



**National Bank
of the Kyrgyz Republic**

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

May 2015

Bishkek

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

Other Publications of the National Bank of the Kyrgyz Republic

Annual Report of the National Bank of the Kyrgyz Republic

This document is an overall report of the National Bank of Kyrgyz Republic (NBKR) for the last year. It contains summary on economic development of the republic and monetary policy, as well as the National Bank financial statements, general information about the NBKR, statistical annexes. It is published in three languages: Kyrgyz, Russian and English.

Bulletin of the National Bank of the Kyrgyz Republic

This monthly informational publication includes statistical data on the basic macroeconomic indicators and economy sectors of the Kyrgyz Republic. It is published in three languages: Kyrgyz, Russian and English.

Balance of Payments of the Kyrgyz Republic

“The Balance of Payments of the Kyrgyz Republic” reflects development trend of the external sector and information about the balance of payment, foreign trade, international reserves, foreign debt and the international investment position of the Kyrgyz Republic. It is published quarterly in January, May, July and October in Kyrgyz, Russian and English.

Monetary Policy Report (Inflation Report in the Kyrgyz Republic)

The purpose of this publication is to provide the public at large with regular information about the objectives and results of monetary policy. This publication contains analysis of environment and macroeconomic situation development in the country, information about dynamics and inflation factors, inflation forecasts, development of real and external sectors of economy in the Kyrgyz Republic and in the countries-major trading partners.

Press-Release of the National Bank of the Kyrgyz Republic

The purpose of the document is to publish statutory acts of the National Bank officially in order to provide commercial banks and public with statutory acts and official information on the National Bank activity, as well as propaganda of the Kyrgyz Republic banking legislation. Presumable publication frequency is once a month in Kyrgyz and Russian languages.

Statutory Acts of the National Bank of the Kyrgyz Republic

The purpose of the document is to publish statutory acts of the National Bank officially in order to provide commercial banks and public with statutory acts and official information on the National Bank activity, as well as propaganda of the Kyrgyz Republic banking legislation. Presumable publication frequency is once a month in Kyrgyz and Russian languages.

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PREAMBLE

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

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

Results of the monitoring and analysis of financial stability are considered by the National Bank in forming main directions 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.

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MAJOR CONCLUSIONS

On the basis of the results of 2014, the results of macro prudential analysis, econometric modeling, as well as direct and “reverse” stress tests indicate that the financial sector of the Kyrgyz Republic is evaluated as sustainable and the financial strength is sufficient to withstand certain macroeconomic shocks.

Slowdown of economic growth is observed on the background of existing macroeconomic risks, weak diversification and dependence of the Kyrgyz Republic economy on external factors. Country risk still remains moderate for the banking sector. The share of placed banks assets of non-residents decreased at the end of 2014 compared to 2013 (from 14.1% to 12.4%). Meanwhile, the Kyrgyz Republic banks obligations to non-residents increased due to a growth in the share of foreign borrowings from OECD countries (the share of the Kyrgyz Republic banks obligations to non-residents increased from 15.0% to 17.6%). The risks related to geopolitical situation in the region still remain moderate.

Volatility of the national currency exchange rate did not influence significantly of the stability of the Kyrgyz banking sector in 2014. Results of macro-prudential analysis indicate that the significant weakening of the national currency, besides change in the level of dollarization, did not affect significantly the sustainability of the banking sector in the Kyrgyz Republic.

Decline in stocks of financial strength of the banking sector in the Kyrgyz Republic is still observed on the background of active growth of lending to the economy. The results of financial modeling and “reverse” stress tests indicate a slight decline in stocks of financial strength at the end of 2014 compared to 2013 due to significant growth of lending to the economy and increase of risks in the banking sector of the Kyrgyz Republic.

Slowdown of increase in prices for real estate was observed in the real estate market. The results of stress tests carried out in the commercial banks indicate that the banking sector of the Kyrgyz Republic is likely to suffer losses in case of decline in prices for real estate by more than 28%. Potentially, large banks can sustain losses in case of decrease in prices for real estate by more than 40%.

According to the results of 2014, the payments systems of the Kyrgyz Republic operated normally, the level of system risks in the financial infrastructure was assessed as moderate.

I. MACROECONOMIC AND FINANCIAL ENVIRONMENT

1.1. Macroeconomic Conditions and Risks

Taking into account remained inflation risks, the National Bank carried out monetary policy focused on restriction of inflation monetary component.

Factors of economic growth slowdown in the Kyrgyz Republic in 2014 indicated that its slight diversification still existed as well as dependence of external macroeconomic environment. Internal factors such as decrease of production output in agriculture and at deposit “Kumtor”, external factors, particularly, slowdown of business activity in Russia, which resulted in downward trend of money transfers, which are among the main sources of disposable income for households, determined preservation of macroeconomic risks for sustainable economic growth.

Gross Domestic Product

Slowdown of economic growth was observed in the country during 2014. According to the results of the reporting period, GDP growth rate¹ made 3.6 percent (GDP, excluding companies for the development of gold deposit “Kumtor”, increased by 4.6 percent), meanwhile, GDP growth made 10.9 percent in 2013 (excluding companies on the development of gold deposit “Kumtor”, GDP increased by 6.1 percent). Growth was supported by the sector of services, its share made 1.9 p.p. in GDP growth, contribution of construction sector made 1.6 p.p. Manufacturing industry and agriculture made negative contribution of (-)0.5 p.p. and (-)0.1 p.p. respectively.

Reduction in the volumes of industrial output in 2014 by 1.7 percent against the same value of 2013 was due to decline in the manufacturing industry (-3.0 percent), particularly, decrease of output at the enterprises on development of gold deposit “Kumtor” (-6.8 percent), decrease in the physical volume of production in the group “textile manufacture; production of clothing and footwear, manufacture of leather and leather products”. In agriculture, decrease made 0.6 percent, which is generally resulted from reduction in crop production output (-4.6 percent) due to unfavorable climate conditions.

Growth of activity was observed in the sector of construction: at the end of 2014, growth in this sector made 24.9 percent due to increase of investments in fixed capital by 21.6 percent (in comparable prices). Growth of construction was primarily due to increase in the volumes of performed construction contract and other capital works, overhaul and current repairs of buildings and structures.

In the sphere of services, increase was at the level of 4.1 percent due to growth in the sector of trade – by 8.3 percent and information and communication – by 5.0 percent.

¹ Preliminary data.

Table 1.1.1. Contribution of Individual Activities in GDP

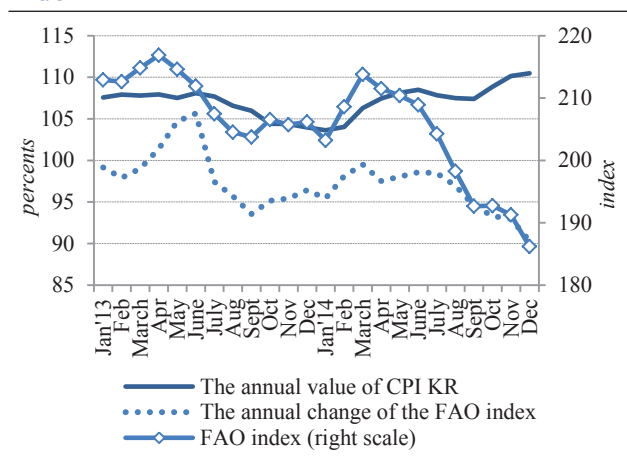
	2013			2014		
	Share, percent	Growth rate, percent	Contribution in growth, perc. points	Share, percent	Growth rate, percent	Contribution in growth, perc. points
GDP	100.0	10.9	10.9	100.0	3.6	3.6
Agriculture, forestry and fishery	14.6	2.7	0.4	14.8	-0.6	-0.1
Industry	18.5	35.9	5.6	15.5	-1.7	-0.3
<i>Mining</i>	0.7	-6.3	-0.1	0.6	-0.5	-0.004
<i>Processing sectors (Processing industry)</i>	15.8	47.5	5.7	13.1	-3.0	-0.5
<i>Provision (supply) of electric energy, gas, steam and conditioned air</i>	1.8	-1.8	-0.05	1.6	7.8	0.1
<i>Water supply, waste treatment and processing, receipt of recyclable materials</i>	0.3	7.5	0.02	0.2	7.1	0.02
Construction	6.3	16.4	1.1	7.4	24.9	1.6
Services	46.6	4.8	2.3	48.1	4.1	1.9
<i>Wholesale and retail trade; repair of cars and motor-cycles</i>	16.5	7.3	1.2	17.4	8.3	1.4
<i>Transportation activity and storage of cargo</i>	3.9	6.1	0.3	4.2	2.9	0.1
<i>Information and communication</i>	4.4	15.7	0.8	4.2	5.0	0.2
<i>Activity of hotels and restaurants</i>	1.6	13.3	0.2	1.7	9.6	0.2
<i>Financial intermediation and insurance</i>	0.8	2.7	0.02	0.8	0.8	0.01
<i>Operations with real estate</i>	2.3	-1.2	-0.03	2.3	2.9	0.1
<i>Professional, scientific and technical activity</i>	1.5	-2.6	-0.04	1.7	-0.3	-0.01
<i>Administrative and auxiliary activity</i>	0.4	1.7	0.01	0.4	5.3	0.02
<i>State administration and defence; obligatory social security</i>	5.0	-1.6	-0.1	5.4	-2.5	-0.1
<i>Education</i>	5.3	0.4	0.02	5.1	1.3	0.1
<i>Healthcare and social servicing of population</i>	3.1	1.6	0.1	3.2	0.6	0.02
<i>Art, entertainment and rest</i>	0.6	1.5	0.01	0.7	2.3	0.01
<i>Other servicing activity</i>	1.1	-1.3	-0.01	1.0	1.0	0.01
Net (exclusive of subsidies) taxes on products	13.9	10.9	1.4	14.1	3.6	0.5

Source: NSC KR

Despite positive rates of GDP growth existing in 2014, unstable dynamics of development, related to volatile indicators of production in the sectors of industry and agriculture is observed in the medium-term period.

Inflation

In 2014, dynamics of overall price level in the country was affected by internal and external factors. Strengthening of the US dollar in the domestic market owing mainly to external factors resulted in growth of prices for imported goods and increased inflation expectations of the population in Kyrgyzstan. Additional factors of more expensive imported goods were increase in the cost of wheat imported to the country against declining harvests of grain crops in Kazakhstan, resulting in more rapid growth in domestic prices for bakery products, as well as growth of domestic prices for fuel in the third quarter of 2014, because of the growth of the wholesale prices for oil products in the market of Russia. The decline in production of domestic agricultural products by 0.6 percent in 2014 year amid adverse weather conditions, as well as raising tariffs for housing and utility services during the second half of 2014 made a significant contribution to the formation of inflation in the reviewed period. According to the NSC KR, the CD, at the end of 2014 (December 2014 to December 2013) inflation rate constituted 10.5 percent (the comparable indicator in 2013 made 4.0 percent). Meanwhile, the annual core inflation value was formed at the level of 9.4 percent.

Chart 1.1.1. Dynamics of CPI KR and the FAO Index

Source: NSC KR, www.fao.org

In 2014, the prices in the world food markets were characterized by the downward trend. Significant volumes of food staples harvest were gathered in many producing countries, which conditioned increase in supply. The average value of FAO Food Price Index, reflecting changing trend in the world prices, in 2014, made 201.8 points, having decreased by 3.8 percent against the value of 2013. Multidirectional dynamics of FAO index and inflation in our country are primarily conditioned by more significant impact of internal factors, such as decrease of domestic production output in the agricultural sector of the republic, growth of prices for imported industrial goods, as well as due to changes in the exchange rate, increase in tariffs for housing and public utilities services.

State Budget

According to the preliminary data of the Central Treasury of the Ministry of Finance of the Kyrgyz Republic, state budget deficit at the end of 2014 amounted to KGS 1.9 billion or 0.5 percent to GDP, meanwhile, at the end of 2013, the budget was executed with deficit of KGS 2.3 billion or 0.7 percent to GDP. Observed downward trend of budget deficit in percent to GDP reflects attempts on fiscal consolidation and corresponds with the objectives of the fiscal policy in the medium-term period and the National strategy for sustainable development of the Kyrgyz Republic in 2013-2017. Total financing of the budget deficit was carried out entirely by external sources in the amount of KGS 22.1 billion (5.6 percent to GDP), while in the internal sources negative balance was formed in the amount of KGS 10.0 billion.

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

	Jan-Dec 2014		Jan-Dec 2013	
	billions of KGS	% to GDP	billions of KGS	% to GDP
Total incomes (including sales of non-financial assets)				
including incomes from operational activity	119.4	30.1	101.9	29.1
sale of non-financial assets	0.0	0.0	0.1	0.0
Total expenditures (including purchase of non-financial assets)				
including expenditures for operational activity	121.3	30.5	104.3	29.8
purchase of non-financial assets	95.6	24.1	86.6	24.7
	25.7	6.5	17.7	5.0
Deficit(-) / Profit (+)	-1.9	-0.5	-2.3	-0.7
Budget financing				
External financing	12.1	3.0	7.9	2.2
Internal financing	22.1	5.6	17.7	5.1
	-10.0	-2.5	-9.9	-2.8

Comparable methodologies applied in calculations² reflect significant difference between budget revenues and spending at the end of 2014, which, according to the NBKR estimates, amounted to KGS 14.4 billion or 3.6 percent to GDP (at the end of 2013, budget deficit in comparable methodology amounted to KGS 13.4 billion or 3.8 percent to GDP).

Despite the difficult situation in the real economy, the fulfillment of measures to increase revenues and improve the efficiency of tax administration provided additional budget revenues, which contributed to performance of social obligations in full. In 2014, revenue part of the republican budget was executed by 103.0 percent, it result in implementation of the plan on collection of tax revenues by 101.3 percent and non-tax revenues – by 113.9 percent. Meanwhile, the plan for the collection of taxes by the State Tax Service was implemented by 101.6 percent, the State Customs Service plan – by 101.2 percent. Financing of the republican budget expenditures was fulfilled by 97.7%.

Macroeconomic risks

Downward trend in the development of the external environment as a business slowdown in the economies of trading partners will continue to have a negative impact on the further development of the economy and comprises risks for the stable development of the real sector.

The volume of remittances, exports and imports is likely to continue decreasing due to change of the US dollar exchange rate as well as due to change of the customs tariff within the entry into the Eurasian Economic Union. According to the forecasts, slight reduction of production output is expected at “Kumtor” mine in 2015, which can affect performance of the industrial sector and the GDP as a whole.

Inflationary processes in the country will still depend on the degree of influence of external and internal factors, including inflation expectations of the population, further increase in tariffs and insufficient level of domestic production. Meanwhile, there is a high dependence on conjuncture of the world food markets, and consequently there are risks for price stability.

It is expected that in 2015 financing of budget deficit will be primarily carried out at the expense of external receipts. Increase of the US dollar exchange rate against Kyrgyz som³ can result in increase in the amount of budget funds, which are necessary for servicing public external debt.

Decrease in the level of business activity in Kyrgyzstan and in the countries-major trading partners may result in the loss of the planned amounts of duties and taxes.

² According to the recommendations of the Accounting Chamber of the Kyrgyz Republic as a result of the audit of the report on execution of the republican budget for 2012, the Ministry of Finance made amendments to the Programme of State Investments in part of recredited funds which were registered not as expenses from September 2013 but as financial assets and accordingly reflected in the sources of budget deficit coverage (source: Rationale to the draft Decree of the Government of the Kyrgyz Republic “On the draft Law “On amendments to the Law of the Kyrgyz Republic “On the republican budget of the Kyrgyz Republic for 2013 and forecasts for 2014-2015”).

³ Forecasted average annual exchange rate of the US dollar according to the Law of the Kyrgyz Republic “On republican budget of the Kyrgyz Republic for 2015 and the forecast for 2016-2017” makes KGS 53.5 per USD 1.

1.2. Structure of the Financial Sector

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

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

Financial institutions	2010	2011	2012	2013	2014
Commercial banks	22	22	23	24	24
Other financial companies, including:	936	958	837	794	689
Non-bank financial institutions (NBFI), including:	906	931	810	765	660
Microfinancial organizations, including:	397	454	320	277	215
microcredit companies	266	340	242	208	154
microcredit agencies	127	110	74	65	56
microfinancial companies	4	4	4	4	5
“SFRB” LLC*	1	-	-	-	-
“FCCU” OJSC	1	1	1	1	1
Credit unions	217	197	183	153	135
Exchange offices	290	279	306	334	309
Insurance companies	19	16	16	18	17
Investments funds	6	8	8	8	9
Stock exchanges	2	1	1	1	1
Pension funds	3	2	2	2	2

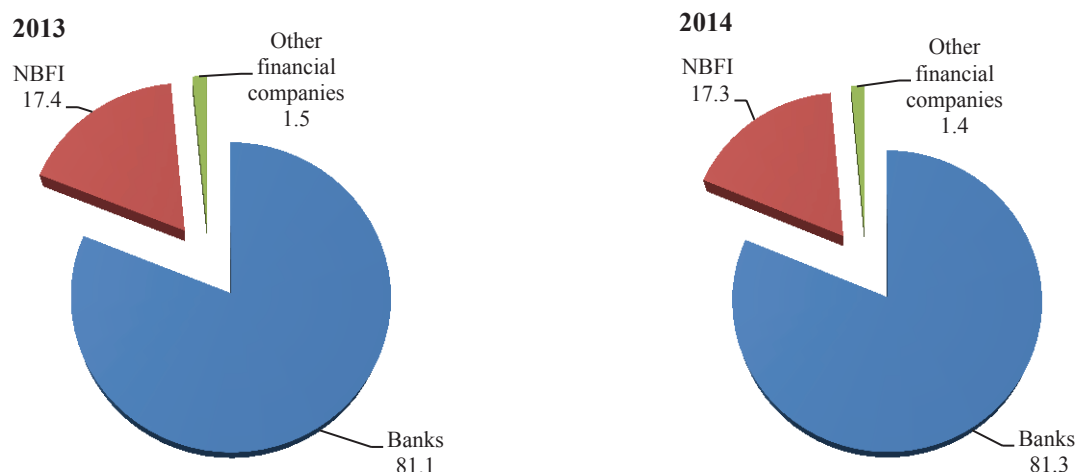
Source: NBKR, NSK KR

* License was revoked by the NBKR Resolution №40/5 dated July 27, 2011

As of the end of 2014, assets of the financial sector constituted KGS 166.9 billion, an increase compared with 2013 was KGS 31.9 billion.

The banking sector's share in the total in the total assets of the financial sector constituted 81.3 percent. The share of NBFI and other financial companies accounted for 17.3 percent and 1.4 percent, respectively (Chart 1.2.1).

