National Bank
of the Kyrgyz Republic

The financial sector stability report of the Kyrgyz Republic

June 2013

National Bank of the Kyrgyz Republic

THE FINANCIAL SECTOR STABILITY REPORT OF THE KYRGYZ REPUBLIC

June 2013

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Other publications of the National Bank of the Kyrgyz Republic

Annual Report of the National Bank of the Kyrgyz Republic

This publication is the report of the National Bank of the Kyrgyz Republic (NBKR) for the past year. It contains a summary of economic development of the republic and a monetary policy, financial reporting of the NBKR, an overview of the NBKR activity, and statistical annexes. It is published in three languages: Kyrgyz, Russian and English languages.

Bulletin of the National Bank of the Kyrgyz Republic

This monthly information contains the statistical data on key macroeconomic indicators and economic sectors of the Kyrgyz Republic. It is published in three languages: Kyrgyz, Russian and English.

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"The Balance of Payment of the Kyrgyz Republic" reflects development trends of the external sector and information about the balance of payment, foreign trade, international reserves, external 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 languages.

Review of Inflation of the Kyrgyz Republic

The publication describes a customer price behavior in the republic and regions, an analysis of main factors of inflation, informs of monetary policy decisions of the National Bank of the Kyrgyz Republic, and provides an inflation forecast for the coming period. It is published quarterly in Kyrgyz, Russian and English languages.

Press Release of the National Bank of the Kyrgyz Republic

"Press Release of the NBKR" contains a chronicle of events to the NBKR and the banking system, the basic weekly financial market data and other information for the mass media, legal entities and individuals. It is published weekly in Kyrgyz and Russian languages.

Regulations of the National Bank of the Kyrgyz Republic

The publication is intended for official publication of the NBKR regulations to provide regulatory documents and information to commercial banks and the public on activities of the NBKR, and to popularize the banking legislation of the Kyrgyz Republic. It is commonly published once a month in Kyrgyz and Russian languages.

Preamble

The National Bank of the Kyrgyz Republic has been publishing the Financial Sector Stability Report of the Kyrgyz Republic since 2012. The Report is targeted to inform the public about risks, threats, and imbalances, identified in the economy, which could adversely affect the stability of the financial system.

Financial stability is a state of the financial system enabling it to withstand foreign and domestic shocks without development of cumulative processes preventing from performing its inherent functions. An essential condition for achieving and maintaining financial stability is that of the adequate regulatory policy pursued by the public authorities and the rational economic behavior of the population, as well as the reasonable risk-oriented financial policy of each institution.

This Report reflects an overall assessment of the National Bank with regard to foreign and domestic economic factors affecting financial stability, state of the banks and other institutions of financial intermediation, as well as the analysis of the current state of financial markets and financial sector stability in Kyrgyzstan.

Results of the financial stability monitoring and analysis by the National Bank of the Kyrgyz Republic are taken into account when forming the main NBKR monetary policy directions, monitoring banking activity, and when generating a development strategy for financial institutions of the Kyrgyz Republic.

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

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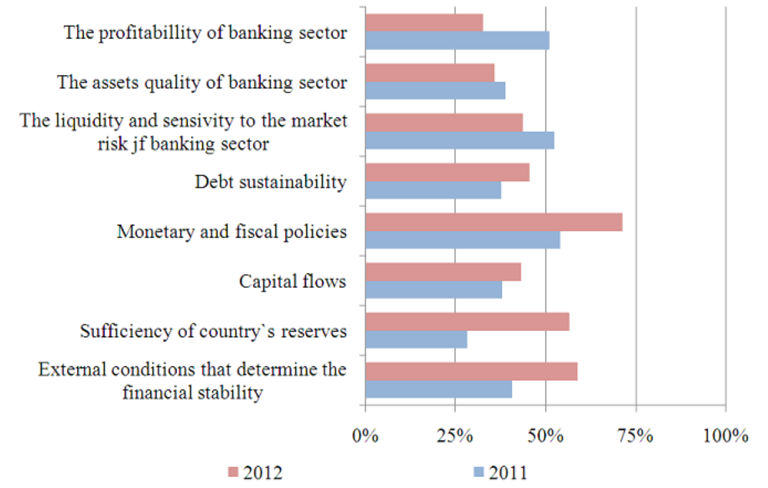
Major Conclusions

Carried out analysis[1] of indices characterizing external conditions, reserves adequacy in the country, monetary and fiscal policy reflects the availability of moderate risk. In other groups of indices the risk level is estimated as insignificant.

