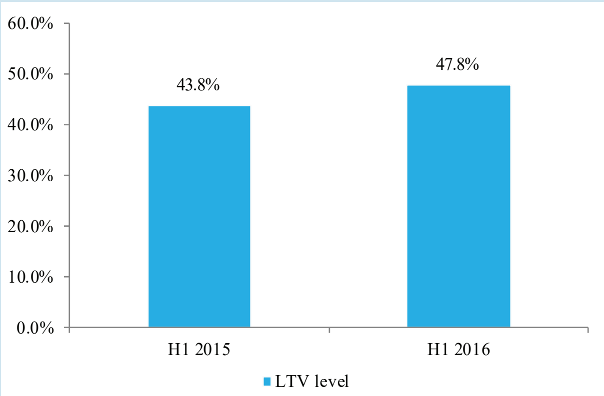
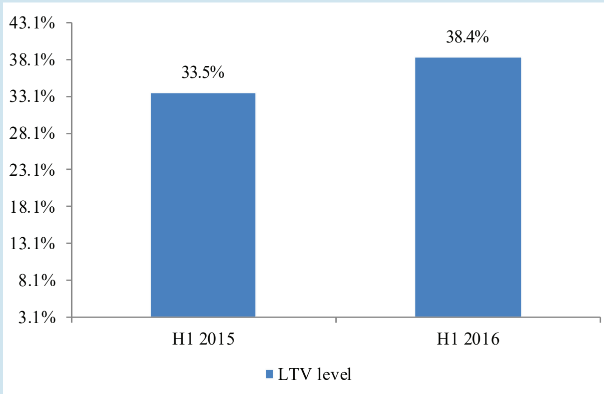



**Chart 2.2.20. LTV level by 15 largest borrowers of the banking sector**




Meanwhile, LTV value of small banks is higher than that of large and medium banks and in the banking sector in general (Charter 2.2.21).

**Chart 2.2.21. LTV level by all borrowers divided up in groups of banks in H1 2016**

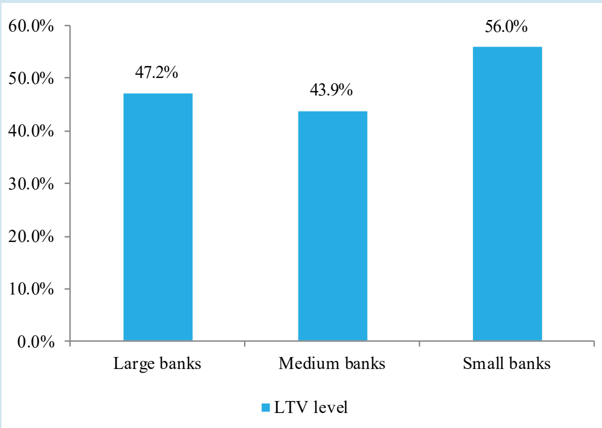
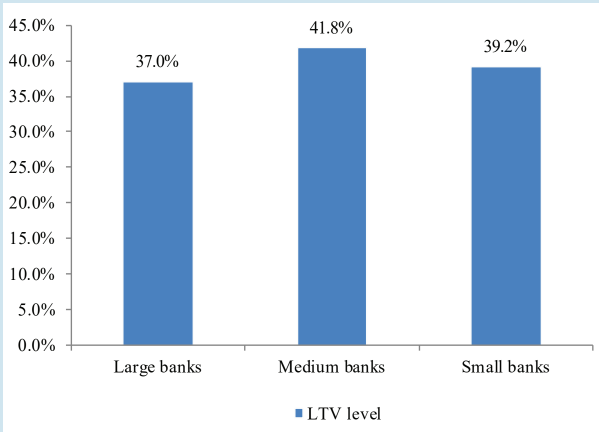



**Chart 2.2.22. LTV level by 15 largest borrowers divided up in groups of banks in H1 2016**




The indicator contrary to LTV was calculated in order to determine to what extent the market value of collateral covers the volume of loans issued, that is the ratio of collateral to the volume of loans issued (Chart 2.2.23).

CONTENT

**Chart 2.2.23. Ratio of collateral to the volume of loan portfolio by all borrowers divided up in groups of banks in H1 2016**

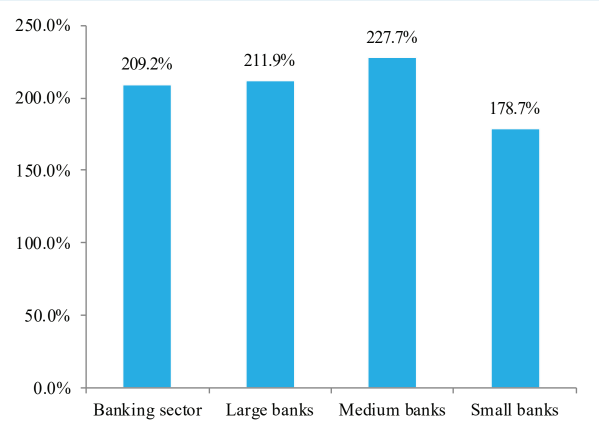
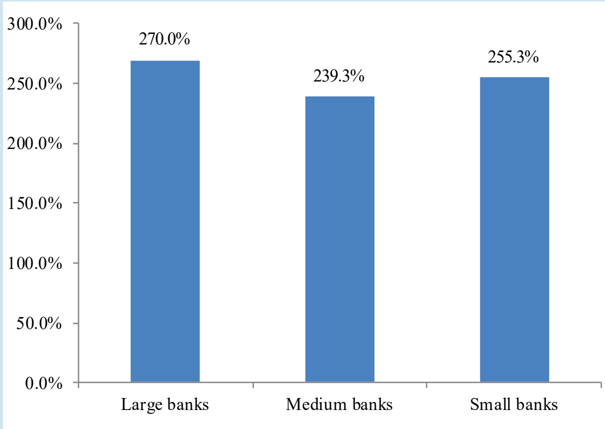



**Chart 2.2.24. Ratio of collateral to the volume of loan portfolio by 15 largest borrowers divided up in groups of banks in H1 2016**




At the end of the first half of 2016, specific gravity of collateral in terms of real estate in the structure of common collateral of banks constituted 85.8 percent (Chart 2.2.25).

**Chart 2.2.25. Structure of collateral of the banking sector as of June 30, 2016**

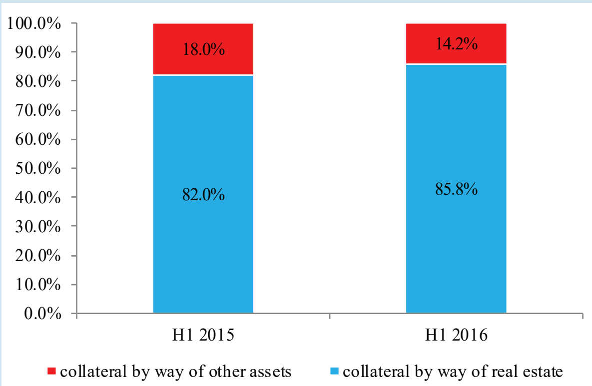
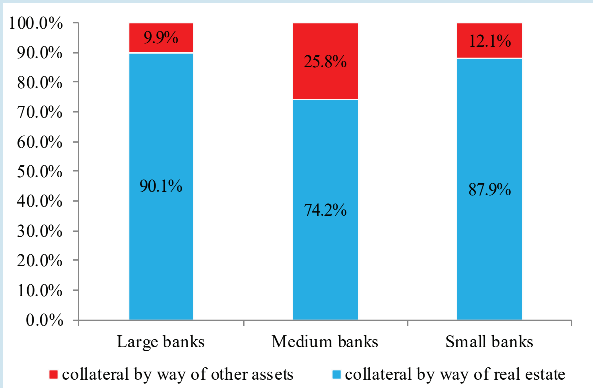



**Chart 2.2.26. Structure of collateral of the banking sector divided up in groups of banks as of June 30, 2016**






CONTENT

### *2.2.2. Liquidity Risk*

Public confidence in the banking sector depends on timely fulfilment of obligations by banks, which suggests availability of sufficient liquidity in the banks. For regulatory purposes, liquidity risk is assessed using economic current liquidity ratio[14].

At the end of the first half of 2016, current liquidity ratio increased from 64.5 percent (at the end of the first half of 2015) to 79.9 percent (Chart 2.2.27).

**Chart 2.2.27. Liquidity Indicators in the Banking Sector**

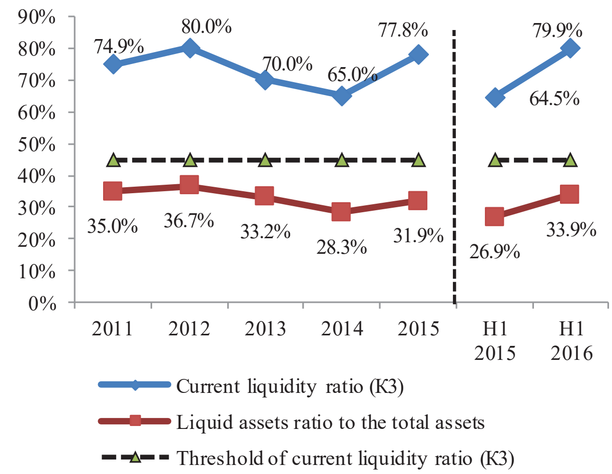
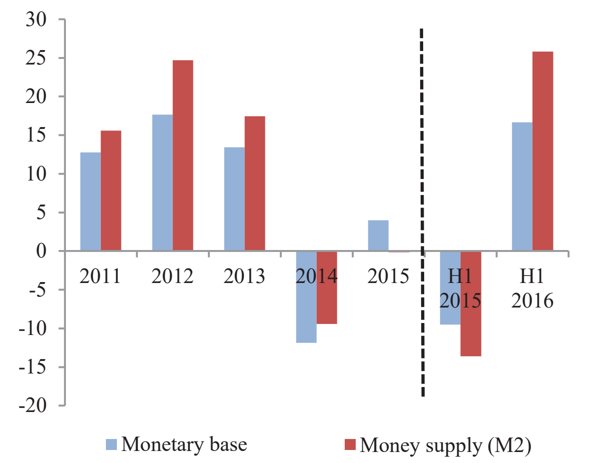



**Chart 2.2.28. Growth Rates of Money Supply (M2) and Monetary Base,** *percent*




Increase in liquidity ratio of banking sector was caused by excess of growth rate of liquid assets over growth rate of total assets.

In the breakdown of groups of banks, all banks faced an increase of liquidity as of June 30, 2016 (Scheme 2.2.1). As of June 30, 2016, the current liquidity ratio of one bank was under 47 percent.

**Scheme 2.2.1. Current Liquidity Ratio (K3) by Groups of Banks**

| | 1st half of 2015 | | 1st half of 2016 |
|---|---|---|---|
| **Large banks** | 66.8 % | ⇒ | 75.1 % |
| **Medium banks** | 57.7 % | ⇒ | 87.9 % |
| **Small banks** | 81.0 % | ⇒ | 90.2 % |

At the end of the reporting period, banks' short-term financial liabilities of up to 1 year maturity outstripped growth rates of short-term financial assets. Finally, this dynamics contributed to the increase of negative gap between financial assets and liabilities of banks with a maturity period of up to 1 year.

[14] *Economic current liquidity ratio* is one of the mandatory standards for the bank established by 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.

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The most significant gaps by maturity were still observed in the "demand" category (Table 2.2.3), therefore the banks kept a substantial amount of low-income high quality liquid assets in the structure of assets.