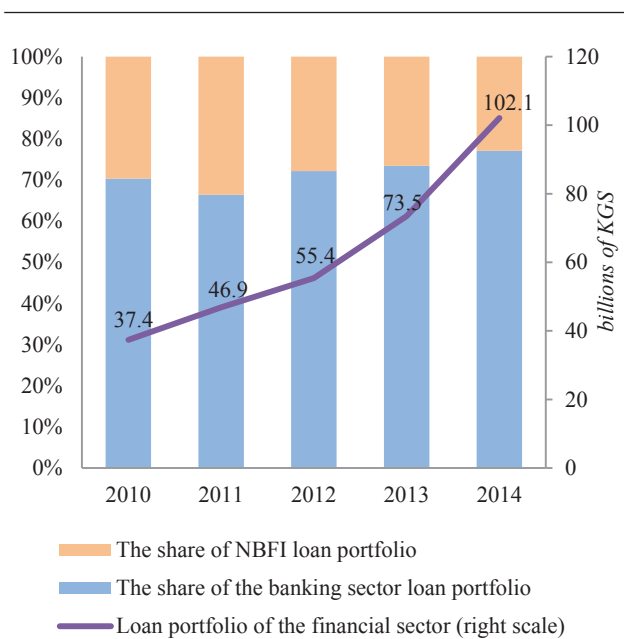
Chart 1.2.1. Institutional Structure of the Financial Sector Assets of Kyrgyzstan
percent



Source: NBKR

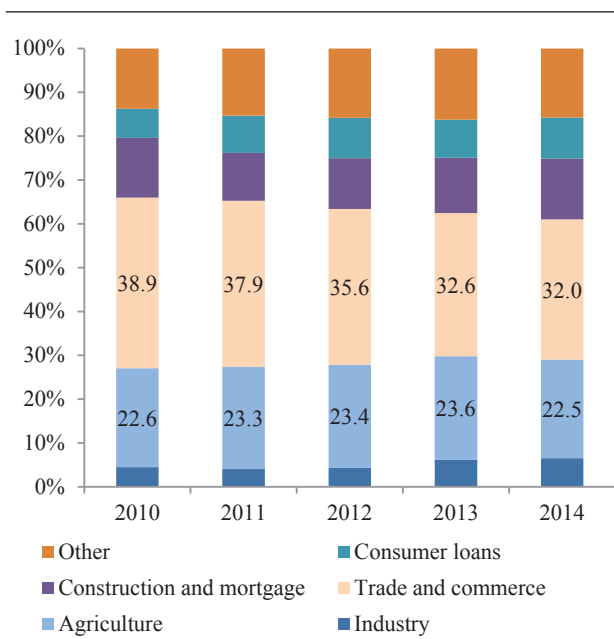
The total loan portfolio of banks and NBFIs in the reporting period increased by 39.0 percent compared with 2013 and amounted to KGS 102.1 billion. The share of bank loans in the loan portfolio of the financial sector increased by 3.7 p.p. and as of December 31, 2014 constituted 77.1 percent (Chart 1.2.2).

Chart 1.2.2. Structure of the Loan Portfolio



Source: NBKR

Chart 1.2.3. Sectoral Structure of the Loan Portfolio



Source: NBKR

The concentration was still observed in the trading industry (banks) and agriculture (NBFI) within the sectoral structure of the loan portfolio of the financial sector. The aggregate share of the loan portfolio of the financial sector in the above-noted sectors of the economy at the end of the reporting period constituted 54.5 percent of total issued loans (Chart 1.2.3) or KGS 55.6 billion.

1.3. Status of the Financial Markets

In the reviewed period, the situation in the domestic foreign exchange market was characterized by increased pressure on the exchange rate towards weakening of the national currency in nominal terms. Meanwhile, the exchange rate dynamics varied in different directions during the year. 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 increase in the activity against decrease of a daily average indicator of excess reserves of the commercial banks. The market of the state treasury bill and bonds issued by the Ministry of Finance of the Kyrgyz Republic varied in different directions.

1.3.1. Status of the Currency and Money Market

Currency Market

Generally, the exchange rate of the US dollar was increasing in the currency market of the country; slight decrease was observed in the second quarter. Dynamics of the US dollar exchange rate in the domestic market of the Kyrgyz Republic was conditioned by the impact of fundamental factors – strengthening of the US dollar in the world due to recovery of the American economy and policy on rolling back of stimulating measures conducted by the US FRS on the one hand; impact of two external shocks: one-step devaluation of the Kazakh tenge by 20 percent and significant devaluation of the Russian ruble due to aggravation of geopolitical situation. The official exchange rate of the US dollar increased in 2014 by 19.6 percent, from KGS 49.2470 to KGS 58.8865/USD 1.

In the reporting period, the effect of external shocks and speculative pressure was regulated by foreign exchange market interventions and other measures of the NBKR, which were focused on smoothing sharp fluctuations of the national currency exchange rate. The National Bank carried out foreign exchange market interventions on selling (in cash and non-cash form) and purchase of foreign currency. Meanwhile, net sales constituted USD 516.3 million. The volume of operations on purchase and sale of foreign currency in the domestic foreign exchange market amounted to KGS 593.5 billion, having increased by 56.3 percent compared with the same indicator of the previous year.

Money Market

The activity of commercial banks increased in the inter-bank market of credit resources due to change in the basis of carrying out monetary policy. In particular, the volume of repo transactions in the inter-bank borrowings market increased by 5.7 times compared with the same period of 2013. Demand for liquidity was mainly due to uneven distribution of excess reserves in the banking sector between the market participants. In general, the situation in the market was stable, ensuring redistribution of liquidity among commercial banks at the expense of interbank transactions. Besides, the volumes of standard interbank credit transactions in the national currency decreased down to KGS 563.4 billion.

The NBKR continued improving monetary policy instruments in the reviewed period. Additional instruments on withdrawal and provision of liquidity, in particular, 7-day overnight loans and deposits, were introduced. Significant increase of demand for overnight loans from the commercial banks was observed in the reviewed period. The volume of these loans aimed at support of short-term liquidity in the national currency increased by 7 times against the same indicator of 2013, up to 56.7 billion (average weighted interest rate for the period – 9.1 percent). Gross volume of funds placed on overnight deposits within the year amounted to KGS 137.6 billion (average weighted interest rate for the period – 2.0 percent).

1.3.2. Status of the Securities Market

The market of the state treasury bills and bonds, issued by the Ministry of Finance changed in different directions according to the volumes and profitability dynamics.

In the state treasury bills market, which consisted of 3-, 6- and 12-month securities, the total volume supply decreased down to KGS 5.4 billion (-9.1 percent), the volume of initial sale of decreased down to KGS 3.4 billion (-40.5 percent). The weighted average revenue of these securities increased by 0.9 percentage points, up to 9.5 percent.

2-, 3- and 5-year state treasury bonds were issued in the reviewed period. The total volume of declared issued ST-Bonds constituted KGS 4.0 billion, an increase by 2.1 times compared to the indicator of the same period of 2013. Thus, the total weighted average revenue decreased down to 14.4 percent.

1.4. Real Estate Market

The real estate market experienced slowdown of the price index growth rates. Slowdown of the price growth rate for real estate contributed to preservation of housing affordability index at the same level.

Risks to the financial sector from the real estate market remain moderate due to underdeveloped mortgage credit lending.

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



At the end of 2014, slowdown in growth rate of property price⁴ index compared with 2013 was observed in Kyrgyzstan (Chart 1.4.1).

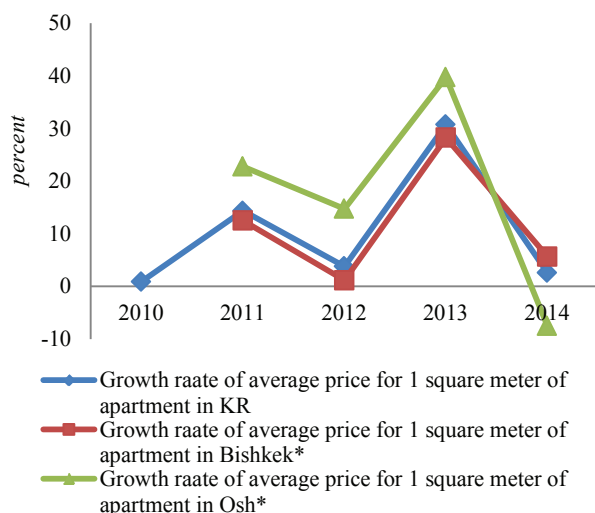
Source: SRS KR

As of the end of 2014, the average price for 1 square meter of flats in Bishkek increased by 5.6 percent compared with 2013 (Chart 1.4.2). In Osh, at the end of the reporting period, the average price for 1 square meter of flats decreased by 7.5 percent compared with 2013. The average price for 1 square meter of detached houses in Bishkek and Osh grew by 47.6 and 17.9 percent, respectively (Chart 1.4.3).

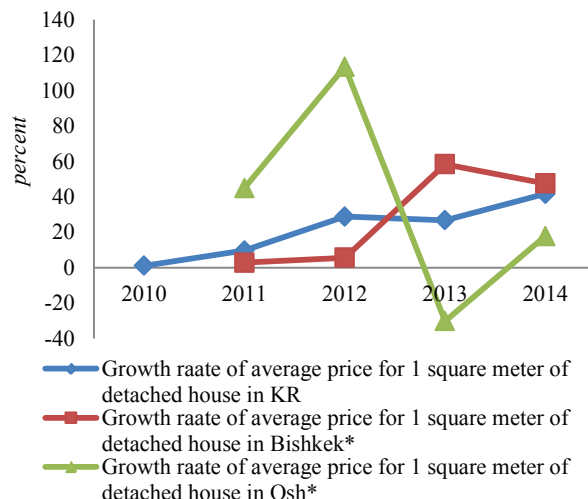
⁴Laspeyres index method was used in developing the index of real estate price. In general, the Laspeyres index is computed as follows:

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

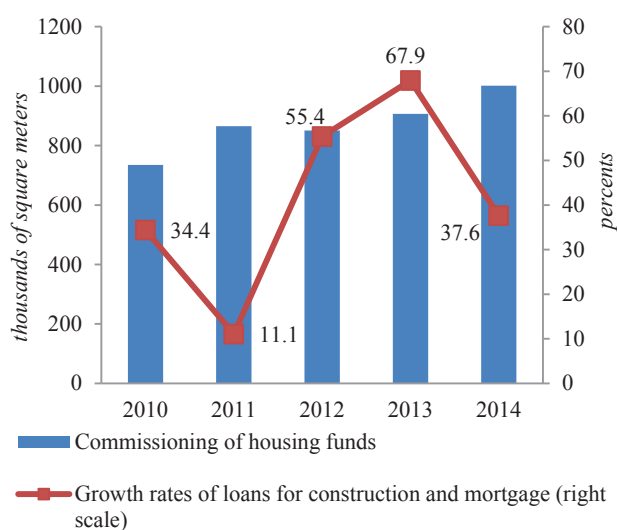
where K = number of type of real estate;
 Q_{oi} = number of real estate of type i in the base period;
 P_{oi} = price of real estate of type i in the base period;
 P_{ti} = price of the real estate of type i in the current period.

Chart 1.4.2. Dynamics of Change in Prices for Flats


Source: SRS GKR, NSC KR, NBKR calculations
 *data on Bishkek and Osh cities up to 2010 are not available

Chart 1.4.3. Dynamics of Change in Prices for Detached Houses


Source: SRS GKR, NSC KR, NBKR calculations
 *data on Bishkek and Osh cities up to 2010 are not available

Chart 1.4.4. Dynamics of Housing Commissioning and Provided Loans for Construction and Mortgage


Source: SRS GKR, NSC KR, NBKR calculations
 Note: data for the reporting period

At the end of 2014, the increase in the aggregate level of commissioning of housing funds constituted 10.4 percent compared with 2013 (Chart 1.4.4).

The main share of commissioned housing still accounted for Bishkek city and Chui oblast, Osh city and Osh oblast (Table 1.4.1).

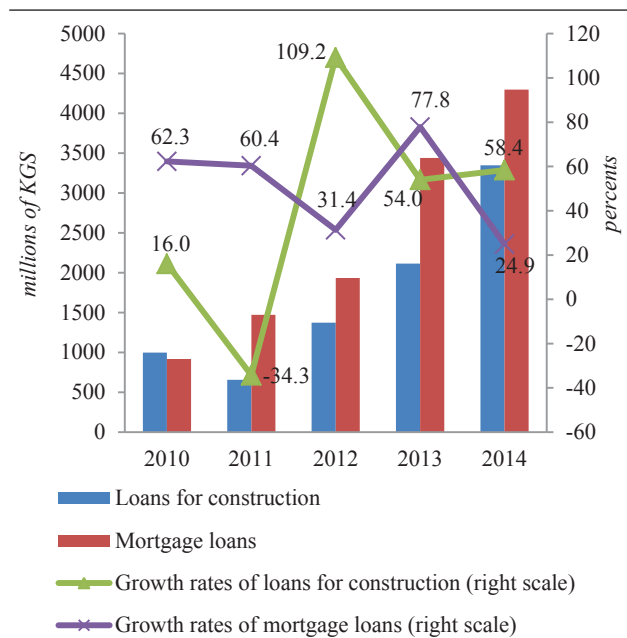
Table 1.4.1. Geographic Structure of Commissioned Housing

	2013		2014	
	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	486.1	51.9	334.4	33.4
Osh city and Osh oblast	206	22.0	205.6	20.5
Other oblasts of KR	244.9	26.1	461.2	46.1
Total	937	100.0	1,001.2	100.0

Source: NSC KR

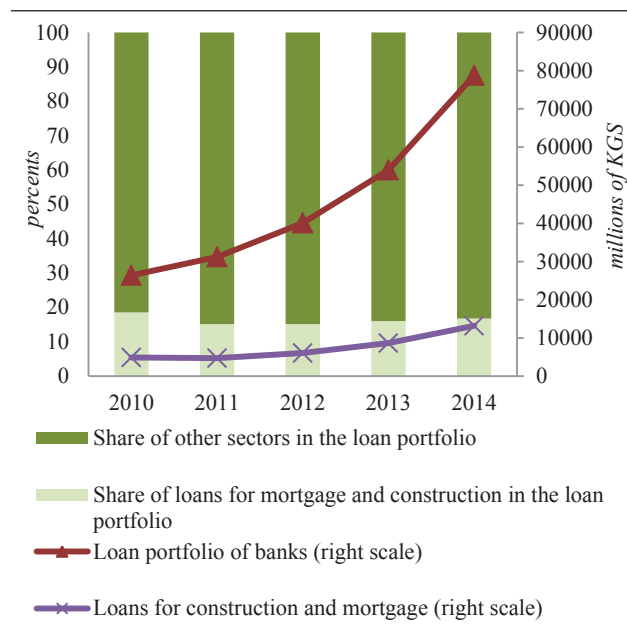
In the reporting period, the volume of mortgage loan and loans to finance the construction increased by 24.9 and 58.4 percent, respectively, compared with 2013 and constituted KGS 7.6 billion (Chart 1.4.5).

Chart 1.4.5. Loans Provided for Construction and Mortgage



Source: NBKR
Note: data for the reporting period

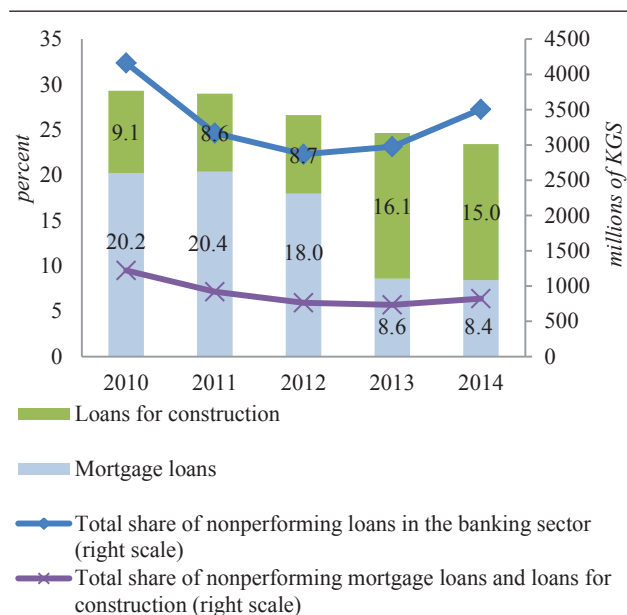
Chart 1.4.6. Total Share of Loans for Mortgage and Construction in the Loan Portfolio of Commercial Banks



Source: NBKR
Note: data for the reporting period

As of the end of 2014, total loans for mortgage and construction grew by 52.5 percent compared with 2013 and amounted to KGS 13.2 billion or 16.8 percent of the total loan portfolio of commercial banks (increase by 0.8 p.p. compared with 2013, Chart 1.4.6).

Chart 1.4.7. Dynamics of Nonperforming Loans for Mortgage and Financing of Construction



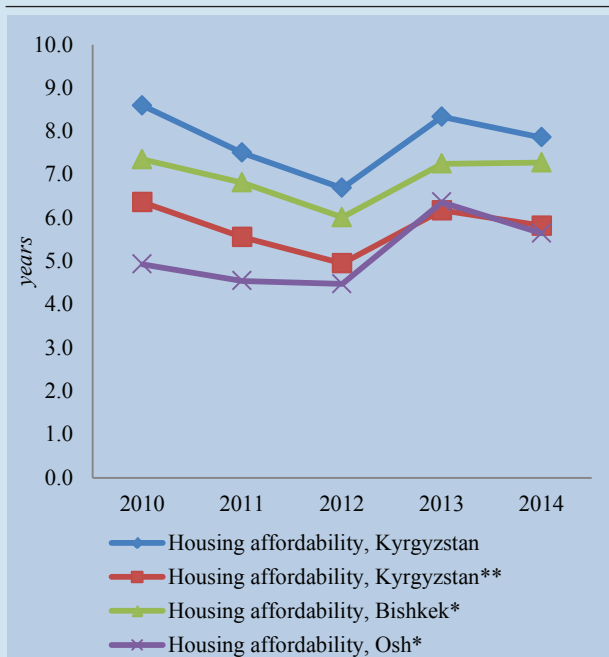
Source: NBKR

At the end of 2014, the share of gross troubled mortgage and construction loans in total nonperforming loans decreased by 1.2 p.p. compared with 2013 and amounted to 23.4 percent or KGS 821.5 million (increase by KGS 88.0 million, Chart 1.4.7).

Box 1. Housing Affordability Index

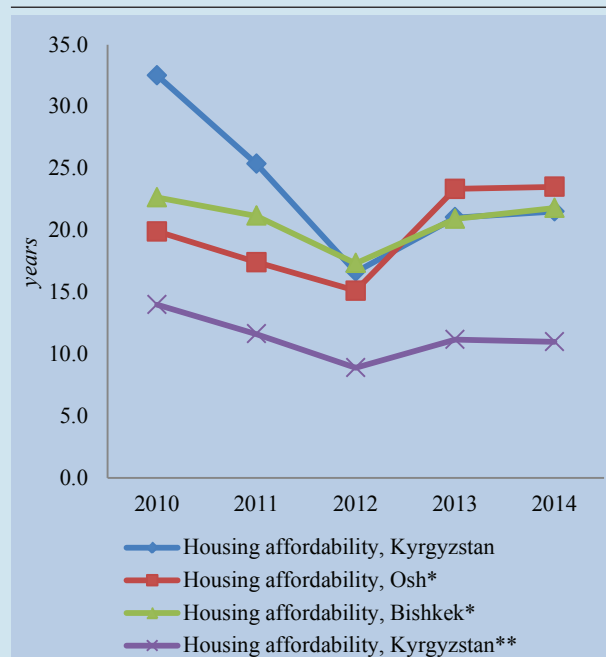
As of the end of 2014, the situation with housing affordability in the Kyrgyz Republic improved slightly (index value decreased by 0.4 years) compared with 2013. This is due to slowdown of growth in property prices at the end of the reporting period (Chart 1.4.8).

Chart 1.4.8. Housing (Flats) Affordability Index without Minimal Consumer Budget



Sources: NSC KR, NBKR calculations
 * data up to 2010 on Bishkek and Osh are not available
 ** including non-registered income

Chart 1.4.9. Housing (Flats) Affordability Index Including Minimal Consumer Budget



Sources: NSC KR, NBKR calculations
 * data up to 2010 on Bishkek and Osh are not available
 ** including non-registered income

According to the results of 2014, to purchase an apartment of 54 square meters in Kyrgyzstan one should save all wages for 7.9 years (including unrecorded wages⁵ – 5.8 years).

By the end of the reporting period, a family in Kyrgyzstan with the minimum consumer budget of KGS 15 783.6 (63.5 of total family income) will need 21.5 years (including unrecorded revenues – 13,7 years, Chart 1.4.9) in order to purchase housing.