Increase of the risk of external conditions change was due to slowdown of economic growth in the countries, major trade and economic partners of Kyrgyzstan, as well as decline in world prices for raw materials.

Growth of imports, as well as increase in future repayments of external debt conditioned increase in the risk of country's reserves adequacy. The amount of the NBKR reserve assets corresponded to 3.3 months of covering future critical volume of goods and services import.

Graph 1. The map of the risk assesment



Source: NBKR, NSC KR, NBKR calculations

Current state budget deficit is connected with growth of liabilities on the wage payment of the public sector employees and decrease of inflows to the state budget. As a result, there was increase in the group of indices reflecting monetary and fiscal policy.

Thus, risks of such groups as "Debt sustainability" and "Capital flows" increased insignificantly. Despite increase in foreign borrowings, generally, there was insignificant risk of debt sustainability in middle- and long-term prospects: the ratio of country's external debt and GDP constituted 85.1 percent, having increased by 3.1 percent. At the end of 2012, the share of public debt in the gross external debt constituted 56.3 percent, having increased by 3.8 percent. Increased negative balance of goods and services conditioned increase of risks connected with capital flows.

Moreover, the banking sector demonstrated improvement of indices. Thus, the indices being analyzed and related to this sector reflected positive risk decreasing trend. Growth of sustainability to market and liquidity risks was accompanied by increase of depositary base and decrease of the share of foreign currency liabilities in the total liabilities. Besides, decrease in the share of bad loans in the loan portfolio and gradual decline of sectoral concentration contributed to improvement in the assets quality of the banking sector. Decrease in the indices of ratio between non-interest expenditures and gross income and ratio between operational expenditures and gross income indicates reduction of the banking sector profitability.

Thus, at the end of 2012, the financial system of the country remained relatively stable, despite some deterioration of macroeconomic environment. Growth rates of major quantitative indices of the banking sector development exceeded economic growth in Kyrgyzstan. There was gradual increase of

[1] Methodology of the risk assessment map generation was given in the publication "The financial sector stability report of the Kyrgyz Republic, for the 1st half of 2012"

financial penetration of the banking sector conditioned by completion processes of recovery from crises occurring in the banking sector of Kyrgyzstan in 2010-2011.

Nevertheless, the level of financial intermediation remained rather low as compared to the CIS countries. Shortage of long-term lending resources remains the major problem of the banking sector. At that, shortage of necessary long-term financial resources can become restraining factor for banks' credit expansion. Shortage of the funding base in the banks formed under the influence of complicated macroeconomic conditions, weak domestic institutional investors and non-optimal structure of depositary resources. Slight competition remains in the financial sector; it is reflected in insignificant role of potential banks' rivals – other financial companies (insurance and investment companies, enterprises possessing free financial resources, state) both in the deposit and in the credit market.

High levels of risks in the economy, including political instability, relatively high inflation background remain factors for preserving high interest rates.

I. Macroeconomic environment

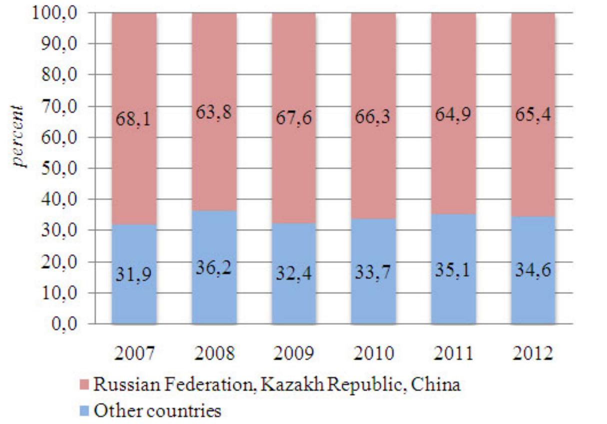
1.1. External Conditions Affecting Financial Stability

Slowdown of the economic growth was observed in the countries, being major trade and economic partners of Kyrgyzstan, at the end of 2012. Such external risks as strengthening of economic crisis in the euro area, dependency on the situation in the world commodity markets, structural and sectoral disproportions in the economy influence macroeconomic stability of Russia, Kazakhstan and China.