**Table 2.2.3. Cumulative Gap[15] by Maturity of Financial Assets and Liabilities,** *as of June 30, 2016, millions of KGS*

| Total | demand | up to 1 month | up to 3 months | up to 1 year | up to 3 years | Grand total |
|---|---|---|---|---|---|---|
| Total financial assets | 43,941 | 66,244 | 78,616 | 107,634 | 179,453 | 179,453 |
| Total financial liabilities | 60,784 | 69,437 | 79,424 | 113,979 | 143,091 | 143,091 |
| Gap (gap interval) | -16,842 | -3,193 | -808 | -6,346 | 36,362 | 36,362 |
| Gap in % from assets | -9.4% | -1.8% | -0.5% | -3.5% | 20.3% | 20.3% |
| Gap in % from net total capital | -59.0% | -11.2% | -2.8% | -22.2% | 127.5% | 127.5% |

| in foreign currency | demand | up to 1 month | up to 3 months | up to 1 year | up to 3 years | Grand total |
|---|---|---|---|---|---|---|
| Total financial assets | 23,833 | 34,382 | 40,307 | 50,393 | 83,314 | 83,314 |
| Total financial liabilities | 32,183 | 36,733 | 40,936 | 57,991 | 73,975 | 73,975 |
| Gap (gap interval) | -8,351 | -2,351 | -629 | -7,597 | 9,340 | 9,340 |
| Gap in % from assets in foreign currency | -10.0% | -2.8% | -0.8% | -9.1% | 11.2% | 11.2% |
| Gap in % from net total capital | -29.3% | -8.2% | -2.2% | -26.6% | 32.7% | 32.7% |

| in national currency | demand | up to 1 month | up to 3 months | up to 1 year | up to 3 years | Grand total |
|---|---|---|---|---|---|---|
| Total financial assets | 20,108 | 31,863 | 38,310 | 57,240 | 96,138 | 96,138 |
| Total financial liabilities | 28,600 | 32,704 | 38,488 | 55,989 | 69,116 | 69,116 |
| Gap (gap interval) | -8,492 | -842 | -178 | 1,252 | 27,022 | 27,022 |
| Gap in % from assets in national currency | -8.8% | -0.9% | -0.2% | 1.3% | 28.1% | 28.1% |
| Gap in % from net total capital | -29.8% | -3.0% | -0.6% | 4.4% | 94.7% | 94.7% |

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**Table 2.2.4. Maturity of Financial Assets and Liabilities,** *as of June 30, 2016, millions of KGS*

| Name | Maturity | | | | | Grand total |
|---|---|---|---|---|---|---|
| | up to 1 total month | 1- 3 months | 3-6 months | 6-12 months | more than 12 months | |
| Total financial assets | 66,244 | 12,372 | 10,886 | 18,132 | 71,819 | 179,453 |
| including credits and financial lease to the clients | 4,340 | 5,090 | 7,655 | 14,594 | 58,447 | 90,127 |
| Total financial liabilities | 69,437 | 9,986 | 17,770 | 16,785 | 29,111 | 143,091 |
| including deposits of individuals and fixed deposits of legal entities | 25,378 | 4,427 | 8,287 | 9,658 | 10,978 | 58,728 |
| Gap | -3,193 | 2,386 | -6,885 | 1,347 | 42,708 | 36,362 |
| including gaps by credits and deposits | -21,039 | 663 | -631 | 4,937 | 47,470 | 31,399 |

[15] *Cumulative gap* is the amount of possible expenses for support of solvency, estimated for each range of maturity.

**Box 5. Assessment of "Irreducible" (Stable) Level of Demand Deposits During the Period of 2010–H1 2016[16] ("Irreducible" Balance of Deposits)**

The purpose of determining the "irreducible" level of demand deposits is to reveal volumes of banks' demand deposits, which are permanently at banks' disposal ("irreducible" balance[17]) and are used in assessment of so-called "excess liquidity".

Chart 2.2.29 shows that during the first half of 2016, demand deposits of commercial banks[18] had certain volatility. At the end of the reporting period, the volume of demand deposits increased by KGS 8.3 billion compared to the same period of the last year and amounted to KGS 48.0 billion. "Irreducible" balance of demand deposits increased as well. At the end of the first half of 2016 it amounted to KGS 44.0 billion or 91.7 percent of the total volume of demand deposits (Chart 2.2.29).

**Chart 2.2.29. Volume of "Irreducible" Balances of Demand Deposits**
*billions of KGS*

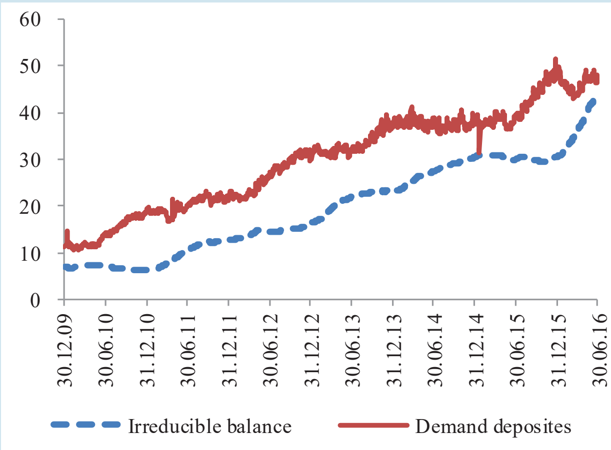
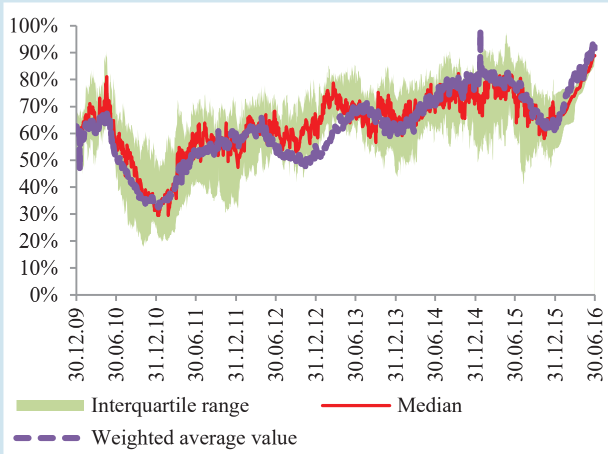



**Chart 2.2.30. Share of "Irreducible" Balances in Demand Deposits**




"Unstable" share of demand deposits constituted 8.3 percent, respectively.

In view of the banks, the interquartile range of minimum "stable" level of demand deposits at the end of the first half of 2016 constituted 70.8-96.3 percent of the total volume of demand deposits (Chart 2.2.30).

At the end of the first half of 2016, there was a growth in the volume of banks assets; finally it resulted in increased value of a positive cumulative gap between the financial assets and liabilities by maturities up to one month and up to one year (Chart 2.2.2). Thus, taking into account "irreducible" balance, financial assets exceeded financial liabilities of banks. A parallel dynamics was observed broken down by the currencies.

As a result, the positive cumulative gap adjusted for "irreducible" balances of demand deposit as of June 30, 2016 constituted 21.7 percent of banking sector assets (by maturity on demand), 29.3 percent of banking sector assets (by maturity of up to 1 month) and 27.5 percent of banking sector assets (by maturity of up to one year).

In case of maintaining the previous dynamics, the marginal growth of medium- and long-term loans for account of short-term liabilities, whereby a cumulative gap[19] may preserve positive value, constitutes KGS 40.8 billion.

[16] Conducted calculations did not include demand deposits and settlement accounts of troubled banks, as well as relatively new banks possessing restricted historical data series for analysis.

[17] Volumes of "irreducible" balances of commercial banks are calculated on the basis of demand deposit daily balances since 2010 as the difference between arithmetical average and 2.33 of standard deviations. Credibility level of 99 percent was chosen in the calculations.

[18] Including settlement (current) accounts.

[19] Inclusive of "irreducible" balances of demand deposits.

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**Scheme 2.2.2. Cumulative Gap by Maturities (Exclusive and Inclusive of "Irreducible" Balances of Demand Deposits)**
*percent of the total assets*

### *2.2.3. Concentration Risk*

Generally, as of June 30, 2016, the concentration risk stayed at about the same level compared to the first half of 2015.

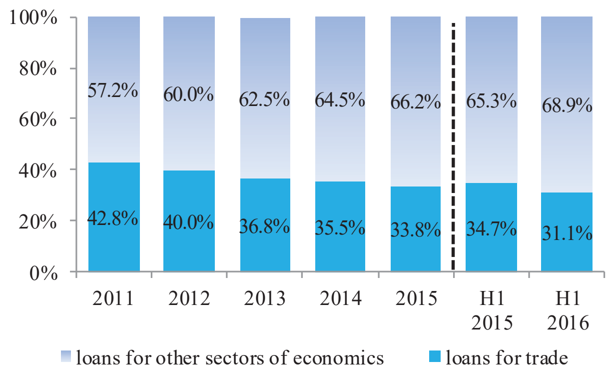
#### *Concentration of the Largest Sources of Financing*

As a result of reverse stress testing, some banks could not get through a shock related to outflow of one to five largest sources of financing[20] (liquidity ratio goes below 45 percent threshold).

#### *Loan Concentration*

Potential default of one to five largest borrowers[21] in separate banks may decrease regulatory capital below economic standard of the National Bank of the Kyrgyz Republic.

**Chart 2.2.31. Sectoral Concentration of the Loan Portfolio**

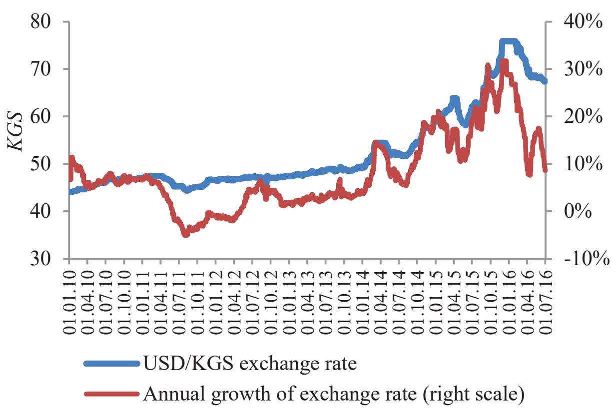



Insignificant decrease of the level of trade loans concentration was observed in the sectoral structure of loan portfolio amid increase of lending to the agricultural sector. Based on the results of the first half of 2016, the share of loans for trade decreased from 34.7 percent to 31.1 percent (Chart 2.2.31).

### *2.2.4. Currency Risk*

At the end of the first half of 2015, *direct currency risk* was at a moderate level.

**Chart 2.2.32. Dynamics of USD/KGS Nominal Exchange Rate**




Generally, banks held open currency positions of assets and liabilities within the limits of economic standards of the National Bank.

The risk of currency position overestimation in the banking sector is minimum (VaR: 0.1 – 0.9 percent of the net total capital, Chart 2.2.33).

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

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

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**Chart 2.2.33. Dynamics of Open Currency Position (OCP) and Revaluation Risk (VaR),** *in percent of NTC*

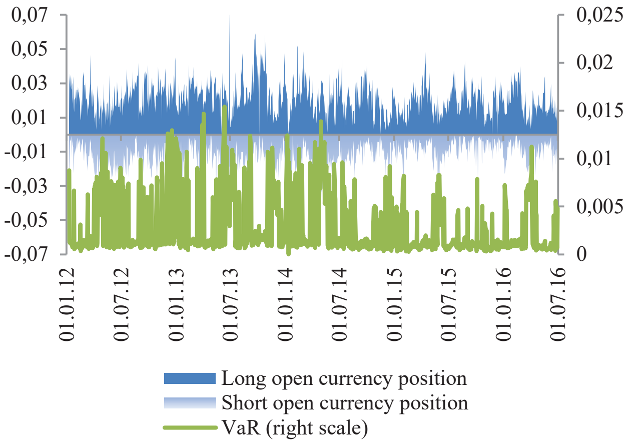
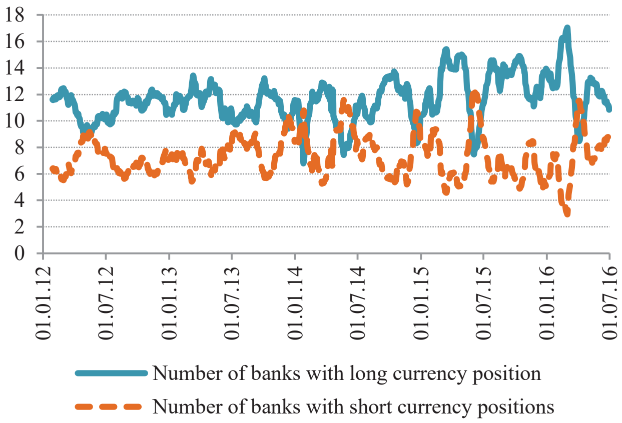



**Chart 2.2.34. Currency Position of the Banks,** *units*




## Box 6. Credit Risk Through Indirect Currency Risk

As of June 30, 2016, 27.5 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 2.2.35). 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 currency risk impact on the credit risk is shown in Chart 2.2.36 displaying proportions of non-performing loans broken down by groups of loans:

- Group 1 – 13.5 percent, basic incomes of the borrower are generated in the national currency, and loans are repaid in foreign currency;
- Group 2 – 8.0 percent, basic incomes and loans payable by the borrower in the same currency.

**Chart 2.2.35. Loan Portfolio by Groups of Loans***

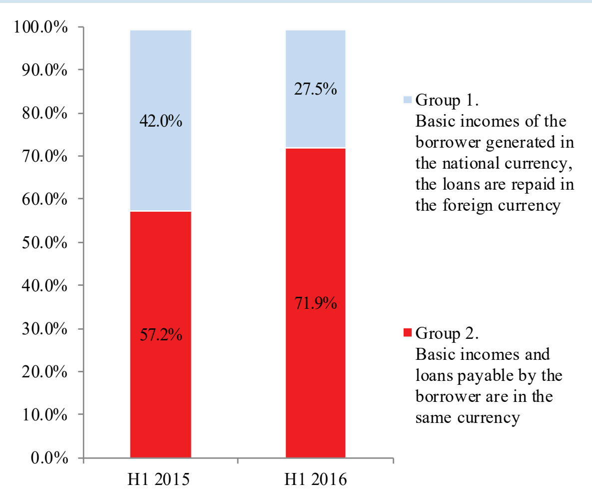
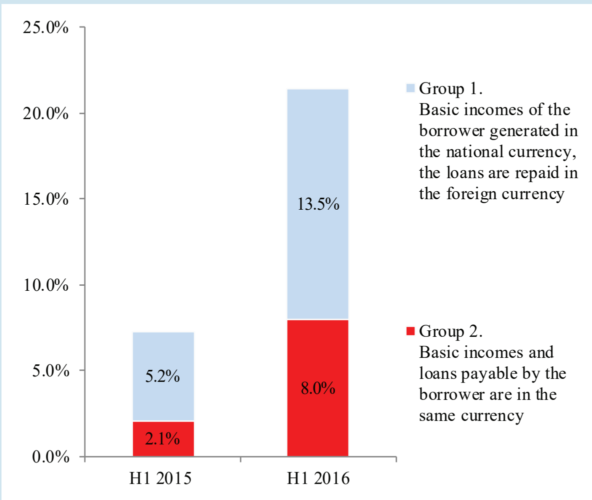



**Chart 2.2.36. Share of Non-performing Loans by Groups of Loans***




* Source: Beginning from 2016, records were reckoned based on Section 37 of Periodic Regulating Bank Report, records before 2016 were reckoned based on questionnaires.