⁵ According to the conclusions of the Working Group on the research of the black economy of the Kyrgyz Republic, the level of shadow income of the population constituted around 35 percent of the wages fund. This research was held by the Public Association “Investment Roundtable”, Bishkek city, December 2012.


Box 2. Stress Testing of Impact from Change in Prices in the Real Estate Market on the Banking Sector⁶

As of the end of 2014, the share of loans, secured by pledged real estate, constituted 90.7 percent of the total volume of loans in the loan portfolio of banks.

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

Stress testing⁷ is focused on quantitative assessment of possible losses from outstanding loans and identification of the most vulnerable banks (groups of banks) to potential change in prices for real estate.

Scheme 1. Loans Issued by the Banks and Secured by Pledged Real Estate as of December 31, 2014

<i>Loan repayment balance⁸</i>		Less than 20%	20 - 40%	40 - 60%	60 - 80%	More than 80%	Total
<i>Total amount of loan⁹</i>							
Loan repayment balance, millions of KGS		1,358.0	5,172.0	14,485.6	29,369.2	30,750.5	81,135.3
Total volume of pledged real estate, millions of KGS		9,578.3	17,637.2	28,494.0	47,015.0	42,680.4	145,405.0
including – residential:		7,085.9	14,782.8	23,012.0	37,531.5	36,507.5	118,919.7
– non-residential:		2,527.8	2,856.7	5,481.9	9,483.2	6,173.7	26,523.2

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

	<i>Banking sector</i>	<i>Large banks</i>
1) “Negative” scenario Price for real estate ↓ by 40% for a year	Decrease in volume of pledged real estate is below the amount of loan repayment balance by KGS <u>6.3 billion</u>	Decrease in volume of pledged real estate is below the amount of loan repayment balance by KGS <u>0.1 billion</u>
2) “Historical” scenario* Price for real estate ↓ by 23% for a year	-----	-----
3) “Alternative” scenario Price for real estate for 2 years ↓ by 40% (by 20% for a year)	Decrease in volume of pledged real estate is below the amount of loan repayment balance by KGS <u>1.3 billion</u> (last group of loans)	-----

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

⁶ Stress testing was conducted on the basis of data provided by the commercial banks by means of the survey as of December 31, 2014.

⁷ Based on the data of the commercial banks surveys.

⁸ The principal amount of a loan and interest.

⁹ The amount of a loan includes the amount of issued loan plus accrued interest for the whole loan term.

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 28%, large banks – by 40%.

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

	<i>Stress test as of June 30, 2014</i>	<i>Stress test as of December 31, 2014</i>
Banking sector	Scenario 1: KGS -5.3 billion; Scenario 2: ----- Scenario 3: KGS -1.6 billion	Scenario 1: KGS -6.3 billion; Scenario 2: ----- Scenario 3: KGS -1.3 billion
Large banks	Scenario 1: KGS -1 billion Scenario 2 and 3: ----- <i>Banks at risk: 1 bank</i>	Scenario 1: KGS -0.1 billion Scenario 2 and 3: ----- <i>Banks at risk: 2 banks</i>
Separate banks	<i>Most vulnerable banks: 3 banks</i> <i>Banks at risk: 4 banks</i>	<i>Most vulnerable banks: 4 banks</i> <i>Banks at risk: 4 banks</i>
<i>Threshold level of decline in prices for real estate</i>	<i>for the banking sector:</i> ↓ 28 %	<i>for the banking sector:</i> ↓ 28 %

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

II. BANKING SECTOR

Generally, development of the banking sector was characterized by growth of lending volume on the background of some diversification of the loan portfolio. Growth of major indicators of the banking sector: assets, loan portfolio, resource base and net profit were observed.

Growth of financial intermediation on the part of the banks remained on the background of the main indicators of the banking sector outrunning the rates of economic growth.

The results of stress testing indicate moderate level of risks in the banking sector.

2.1. Major Trends

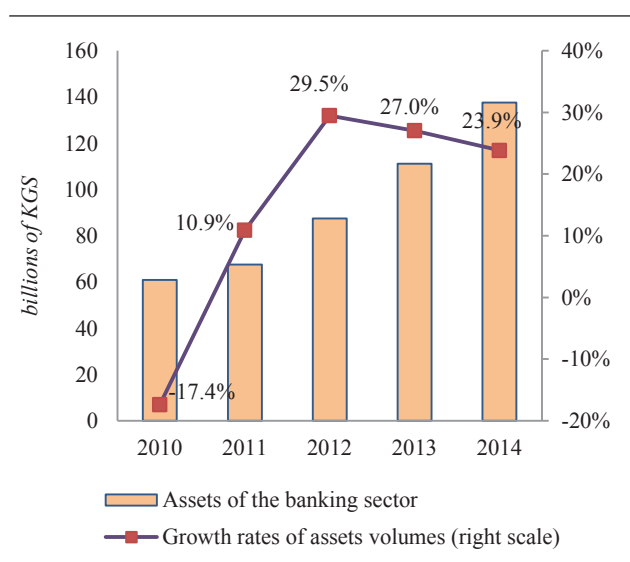
As of December 12, 2014¹⁰ 24 commercial banks (including the Bishkek branch of the National Bank of Pakistan) and 293 of their branches worked in the territory of the Kyrgyz Republic, among which there were 16 banks with foreign participation in the capital, including 10 banks with foreign participation in the amount of more than 50 percent. All banking institutions of the country are universal by the type of business.

Two banks: “Manas Bank” CJSC, “Issyk-Kul” IB OJSC operated in the preservation regime, “KyrgyzCredit” CJSC operated in the regime of temporary administration (here in after referred to as troubled banks).

Assets

Generally, growth in the volume of all types of the banking sector assets was observed at the end of the reporting period. Assets of the banking sector at the end of 2014 amounted to KGS 137.6 billion, having increased by 23.9 percent compared with 2013 (Chart 2.1.1).

Chart 2.1.1. Dynamics of Assets in the Banking Sector



Growth of assets was primarily provided by increase of:

- the loan portfolio by 45.9 percent or KGS 24.8 billion;
- the correspondent accounts and cash by 12.8 percent or KGS 4.1 billion.

The share of loan portfolio in the structure of assets constituted 57.2 percent, having increased by 8.6 p.p. compared with 2013.

At the end of 2014, significant changes were not observed in the structure of the banking sector assets by sectors of economy (Chart 2.1.3).

The total share of liquid assets (cash, correspondent accounts and securities) at the end of 2014 decreased by 7.6 p.p. compared with 2013 and amounted to 31.2 percent of the total volume of assets or KGS 43.0 billion.

¹⁰ The data are submitted according to periodic regulatory reporting of the commercial banks.

Chart 2.1.2. Change of Assets Structure in the Banking Sector
billions of KGS

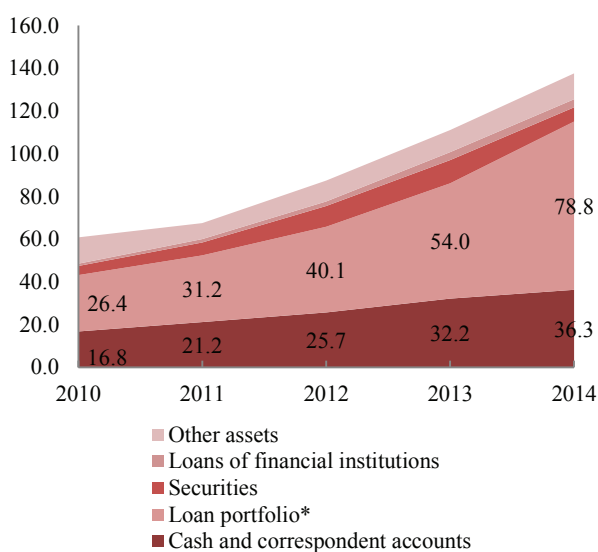
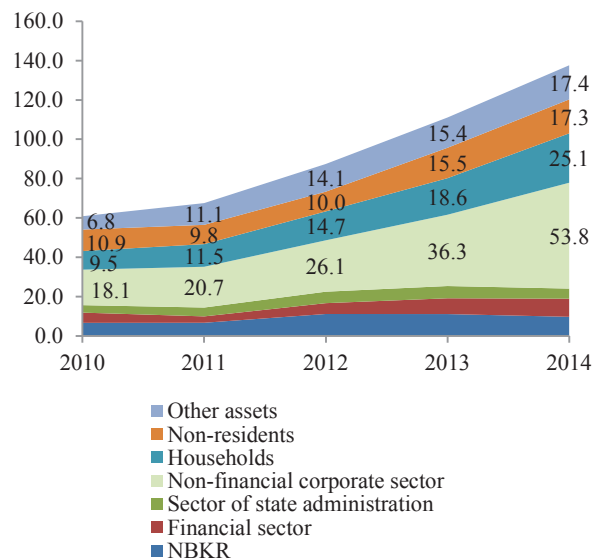


Chart 2.1.3. Institutional Structure of Assets in the Banking Sector
billions of KGS



* Loans and financial leasing to the clients exclusive of special loss provisions

Loan Portfolio

Growth of banks' loan portfolio in 2014 was primarily due to increase in the volume of lending to agricultural sector and trade.

At the end of 2014, the level of dollarization of the loan portfolio in the banking sector increased by 4.0 p.p. compared with 2013 and amounted to 57.6 percent (Chart 2.1.4).

Chart 2.1.4. Dynamics of Loan Portfolio in the Banking Sector
billions of KGS

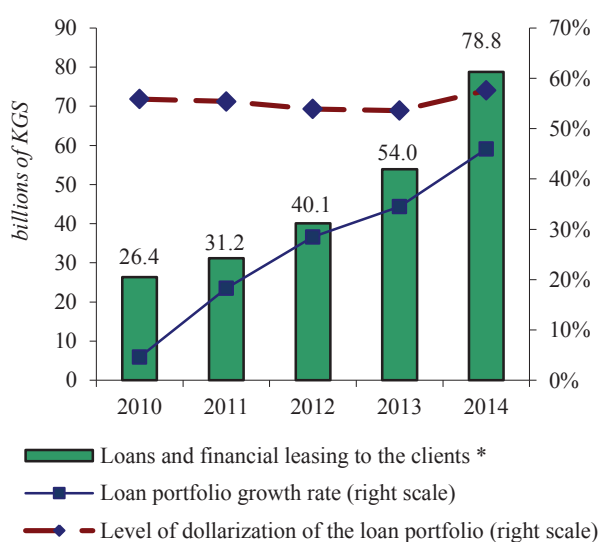
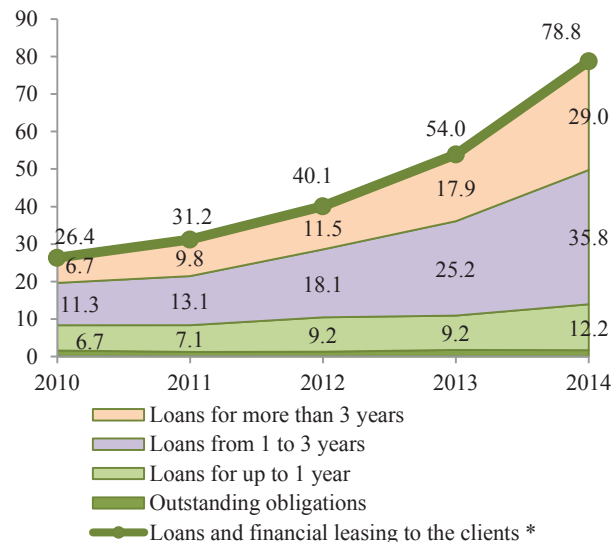


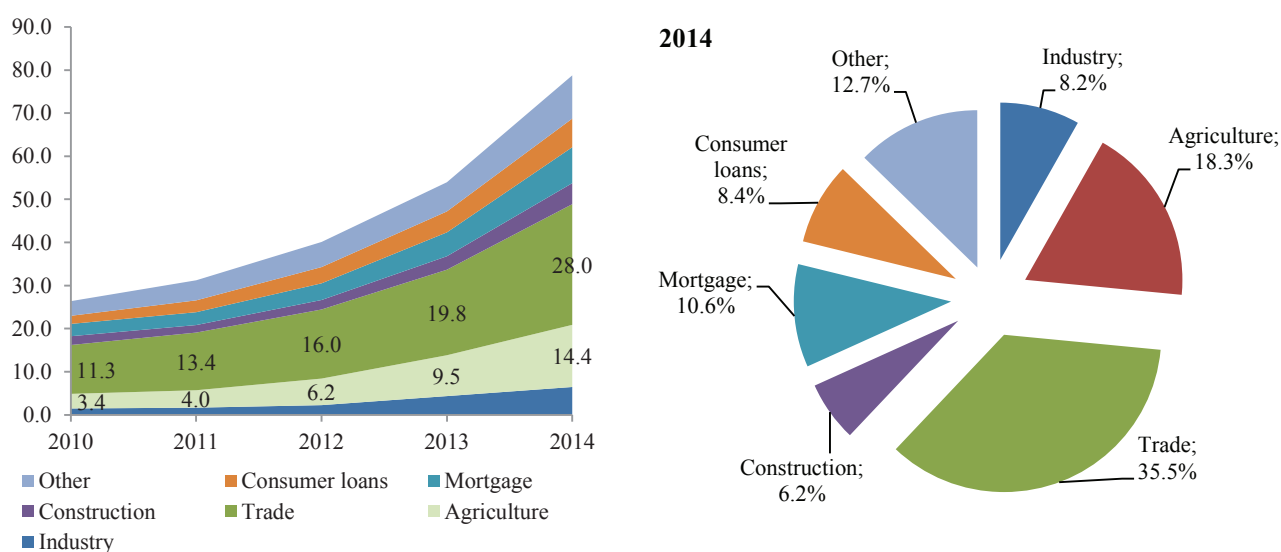
Chart 2.1.5. Structure of Loan Portfolio by Maturity
billions of KGS



* excluding loans provided by FCI and special loan loss provisions

The major share was accounted for medium-term loans from 1 to 3 years in the structure of loan portfolio by maturity, which constituted 45.4 percent at end of 2014 (Chart 2.1.5).

Chart 2.1.6. Sectoral Structure of the Loan Portfolio
billions of KGS



Decrease in the share of loans to the trade as well as outstripping growth rates of lending to agricultural sector over growth rates of lending to trade was observed in the sectoral structure of the loan portfolio (Chart 2.1.6). Thus, the share of lending to trade in the loan portfolio at the end of 2014 decreased from 36.8 percent to 35.5 percent compared with 2013. The share of agricultural sector loans increased from 17.6 percent to 18.3 percent. The volume of lending to agricultural sector at the end of 2014 increased by 1.5 times compared with 2013 and amounted to KGS 14.4 billion.

Liabilities

At the end of 2014, liabilities of the banking sector amounted to KGS 116.8 billion, having increased by 26.5 percent compared with 2013.

Decrease in the share of households' and non-financial enterprises' funds were observed in the institutional structure of liabilities (Chart 2.1.7). Moreover, households' funds remained the major source of attracted banks' resources.

Chart 2.1.7. Institutional Structure of Liabilities

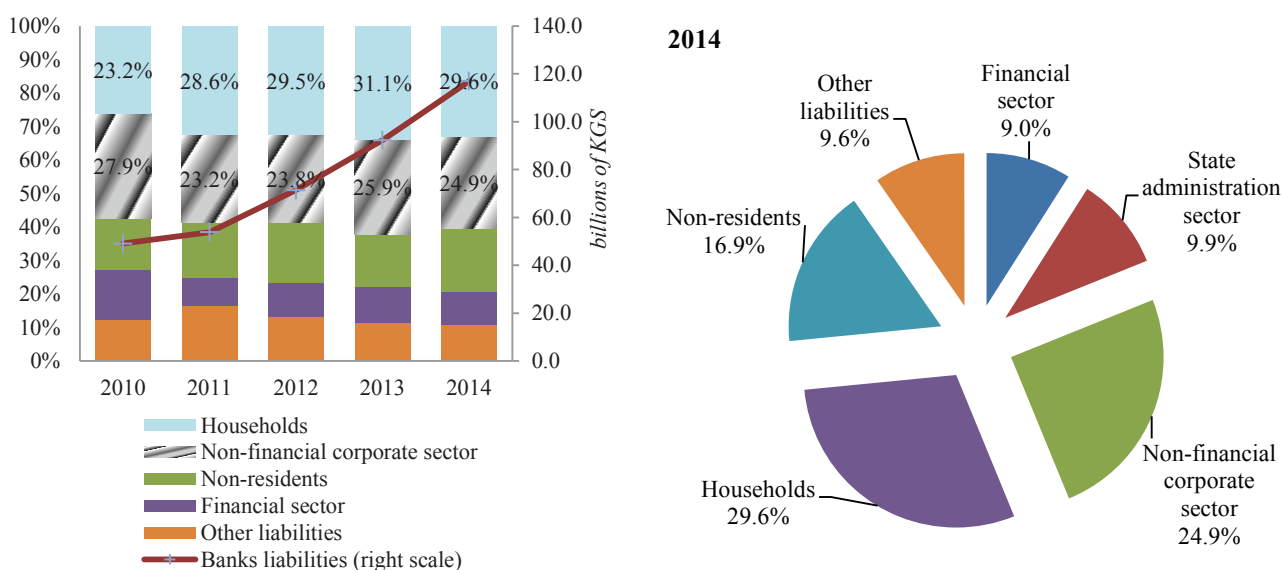
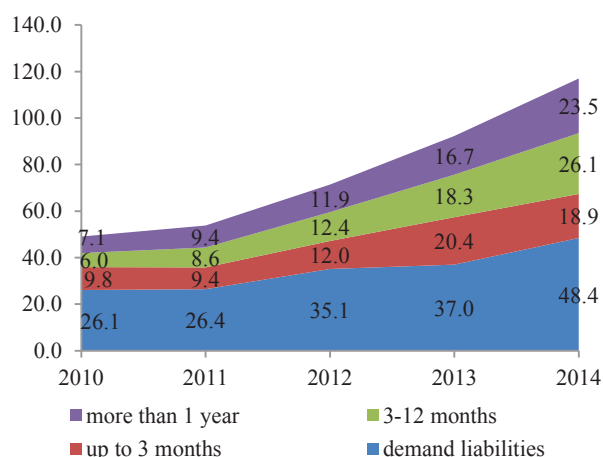


Chart 2.1.8. Structure of the Banking Sector Liabilities by Maturity
billions of KGS



As of the end of 2014, demand liabilities amounted to KGS 48.4 billion (the share of demand liabilities increased from 40.1 percent as of the end of 2013 to 41.4 percent). Liabilities with maturity of more than 1 year increased by 40.1 percent for the reporting year and amounted to KGS 23.5 billion or 20.1 percent of the total volume of banks' liabilities (Chart 2.1.8).

The share of liabilities in foreign currency in the total volume of attracted funds increased by 5.7 p.p. and amounted to 58.2 percent or KGS 67.9 billion (Chart 2.1.9).