Foreign Trade with Russia, Kazakhstan and China

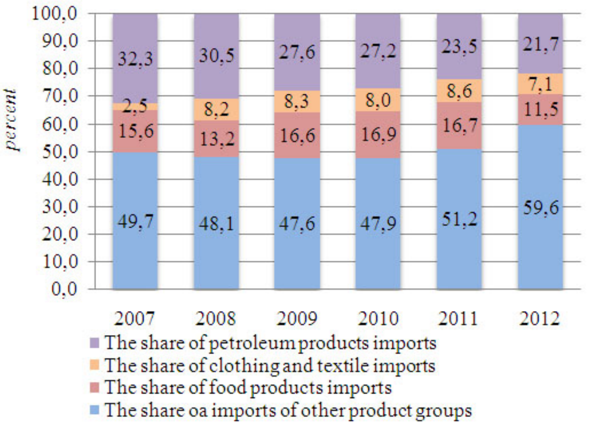
Significant changes were not observed in the geographic structure of imports at the end of 2012. The main trading partners are still Russia, Kazakhstan and China. In 2012, the total imports from these countries amounted to 65.4 percent (USD 3 513.9 million) of the gross imports to the Kyrgyz Republic (Graph 1.1.1).

Graph 1.1.1. Geographic strucutre of imports to Kyrgyzstan



Source NSC KR

Graph 1.1.2. The structure of imports to Kyrgyzstan by commodity groups



Source: NSC KR

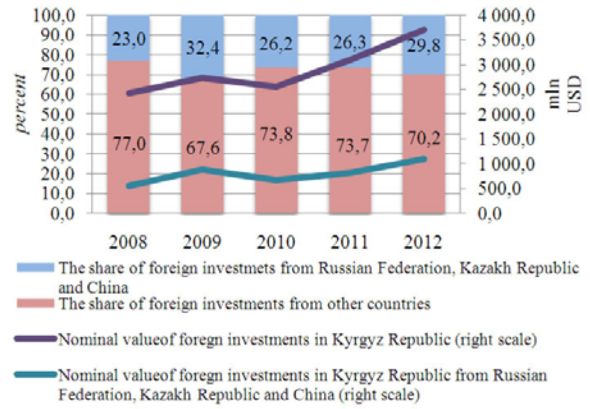
The country still remains dependent on the import of petroleum and food products, as well as clothing and textiles from Russia, Kazakhstan and China. In 2012, the total share of these commodity groups constituted 40.3 percent of the total imports, having decreased by 8.4 percentage points as compared to the previous year (Graph 1.1.2).

Foreign Investments and External Debt of Kyrgyzstan to Russia, Kazakhstan and China

Foreign investments on the part of the main trading partners are one of the major channels of influence on the economy of Kyrgyzstan.

At the end of 2012, the total amount of investments from Russia, Kazakhstan and China increased by 35.3 percent and constituted USD 1 101.4 million (29.8 percent of the total volume of foreign investments). Moreover, at the end of 2012, direct foreign investments from the countries, main trading partners of Kyrgyzstan, amounted to USD 218.8 million, however, other foreign investments constituted USD 881.7 million. The share of portfolio foreign investments was insignificant.

Graph 1.1.3. Geographic structure of foreign investments from Russian Federation, Kazakh Republic and China as of the end of the period



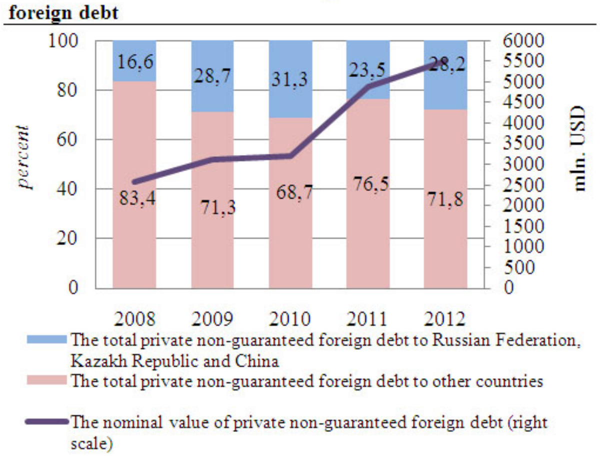
Source: NSC KR

At the end of 2012, the debt to Russia, Kazakhstan and China constituted USD 1 016.4 million or 32.8 percent of the total public external debt, which constituted USD 3 100.0 million. Meanwhile, the share of Russia constituted 15.8 percent, China – 17.0 percent.