*Note:* Group 3 *"Basic income of a borrower are generated in foreign currency, loans are repaid in the national currency"* is not included in the chart as the share of this group in the loan portfolio is insignificant (0.6 percent of the total loan portfolio as of June 30, 2016).

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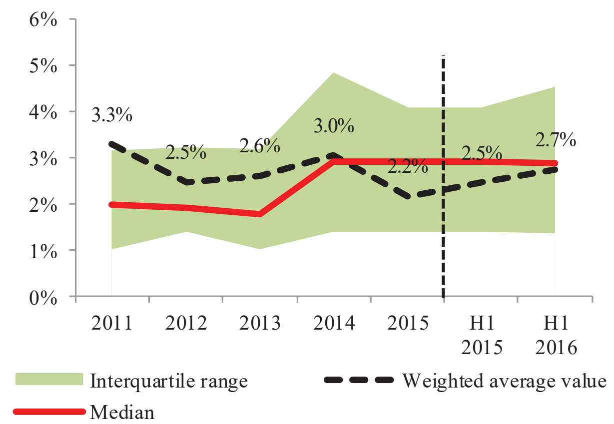
### *2.2.5. Interest Rate Risk*

At the end of the first half of 2016, the interest rate risk increased insignificantly.

**Chart 2.2.37. Dynamics of Interest Rate Risk (VaR)**
*in percent of NTC*




Slight increase in the interest rate risk (VaR) from 2.5 percent to 2.7 percent of net total capital was resulted from increase of gaps by maturities between financial assets and liabilities vulnerable to interest rates dynamics.

Average value of interest rate risk during the period of 2011 – H1 2016 was within accessible limits (2 - 4 percent of net total capital).

**Chart 2.2.38. Dynamics of Average Weighted Interest Rate of Individuals' Time Deposits,**
*in percent*

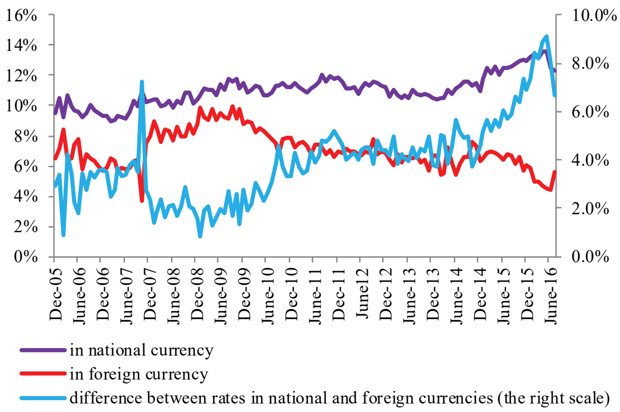
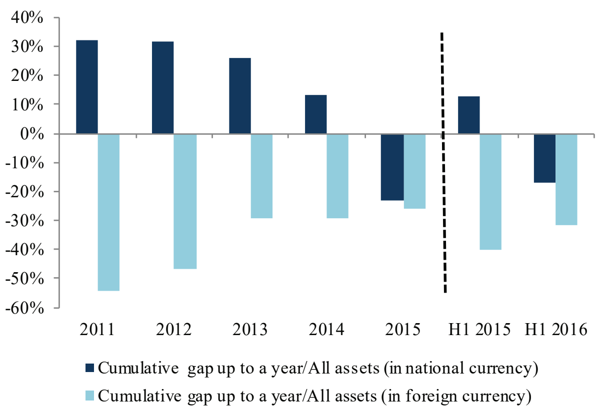



**Chart 2.2.39. Cumulative Gap of Assets and Liabilities Exposed to Interest Rate Risk**

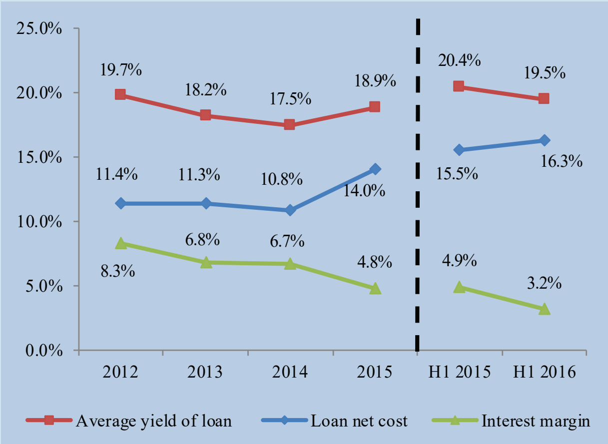



CONTENT

**Box 7. Prime cost and average yield of loan of the banking sector in the Kyrgyz Republic**

A trend of reduction of average yield of loans was observed during the reporting period. An average yield of loans of commercial banks reduced by 0.9 p.p. and constituted 19.5 percent. The prime cost of loans of commercial banks in the Kyrgyz Republic constituted 16.3 percent, having increased by 0.8 p.p. as compared to H1 2015 (Chart 2.2.40).

**Chart 2.2.40. Prime cost[22] and average yield of loan[23]**

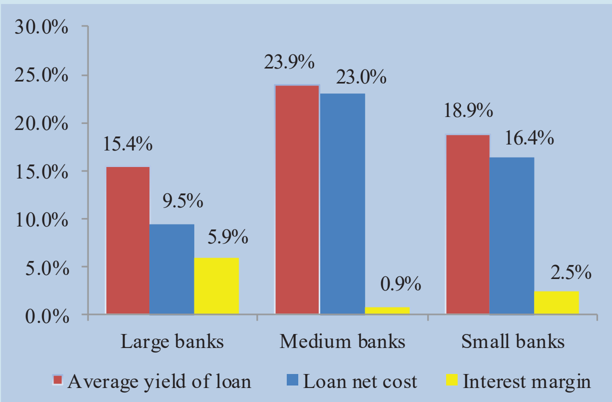



*Source: NBKR, NBKR calculations*

Analysis of prime cost and average yield broken down by groups of bank shows that at the end of the first half of 2016 large banks operated more effectively. An interest margin of this group at the end of the reporting period constituted 5.9 percent. High efficiency of operation of large banks is explained by low prime cost of credit resources in the aggregate with returns of the scale (Chart 2.2.41).

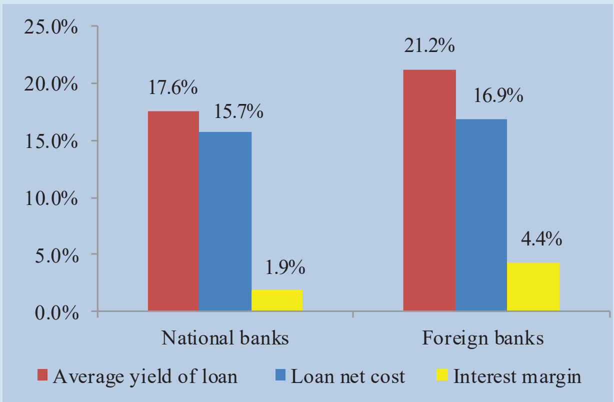
Bank analysis broken down by countries shows that foreign banks are more effective than national banks. Average yield of loans of foreign countries reached 21.2 percent, which is 3.6 p.p. higher than that of the national banks (Chart 2.2.42).

**Chart 2.2.41. Prime cost and average yield of loan divided up by bank sizes**




*Source: NBKR, NBKR calculations*

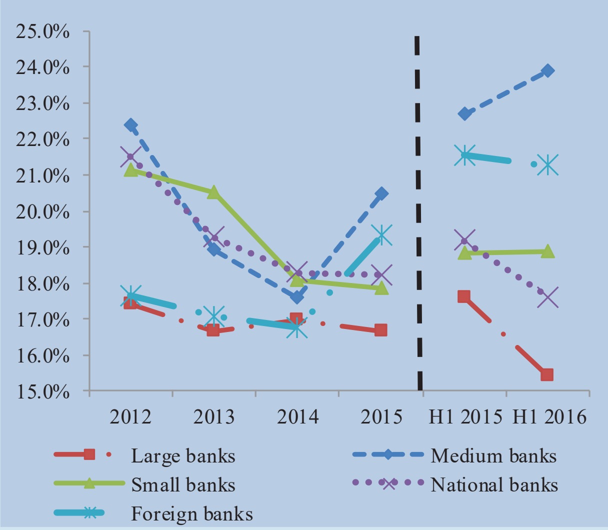
**Chart 2.2.42. Prime cost and average yield of loan of national and foreign banks**




*Source: NBKR, NBKR calculations*

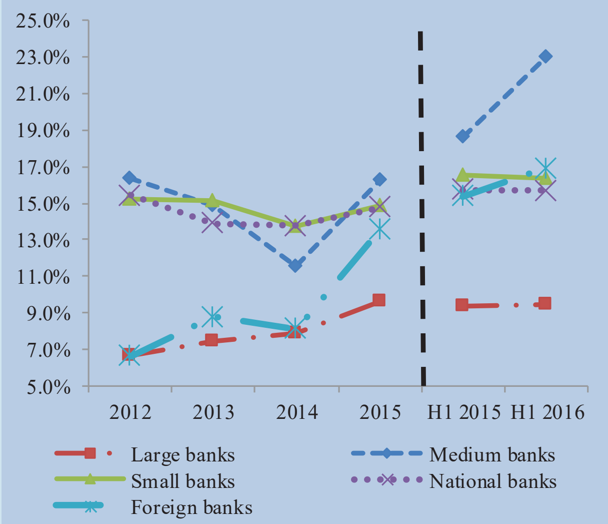
[22] Prime cost of loan = (Gross Expenditures – Non Credit Incomes) / Average Annual Loan Portfolio.
[23] Average yield of loan = Interest Income to Loans / Average Annual Loan Portfolio.

**Chart 2.2.43. Average yield of loan broken down by groups of banks**




*Source: NBKR, NBKR calculations*

**Chart 2.2.43. Average yield of loan broken down by groups of banks**




*Source: NBKR, NBKR calculations*

At the end of the first half of 2016 large and national banks showed the most reduction of average yield of loans (reduction of yield by 2.2 p.p. and 1.6 p.p., respectively) as compared to the first half of 2015. Yield of medium banks increased by 1.2 p.p., and of small and foreign banks was not virtually changed as compared to the same period of the last year (Chart 2.2.43).

Analysis of commercial banks' loan prime cost dynamics shows significant increase of prime cost of loans of medium banks (increased by 4.3 p.p.), and of foreign banks (increased by 1.5 p.p.) as well. Prime cost of the rest groups of banks was not virtually changed. (Chart 2.2.44).

**Table 2.2.5. Average yield of loan and weighted average interest rate as of the end of the period**

| | 2012 | 2013 | 2014 | 2015 | H1 2015 | H1 2016 |
|---|---|---|---|---|---|---|
| Average yield of loan | 19.7% | 18.2% | 17.5% | 18.9% | 20.4%* | 19.5% |
| Weighted average interest rate on loans as of the end of the period | 19.9% | 18.4% | 17.6% | 18.9% | 18.7% | 19.5 % |

** Significant excess of average yield over the weighted average interest rate in this period is caused by transformation of MCC "Finca" CJSC into "FINCA Bank" CJSC on March 3, 2015.*

On the basis of the review, an obvious interrelation between the weighted average interest rate on loan portfolio of commercial banks and average yield on loans was observed.

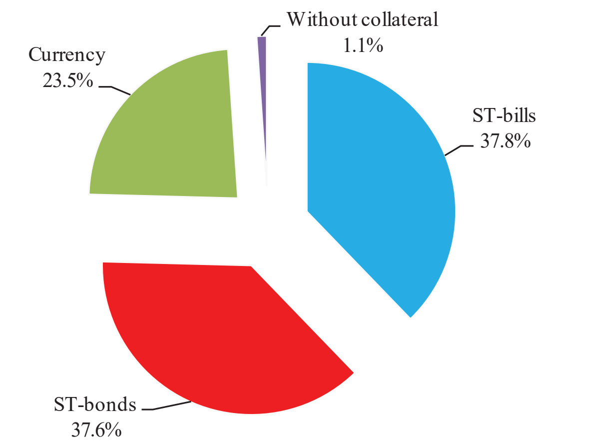
CONTENT

### 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 2016, the volume of transactions on interbank market concluded between resident banks amounted to KGS 4.6 billion, having reduced by 81.0 percent as compared to the same period of 2015.