Chart 2.1.9. Banks' Liabilities in Foreign Currency

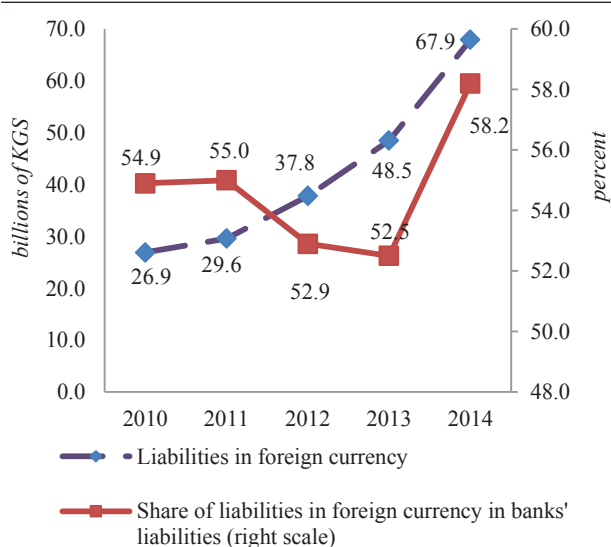
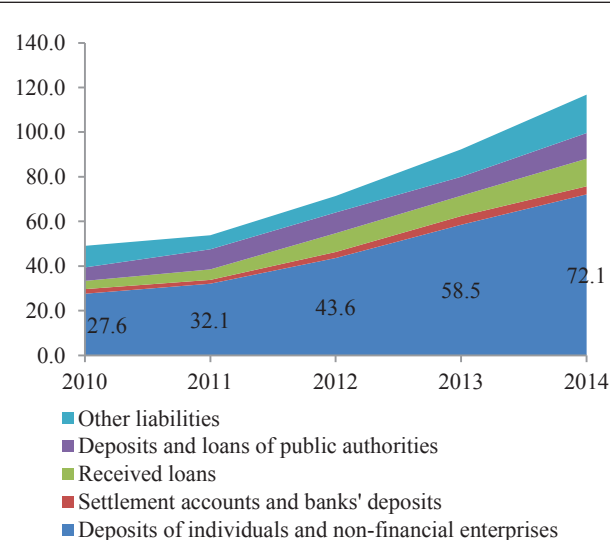


Chart 2.1.10. Structure of Banks' Liabilities by the Reserve Sources
billions of KGS



Deposits of individuals and non-financial enterprises increased by 23.3 percent at the end of 2014 and amounted to KGS 72.1 billion (Chart 2.1.10). The share of deposits of individuals and non-financial enterprises in banks' liabilities decreased by 1.7 p.p. and constituted 61.7 percent.

Financial Results¹¹

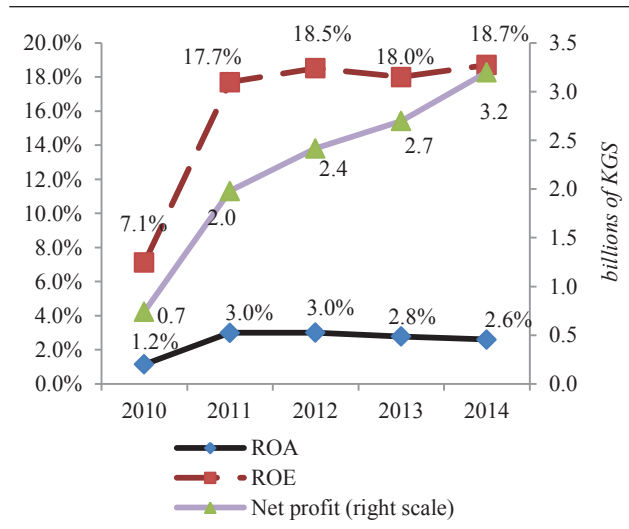
Generally, insignificant change of profitability indicators¹² at the end of 2014 was observed compared with 2013 (Chart 2.1.11):

- ROA decreased by 0.2 p.p. and constituted 2.6 percent;
- ROE increased by 0.7 p.p. and constituted 18.7 percent.

¹¹ For the purposes of this publication the main indicator of profitability of the banking activity is rate of return on assets (ROA), defined as the ratio of profits to average assets, as well as the rate of return on equity (ROE), defined as the ratio of profits to the average size of the regulatory capital of the 1 level.

¹² ROA, ROE indicators are presented in annual terms.

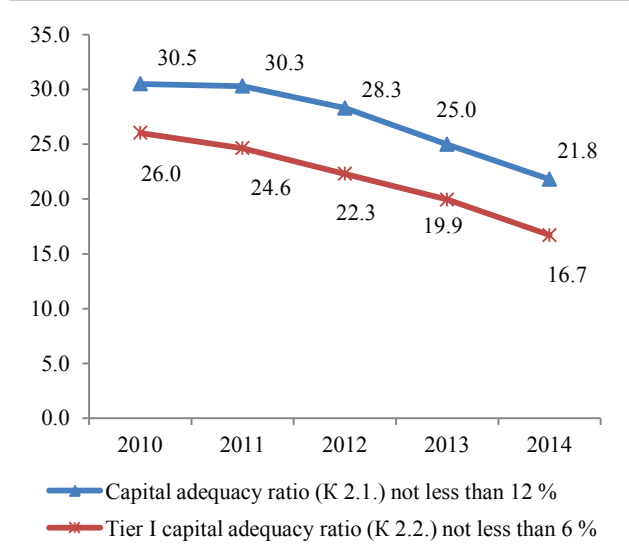
Chart 2.1.11. Indices of the Banking Sector Profitability for the Period



Meanwhile, net profit of the banking sector increased by 18.6 percent, compared with 2013, and amounted to KGS 3.2 billion.

Capital Adequacy

Chart 2.1.12. Dynamics of Capital Adequacy Ratios
percent



With statutory minimum capital adequacy at 12.0 percent, at the end of 2014, this figure amounted to 21.8 percent (Chart 2.1.21), having decreased by 3.2 p.p compared with 2013.

Decrease of capital adequacy was due to growth rates of risk weighted assets and off-balance sheet liabilities (+33.2%) outstripping growth rates of net total capital (+16.2%).

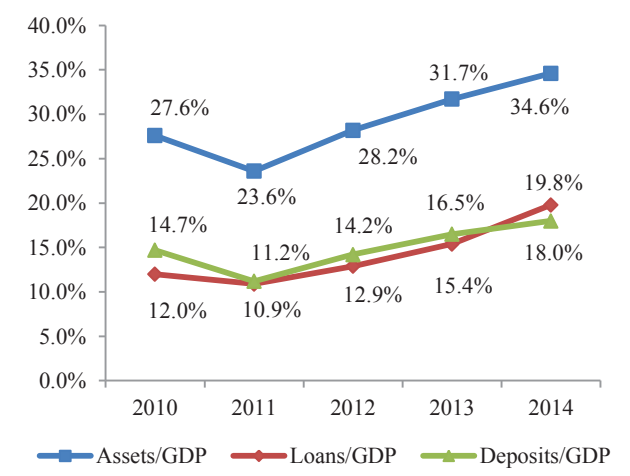
At the same time, the actual level of capital adequacy in the banking sector generally formed according to the results of 2014 can further increase the volume of risky and earning assets by 1.8 times, without exceeding established level of capital adequacy.

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 2.1.13. 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.

At the end of 2014, growth of financial intermediation was still observed (Chart 2.1.13). However, growth rates of major indicators in the banking sector outstrip economic growth. Dynamic growth in the amount of borrowers and depositors was observed in the banking sector of the Kyrgyz Republic.

At the end of 2014, increase of financial intermediation indicators in the banking sector of the Kyrgyz Republic compared with 2013 was the

following:

- Assets to GDP – from 31.7 percent to 34.6 percent;
- Loans to GDP – from 15.4 percent to 19.8 percent;
- Deposits to GDP – from 16.5 percent to 18.0 percent.

2.2. Banking Sector Risks

2.2.1. Credit Risk¹³

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

At the end of 2014, increase of lending to economy was observed; it resulted in increase of risk weighted assets and credit risks in the banking sector (Chart 2.2.1). The volume of nonperforming loans increased by KGS 497.6 million or 16.5 percent compared with 2013. The share of nonperforming loans in the loan portfolio of banks decreased by 1.1 p.p. compared with 2013 and formed at the level of 4.5 percent (Chart 2.2.2).

Chart 2.2.1. Structure of Risk Weighted Assets
millions of KGS

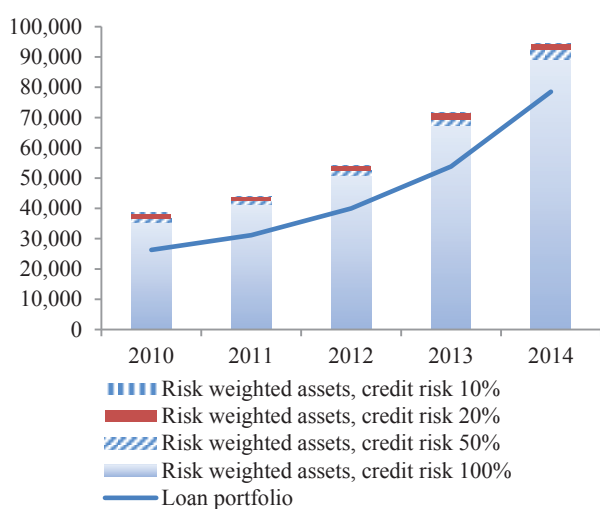
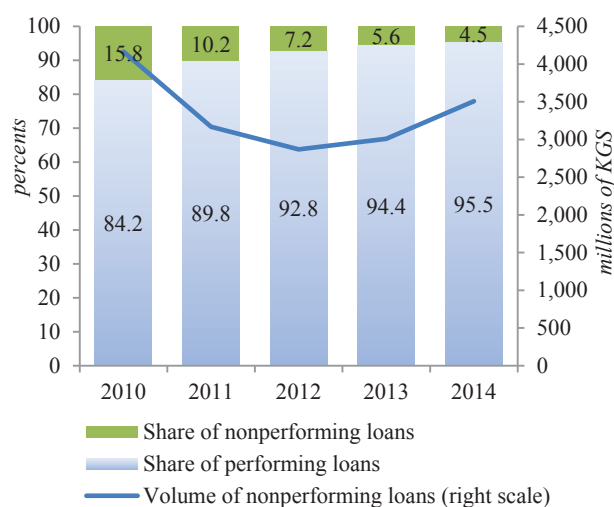


Chart 2.2.2. Loan Portfolio Quality



In order to assess the quality of the loan portfolio, the commercial banks use a loan classification system¹⁴, which contributes to determining the possible level of potential losses from bad loans and compensating them in time through creation of appropriate reserves.

Nonperforming and overdue loans, reflecting the first signs of deterioration in the quality of loan portfolio, require particular attention during analysis of the loan portfolio quality. In the reporting period, there was gradual decrease in the share of nonperforming and overdue loans, as well as loans placed in a non-accrual status (Chart 2.2.3).

At the end of 2014, the indicator of the risk of default on assets (the ratio of special loss provisions and loan portfolio) constituted 2.6 percent.

¹³ Banking transaction, carrying credit risk, are considered within the framework of this section.

¹⁴ 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 "nonperforming". For each of six categories, the bank has to create a reserve corresponding to this category defined as a percentage of loans issued.

Chart 2.2.3. Indicators of the Loan Portfolio Quality
percent

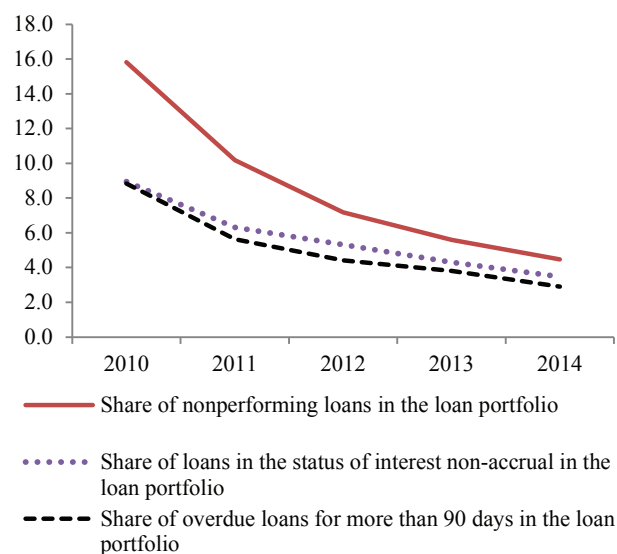
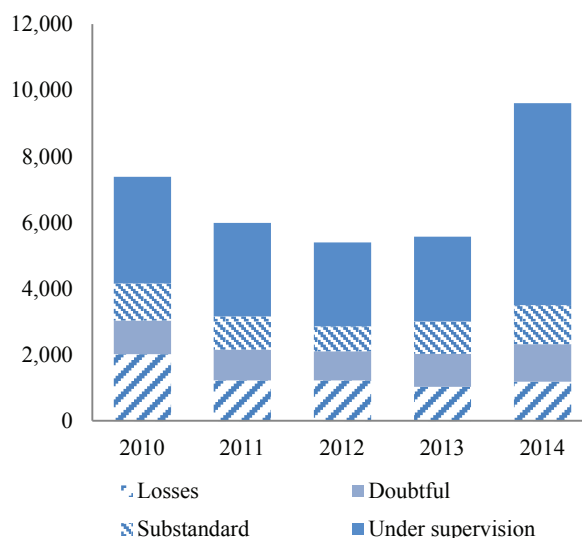


Chart 2.2.4. Change of Loan Portfolio Classification in the Banking Sector
millions of KGS



Change in the volume of loans classified as loans “under supervision” is among the factors that may influence improvement or deterioration of the loan portfolio quality in the future (Chart 2.2.4). The share of such loans in the reporting period increased by 3.0 p.p. of the total loan portfolio and constituted 7.8 percent.

Aggregate reserves created by the commercial banks constituted 4.8 percent of the total loan portfolio (as of December 31, 2013 this index constituted 5.4 percent). Meanwhile, the share of special loan loss provision as of December 31, 2014 constituted 54.8 percent of the total reserves (Chart 2.2.5).

Chart 2.2.5. Total and Special Reserves
millions of KGS

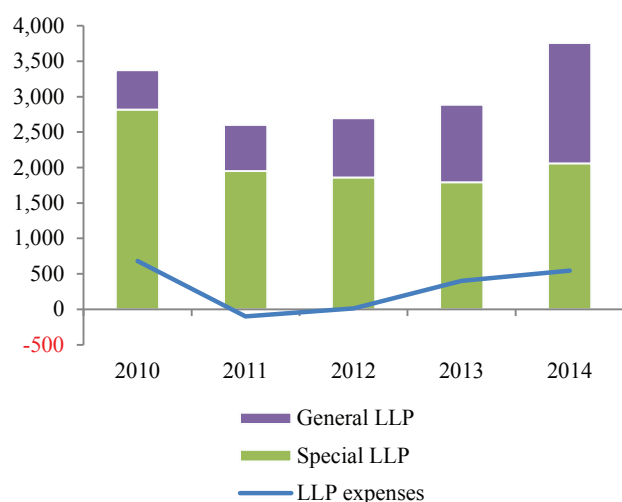
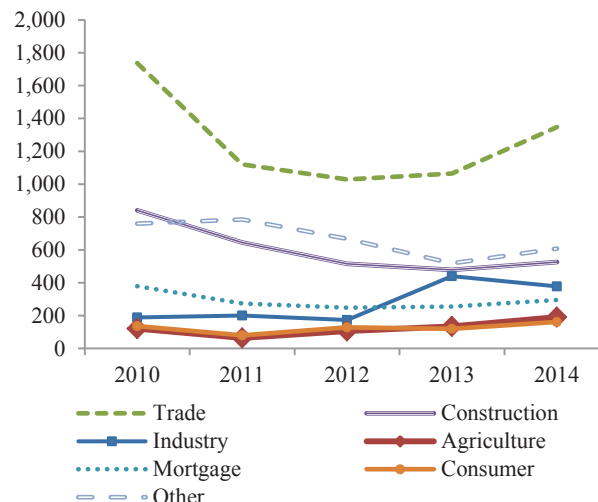


Chart 2.2.6. Volume of Nonperforming Loans by Sectors of Economy
millions of KGS



General increase in the volume of nonperforming loans in many sectors of economy was observed during the reviewed period, except for decrease in the volume of nonperforming loans in the industrial sector by KGS 62.3 million (Chart 2.2.6).

As of the end of December 31, 2014, the highest concentration of credit risks was still observed in the trade and construction sectors of economy.

Box 3. Results of the Survey of the Clients of Commercial Banks¹⁵

A significant portion of the loans (61.6%) given to borrowers is used in the manufacturing sector of the economy, thereby reflecting contribution of the banking sector in creation of the country's GDP; less than 1/5 of issued loans (18.8%) are forwarded for financing of imports.

Sectoral Focus of Borrowers Activity

Chart 2.2.7. Sectoral Structure of Loans as of December 31, 2013

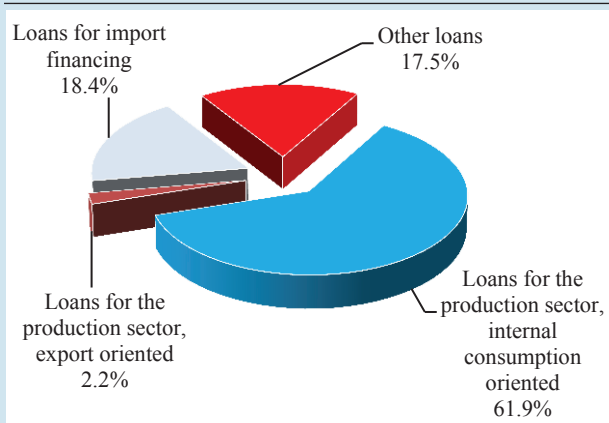
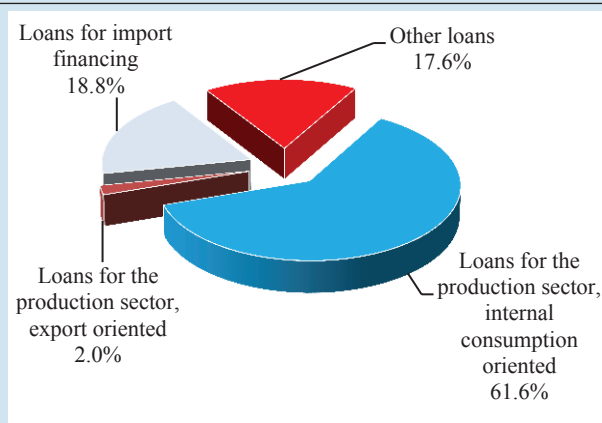


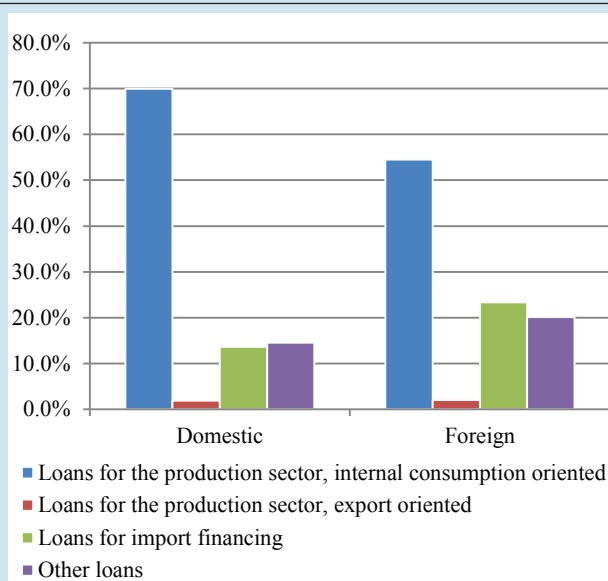
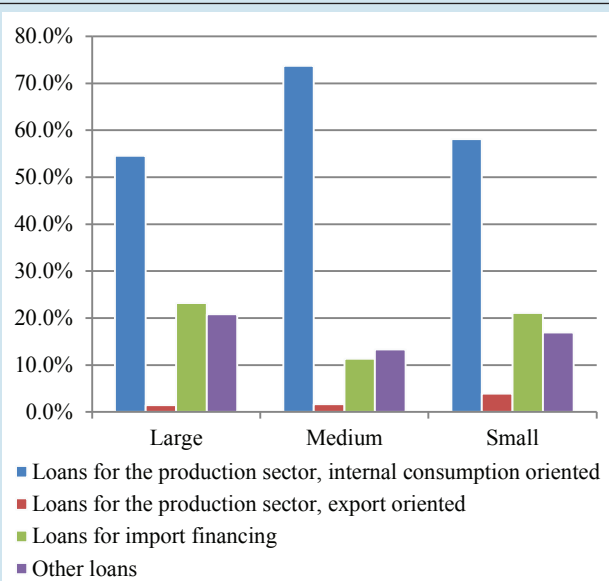
Chart 2.2.8. Sectoral Structure of Loans as of December 31, 2014



The major share of loans at the end of 2014 was still concentrated in the manufacturing sector of economy¹⁶ (61.6 percent of total borrowers' loans). The share of loans financing the imports amounted to 18.8 percent (Chart 2.2.8).