Graph 1.1.4. The structure of public foreign debt

Source: NSC KR

Graph 1.1.5. The structure of non-guaranteed foreign debt



Source: NSC KR

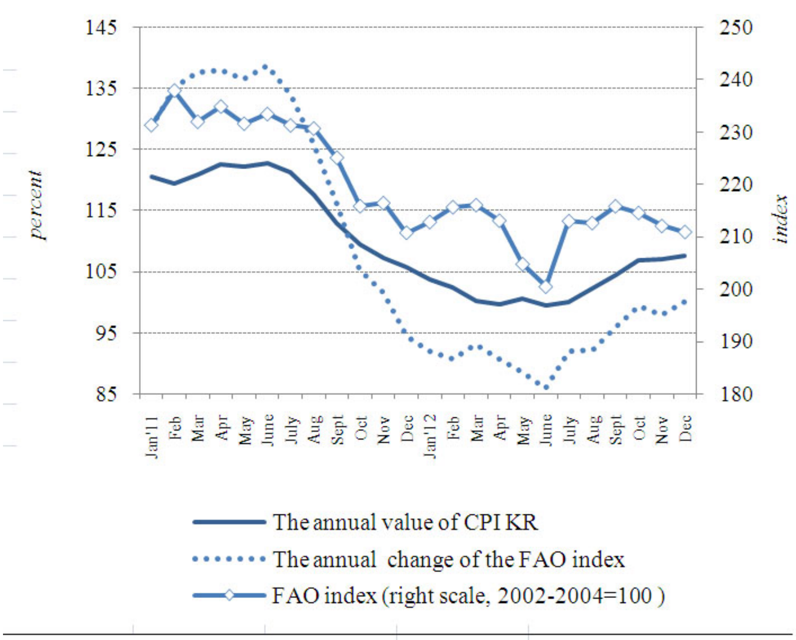
Private non-guaranteed external debt to Russia, Kazakhstan and China increased by 39.7 percent and as of December 31, 2012, constituted USD 533.2 million (38.1 percent of the total private non-guaranteed external debt of Kyrgyzstan) (Graph1.1.5).

Inflation in the World and the Impact on the Kyrgyz Republic

In 2012, inflation in the developed and developing countries slowed down compared to 2011. In 2012, inflation in the developed countries constituted 2.0 percent (2.7 percent in 2011), in the developing countries - 5.9 percent (7.2 percent in 2011). According to the IMF[2] data, inflation in the CIS countries in 2012 constituted 6.5 percent (10.1 percent in 2011) due to lower world prices for food products and tightening monetary policy in some countries.

[2] World Economic Outlook (International Monetary Fund), May 2013

Graph 1.1.6. The dynamics of CPI KR and the FAO index



Source: NSC KR, UN FAO

In 2012, average FAO Food Price Index (FAO Index) reached 212 points, having decreased by 7.0 percent compared to the corresponding index of 2011. However, decrease of price indices for sugar (17.1 percent), diary products (14.5 percent) and vegetable oils (10.7 percent) was the most significant. Decrease of prices for cereals (2.4 percent) and meat (1.1 percent) in 2012 was less significant. Further stabilization/decrease of prices for wheat and bakery products is expected in the near future.

In 2013-2014, the average inflation rates will be characterized by upward trend, taking into account liberal trend of fiscal policy. Current situation in the world commodity markets, as well as foreign economic environment is likely to contribute to moderate growth of prices in our country. Generally, IMF expects average increase of consumer price index to 8.6 percent in Kyrgyzstan at the end of 2013.

Russia

Macroeconomic Trends in Russia

According to the preliminary data, Russia’s economic growth in 2012 totaled 3.4 percent (the corresponding index of 2011 constituted 4.3 percent). In the period under review, there was increase in the sectors of trade (5.9 percent), manufacturing (4.1 percent), and construction (2.4 percent). Decrease of production output was observed in the agriculture (-4.7 percent) due to adverse weather conditions.

In 2012, inflation constituted 6.6 percent (a similar indicator in 2011 was 6.1 percent). Growth of prices in the 1st half was insignificant due to moderate growth of prices for consumer goods, as well as transfer of the term increase in the regulated tariffs from the beginning of the year to the second half year. However, since June, inflation rates increased due to drought and negative forecasts for the grain harvest in Russia in 2012 and in the whole world.

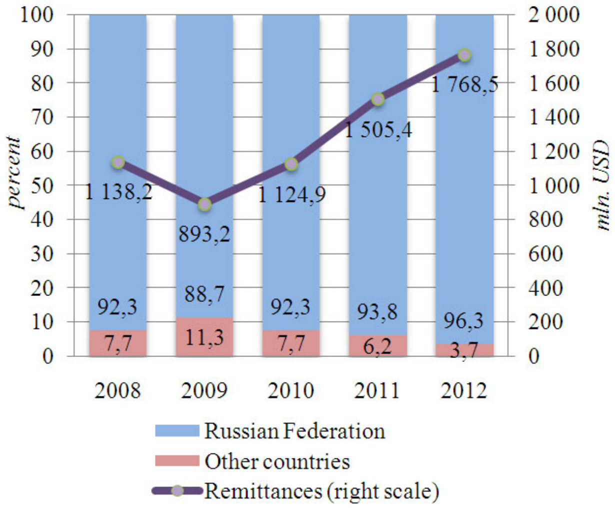
The volatility of oil prices, fluctuations of the ruble exchange rate and stock markets form risks to financial stability. The main budget parameters are closely linked to energy prices.