**Chart 2.2.45. Distribution of Interbank Loan Transactions Made in H1 2016 between Resident Banks, Depending on Collateral**
*in percent*




The loans in the interbank market are covered by collateral in the form of highly liquid government securities or foreign exchange (Chart 2.2.45) in the banking sector of Kyrgyzstan. By our estimates, banks of Kyrgyzstan do not practically issue interbank credits without collateral.

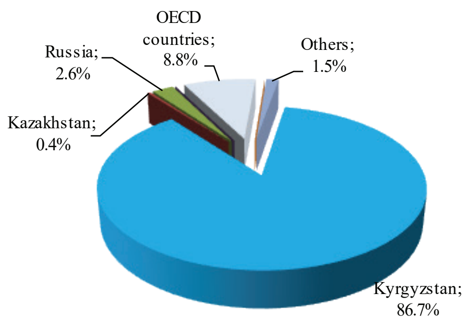
In general, the possibility of the "contagion" risk on the interbank credit market of Kyrgyzstan is minimal, which caused by highly liquid collateral and insignificant value of transactions.

### 2.2.7. Country Risk[24]

The banking sector of the Kyrgyz Republic, as of June 30, 2016, remained relatively isolated and poorly integrated in the global financial markets.

**Foreign assets (external assets)**. In general, the volume of disposed assets of non-residents amounted to KGS 24.0 billion, or 13.3 percent of total banking sector assets. The highest concentration of dispositions was observed in the OECD countries – 8.8 percent (KGS 15.8 billion) of total banking sector assets of the Kyrgyz Republic (KGS 180.2 billion).

**Chart 2.2.46. Geographic structure of assets as of June 30, 2016**




The main share of assets placed abroad was focused on correspondent or deposit accounts and constituted KGS 23.0 billion, or 95.8 percent of total disposed assets of non-residents.

73.8 percent of total assets disposed abroad accounted for six banks.

At the end of the first half of 2016, banks' liabilities to non-residents of the Kyrgyz Republic totaled KGS 28.3 billion, or 19.8 percent of the total liabilities of the banking sector. The main share of these resources was drawn from non-resident banks in the form of loans and deposits, which amounted to KGS 24.6 billion, or 86.8 percent of the total liabilities to non-residents.

[24] Data is given subject to relevant Loan Loss Provision and depreciation charges.



CONTENT

**Chart 2.2.47. Geographic Structure of Liabilities as of June 30, 2016**

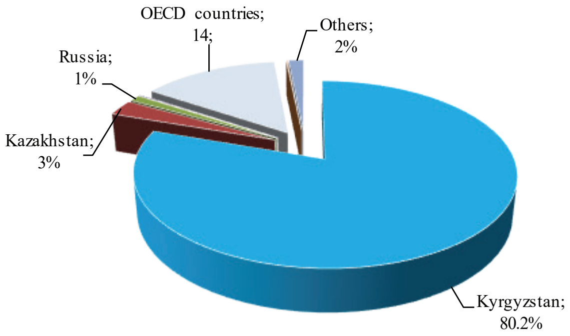
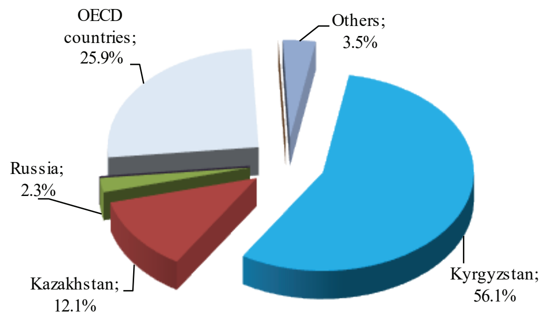



**Chart 2.2.48. Authorized Capital by Countries as of June 30, 2016**




At the end of the first half of 2016, foreign capital amounted to KGS 8.3 billion, or 43.9 percent of the total authorized capital of the banking sector.

## 2.3. Reverse Stress Testing of the Banking Sector

### *2.3.1. "Reverse" Stress Testing of Credit Risk*[25]

"Reverse" stress testing was used for calculation of maximum acceptable share of "unclassified"[26] credits in a loan portfolio, which can decrease CAR to the threshold level of 12 percent when passing to the category of "unclassified".

This method allows detecting a buffer stock of capital (net total capital) of banks that can cover additional allocations to LLP, due to transformation of "unclassified" loans into the category of "classified" loans[27].

In addition, this method allows determining maximum growth of enlargement of classified loans, in which adequacy of capital (K2.1) will decrease to the threshold level of 12 percent.

According to the results of "reverse" stress testing of the banking sector, as of June 30, 2016, maximum acceptable share of "unclassified" loans in the banking sector, when passing to the category of "classified" ones, amounted to 43.9 percent on an average (Chart 2.3.1.)

Thus, the banking sector has a potential to sustain a significant decline in the loan portfolio quality the defrayal of which will require a creation of additional LLP of up to 50 percent of net total capital on an average (Chart 2.3.2).

CONTENT

**Chart 2.3.1. Maximum possible share of "performing" loans[28] passing to the category of "classified" loans[29],** *in percent from non-performing loans*

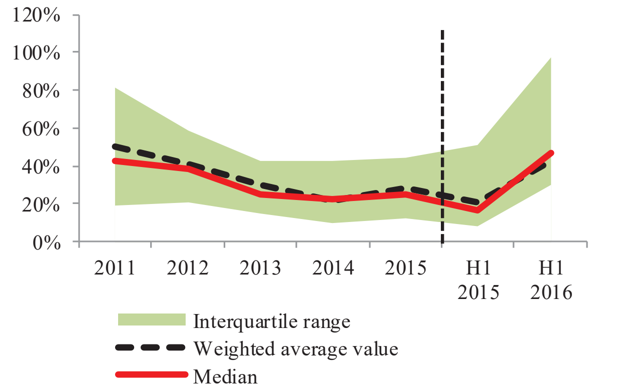
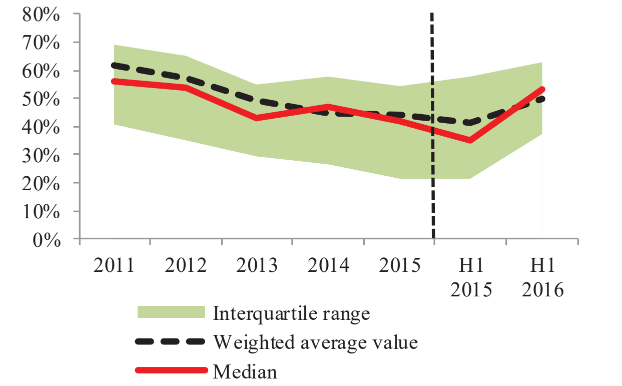


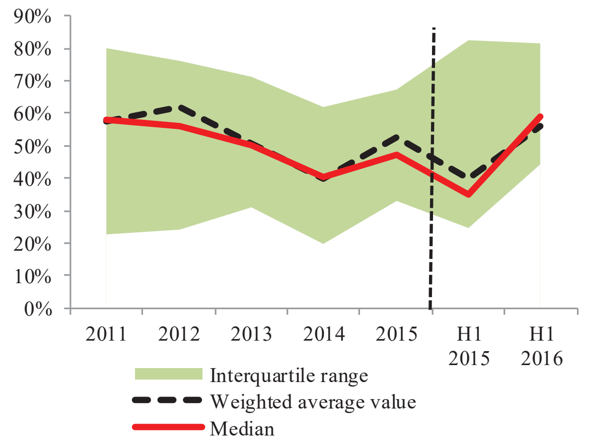

**Chart 2.3.2. Additional LLP under creation of which CAR will decrease to 12 percent,** *in percent from net loan sum*




[25] Exclusive of troubled banks.
[26] Exclusive of the category "normal" that are non-risky.
[27] Meanwhile, transformation of "working" credits into "classified" occurs uniformly on the three categories ("substandard", "doubtful" and "losses").
[28] Exclusive of "normal" loan category.
[29] In which CAR decreases to 12 percent.

### *2.3.2. “Reverse” Stress Testing of Liquidity Risk*

**Chart 2.3.3. Deposit outflow value, in which K3 decreased to 45 percent,** *in percent from total deposit value of customers*




The reserve of liquid assets capable to cover mass outflow of deposits of the population and non-financial enterprises has been determined to estimate liquidity of the banking sector without violating the National bank’s economic standard on current liquidity:

**Shock** is a maximum deposit outflow value of individuals and non-financial enterprises that can decrease the liquidity standard to the threshold level of 45 percent.

Results of “reverse” stress testing demonstrate (Chart 2.3.3) that as of June 30, 2016, the actual liquid asset value of the banking sector was able to cover a 58.3 percent outflow of total deposits of the population and non-financial enterprises on an average (Tab. 2.3.1).

### *2.3.3. “Reverse” Stress Testing of Market Risk*

In general, results of “reverse” stress testing suggested that, as of June 30, 2016, the banking sector had insignificant sensitivity to the direct interest 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).

Results of the “reverse” stress testing indicate that the banking sector has insignificant sensitivity to the direct interest rate risk. Decrease of the average level of interest rates on loans by 15.1 p.p. can reduce the capital adequacy to 12 percent (Tab. 2.3.1).

In general, according to the results of the “reverse” stress testing, the banking sector has a 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 the zero level.

The results of stress testing indicate that commercial banks endure the influence of direct currency rate (Tab. 2.3.1).

CONTENT

**Table 2.3.1. Total results of “reverse” stress testing as of June 30, 2016**

<table>
<tr><td colspan="2"></td><td>Banking sector</td></tr>
<tr><td colspan="3">Credit risk</td></tr>
<tr><td>Scenario1</td><td>Share of unclassified loans transferring to the «non-performing» category, in percent</td><td>43.9</td></tr>
<tr><td colspan="3">Interest rate risk</td></tr>
<tr><td>Scenario 1</td><td>Decrease of interest rate on loans, when CAR de-clines to 12%, in percentage points</td><td>15.1</td></tr>
<tr><td colspan="3">Currency risk</td></tr>
<tr><td>Scenario 1</td><td>Growth rate of USD/ KGS (±) exchange rate when CAR declines to 12%, in percent</td><td rowspan="2">Commercial banks overcome the effect of the direct currency risk (change of currency rate for more than 100 percent)</td></tr>
<tr><td>Scenario 2</td><td>Growth rate of USD/ KGS (±) exchange rate when net profit declines to zero level, in percent</td></tr>
<tr><td colspan="3">Liquidity risk</td></tr>
<tr><td>Scenario 1</td><td>Outflow of clients’ deposit share of the total deposites, when current liquidity ratio declines to 45%, in percent</td><td>58.3</td></tr>
</table>

# III. NON-BANKING FINANCIAL INSTITUTIONS

***In general, the situation in the system of non-banking financial institutions (NBFI) is assessed as rather stable. Major indicators, including assets, loan portfolio and resource base, are reducing. The results of stress testing indicate that the credit risk of the NBFI system is moderate.***

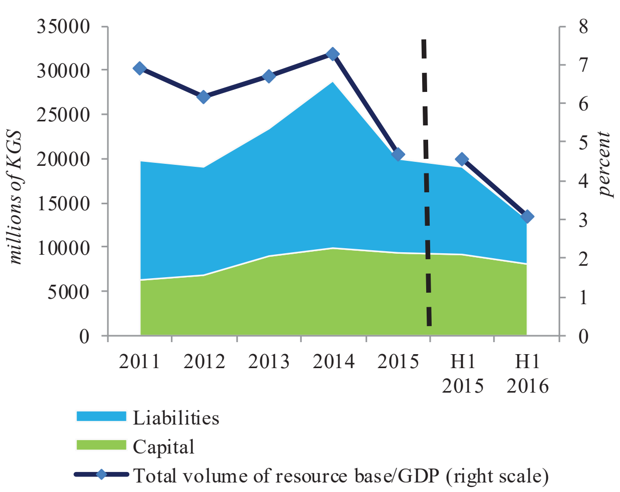
***The weighted average interest rates on loans of microfinance organizations and credit unions increased compared to the same period of 2015 (MFI – by 0.1 p.p. compared to the first half of 2015, CU – by 1.1 p.p.).***

## 3.1. Main Trends

As of June 30, 2016 the system of non-banking financial institutions subjected to licensing and regulation by the National bank in the Kyrgyz Republic included a specialized financial institution "FCCU" OJSC; 119 credit unions; 168 microfinance organizations (including 6 microfinance organizations, 106 microcredit companies and 56 microcredit agencies) and 345 exchange offices.

### *Resources*

**Chart 3.1.1. Dynamics of obligations and capital of NBFI**




*Source: NBKR*
*Note: since H1 2015 data specified exclusive of "Finca" MCC CJSC, since H1 2016 – exclusive of "Companion" MFC CJSC*

According to the results of H1 2016, the obligations of NBFI have decreased by 49.2 percent compared to the same period of 2015 and amounted to KGS 5,001.9 million. NBFI capital for 6 months decreased by 11.2 percent and amounted to KGS 8,157.3 million (Chart 3.1.1.)