Domestic banks forward 69.9 percent of the loan portfolio to the manufacturing sector and 13.6 percent – to finance imports. Generally, foreign banks also provided loans to the manufacturing sector of economy (54.5 percent). In the reviewed period, the share of loans forwarded to finance imports constituted 23.3 percent of the loan portfolio (Chart 2.2.9).

Chart 2.2.9. Sectoral Structure of Loans by the Groups of Banks and Forms of Ownership as of December 31, 2014



¹⁵ According to the data of survey (questionnaire) of commercial banks.

¹⁶ The production sector means the activity of the bank clients connected with the production of goods and services.

2.2.2. Liquidity Risk

Public confidence in the banking sector depends on the timely implementation of obligations by banks, which suggests availability of sufficient liquidity in the banks. For regulatory purposes, *liquidity risk* is assessed using economic current liquidity ratio¹⁷.

Current liquidity ratio decreased from 70.0 percent (as of the end of 2013) to 65.1 percent (Chart 2.2.10).

Chart 2.2.10. Liquidity Indicators in the Banking Sector

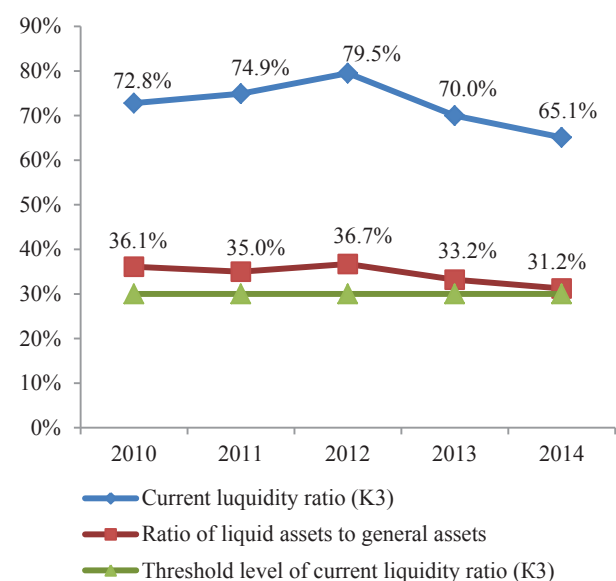
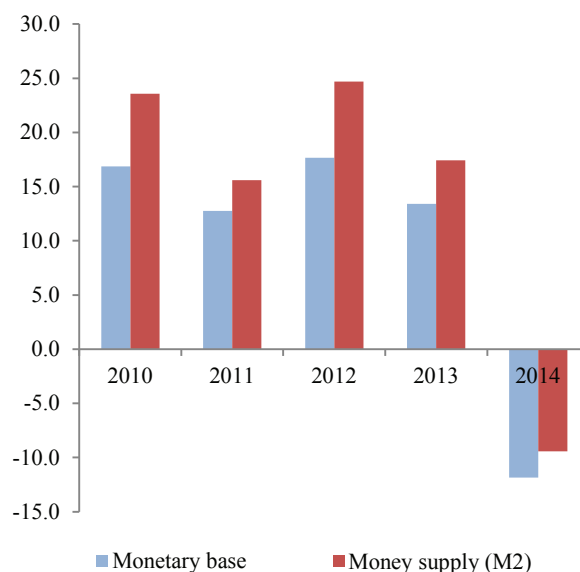


Chart 2.2.11. Growth Rates of Money Supply (M2) and Monetary Base
percent



In terms of the groups of banks, significant decrease of liquidity at the end of 2014 was observed in the large and small banks (Scheme 2.2.1).

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

	2013		2014
Large banks	60.6%	⇒	55.0%
Medium banks	71.4%	⇒	72.3%
Small banks	98.7%	⇒	87.1%

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

The most significant gaps by maturity were still observed in the “demand” category (Table 2.2.1), therefore the banks kept a substantial amount of low-income high quality liquid assets in the structure of assets.

¹⁷ *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 30 percent of short-term liabilities.

Table 2.2.1. Cumulative Gap¹⁸ by Maturity of Financial Assets and Liabilities, as of December 31, 2014
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	31,420	44,654	52,037	72,745	138,316	138,316
Total financial liabilities	46,344	52,690	64,456	89,477	111,959	111,959
Gap (gap interval)	-14,924	-8,037	-12,419	-16,732	26,357	26,357
Gap in % of assets	-10.8%	-5.8%	-9.0%	-12.1%	19.1%	19.1%
Gap in % of net total capital	-80.0%	-43.1%	-66.6%	-89.7%	141.3%	141.3%

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	17,717	25,999	29,095	36,945	72,873	72,873
Total financial liabilities	26,956	30,128	35,733	49,042	64,288	64,288
Gap (gap interval)	-9,238	-4,129	-6,638	-12,097	8,585	8,585
Gap in % of assets	-12.7%	-5.7%	-9.1%	-16.6%	11.8%	11.8%
Gap in % of net total capital	-49.5%	-22.1%	-35.6%	-64.8%	46.0%	46.0%

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	13,703	18,655	22,942	35,800	65,443	65,443
Total financial liabilities	19,388	22,562	28,723	40,435	47,671	47,671
Gap (gap interval)	-5,686	-3,907	-5,781	-4,635	17,772	17,772
Gap in % of assets	-8.7%	-6.0%	-8.8%	-7.1%	27.2%	27.2%
Gap in % of net total capital	-30.5%	-20.9%	-31.0%	-24.8%	95.3%	95.3%

Table 2.2.2. Maturity of Financial Assets and Liabilities, as of December 31, 2014
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	44,654	7,383	6,661	14,047	65,571	138,316
Including loans and financial leasing to the clients	3,084	3,542	5,083	11,635	55,178	78,522
Total financial liabilities	52,690	11,766	9,536	15,485	22,482	111,959
Including deposits of individuals and fixed deposits of legal entities	17,002	8,014	5,151	7,929	7,933	46,029
Gap	-8,037	-4,383	-2,875	-1,438	43,089	26,357
Including on loans and deposits	-13,918	-4,472	-68	3,706	47,245	32,492

¹⁸ Cumulative gap is the amount of possible expenses for support of solvency, estimated for each range of maturity.

Box 4. Assessment of “Irreducible” (Stable) Level of Demand Deposits during the Period of 2010 – 2014¹⁹ (“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” balance²⁰) and are used in assessment of so called “excess liquidity”.

Chart 2.2.12 shows that during 2014, demand deposits of commercial banks²¹ had a fairly weak volatility. At the end of the reporting period, the volume of demand deposits increased by KGS 0.6 billion compared to the same period of the last year and amounted to KGS 37.5 billion. “Irreducible” balance of demand deposits increased, and at the end of 2014 amounted to KGS 30.1 billion or 80.3 percent of the total volume of demand deposits (Chart 2.2.13).

Chart 2.2.12. Volume of “Irreducible” Balances of Demand Deposits
billions of KGS

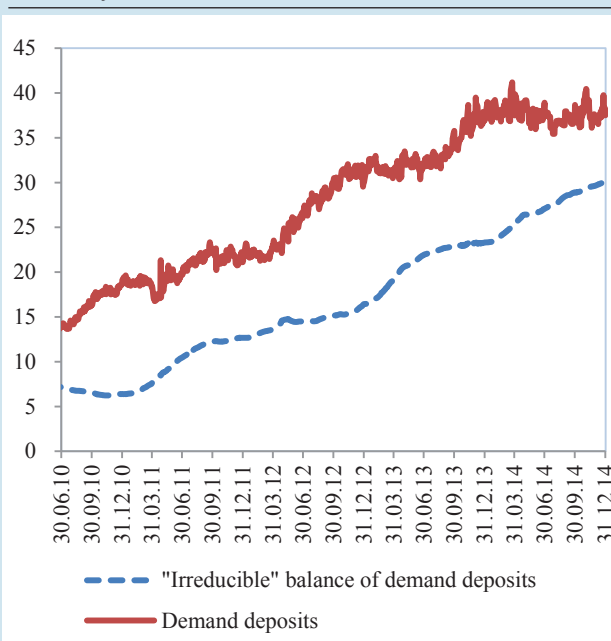
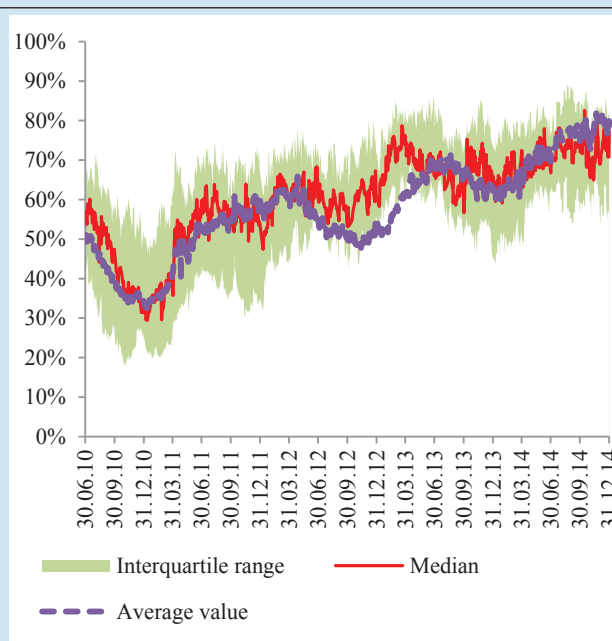


Chart 2.2.13. Share of “Irreducible” Balances in Demand Deposits



“Unstable” share of demand deposits constituted 19.7 percent, respectively.

Divided by the banks, the interquartile range²² of minimum “stable” level of demand deposits at the end of 2014 constituted 55.3-82.8 percent of the total volume of demand deposits (Chart 2.2.13).

Taking into account “irreducible” balance of demand deposits, the cumulative gap between the maturities changed from negative to positive (Scheme 2.2.2). Thus, taking into account “irreducible” balance, financial assets exceeded financial liabilities of banks.

¹⁹ 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.

²⁰ 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.

²¹ Including settlement (current) accounts.

²² Share of “irreducible” balance of demand deposits ranged among the banks from the largest to the smallest. Interquartile range reflects the smallest and the largest shares.

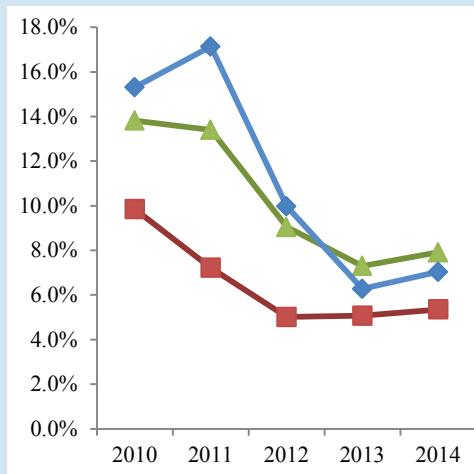
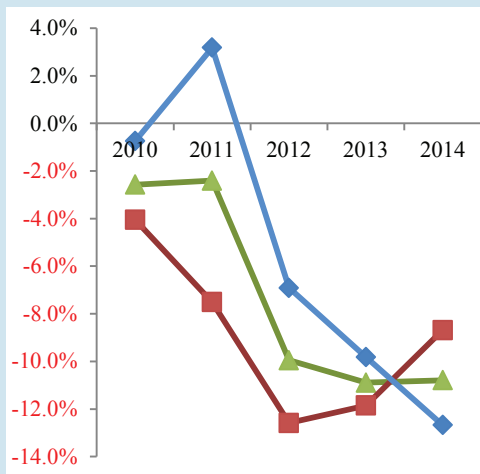
Scheme 2.2.2. Cumulative Gap by Maturities (Exclusive and Inclusive of “Irreducible” Balances of Demand Deposits)
percent of the total assets

Maturities

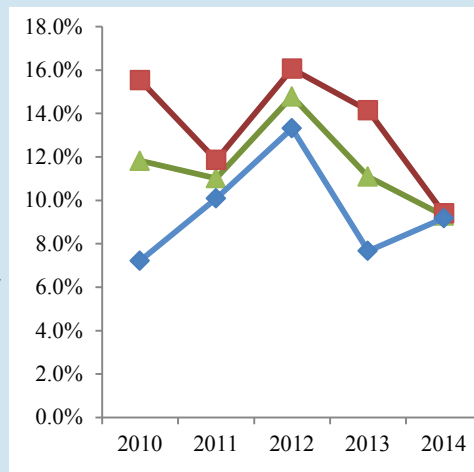
Exclusive of “irreducible” balance

Inclusive of “irreducible” balance

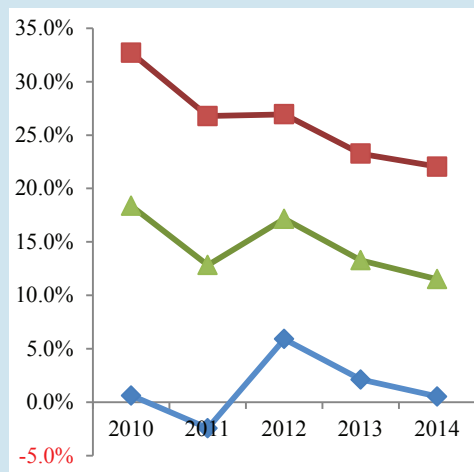
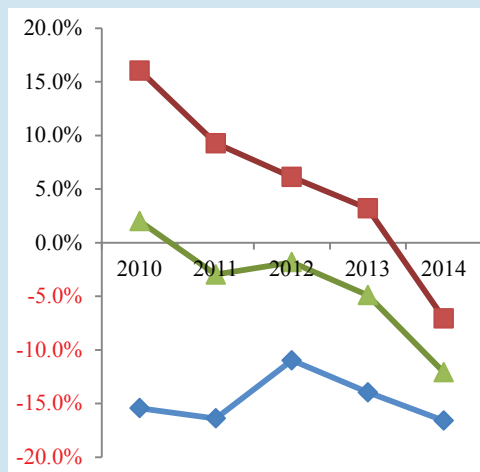
Demand:



Up to 1 month:



Up to 12 months:



General in national currency in foreign currency

CONTENT

2.2.3. Risk of Concentration

Generally, as of December 31, 2014, slight increase of *concentration risk* was observed compared with 2013.

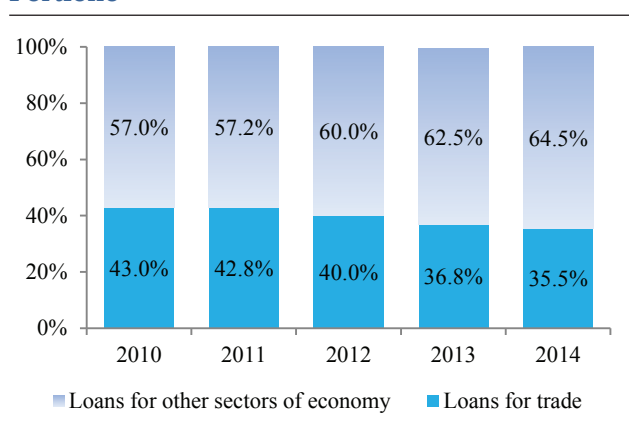
Concentration of the Largest Sources of Financing

The results of stress testing show that some banks are exposed to the risks of liquidity deficit related to outflow of funds of the largest sources of financing²³.

Loan Concentration

According to the results of stress-testing, potential default of 5 largest borrowers in separate banks may decrease regulatory capital below economic standard of the NBKR.

Chart 2.2.14. Sectoral Concentration of the Loan Portfolio

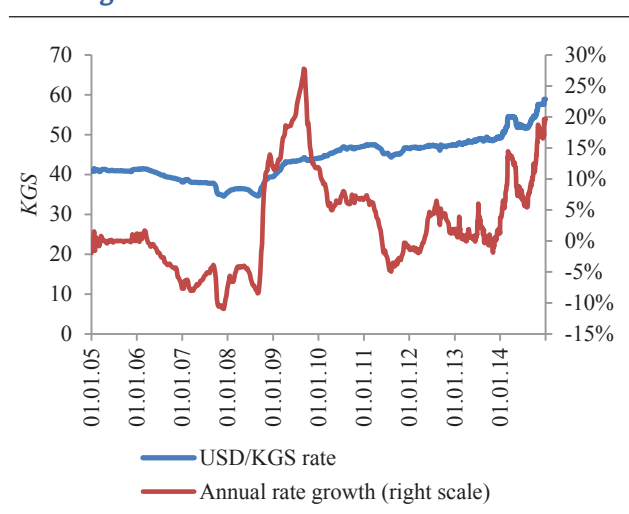


Insignificant decrease of the level of trade loans concentration was observed in the sectoral structure of loan portfolio amid increase of lending to the agricultural sector. Based on the results of 2014, the share of loans for trade decreased from 36.8 percent to 35.5 percent (2.2.14).

2.2.4. Currency Risk

At the end of 2014, direct *currency risk* was at a moderate level.

Chart 2.2.15. Dynamics of USD/KGS Nominal Exchange Rate

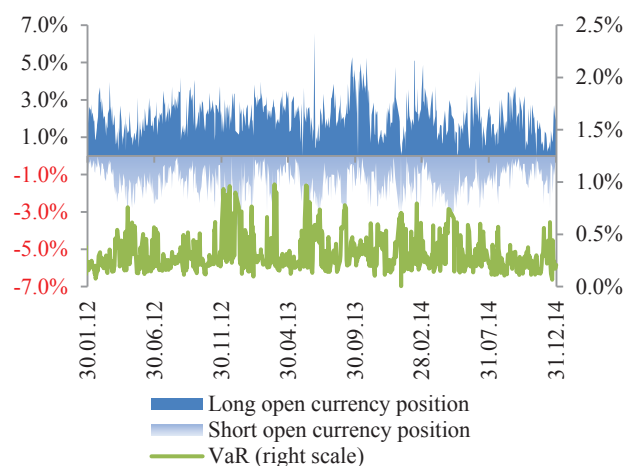


The risk of currency position overestimation in the banking sector is minimum (VaR: 0.1–0.9 percent of the net total capital, Chart 2.2.15).

Banking sector is still insignificantly subjected to direct currency risk due to balanced currency structure of banks' assets and liabilities.

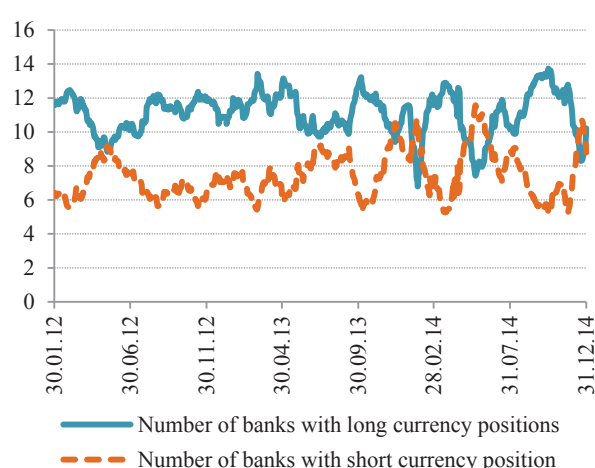
²³ The largest sources of financing (LSF) are the funds of creditors and depositors (received loans, settlement accounts, demand deposits and fixed deposits), including funds of the government sector.