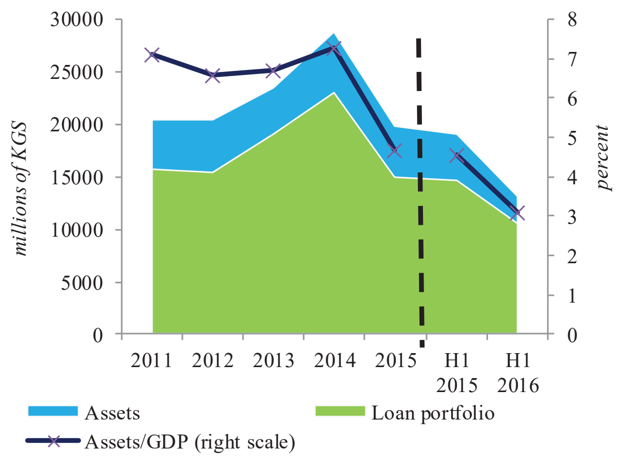
The resource base reduction was mainly conditioned by the withdrawal of "Finca" MCC CJSC from the NBFIs membership and reorganization thereof into "FINCA Bank" CJSC.

Main volume of the resource base of NBFIs accounts for the loans of financial and credit institutions of the Kyrgyz Republic (as of June 30, 2016, the ratio was 61.6 percent).

CONTENT

### Assets

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




*Source: NBKR*
*Note: since 1st half of 2015 data specified exclusive of "Finca" MCC CJSC, since 1st half of 2016 – exclusive of "Companion" MFC CJSC*

According to periodic regulatory reporting, the total assets of NBFIs over the six months of 2016 have decreased by 30.8 percent and amounted to KGS 3,159.3 million[30]. This decrease was due to reduction in the loan portfolio of NBFIs (Chart 3.1.2). Decrease of cumulative assets and loan portfolio is also due to the transformation of "MFC Financial Group Companion" CJSC to "Companion Bank" CJSC.

Lending remains the main area of NBFIs activities. As of June 30, 2016, the loan portfolio decreased by 28.3 percent and amounted to KGS 10,543.4 million (Tab. 3.1.1.)

As of June 30, 2016, the number of borrowers decreased by 30.2 percent in comparison with the same period of 2015, having amounted to 226,361 persons.

**Table 3.1.1. Structure of Assets in NBFIs**

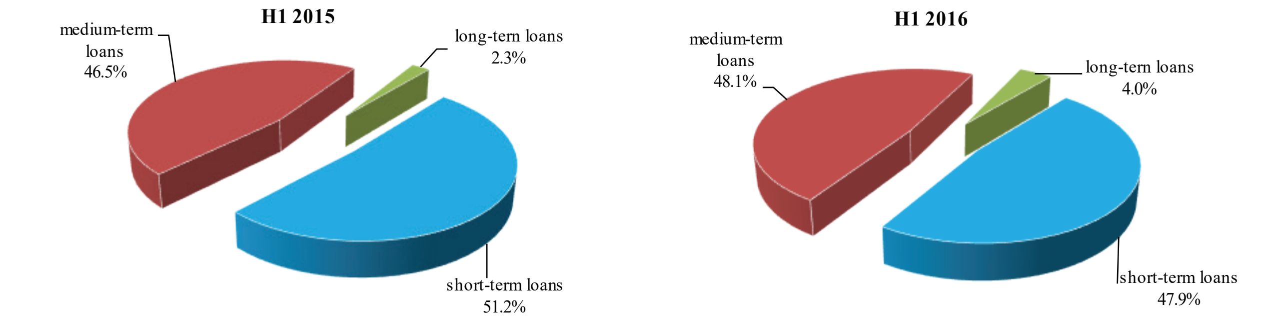
| | 30.06.2015 | | 30.06.2016 | |
|---|---|---|---|---|
| | *millions of KGS* | *share, %* | *millions of KGS* | *share, %* |
| Financial assets, including: | 17,388.7 | 91.4 | 11,659.9 | 88.6 |
| *net loans and borrowings** | *14,182.4* | *74.5* | *9,988.8* | *75.9* |
| *correspondent accounts in commercial banks* | *1,629.0* | *8.6* | *912.2* | *6.9* |
| *deposits in commercial banks* | *1,061.3* | *5.6* | *581.4* | *4.4* |
| *other financial assets* | *515.9* | *2.7* | *177.5* | *1.3* |
| Non-financial assets, including: | 1,637.2 | 8.6 | 1,499.4 | 11.4 |
| *fixed assets* | *620.1* | *3.3* | *275.7* | *2.1* |
| *other non-financial assets* | *1,017.2* | *5.3* | *1,223.7* | *9.3* |
| Total assets | 19,026.0 | 100.0 | 13,159.3 | 100.0 |

*Source: NBKR*
** exclusive of LLP*

There have been slight changes in the structure of the maturity of loans provided to NBFIs over the reporting period. As of June 30, 2016, an increase in the share of short-term credit resources and the decline in the share of long-term and medium-term loans were observed (Chart 3.1.3).

[30] Exclusive of "FCCU" OJSC.

**Chart 3.1.3. The Structure of NBFIs Loan Portfolio by Maturity**

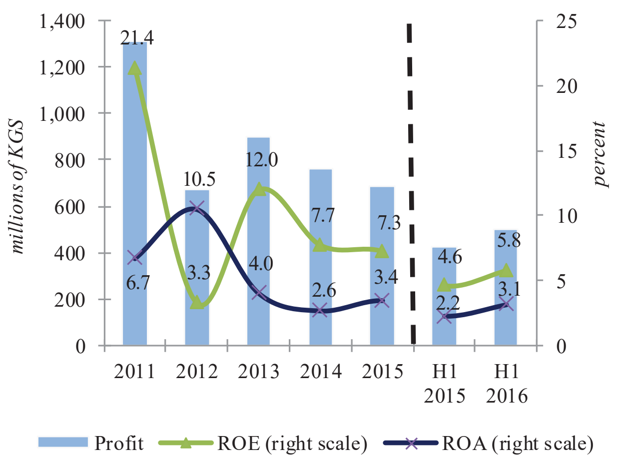



*Source: NBKR*
*Note: Data for the period*

The main regions, where the major share of loan portfolio of NBFIs is concentrated (78.7 percent of total loan portfolio), are Bishkek city, Chuy, Osh and Dzhalal-Abad oblasts, where the business activity is traditionally the highest.

### *Revenue Position*[31]

**Chart 3.1.4. Dynamics of NBFIs Revenue Position***




*Source: NBKR*
** exclusive of FCCU*

According to the results of six months of 2016, net profit of NBFIs increased by 18.0 percent in comparison with the same period of the last year and amounted to KGS 501.9 million. ROA at the end of the reporting period increased by 0.9 p.p. and amounted to 3.1 percent, ROE increased by 1.2 p.p. and amounted to 5.8 percent (Chart 3.1.4.).

CONTENT

[31] ROA and ROE indicators are provided in annual terms.

## 3.2. Risks of Non-Bank Financial Institutions

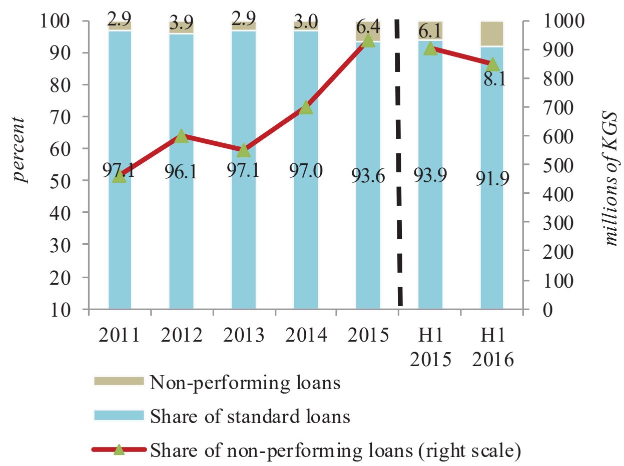
Major risk factors of the NBFIs activities are the quality of the loan portfolio, industrial and institutional concentration, as well as the status of the external debt of NBFIs sector.

### *Quality of NBFIs Loan Portfolio*

As of June 30, 2016, the share of classified loans in a loan portfolio of NBFIs constituted 8.1 percent, meanwhile, their nominal volume increased by KGS 5.6 million, or 5.7 percent, in comparison with the first half of 2015 (Chart 3.2.1).

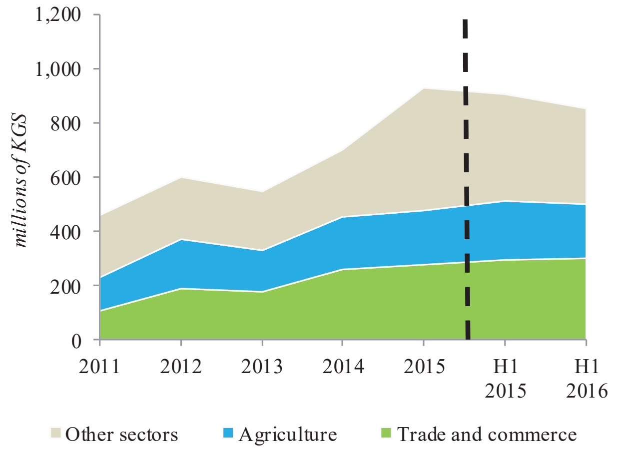
At the end of the reporting period, a significant increase in the share of default loans for trade and commerce sector was registered in the structure of NBFIs non-performing loans (by 2.8 p.p. in comparison with the same period of 2015). In total volume of NBFIs classified loans, their share amounted to 35.5 percent (Chart 3.2.2).

**Chart 3.2.1. Quality of NBFIs Loan Portfolio**




*Source: NBKR*
*Note: since H1 2015 data specified exclusive of "Finca" MCC CJSC, since H1 2016 – exclusive of "Companion" MFC CJSC*

**Chart 3.2.2. The Structure of NBFIs Non-performing Loans by Economic Sectors**




*Source: NBKR*
*Note: since H1 2015 data specified exclusive of "Finca" MCC CJSC , since H1 2016 – exclusive of "Companion" MFC CJSC*

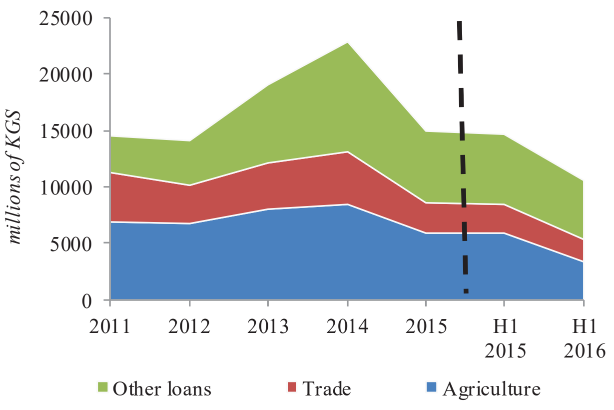
### *Sectoral Concentration*

NBFI loan portfolio is concentrated in agriculture (31.8 percent of NBFIs total loans), trade and consumer loans (18.4 and 17.6 percent of total value of NBFIs loans, respectively, Chart 3.2.3). Lending to agriculture is associated with a high risk because of its dependence on climate conditions.

### *Institutional Concentration*

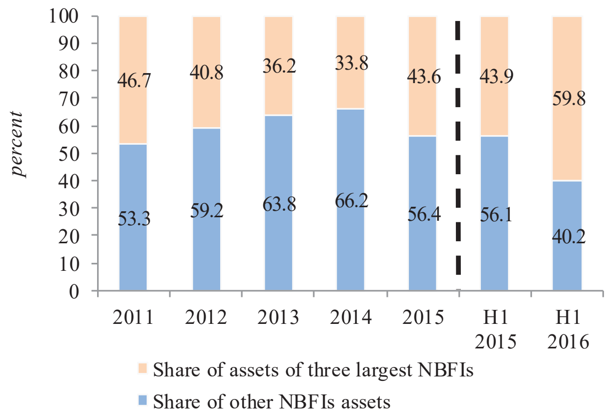
As of June 30, 2016, the assets share of the three largest NBFIs decreased by 15.9 p.p. compared to the same period of 2015 and amounted to 40.2 percent of total assets of NBFIs system (Chart 3.2.4). Decrease of assets share of the three largest NBFIs, as it was mentioned before, was mainly associated with the reorganization of "MFC Companion" CJSC to "Companion Bank" CJSC.

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




*Source: NBKR*
*Note: since H1 2015 data specified exclusive of "Finca" MCC CJSC, since H1 2016 – exclusive of "Companion" MFC CJSC*

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



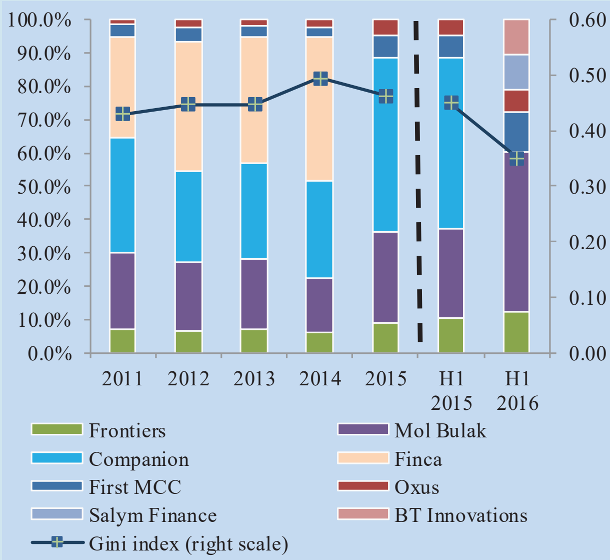

*Source: NBKR*

**Box 8. Assessment of NBFIs System Activity on the Basis of Concentration Indices[32]**

***The Herfindahl–Hirschman Index***

The Herfindahl-Hirschman index was calculated for the purposes of concentration risk analysis in the NBFIs system[33]. As of June 30, 2016, the Herfindahl-Hirschman index for NBFI system was 849.9 points. According to the rule of thumb[34], the value obtained indicates insignificant concentration of NBFIs assets or low concentration of microfinance market.

**Chart 3.2.5. Dynamics of the Gini index and 6 largest NBFIs**




*Source: NBKR*
*Note: since H1 2015 data specified exclusive of "Finca" MCC CJSC, since H1 2016 – exclusive of "Companion" MCC CJSC*

***The Gini Index***

The Gini index was calculated for estimating the uniformity of NBFIs assets distribution. As of June 30, 2016, the index value was 0.351, which reflected the moderate distribution of assets among the largest microfinance institutions. Meanwhile, decrease of concentration level was observed in the reporting period (Chart 3.2.5).

CONTENT

[32] Concentration indexes are calculated on the basis of data submitted by six largest NBFIs.

[33] $H = \sum_{i=1}^{n}(\text{share } i)$ ^2

[34] 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 NBFIs*

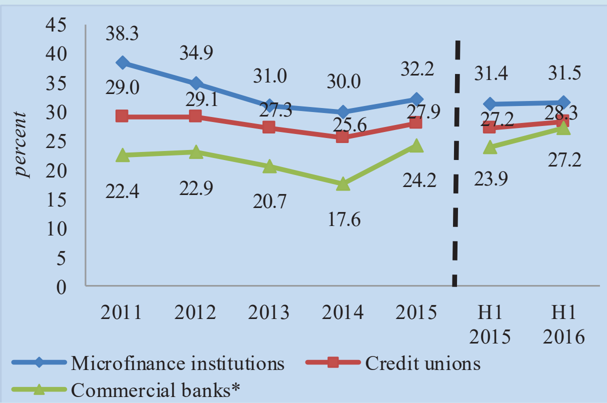
As of June 30, 2016, external debt of NBFI amounted to USD 22.1 million. In the institutional structure of NBFI external debt, the substantial proportion falls upon six largest NBFIs established and funded by international financial institutions. Most of external debts of NBFIs are loans provided by international financial institutions (73.2 percent of total external debt of NBFIs), and the rest are loans of international financial institutions (26.8 percent total external debt of NBFIs).

According to the results of six months of 2016, external debt of the largest NBFI decreased by 81.5 percent compared to the same period of 2015 and amounted to USD 17.4 million.



## Box 9. Overview of Interest Rates, Net Cost and Profitability of NBFI Loans

**Chart 3.2.6. Dynamics of Weighted Average Interest Rates on NBFIs Loans***



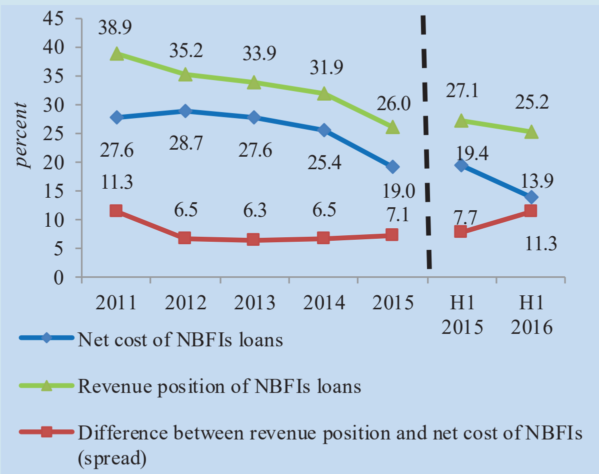

*Source: NBKR*
**interest rates of commercial banks are presented in the national currency*

In the reporting period, the trend of increase of interest rates on NBFIs loans was observed. The weighted average interest rates of MFIs increased by 1.1 p.p, CU – by 1.1 p.p. (Chart 3.2.6).

As of June 30, 2016, the net cost[35] of loan resource of NBFIs decreased by 5.5 p.p. due to decrease in the net cost of 6 largest NBFIs loans by 1.3 p.p.

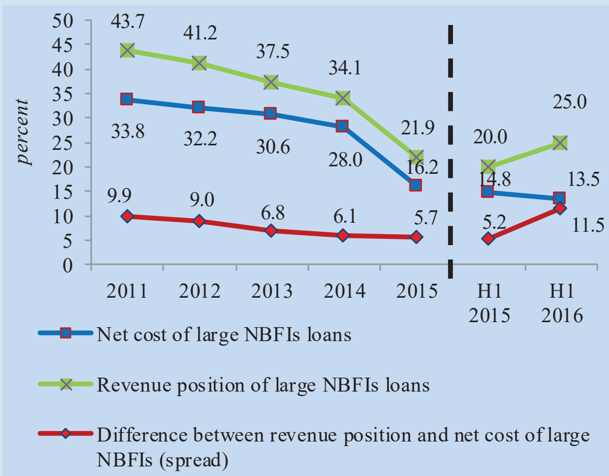
Meanwhile, the net cost of the largest NBFIs loans was less than the average net cost of loans in the NBFIs system in general.

**Chart 3.2.7. Dynamics of Net Cost and Yield of NBFIs Credit Resources**




*Source: NBKR*

**Chart 3.2.8. Dynamics of Net Cost and Yield of NBFIs Credit Resources**




*Source: NBKR*

In general, the NBFIs loan profitability[36] was decreasing (Charts 3.2.7 and 3.2.8), because the decreasing rates of the NBFIs interest income outstripped the decreasing rates of the average annual loan portfolio.

---

[35] Loans net cost or breakeven point = (gross expenditures – non-credit incomes) / Annual average loan portfolio.
[36] Loan profitability is calculated as a ratio of interest incomes to annual average loan portfolio.

## 3.3. Stress Testing of NBFI System

### *Stress Testing of the NBFIs Credit Risk*

Stress testing, when the effect of deterioration of the loan portfolio quality on the NBFIs system taken as a whole is computed, was conducted.

The following three scenarios were considered when conducting stress testing:

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

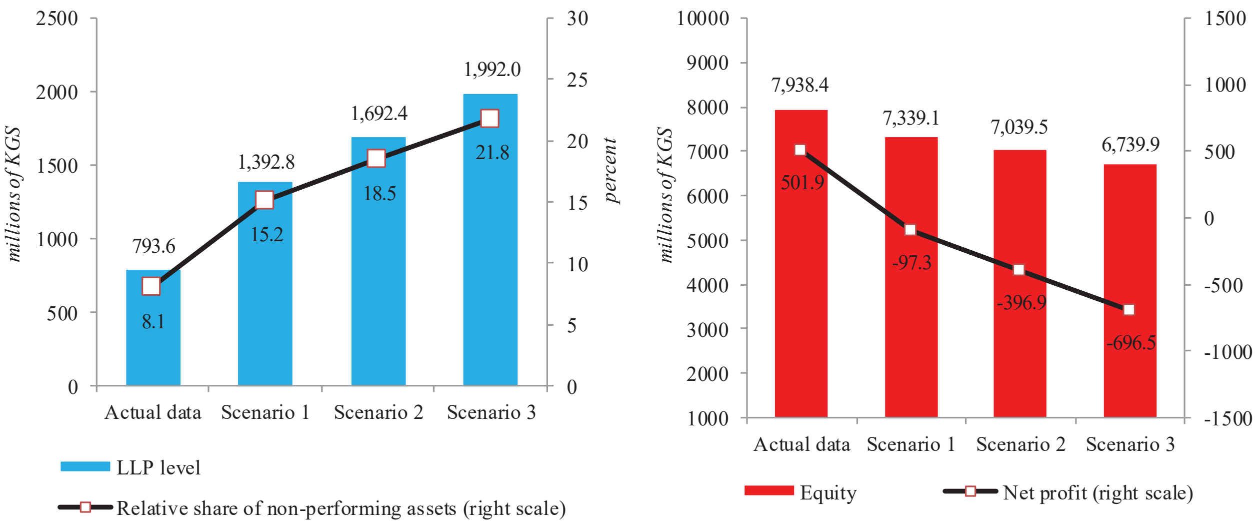
*Scenario 2:* 75 percent of loans transition from one category to another;

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

Transition of loans from one category to another occurs uniformly by the following categories: "standard", "under supervision", "substandard", "doubtful" and "losses".

The level of LLP[37] in NBFIs loan portfolio increased from 75.5 to 151.0 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, 2016**




*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 NBFIs. In the case of the first scenario, the NBFIs become unprofitable and suffer losses in the amount of KGS 97.3 million. Implementation of the second and third scenarios may result in increase of losses up to KGS 396.9 million and KGS 696.5 million, respectively (Chart 3.3.1).

[37] MFIs create general and special LLPs for relevant categories of classifications implementing the following allocations indicated in percentage from the amount of assets:
- Standard – from 0 percent to 5 percent;
- Assets under supervision – 10 percent;
- Substandard – 25 percent;
- Doubtful – 50 percent;
- Losses – 100 percent.

CONTENT

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

| | Share of non-performing loans in NBFI loan portfolio |
|---|---|
| **Scenario 1:** transition of 50% of loans from one category to another | 15.2 |
| **Scenario 2:** transition of 75% of loans from one category to another | 18.5 |
| **Scenario 3:** transition of 100% of loans from one category to another | 21.8 |

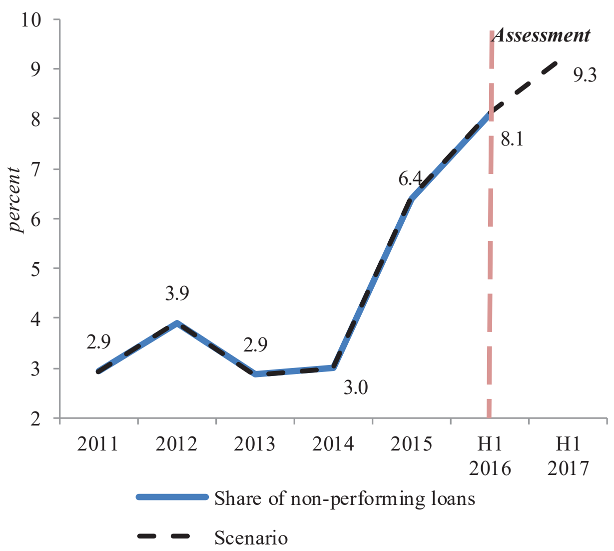
*Source: NBKR, NBKR calculations*

Implementation of the first scenario may result in an increase in the share of troubled assets in the loan portfolio of NBFIs by 7.1 p.p., up to 15.2 percent. In case of the second scenario non-performing loans may increase by 10.4 p.p. to the level of 18.5 percent, and in the implementation of the third scenario – by 13.7 p.p. and may reach the level of 21.8 percent.

***Stress testing of the NBFIs credit risk based on the econometric model***

This stress testing was carried out on the basis of the econometric model characterizing the dependence of NBFIs non-performing loans on macroeconomic factors.

**Chart 3.3.2. Dynamics of NBFIs non-performing Loans**




*Source: NBKR*

In order to assess the impact of macroeconomic shock on the dynamics of the NBFIs non-performing loans share the following scenario was considered:

- *Reducing the rate of GDP growth by 10 percent.*

An increase in the share of troubled loans in the loan portfolio by 1.2 p.p. up to the level of 9.3 percent may occur in the process of this scenario implementation.

CONTENT

# IV. PAYMENT SYSTEMS

***The complex of measures taken in the reporting period and aimed at minimizing financial and operational risks in important payment systems, providing regularity of system function through controlling work of payment infrastructure, have allowed minimizing the impact of possible risks on stability of the financial sector.***

***In general, the level of risks in systemically important systems was minimal and conditioned by remaining sufficient level of liquidity on the correspondent accounts in the National bank.***

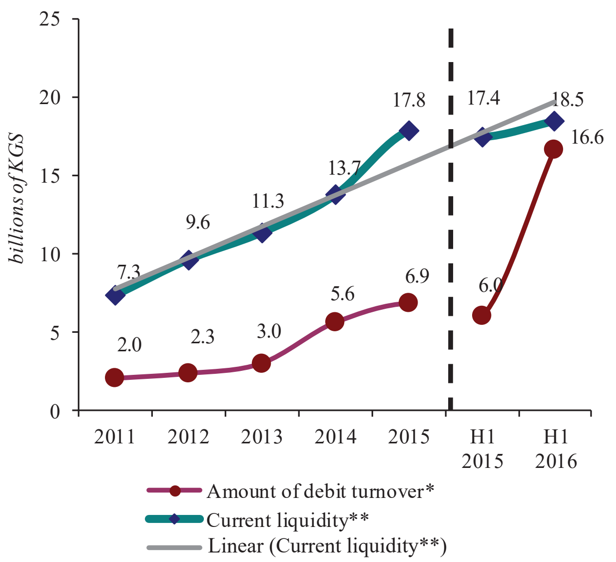
Effective and fail-safe payment system is one of the main factors, which determine stability of the financial sector in the country.