Chart 2.2.16. Dynamics of Open Currency Position (OCP) and Revaluation Risk (VaR)* in percent of NTC



* excluding troubled banks

Chart 2.2.17. Currency Position of the Banks* units



Box 5. Credit Risk Through Indirect Currency Risk

As of the end of 2014, 46.4 percent of the total loan portfolio was accounted for the loans, which were repaid in foreign currency, while the income of the borrowers generated in the national currency (Chart 2.2.18). This volume of the loan portfolio was potentially exposed to credit risk through exposure to currency risk (so-called indirect currency risk).

Indirect confirmation of the impact made by the currency risk on the credit risk is given in Chart 2.2.19 that displays the proportion of nonperforming loans by groups of loans:

- Group 1 – 4.8 percent, basic incomes of the borrower are generated in the national currency, and the loans are repaid in foreign currency;
- Group 2 – 4.6 per cent, basic incomes and loans payable by the borrower, are in the same currency.

Chart 2.2.18. Loan Portfolio by Groups of Loans*

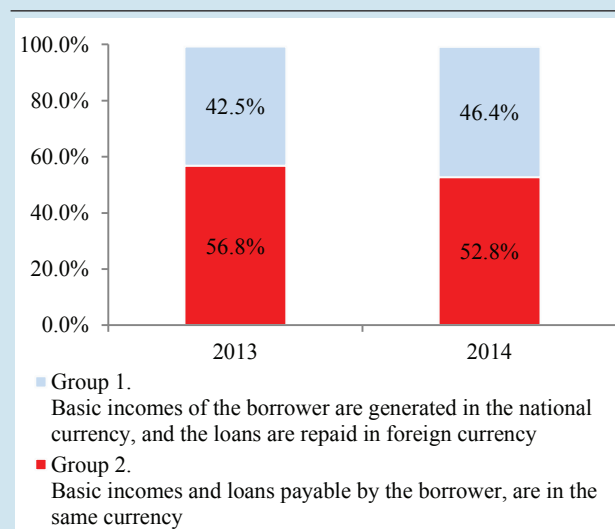
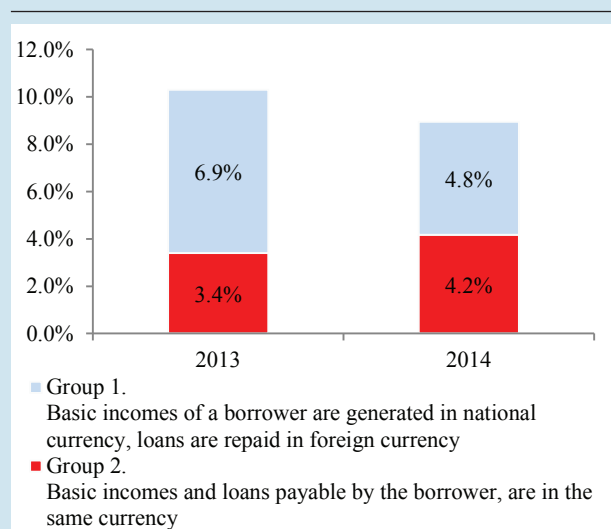


Chart 2.2.19. Share of nonperforming loans by groups of loans*

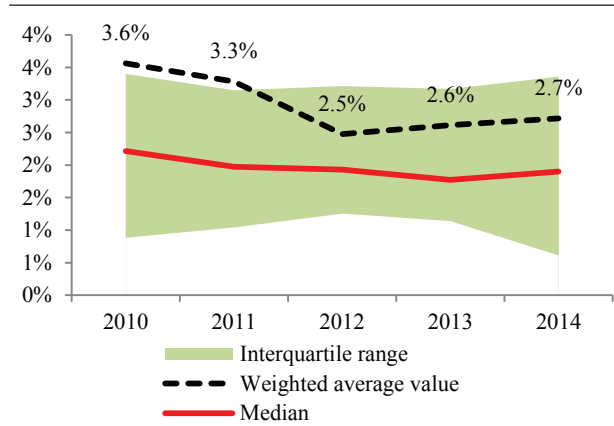


* Group 3 “Basic income of a borrower are generated in foreign currency, loans are repaid in the national currency” is not included in the chart as the share of this group in the loan portfolio is insignificant (0.8 percent of the total loan portfolio as of the end of 2014).

2.2.5. Interest Rate Risk

At the end of 2014, *interest risk* was moderate.

Chart 2.2.20. Dynamics of Interest Rate Risk (VaR) in percent of NTC



Slight increase of interest rate risk (VaR) from 2.6 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 2010 – 2014 was within accessible limits (2-4 percent of net total capital).

Chart 2.2.21. Dynamics of Average Weighted Interest Rate of Individuals' Time Deposits

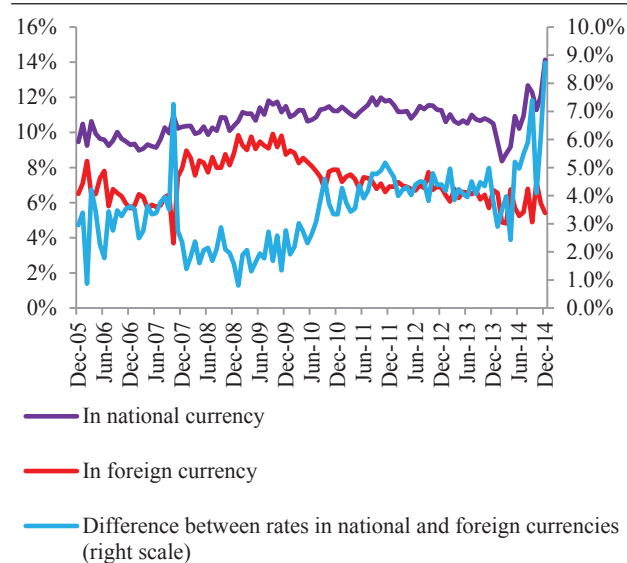
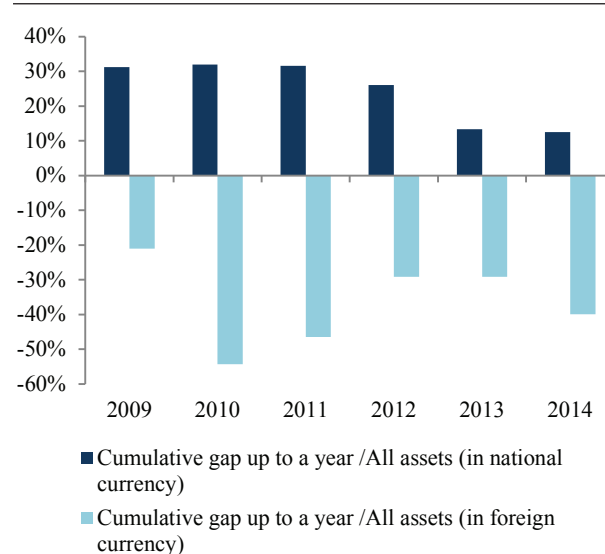


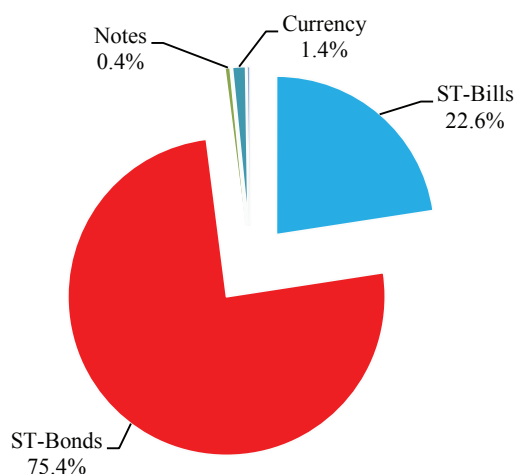
Chart 2.2.22. Cumulative Gap of Assets and Liabilities Exposed to Interest Rate Risk



2.2.6. Risk of “Contagion”

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

Chart 2.2.23. Distribution of Interbank Loan Transactions Made during 2014 between Resident Banks, Depending on Collateral



The loans in the interbank market are covered by collateral in the form of highly liquid government securities or foreign exchange (Chart 2.2.23) in the banking sector of Kyrgyzstan. Commercial banks did not grant interbank loans without collateral.

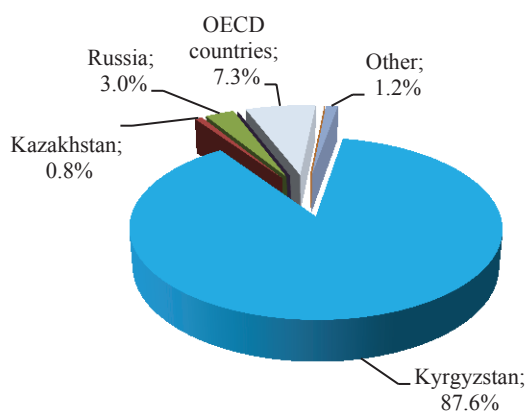
In general, the “contagion” risk in the interbank credit market of Kyrgyzstan was insignificant.

2.2.7. Country Risk

The banking sector of the Kyrgyz Republic as of December 31, 2014 remained poorly integrated in the global financial markets.

The volume of disposed assets of non-residents constituted KGS 17.2 billion or 12.4 percent of total banking sector assets. The highest concentration of dispositions was observed in the OECD countries – 7.3 percent of total assets (Chart 2.2.24).

Chart 2.2.24. Geographic Structure of Assets as of December 31, 2014



The main share of the assets placed abroad was focused on correspondent or deposit accounts and constituted KGS 15.6 billion or 91.1 percent of total disposed assets of non-residents.

Meanwhile, 73.0 percent of total assets disposed abroad accounted for 6 banks.

At the end of 2014, banks’ liabilities to non-residents of the Kyrgyz Republic totaled KGS 19.7 billion or 17.6 percent of the total liabilities of the banking sector. Main volume of the resources was drawn from non-resident banks in the form of loans and deposits, which amounted to KGS 18.9 billion or 95.7 percent of the total liabilities to non-residents.

In terms of urgency of liabilities to non-residents, the main share accounted for the medium-term loans as before.

As of December 31, 2014, 79.1 percent of the total volume of liabilities drawn from non-residents accounted for 6 banks.

Chart 2.2.25. Geographic Structure of Liabilities as of December 31, 2014

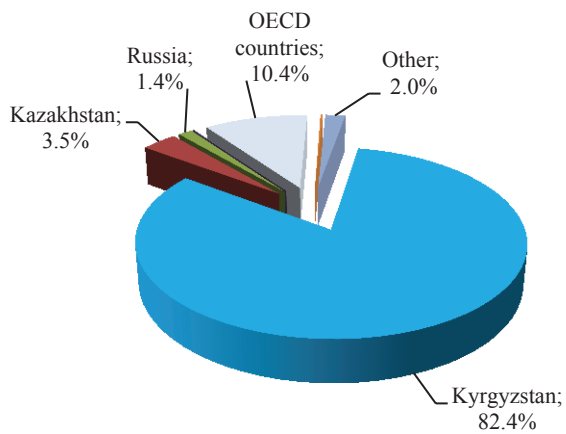
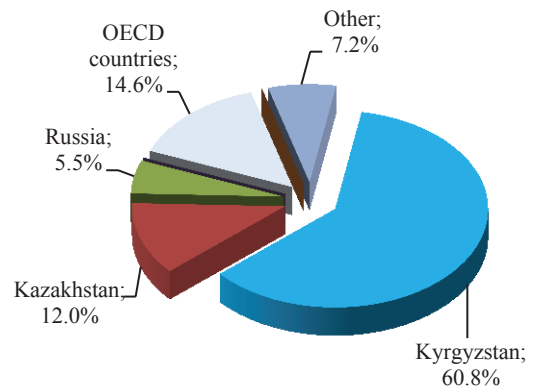


Chart 2.2.26. Authorized Capital by Countries as of December 31, 2014



At the end of 2014, foreign capital amounted to KGS 3.9 billion or 35.4 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 Risk²⁴

This method allows detecting a buffer stock of capital (net total capital) of banks, which can cover the additional allocations to LLP in connection with the transformation of performing loans into the category of troubled loans²⁵. “Reverse” stress testing allows calculating the growth rate of nonperforming (troubled) loans under which the capital adequacy (K2.1) will drop to the threshold level of 12 percent.

The results of calculations using the aforementioned method show that as of December 31, 2014 the possible share of performing loans, which can become troubled, constituted approximately 21.7 percent (Chart 2.3.1).

Thus, the banking sector has the potential to sustain a significant deterioration in the quality of the loan portfolio, which may require the creation of additional LLP approximately up to 44.6 percent of net total capital (Chart 2.3.2).

Chart 2.3.1. Maximum Possible Share of “Performing”²⁶ Loans that May Become “Nonperforming” Loans²⁷
in percent of performing loans

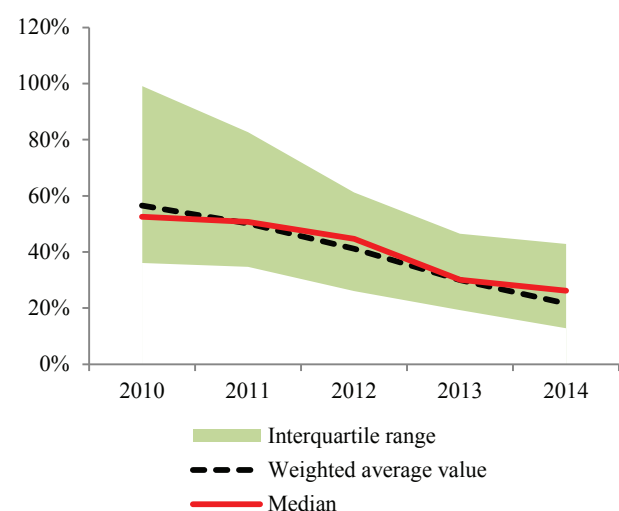
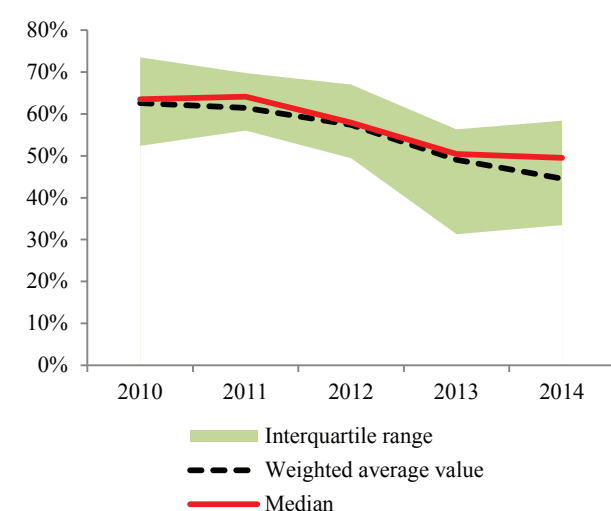


Chart 2.3.2. Additional LLP, in Creating thereof CAR Decreases to 12 Percent
in percent of NTC



²⁴ Exclusive of troubled banks.

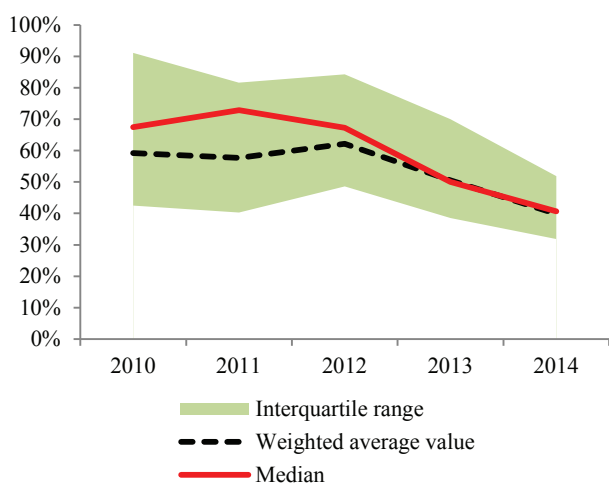
²⁵ Herewith, transition of “performing” loans to the category of “nonperforming” loans is fulfilled smoothly by three categories (“substandard”, “doubtful” and “losses”).

²⁶ Exclusive of “normal” loan category.

²⁷ When CAR decreases to the level of 12 percent.

2.3.2. “Reverse” Stress Testing of the Liquidity Risk

Chart 2.3.3. Scope of Potential Outflow of Deposits when K3 May Drop to 30 Percent in percent of the total volume of clients’ deposits



For assessment of the banking sector liquidity risk the liquidity ratio was calculated using scenario – the maximum amount of the outflow of deposits of individuals and non-financial companies, which may reduce the liquidity ratio to the threshold level of 30 percent.

The results of the “reverse” stress testing show (Chart 2.3.3), that as of December 31, 2014 the actual amount of liquid assets of the banking sector was able to potentially cover the outflow of an average of 39.2 percent of total deposits of population and non-financial enterprises (Table 2.3.1).

2.3.3. “Reverse” Stress Testing of the Market Risk

In general, the results of the “reverse” stress testing of the market risk indicate that the banking sector still has little sensitivity to the direct interest rate and currency risks.

Interest Rate Risk

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

The results of the “reverse” stress testing indicate little sensitivity of the banking sector to the direct interest rate risk. Decrease of the average interest rates on loans by 18.4 p. p. can reduce the level of capital adequacy ratio to 12 percent (Table 2.3.1).

Scenario 2 – decrease of average weighted interest rate on loans, when net profit of the commercial banks declines to the zero level.

The results of the “reverse” stress testing show that upon decrease of interest rates on loans by 6.5 p. p., net profit of the commercial banks decreases to the zero level (Table 2.3.1).

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

Currency Risk (Revaluation Risk)

Maximum increase/decrease level of the U.S. dollar exchange rate, which will influence capital adequacy and net profit, was calculated for valuation of the currency risk in the banking sector.

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

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

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

The results of stress testing indicate that with increase/decrease of the USD/KGS exchange rate by 194.4 percent, net profit of the commercial banks drops to the zero level (Table 2.3.1).

Table 2.3.1. General Results of the “Reverse” Stress Tests as of December 31, 2014

		Banking sector
Credit risk		
Scenario 1	Share of performing loans transferring to the category of “nonperforming” loans, <i>in percent</i>	21.1
Interest rate risk		
Scenario 1	Decrease of interest rate on loans, when CAR declines to 12%, <i>in percentage points</i>	18.4
Scenario 2	Decrease of interest rate on loans, when net profit declines to the zero level, <i>in percentage points</i>	6.5
Currency risk		
Scenario 1	Growth rate of USD/KGS (\pm) exchange rate, when CAR declines to 12%, <i>in percent</i>	Commercial banks overcome the effect of the direct currency risk (change of currency rate for more than 100 percent)
Scenario 2	Growth rate of USD/ KGS (\pm) exchange rate, when net profit declines, <i>in percent</i>	
Liquidity risk		
Scenario 1	Outflow of clients’ deposit share of the total deposits, when current liquidity ratio declines to 30%, <i>in percent</i>	39.2

III. NON-BANK FINANCIAL INSTITUTIONS

In general, the state of the system of NBFIs is assessed as rather stable. The share of troubled loans in the non-banking sector remains rather low. Stress test results indicate that the credit risk of the NBFIs is moderate.

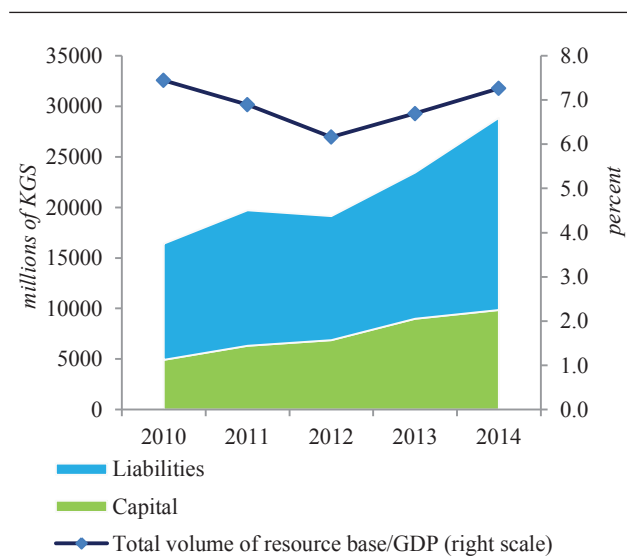
The trend of gradual decline in the weighted average interest rate on loans (MFI – by 1.0 p.p. compared with 2013, CU – by 1.7 p.p.).

3.1. Main Trends

The system of non-bank financial institutions subjected to licensing and regulation by the National Bank as of December 31, 2014 in the Kyrgyz Republic included: a specialized financial institution – “FCCU” OJSC; 135 credit unions; 215 microfinance institutions (including 5 microfinance companies, 154 microcredit companies and 56 microcredit agencies) and 309 exchange offices.

Resources

Chart 3.1.1. Dynamics of NBFIs Liabilities and Capital



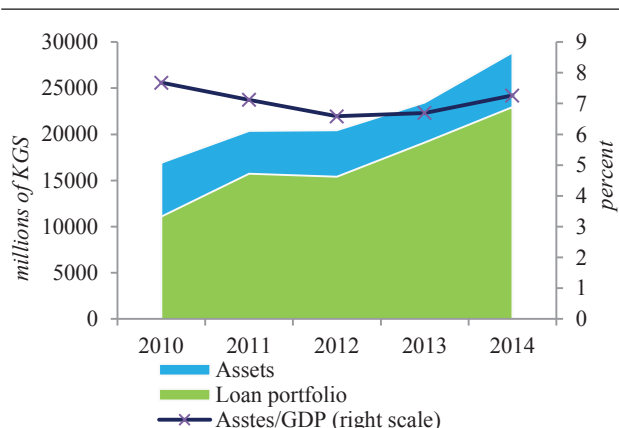
Source: NBKR

Note: since 2012 data are specified exclusive of “Bai-Tushum” Bank

At the end of 2014, NBFIs liabilities increased by 31.5 percent and were formed at the amount of KGS 19 005.4 million. In 2014, NBFIs capital increased by 9.6 percent and totaled KGS 9 849.3 million (Chart 3.1.1). Resource base growth was mainly due to the increase in the share of authorized capital and general reserves of NBFIs, as well as the increase in external financing of the non-banking financial sector.

The main volume of the resource base of the NBFIs was accounted for the loans received from non-residents (as of December 31, 2014 the share of these loans constituted 86.0 percent).

Assets

Chart 3.1.2. Dynamics of NBFIs Assets and Loans


Source: NBKR

Note: since 2012 data are specified exclusive of "Bai-Tushum" Bank

According to periodic regulatory reporting, the total assets of NBFIs in 2014 increased by 23.1 percent and amounted to KGS 28 854.6 million. This growth was due to increase in the loan portfolio of NBFIs (Chart 3.1.2).

The main activity of NBFIs remains lending. At the end of 2014, the loan portfolio of NBFIs increased by 20.1 percent and was formed in the amount of KGS 22 945.7 million (Table 3.1.1).

As of the end of 2014, the number of borrowers decreased by 0.5 percent compared with 2013 and amounted to 445 675 borrowers.

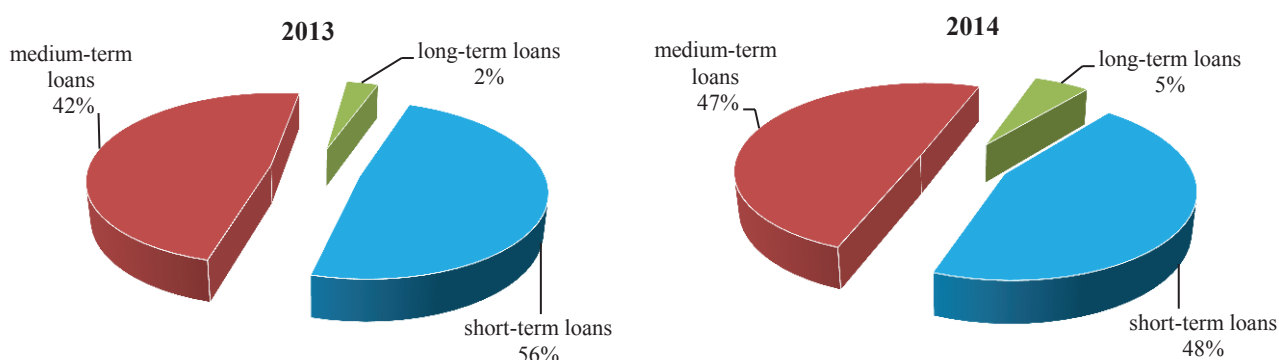
Table 3.1.1. Structure of Assets in NBFIs

	2013		2014	
	millions of KGS	share, %	millions of KGS	share, %
Financial assets, including:	22,008.2	93.9	25,856.9	89.6
<i>net loans and borrowings*</i>	18,678.3	79.7	22,481.3	77.9
<i>correspondent accounts in commercial banks</i>	1,525.9	6.5	1,799.6	6.2
<i>deposits in commercial banks</i>	815.9	3.5	961.0	3.3
<i>other financial assets</i>	988.1	4.2	615.0	2.1
Non-financial assets, including:	1,427.3	6.1	2,997.8	10.4
<i>fixed assets</i>	826.8	3.5	899.9	3.1
<i>other non-financial assets</i>	600.5	2.6	2,097.9	7.3
Total assets	23,435.5	100.0	28,854.6	100.0

Source: NBKR

*exclusive of LLP

There have been slight changes in the structure of the loan maturity provided by NBFIs. As of December 31, 2014, an increase in the share of medium-term credit resources and the decline in short-term loans were observed (Chart 3.1.3).

Chart 3.1.3. Structure of the NBFIs Loan Portfolio by Maturity


Source: NBKR

Note: data for the period

The main oblasts where the major share of loan portfolio of NBFIs is concentrated (65.8 percent of total loan portfolio) are Bishkek city, Chui, Osh and Jalal-Abad oblasts (Table 3.1.2), with is due to the highest level of business activity in these oblasts of the republic.

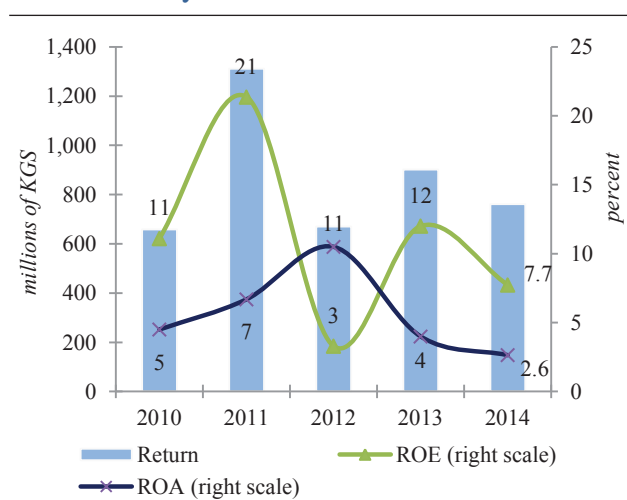
Table 3.1.2. Geographic Structure of the NBFIs Loan Portfolio

	2013		2014	
	millions of KGS	share, %	millions of KGS	share, %
Bishkek city and Chui oblast	6,241.2	32.7	7,693.5	33.5
Jalal-Abad oblast	2,903.6	15.2	3,645.3	15.9
Osh oblast	3,020.5	15.8	3,762.4	16.4
Batken oblast	1,611.8	8.4	1,604.9	7.0
Issyk-Kul oblast	1,643.7	8.6	2,109.6	9.2
Naryn oblast	1,154.6	6.0	1,386.3	6.0
Talas oblast	964.7	5.0	1,273.1	5.5
Outside Kyrgyzstan	1,566.8	8.2	1,470.6	6.4
Total	19,106.9	100.0	22,945.7	100.0

Source: NBKR

Revenue Position²⁸

Chart 3.1.4. Dynamics of NBFIs Revenue Position*



Source: NBKR

* exclusive of FCCU

At the end of 2014 net profit of NBFIs decreased by 15.4 percent compared with 2013 and amounted to KGS 761.9 million. ROA at the end of the reporting period decreased by 1.4 p.p. and amounted to 2.6 percent; ROE decreased by 4.3 p.p. and constituted 7.7 percent (Chart 3.1.4).

²⁸ ROA and ROE indices are provided in annual terms.

3.2. Risks of Non-bank Financial Institutions

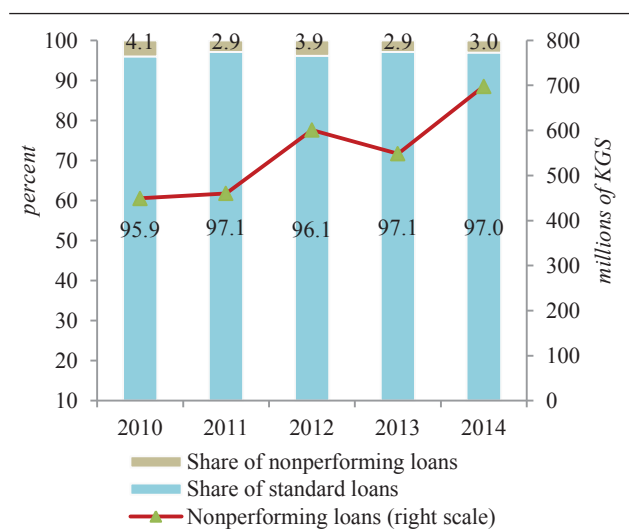
Major risk factors of the activities of NBFIs are the quality of the loan portfolio, industrial and institutional concentration, as well as status of the external debt of NBFIs.

Quality of the Loan Portfolio of NBFIs

As of the end of 2014, the share of nonperforming loans in the loan portfolio of NBFIs constituted 3.0 percent, meanwhile, their nominal volume increased by KGS 149,5 million or 27.3 percent compared with 2013 (Chart 3.2.1).

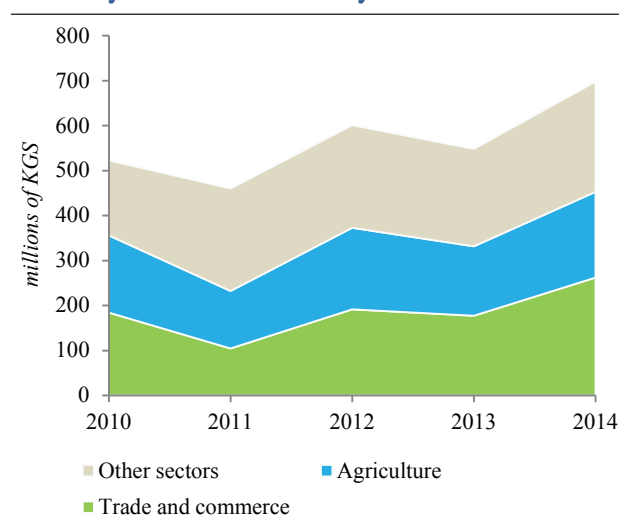
At the end of the reporting period, the structure of NBFIs nonperforming loans noted increase in the share of defaulting loans for trade (by 5.2 p.p. compared with 2013) of the total nonperforming loans of NBFIs (Chart 3.2.2).

Chart 3.2.1. Quality of NBFIs Loan Portfolio



Source: NBKR

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



Source: NBKR

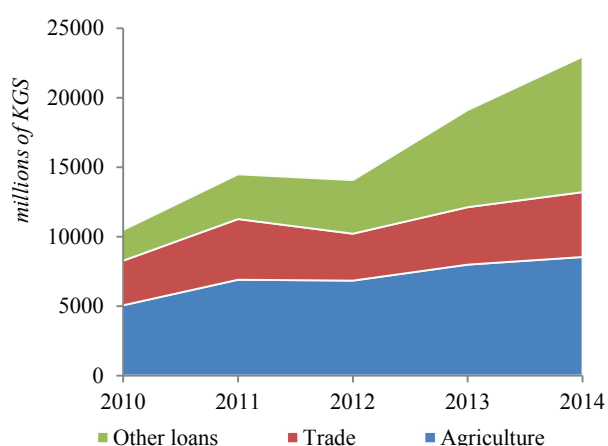
Sectoral Concentration

NBFI loan portfolio is concentrated in agriculture (37.2 percent of NBFIs total loans) and trade (20.3 percent of the total loan portfolio, Chart 3.2.3). Lending of agriculture is associated with a high risk because of their dependence of climate conditions.

Institutional Concentration

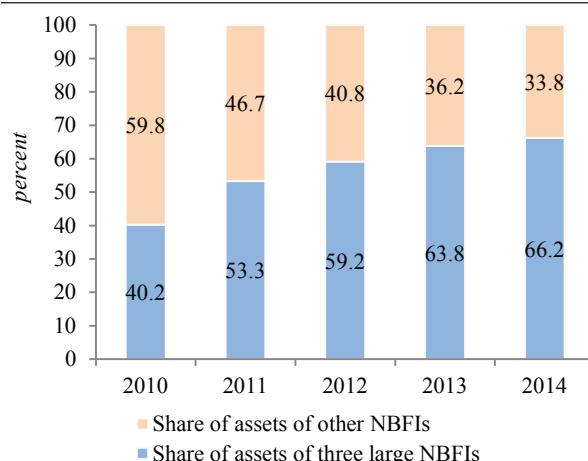
As of December 31, 2014, the share of assets of the three largest NBFIs increased by 2.4 p.p. compared with 2013 and amounted to 66.2 percent of the total assets of NBFIs system (Chart 3.2.4).

Chart 3.2.3. Sectoral Structure of NBFIs Loan Portfolio



Source: NBKR

Chart 3.2.4. Institutional Structure of NBFIs Assets



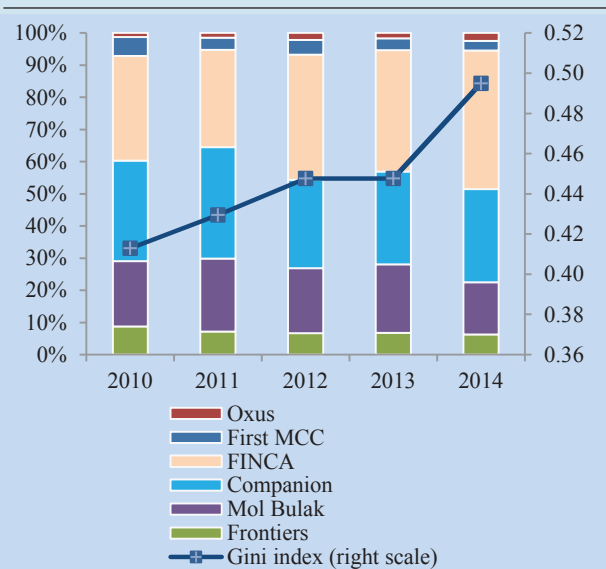
Source: NBKR

Box 6. Assessment of NBFIs System Activity on the Basis of Concentration Indices²⁹

– **The Herfindahl-Hirschman Index**

Herfindahl-Hirschman index³⁰ was calculated for the purposes of concentration risk analysis in the NBFIs system. As of December 31, 2014, Herfindahl-Hirschman index for the NBFIs system constituted 3 016.4 points. According to the rule of thumb³¹ resulting value indicates availability of significant concentration of NBFIs assets or high concentration of microfinance market.

Chart 3.2.5. Dynamics of the Gini Index and 6 Largest NBFIs



Source: NBKR

– **The Gini Index**

The Gini index was calculated for estimating the uniformity of NBFIs assets distribution. As of December 31, 2014, the index value constituted 0.495, which reflected the moderate distribution of assets among the largest microfinance institutions. Meanwhile, growth of concentration level was observed in the reporting period (Chart 3.2.5).

²⁹ Concentration indices are calculated on the basis of data submitted by 6 largest NBFIs.

³⁰ $H = \sum_{i=1}^n (\text{share } i)^2$

³¹ 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.

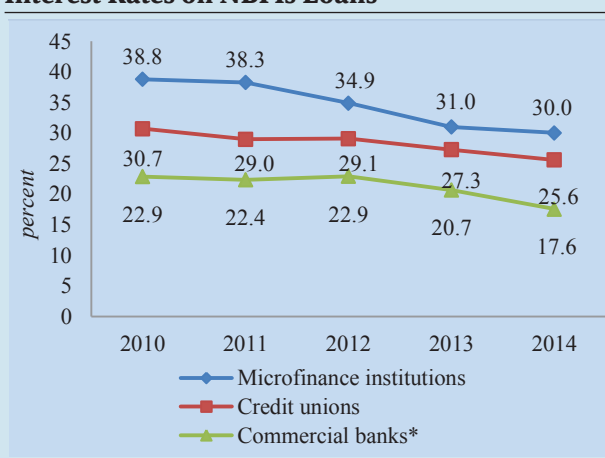
External Debt Status of NBFIs

As of December 31, 2014, the external debt of NBFIs amounted to USD 252.5 million. In the institutional structure of the external debt of NBFIs, a substantial proportion falls under six largest NBFIs established and funded by international financial institutions. More than half of the external debt of NBFIs are loans provided by the international financial institutions (53.5 percent of total external debt of NBFIs), and the rest are loans of foreign commercial financial institutions (46.5 percent of total external debt of NBFIs).

At the end of 2014, external debt of 6 largest NBFIs increased by 9.6 percent compared with 2013 and amounted to USD 248.4 million.

Box 7. Overview of Interest Rates, Net Cost and Profitability of the NBFIs Loans

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



Source: NBKR

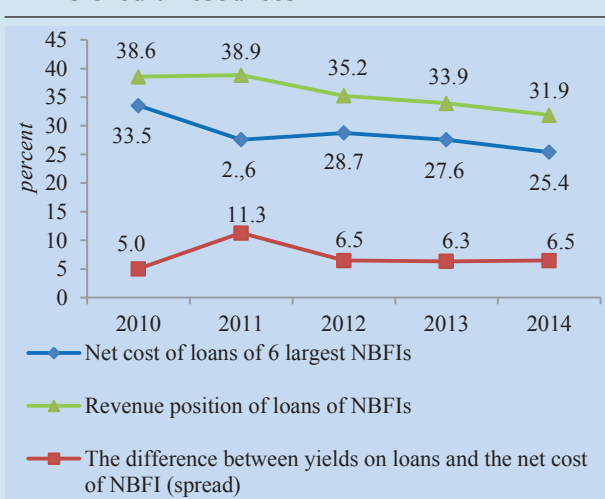
* interest rates are presented in the national currency

In the reporting period, the tendency of decrease of interest rates on NBFIs loans was observed. The weighted average interest rates of MFIs decreased by 1.0 p.p. and CU – by 1.7 p.p. (Chart 3.2.6).

As of December 31, 2014, the net cost³² of loan resource of NBFIs decreased by 2.2 p.p., due to decrease in the net cost of six largest NBFIs loans by 2.6 p.p. (Charts 3.2.7 and 3.2.8).

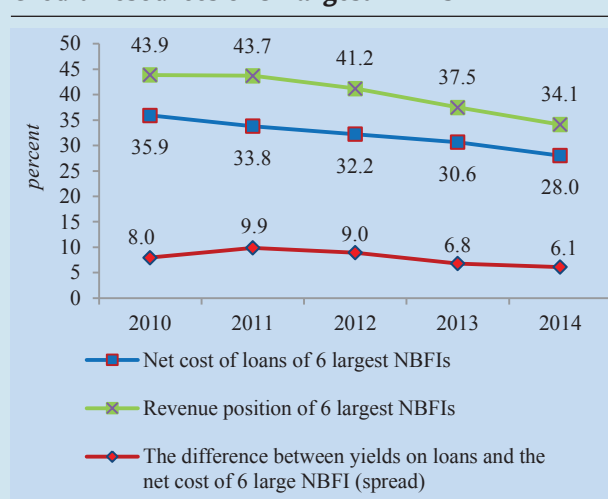
Meanwhile, the net cost of the largest NBFIs loans exceeded average net cost of loans in the NBFIs system in general.