As of June 30, 2016, the following components of the payment were operating in the Kyrgyz Republic:

1. Large Value Payment System of the National Bank – Real Time Gross Settlement (RTGS)
2. Clearing Payments System – the System of Batch Clearing of Small Retail and Regular Payments (SBC), Systems of Payment Cards Settlement, Money Transfer Systems.
3. Infrastructure for financial messages exchange (SWIFT, Interbank communication network).

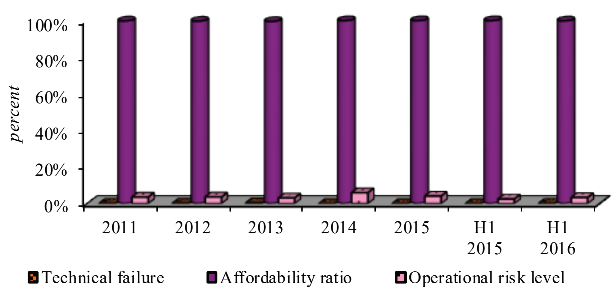
During the first half of 2016, RTGS system operated normally. The level of financial risk in RTGS remained low due to high level of liquidity on the participants' accounts in relation to the turnover in the system (liquidity ratio was 1.1 and turnover ratio – 0.9). Average daily volume of liquid assets of participants showed an increase by 5.8 percent in comparison with the same period of 2015 and amounted to KGS 18.5 billion (Chart 4.1.).

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




Source: NBKR calculations

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




| | 2011 | 2012 | 2013 | 2014 | 2015 | H1 2015 | H1 2016 |
|---|---|---|---|---|---|---|---|
| Technical failure | 0.1% | 0.2% | 0.4% | 0.0% | 0.0% | 0.0% | 0.1% |
| Affordability ratio | 99.9% | 99.8% | 99.6% | 100.0% | 100.0% | 100.0% | 99.9% |
| Operational risk level | 3.6% | 3.6% | 3.1% | 5.9% | 4.1% | 2.5% | 3.4% |

Source: NBKR calculations

Turnover ratio in the reporting period was 0.9 that was almost three times more in comparison with the same period of the last year. This increase was connected with the growth of transactions in Automatic Trade System (ATS) (payments share of ATS was 82.9 percent in total payments value in RTGS).

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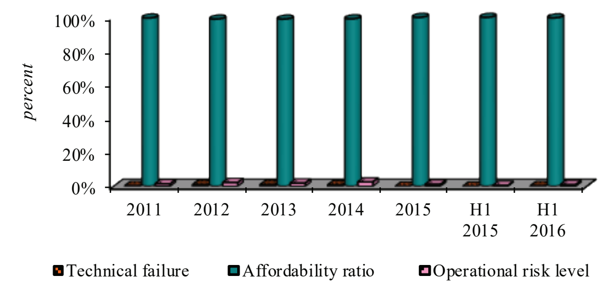
Results of monitoring held during the first half of 2016 have showed that the level of RTGS accessibility remained high, having reached 99.9 percent, and the level of the operational risk, taking into account the system's transaction day prolongation and blackouts, constituted 3.4 percent (Chart 4.2).

***In functioning of BCS,*** the level of financial risks in the reporting period was low. Funds reserved by participants for covering the debit net position increased the required level by nearly 4 times. Following the results of BCS monitoring, the accessibility indicator of the system remained high during the reporting period, having amounted to 99.7 percent (100.0 percent in the first half of 2015), meanwhile, due to prolongation of the system's transaction day on participants' request and blackouts, the level of the operational risk amounted to 1.0 percent (Chart 4.3).

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




| | 2011 | 2012 | 2013 | 2014 | 2015 | H1 2015 | H1 2016 |
|---|---|---|---|---|---|---|---|
| Technical failure | 0.4% | 1.0% | 1.0% | 0.9% | 0.0% | 0.0% | 0.3% |
| Affordability ratio | 99.6% | 99.0% | 99.0% | 99.1% | 100.0% | 100.0% | 99.7% |
| Operational risk level | 1.5% | 2.3% | 2.0% | 2.6% | 1.2% | 0.5% | 1.0% |

*Source: NBKR calculations*

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***Systems of Bank Payment Cards Settlements***

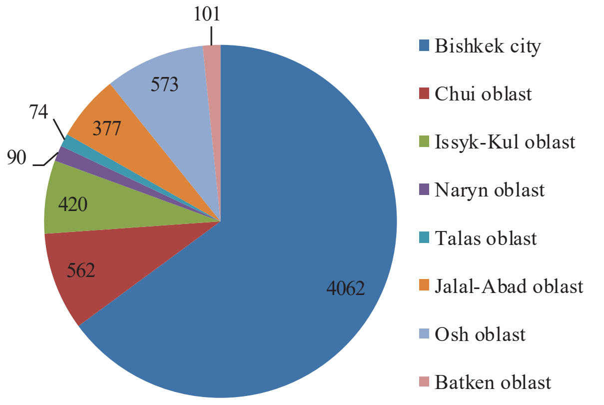
As of June 30, 2016, 5 international card payment systems and the national system "Elcart" operated in the Kyrgyz Republic.

Commercial banks offer various additional services using bank payment cards. However, for some reasons (not very high level of population's literacy, poor marketing activity of banks, insufficient stimulating and informing of banks' clients about services offered and banking products that may be paid by payment cards, insufficient providing with hardware devices in the regions, low return on infrastructure), there is still not very high level of implementation of bank payment cards in the republic.

Meanwhile, there is a positive trend of increasing the number of issued payment cards. Thus, the total number of payment cards in circulation as of June 30, 2016 decreased by 29.5 percent and amounted to 1,354.5 thousand pc. in comparison with the same period of the last year.

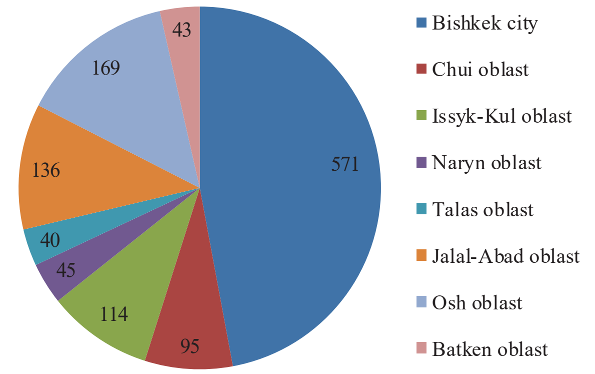
Total number of operating terminals and ATMs was 1,213 ATMs and 6,259 POS terminals, installed all over the republic (Charts 4.4 and 4.5). Comparing to the same period of the last year, the number of ATMs increased by 16.5 percent and the number of terminals – by 18.9 percent. Most of peripheral units were installed in Bishkek city.

**Chart 4.4. The number of POS-terminals as of June 30, 2016**




*Source: NBKR*

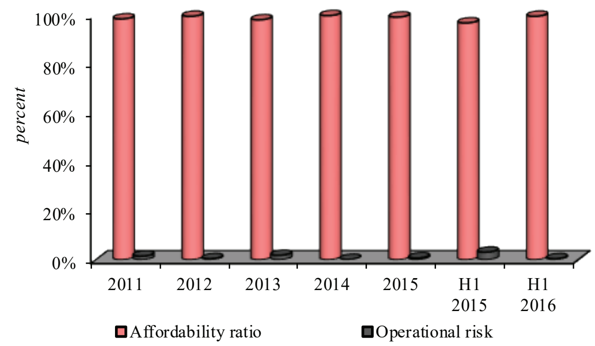
**Chart 4.5. The number of ATMs as of June 30, 2016**




*Source: NBKR*

In the reporting period, 23 commercial banks worked with ***the national system "Elcart"***. During the first half of 2016 by the results of the subsequent monitoring and analysis of operations, the accessibility indicator was 99.6 percent and the level of the operational risk, taking into account technical failures in the system, constituted 0.4 percent (Chart 4.6).

**Chart 4.6. Ratio indicator of accessibility indicator and the operational risk in UIPC**




| | 2011 | 2012 | 2013 | 2014 | 2015 | H1 2015 | H1 2016 |
|---|---|---|---|---|---|---|---|
| Affordability ratio | 98.5% | 99.6% | 98.2% | 99.9% | 99.3% | 96.9% | 99.6% |
| Operational risk | 1.5% | 0.4% | 1.8% | 0.1% | 0.7% | 3.1% | 0.4% |

*Source: NBKR calculations*

During the first half of 2016 receipt and transfer of money without opening an account in the commercial banks was carried out by means of 14 ***international money transfer systems*** (Tab. 4.1).

**Table 4.1. Flows distribution between international money transfer systems**

| Name of the system | Incoming | | Outcoming | |
|---|---|---|---|---|
| | Share from total quantity, % | Share from total volume, % | Share from total quantity, % | Share from total volume, % |
| Zolotaya korona | 67.2% | 64.1% | 88.4% | 86.0% |
| Unistrim | 15.0% | 18.7% | 4.9% | 6.7% |
| Western Union | 3.8% | 5.2% | 3.3% | 3.0% |
| Leader | 8.4% | 4.2% | 0.2% | 0.1% |
| CONTACT | 2.9% | 3.1% | 1.3% | 2.2% |
| Money Gram | 1.1% | 2.0% | 1.3% | 1.6% |
| Salam | 1.0% | 1.7% | 0.0% | 0.1% |
| Others | 0.6% | 1.0% | 0.6% | 0.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% |

*Source: NBKR calculations*

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As for the **local money transfers**, currently there is equal distribution between 4 local money transfer systems operated by banks of Kyrgyzstan.

During the first half of 2016, the total number of incoming local transfers reached 1.595 million, amounting to KGS 40.9 billion. (Tab. 4.2).

**Table 4.2. Flows distribution between local money transfer systems**

| Name of the system | Share from total quantity, % | Share from total volume, % |
|---|---|---|
| Bereke | 26.6% | 35.4% |
| Eco-Perevod | 13.8% | 18.4% |
| Transit | 10.9% | 10.3% |
| Kyrgyz transfer | 12.9% | 7.9% |
| Argymak | 12.3% | 7.9% |
| Bakai Transfer | 5.6% | 5.4% |
| Amanat | 3.6% | 4.1% |
| Berkut | 4.9% | 3.6% |
| Asia Express | 2.6% | 2.4% |
| MoneyStream | 1.0% | 1.5% |
| Yldam | 3.0% | 1.2% |
| Bizdin Companion | 1.8% | 0.9% |
| Capital Transfer | 0.2% | 0.4% |
| Tulpar | 0.6% | 0.4% |
| Narodnyi perevod | 0.2% | 0.1% |
| Total | 100.0% | 100.0% |

*Source: NBKR calculations*

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6 channels for sending and receiving ***cross-border payments/transfers*** functioned in the reporting period. But main stream of financial messages accounted for telecommunication network SWIFT (average value of inward and outward payments was 95.4 percent of total quantity and 84.7 percent of total cross-border payments).

Following the results of monitoring of functioning of the payment system in the Kyrgyz Republic, during the first half of 2016 all the important payment systems worked in a standard mode and did not lead to the system risk occurrence.

# V. IMPROVEMENT OF THE REGULATION OVER THE FINANCIAL SECTOR

***Work on improvement of regulatory and legal base regulating the activity of financial and credit institutions was still carried out in the reporting period. Special attention was given to the issues of improving the oversight function of the National Bank, protecting the rights of financial services consumers, as well as bringing normative legal acts in compliance with amendments in legislation of the Kyrgyz Republic.***

### *Licensing of banks*

According to the Resolution No. 15/2 of the Executive Board of the National bank dated March 30, 2016, alterations and additions to the Regulation "On licensing banks" have been confirmed. Requirements to bank officials, particularly, to the members of Board of Directors and Committee on audit of banks have been revised. The possibility of combining work in the audit organization with the duties of a head of the internal audit service and a chief accountant is excluded. Besides, the amendments made have concerned the problems of order and conditions of opening representative offices as well as issuing and re-legalization the bank licenses. In addition, alterations and additions have excluded the possibility to transform microcredit companies into banks.

In purposes of executing the Resolution No. 90-VI dated December 10, 2015 Jogorku Kenesh of the Kyrgyz Republic "On measures on stabilizing the domestic currency rate and dedollarization of the economy of the Kyrgyz Republic" according to the Resolution No. 27/2 dated June 29, 2016 of the Executive Board of the National bank mentioned regulatory legal enactment has been altered. Additions have intensified the requirements to the conditions of issuance the licenses to banks, concerning installing bank terminals and POS-terminals in the regions of the republic, expansion of ATM chains and terminals on reception and serving banking payment cards. Besides, regulation on connecting banks to the national payment system "Elcart" has been applied.