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 Credit Resources of 6 Largest NBFIs



Source: NBKR

Generally, growth rates of the NBFIs loan portfolio exceeding growth rates of the interest incomes affected decrease of NBFIs loan profitability³³ (Charts 3.2.7 and 3.2.8).

³² Loans net cost or breakeven point = (Gross expenditures – Non-credit incomes)/Annual average loan portfolio.

³³ Loan profitability is calculated as a ratio of interest incomes to annual average loan portfolio.

3.3. Stress Testing of the NBFIs System

Stress Testing of the NBFIs Credit Risk

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

Three scenarios were considered when conducting stress testing:

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

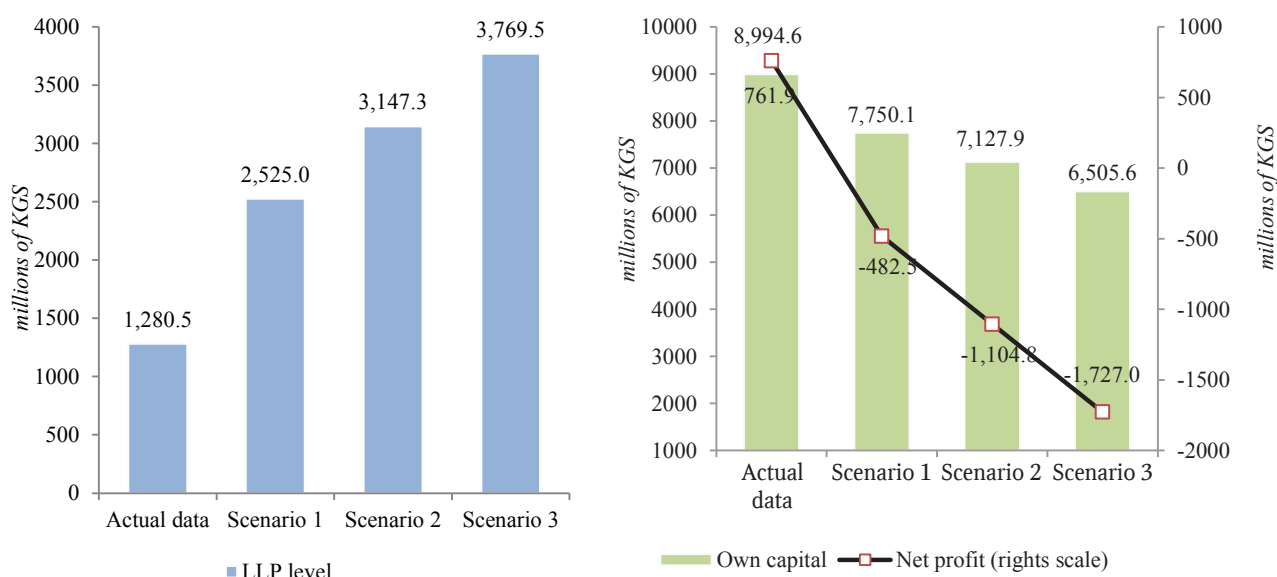
Scenario 2: 75% of loans transition from one category to another;

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

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

The level of LLP³⁴ in the loan portfolio of NBFIs increased from 97.2 to 194.4 percent, depending on the scenario in conducting this stress testing (Chart 3.3.1).

Chart 3.3.1. Results of Stress Testing of the Credit Risk as of December 31, 2014



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 482.5 million. Implementation of the second and third scenario may result in increase of losses up to KGS 1 104.8 million and KGS 1 727.0 million, respectively (Chart 3.3.1).

³⁴ 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% to 5%
- Assets under supervision – 10%
- Substandard – 25%
- Doubtful – 50%
- Losses – 100%

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

	Share of nonperforming loans in the loan portfolio of NBFIs
Scenario 1: transition of 50% of loans from one category to another	7.2
Scenario 2: transition of 75% of loans from one category to another	9.3
Scenario 3: transition of 100% of loans from one category to another	11.2

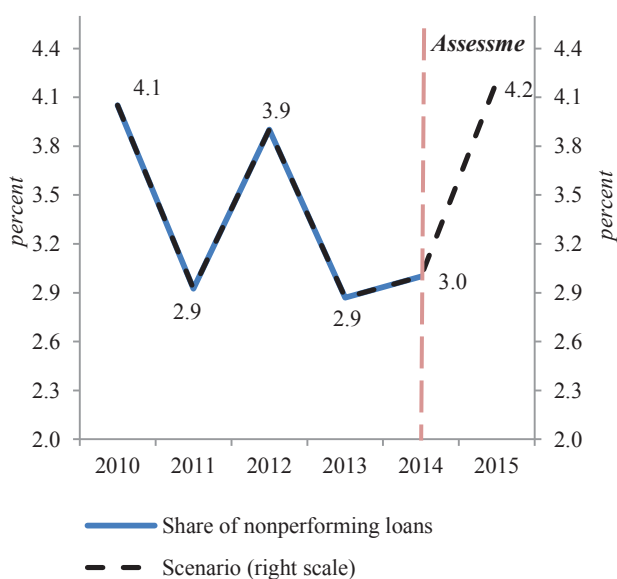
Source: NBKR, NBKR calculations

Implementation of the first scenario may result in an increase in the share of troubled assets in the loan portfolio of NBFIs by 4.2 p.p., to the level of 7.2 percent. In the case of the second scenario, troubled loans may increase by 6.3 p.p., to the level of 9.3 percent, and in the implementation of the third scenario – by 8.2 p.p. and may reach the level of 11.2 percent.

Stress Testing of the Loan Risk of NBFIs Based on the Econometric Model

This stress test was carried out on the basis of an econometric model, which characterizes the dependence of NBFIs nonperforming loans on macroeconomic factors.

Chart 3.3.2. Dynamics of NBFIs Troubled Loans



Source: NBKR

In order to assess the impact of macroeconomic shock on the dynamics of the NBFIs nonperforming 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 4.2 percent may occur in the process of this scenario implementation.

IV. PAYMENT SYSTEMS

In the reporting period, a set of measures taken in the reporting period aimed at minimizing the financial and operational risks in the important payment systems, ensuring smooth functioning of the system through controlling the operation of the payment infrastructure helped to minimize the impact of potential risks on financial sector stability.

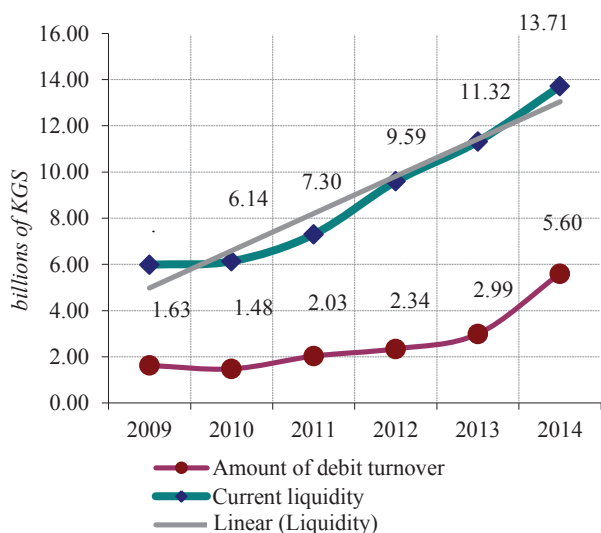
The level of financial risks of systemically important payment systems was minimum and conditioned by remaining high level of liquidity on the correspondent accounts of the participants in the National Bank, as well as updating of equipment in the systems in order to decrease operational risks.

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

As of January 1, 2015, the following components of the payment system were operating in the Kyrgyz Republic:

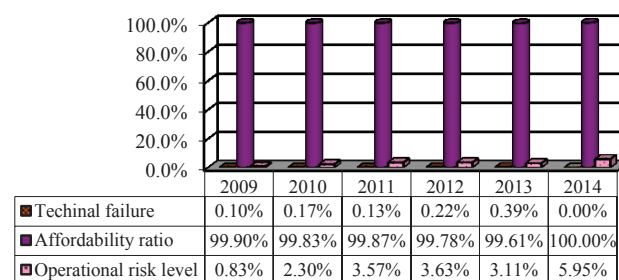
1. Large Value Payment System of the National Bank – Real Time Gross Settlement (RTGS);
2. Clearing Payments System – the System of Batch Clearing of Small Retail and Regular Payments (SBC);
3. Systems of Payment Cards Settlement;
4. Money Transfer Systems.

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



Source: NBKR calculations

The level of financial risk in RTGS remained low due to high level of liquidity in relation to the turnover in the system (liquidity ratio was 2.45, the turnover ratio – 0.41). Average daily volume of liquid assets of participants showed an increase by 21.09 percent (compared to the same period of 2013) and amounted to KGS 13.17 billion.

In 2014, RTGS functioned normally. The results of monitoring in 2014 showed that affordability ratio of the system remained high and constituted 100.0 percent, and the level of operational risk, taking into account prolongation of the transaction day, constituted 5.95 percent. The level of financial risks remained minimum.

Besides, *payments in queue and outstanding payments for insufficiency of participants' funds*³⁵ are the indicators of possible financial risks in the RTGS. 526 payments in queue were registered in 2014 (Table 4.1.) from 7 participants of the system. Average duration of idle time for one payment in the queue within RTGS was 5 minutes (it is not significant), average duration of idle times is 45 minutes.

Table 4.1. Summary Data on Payments of the RTGS

Name	2009	2010	2011	2012	2013	2014	Growth (%)	Increase
Payments in queue:								
- Quantity	46	40	204	215	210	526	2.5	316.0
- Total time (minutes)	1987	1312	6904	11469	10730	2543	-76.3	-8 187.0
Outstanding payments for lack of liquidity:								
- Quantity	2	3	8	4	7	6	-14.3	-1.0
- Volume (millions of KGS)	185.4	22.0	32.3	1.3	17.2	715.1	41.6	697.9

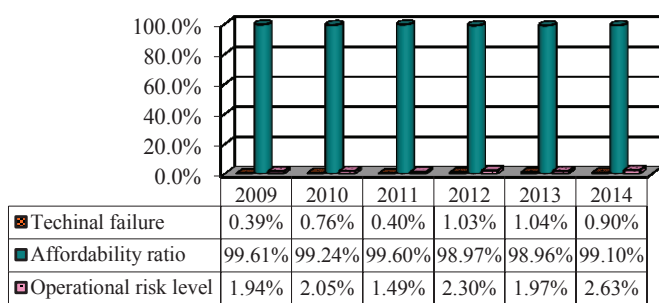
Source: NBKR calculations

Fixed payments in queue did not entail financial risks to other participants, as they were related to the time lag between the receipt of funds to the correspondent account of the participant and sending

payment to the system. In accordance with the rules of the system, in case of lack of liquidity of the individual participants, these payments are automatically rejected by the system at the end of the trading day.

Taking into account the fact that RTGS is a systemically important payment system, failures in its operation can result in serious shocks for the banking system and the financial system as a whole, updating of equipment was carried out and it was put into commercial operation in August 2014.

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



Source: NBKR calculations

In the SBC the level of financial risks in the reporting period was low. Reserves exhibited by the participants to cover a debit net position were 3 times higher than the required level. According to the results of monitoring of the SBC system functioning, the system accessibility index in 2014 remained high and constituted 99.10 percent (in 2013 – 98.96 percent), meanwhile, by extending the work schedule and technical failures, operational risk level was 2.63 percent, having increased by 0.66 percentage points. Significant failures, which could result in operational and financial risks, were not observed. To decrease operational risks updating of the SBC equipment was carried and the system was accepted for commercial operation in May 2014

Systems of Bank Payment Cards Settlements. As of December 31, 2014, 5 international card payment systems and the national system “ElCart” of payment cards settlements operated in the Kyrgyz Republic.

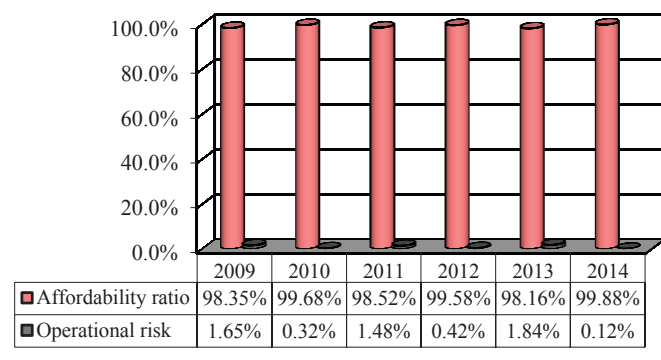
Penetration level of bank payment cards remains rather low, as on average only every 4th person has payment card (taking into account the fact that the number of capable of working and adult capable of working population is 3.881 million people). At the same time, there was a positive trend of increasing in the number of issued payment cards. Thus, the total number of bank payment cards in circulation as

³⁵ Such situation occurs in case of lack of participants' funds on the correspondent account opened in the National Bank.

of December 31, 2014, amounted to 908 908 units, having increased by 39.7 percent compared to the beginning of the year.

The total number of operating terminals and ATMs as of December 31, 2014 constituted 998 ATMs and 4 675 terminals (thereof: 3 526 terminals are installed in the points of sale and trade and 1 149 terminals are installed in the branches and savings offices of the commercial banks), installed in the territory of the whole republic (compared to the beginning of the year, increase of ATMs made 22.0 percent, and terminals – 34.1 percent).

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



Source: NBKR calculations

Pay and Zolotaya Korona.

During 2014, receipt and transfer of money without opening an account in the commercial banks was carried out by means of 22 **international money transfer systems**.

Number and volume of incoming payments compared to the previous period showed growth, which by the number of remittances constituted 3.28 percent, and by the volume – 8.89 percent (KGS 126.83 billion). Increase of indices was observed in the number (by 32.93 percent) and the volume (by 8.28 percent) of remittances transferred abroad. The total volume of outgoing remittances amounted to KGS 33.52 billion.

9 types of **cross-border payment systems** were operated in 2014. However, the main flow of financial messages accounted for SWIFT international interbank telecommunication network (more than 90 percent of the total number and 89 percent of the total volume of payments).

According to the results of subsequent monitoring and analysis of operations of significant payment systems in **the national system “ElCard”** during 2014, the system affordability index constituted 99.88 percent, and the level of operational risks, taking into account technical failures in the system, constituted 0.12 percent.

In the reporting year, 22 commercial banks provided services in the system “ElCard”.

In respect of the **international settlement systems by means of payment cards**, currently, commercial banks operate with such international payment systems as Visa, MasterCard, American Express, Union

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 2014. Special attention was given to the issues of risks management in the activity carried out by the banks and non-bank financial and credit institutions, as well as bringing normative legal acts in compliance with amendments in legislation of the country.

Control of Banks Activity

To minimize indirect currency risks of banks in providing loans in foreign currency to clients whose income is generated in the national currency, the National Bank strengthened requirements to classification of the abovementioned loans and formation of additional loan loss provision.

Amendments in the normative legal acts, concerning the conditions for determining the associated single aggregate debt of various borrowers in calculation of the standard maximum risk per one borrower, were adopted.

The National Bank granted permissions to the microfinance and microcredit companies, transforming into banks to open accounts in foreign currency in the banks-residents in order to create conditions for the implementation of activities at an early stage in the status of the bank.

Regulation of Non-bank Financial Institutions

Instructions regulating the procedure of observing limits of open currency positions by micro-finance institutions were approved in order to minimize the currency risks of micro-finance companies and credit unions licensed to carry out operations with foreign currency. Amendments and additions were introduced to some normative legal acts on calculation of the microfinance companies' equity.

Within the framework of bringing the normative legal acts of the National Bank in compliance with the laws of the Kyrgyz Republic, as well as with regard to the issues on counter-terrorism financing and anti-money laundering, amendments and additions were approved in some normative legal acts related to operation of exchange offices and bureaus.

Amendments and additions were approved in some normative legal acts regulating activity of the non-bank financial institutions on the issues related to determining the sources of monetary funds in the authorized capital of microfinance companies and working capital of the exchange bureaus.

Amendments and additions were approved in some normative legal acts of the National Bank related to enforcement measures applied to non-bank financial institutions in order to provide stability in the micro-finance sector.

Islamic Principles of Financing

A number of normative legal acts regulating activity of non-bank financial institutions was approved due to adopted additions to the Laws "On microfinance organizations in the Kyrgyz Republic" and "On credit unions" aimed at development of the Islamic principles of financing. These normative legal acts are aimed at establishment of prudential standards, requirements on credit risk management, drawing up regulatory reporting and recommendations on accounting obligatory for microfinance organizations and credit unions. The requirements related to regulatory capital and banking operations were reconsidered in order to further improve normative legal acts regulating activity of the Islamic banks and the banks having "Islamic window".

Financial Soundness Indicators of the Kyrgyz Republic³⁶

(in percent)

	2010	2011	2012	2013	2014
Banking sector					
Indicators of the capital adequacy					
Regulatory capital to assets, weighted by risk	30.5	30.3	28.3	25.0	21.8
Tier I capital to assets, weighted by risk	26.5	24.6	22.3	19.9	16.7
Equity to total assets	21.7	21.6	19.7	19.3	16.9
Ratio of nonperforming loans to equity	33.1	21.9	16.8	13.8	16.0
Equity to total liabilities	27.7	27.6	24.4	23.3	20.4
Quality of assets					
Ratio of nonperforming loans to loan portfolio	15.8	10.2	7.2	5.5	4.5
Loan loss provisions to loan portfolio	10.7	6.3	4.7	3.3	2.6
Loan loss provisions to nonperforming loans	67.7	61.6	64.9	59.6	58.8
Ratio of currency loans to loan portfolio	55.7	55.2	53.7	53.6	57.6
Returns indicators					
ROA	1.1	3.0	3.0	2.8	2.6
ROE	7.1	17.7	18.5	18.0	18.7
Interest margin to total income	48.9	45.0	44.7	44.1	43.1
Spread between reference rate on deposits and loans	8.2	9.4	8.0	7.7	7.9
Liquidity indicators					
Ratio of high liquid assets to total assets	36.1	35.0	36.8	38.8	28.4
Ratio of high liquid assets to short-term liabilities	72.8	74.9	80.0	70.0	65.1
Sensitivity of market risk					
Ratio of net foreign exchange position to equity	-10.3	4.1	2.4	4.9	5.6
Other financial corporations*					
Ratio of assets to total assets of the financial system	22.3	23.0	18.7	17.2	17.6
Ratio of assets to GDP	7.7	7.1	6.6	6.7	8.0
Corporate sector (medium- and large-sized enterprises)					
Return on assets (ROA)	2.9	5.9	6.7	5.5	н/д
Return on equity (ROE)	6.2	12.7	16.3	16.4	н/д
Ratio of total liabilities to equity (leverage)**	2.2	2.1	2.1	2.1	н/д
Current liquidity ratio	1.3	1.4	1.4	1.3	н/д
Households sector					
Ratio of the households' debt to GDP	8.4	8.5	9.1	13.4	н/д
Ratio of households' debt to disposable income	11.9	13.2	13.4	21.8	н/д

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

³⁶ Financial soundness indicators are calculated according to the methodology of the IMF ("Instruction on identification of financial soundness indicators", IMF, 2007).

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 repayment and payment of loan interest.

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

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

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

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

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

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

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

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

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

Macro prudential 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 probable 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
OCP	– Open Currency Position
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
FAO	– Food Agriculture Organization of the United Nations
FI	– Financial Institution
CBRF	– Central Bank of the Russian Federation
NTC	– Net Total Capital