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### *Risk management in banks*

In purposes of decreasing the credit risk stipulated by the currency risk, while issuing mortgage and consumer credits in foreign currency to customers and decreasing the level of dollarization of the economy, according to the Resolution No. 7/3 dated February 10, 2016, the Executive Board of the National bank have altered and made additions to some normative legal acts of the National bank. According to these alterations and additions, banks, microfinance organizations and credit unions are forbidden to issue the consumer and mortgage credits in foreign currency to borrowers – individuals, except from individuals who conduct entrepreneurial activity based on the certificate or patent, and overdrafts by payments cards in the frameworks of wage projects.

Besides, the amendments also arrange alterations concerning financial reporting of the customer, credit repayment order, expenditures of third parties, periodicity of monitoring credits that are provided for 40 percent and more with goods in turnover, and also repeated restructuring of credit.

With the Resolution No. 19/6 dated April 27, 2016 the Executive Board of the National bank has confirmed alterations and additions to some normative legal acts of the National bank of the Kyrgyz Republic, concerning the problems of classifying the assets and appropriate assignments to reserve for covering potential losses and also determining the capital adequacy of banks. In accordance with this resolution 'restructured' credits are excluded to banks, where transfer of credit currency is conducted from foreign to national, if this transfer is not connected with the deterioration of the financial situation of borrower.

The resolution above will also allow commercial banks to increase charter capital using retained profit regardless of indicator values "capital buffer".

With the Resolution No. 20/6 dated May 25, 2016 the Executive Board of the National bank have confirmed alterations and additions to the Regulation "On minimal requirements to external audit of banks and financial institutions licensed by the National bank of the Kyrgyz Republic for the purpose to provide regular and effective activity of commercial banks and financial institutions licensed by the National bank of the Kyrgyz Republic and also to apply effective mechanisms of reacting possible incidents that may cause risk for information safety of banks and financial institutions.

Alterations and additions arrange conducting external audit of information systems in commercial banks and financial institutions once every three years in order to analyze and assess the accordance of information technologies and information safety of bank with requirements specified by the National bank and internal documentation of the bank.

With the Resolution No. 25/1 dated June 15, 2016, the Executive Board of the National bank have altered the Regulation "On periodic regulatory banking report".

These alterations have been made to increase effectiveness of providing commercial banks with information about 15 large resources of financing, interest rates, other property and data on balance of money at the accounts of state enterprises, government authorities and at the corresponding accounts in foreign currency.

### *Adjustment of regulatory legal enactments in accordance with legislation*

In order to adjust the normative legal acts in accordance with the Law of the Kyrgyz Republic "On anti-money laundering procedures and financing of terrorism or extremism prevention" the Executive Board of the National bank approved alterations and additions to 27 legal enactments of the National bank with the resolution No. 7/2 dated February 10, 2016.

Within the frameworks of alterations and additions to the Regulation "On the order of conducting exchange operations with cash foreign currency in the Kyrgyz Republic", alterations and additions have been made as a part of improving quality and activating provision of reports by exchange offices to the National bank.

In addition, there are requirements specified to the activity of specialized financial institutions concerning organizing internal control for the purposes of anti-money laundering procedures, financing of terrorism or extremism prevention, and conducting exchange operations with cash foreign currency and provision of reporting to the National bank.

Within the frameworks of adjustment of normative legal acts of the National bank in accordance with legislation of the Kyrgyz Republic and for the purpose of creating measures on keeping stability of commercial banks, the Executive Board of the National bank has accepted additions and alterations to some legal acts of the National bank with the resolution No. 17/3 dated April 11, 2016.

Thus, additions of technical character have been made to the Instruction on review the files about administrative offences in the sphere of bank legislation for adjusting it in accordance with administrative legislation. In order to execute the consequent applying risk-oriented control of commercial banks, alterations and additions have been made to the Instruction on conducting inspection at the places.

### *Regulation of Non-Bank Financial Institutions*

Within the framework of bringing the normative legal acts of the National Bank in compliance with amendments and additions to the laws regulating activities of the specialized financial institutions (SFI), the Executive Board of the National bank approved the Regulation "On licensing of specialized financial institutions" with the resolution No. 12/3 dated March 16, 2016.

For stable activity of SFI, compliant with the requirements of legislation and normative legal acts of the National bank, the Executive Board of the National bank approved the Rules of regulating activity of specialized financial institutions with the resolution No.12/4 dated March 16, 2016.

The rules have specified economics standards, requirements and restrictions, which are obligatory for executing SFI, performing activity on foreign currency exchange, requirements about the order

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and terms of provision regulative and other reports to the National bank, and preventive measures and sanctions applied to SFI. The requirements specified will advance stable activity of SFI and decrease the level of risks in their activity.

In order to increase the quality of controlling activity of microfinance organizations and credit unions, the Executive Board of the National bank approved alterations and additions to Regulations on periodic regulative report of microfinance companies and agencies, microfinance organizations and credit unions with the resolution No. 4/5 dated January 20, 2016.

Within the frameworks of the resolution of the Executive Board of the National bank periodic regulative report has been supplemented with appropriate articles, paragraphs and chapters concerning:

- income/losses from rate difference, factor operations and investments;
- incomes, obtained by agent banking;
- restructured credits;
- currency operations;
- funds borrowed from originators (auctioneers);
- off-balance engagements;
- breakdowns of other assets and obligations;
- sensitivity analysis;
- assets and obligations to changes in interest rates.

In addition, the conditions of withdrawal of saving share for calculating liquidity standard (H5-2) of credit unions attracting deposits of participants were revised.

In order to execute appropriate control for microfinance organizations, the Executive Board of the National bank approved alterations and additions to some normative legal acts of the National bank with the resolution No. 4/6 dated January 20, 2016. According to the alterations and additions, there are requirements specified for microfinance organizations in the part of borrowing funds from legal entities and shareholders individuals. Microcredit volumes were also increased and wholesale credits and microfinance credit were defined.

Within the frameworks of the following development of microcredit agencies and supporting small and medium business, the Executive Board of the National bank approved alterations and additions to some normative legal acts of the National bank with the resolution No. 17/2 dated April 11, 2016, as well as to the Rules of regulating microfinance organizations on the territory of the Kyrgyz Republic, particularly increasing the microcredit volume issued by the microcredit agency.

In order to interpret the order of filling the application of Periodic regulative report of microfinance companies, microfinance organizations, microcredit agencies and credit unions, the Supervisory Committee of the National bank approved new editions of Methodic instructions on filling the periodic regulative report of mentioned non-banking financial institutions with the resolution No. 24/1 dated June 9, 2016.

***Islamic principles of financing***

In order to make analysis of microfinance organizations with “Islamic service” at periodic basis, the Executive Board of the National bank approved alterations and additions to Regulations “On periodic regulative report of microcredit company/microcredit agency” and “On periodic regulative report of microcredit company” with the resolution No. 25/2 dated June 15, 2016.

Besides, some technical amendments were elaborated to Regulations “On periodic regulative report of microcredit companies and microcredit agencies, executing operations in compliance with Islamic principles of banking and financing”, “On periodic regulative report of microcredit companies executing operations in compliance with Islamic principles of banking and financing”. Thus, periodic regulative reports of microfinance organizations were supplemented with tables, which will contain data on the operations with the purpose to expand information provided by microfinance organizations with “Islamic service”.

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## Financial soundness indicators of the Kyrgyz Republic

*(in percent)*

| | 2011 | 2012 | 2013 | 2014 | 2015 | H1 2015 | H1 2016 |
|---|---|---|---|---|---|---|---|
| **Banking sector** | | | | | | | |
| ***Indicators of the capital adequacy*** | | | | | | | |
| Regulatory capital to assets, weighted by risk | 30.3 | 28.3 | 24.5 | 21.8 | 22.4 | 20.9 | 24.5 |
| Tier I capital to assets, weighted by risk | 24.6 | 22.3 | 19.5 | 16.4 | 18.1 | 17.6 | 21.7 |
| Equity to total assets | 21.6 | 19.7 | 17.0 | 16.2 | 15.6 | 15.7 | 16.5 |
| Ratio of classified loans to equity | 21.9 | 16.8 | 6.5 | 6.6 | 11.3 | 8.9 | 12.9 |
| Equity to total liabilities | 27.6 | 24.4 | 20.7 | 19.5 | 18.6 | 18.7 | 19.9 |
| ***Quality of assets*** | | | | | | | |
| Ratio of non-performing loans to loan portfolio | 10.2 | 7.2 | 5.5 | 4.5 | 7.1 | 5.2 | 9.0 |
| Loan loss provisions to loan portfolio | 6.3 | 4.7 | 3.3 | 2.6 | 3.8 | 2.8 | 4.9 |
| Loan loss provisions to non-performing loans | 61.6 | 64.9 | 59.6 | 58.8 | 53.3 | 54.0 | 54.7 |
| Ratio of currency loans to loan portfolio | 55.2 | 53.7 | 53.6 | 57.6 | 55.1 | 52.6 | 44.2 |
| ***Returns indicators*** | | | | | | | |
| ROA | 3.0 | 3.0 | 2.8 | 2.6 | 1.5 | 1.6 | 0.0 |
| ROE | 17.7 | 18.5 | 18.0 | 18.7 | 10.8 | 11.5 | 0.1 |
| Interest margin to total income | 45.0 | 44.7 | 57.3 | 58.6 | 47.6 | 53.4 | 35.6 |
| Spread between reference rate on deposits and loans | 9.4 | 8.0 | 7.7 | 7.9 | 7.1 | 7.8 | 6.1 |
| ***Liquidity indicators*** | | | | | | | |
| Ratio of high liquid assets to total assets | 35.0 | 36.8 | 33.2 | 28.3 | 31.9 | 26.9 | 33.9 |
| Ratio of high liquid assets to short-term liabilities | 74.9 | 80.0 | 69.9 | 65.0 | 77.8 | 64.5 | 79.9 |
| ***Sensitivity of market risk*** | | | | | | | |
| Ratio of net foreign exchange position to equity | 4.1 | 2.4 | 5.6 | 8.3 | -2.1 | 1.0 | 0.5 |
| **Other financial corporations*** | | | | | | | |
| Ratio of assets to total assets of the financial system | 23.0 | 18.7 | 17.2 | 17.1 | 9.9 | 10.6 | 6.9 |
| Ratio of assets to GDP | 7.1 | 6.6 | 6.7 | 8.0 | 4.7 | 4.6 | 3.1 |
| **Corporate sector (medium- and large-sized enterprises)** | | | | | | | |
| Return on assets (ROA) | 5.9 | 6.7 | 5.5 | -0.3 | -5.8 | n/a | n/a |
| Return on equity (ROE) | 12.7 | 16.3 | 16.4 | -1.2 | -25.6 | n/a | n/a |
| Ratio of total liabilities to equity (leverage)** | 2.1 | 2.1 | 2.1 | 3.0 | 4.0 | n/a | n/a |
| Current liquidity ratio | 1.4 | 1.4 | 1.3 | 1.2 | 0.8 | n/a | n/a |
| **Households sector** | | | | | | | |
| Ratio of the households' debt to GDP | 8.5 | 9.1 | 13.4 | 18.1 | 18.3 | 18.4 | 16.7 |
| Ratio of households' debt to disposable income | 13.2 | 13.4 | 21.8 | 27.3 | 27.8 | 28.2 | 25.1 |

*Source: NBKR, NSC KR, calculations: NBKR*
** - other financial corporations are presented by NBFIs*
*** - equity of the corporate sector is represented exclusive of shares of Centerra Gold Company*

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# GLOSSARY AND ABBREVIATIONS

*A bank deposit* is the amount of money, accepted by a financial and credit institution under contract from another person on the terms of repayment, payment and maturity. Deposits can be term 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 in-come 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 sys-tem 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 ac-counts of the participants of the system for the payments and settlements.

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

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

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

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

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

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

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

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

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

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

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

| | |
|---|---|
| ADB | – Asian Development Bank |
| GDP | – Gross Domestic Product |
| SRS GKR | – State Registration Service under the Government of the Kyrgyz Republic |
| POL | – Petroleum and Oil |
| GS | – Government Securities |
| EEU | – Eurasian Economic Union |
| HUS | – Housing and Utilities Sector |
| CJSC | – Closed Joint-Stock Company |
| CPI | – Consumer Price Index |
| CAR | – Capital Adequacy Ratio |
| KR | – Kyrgyz Republic |
| KSE | – Kyrgyz Stock Exchange |
| IMF | – International Monetary Fund |
| MY | – Marketing Year |
| MF KR | – Ministry of Finance of the Kyrgyz Republic |
| MFO | – Microfinance Organization |
| NBKR | – National Bank of the Kyrgyz Republic |
| NSC KR | – National Statistical Committee of the Kyrgyz Republic |
| NBFIs | – Non-bank Financial Institutions |
| NGS | – Non-Government Securities |
| OJSC | – Open Joint-Stock Company |
| OECD | – Organization for Economic Cooperation and Development |
| RK | – Republic of Kazakhstan |
| LLP | – Loan Loss Provisions |
| RF | – Russian Federation |
| CIS | – Commonwealth of Independent States |
| SFBR | – Specialized Fund for Banks Refinancing |
| USA | – United States of America |
| FRS | – Federal Reserve System |
| FAO | – Food Agriculture Organization of the United Nations |
| FI | – Financial Institution |
| CBRF | – Central Bank of the Russian Federation |
| NTC | – Net Total Capital |