In addition, external risks associated with economic crisis in the euro area have a significant impact on macroeconomic stability in Russia. Current estimates of the economic growth in 2013 are rather moderate (2.4 percent according to the forecasts of the Government of Russia).

Economic Impact

Russia remains the largest partner of Kyrgyzstan. The main channels of influence are: a) remittances, б) conditions for the supply of petroleum products, в) demand for the products of textile and clothing industry in Kyrgyzstan.

Graph 1.1.7. Remittances to the Kyrgyz Republic*



Source: NBKR
**Inflows via transfer systems*

The price of imported gasoline and diesel fuel is correlated with changes in the prices for oil in the world markets and the amount of fees imposed on the export of oil petroleum and lubricants. High import dependence of Kyrgyzstan on Russian energy suppliers could negatively affect the economy of Kyrgyzstan, since petroleum products are used in virtually all structurally significant sectors of economy.

Russia remains the major recipient of migrants from Kyrgyzstan. Thus, the share of remittances from Russia in 2012 constituted 96.3 percent of the total money transfers. At the end of 2012, net inflow of remittances of individuals increased by 17.5 percent, as compared to the similar index of 2011 and constituted USD 1 768.5 million (approximately 27.5 percent to GDP).

In 2013, slowdown of economic growth in Russia increases the possibility of so called capital sudden-stop effect in the form of sharp adjustment of exchange rate and deterioration of the balance of payment as a result.

Box 1. Impact of remittances on the banking sector

In case of stressed scenario implementation intended for remittances reduction by 50 percent, net incomes from commission fees can decrease by 18.5 percent. One of the banks is unlikely to withstand such stressed scenario. However, consequences of remittances reduction are generally insignificant for the baking sector.

In 2009, there was reduction of remittances by 21.5 percent, which resulted in decrease of banks' incomes from commission fees by 7.5 percent.

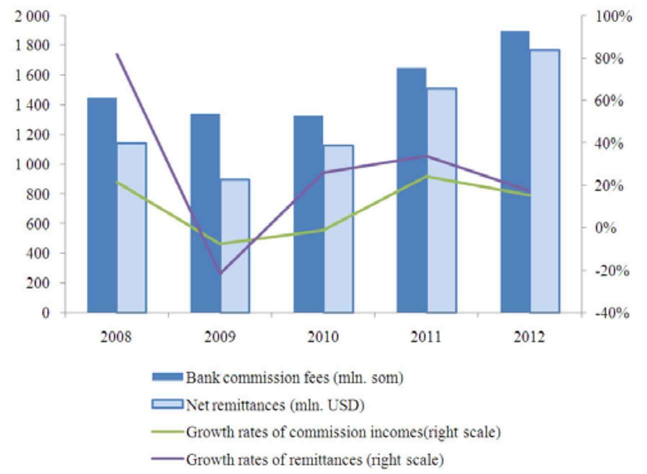
One-factor economic model of banks' incomes dependence on commission fees collected for money transfers was developed for assessment of incomes sensitivity in the banking sector. Data on banks' net incomes from commission fees excluding expenses for collection of commission fees were used for model development.

According to this model, increase (decrease) of remittances by 1 percent resulted in increase (decrease) of banks net incomes from commission fees by 0.37 percent.

Thus, implementation of stressed scenario for contraction of remittances by 50 percent will result in decrease of net incomes from collection of commission fees by 18.5 percent, which will not impact the banking sector significantly.

It should be noted that in 2012, 2 commercial banks received their major income due to commission fees thereby reflecting dependence of such banks on consistency and amount of remittances.

Graph 1. Dynamics of migrants' remittances and banks' commission fees



However, risks are generally insignificant for the banking sector due to minor market share of the aforementioned banks.

Indirect impact of remittances on the banking sector is more significant. Remittances have a direct impact of the households' incomes (constituting approximately 1/3 of total incomes), which are the main creditors and borrowers of the financial sector. Thus, financial status of the households has a direct impact on the financial stability of the banking sector.

Kazakhstan

Macroeconomic Trends in Kazakhstan

In 2012, Kazakhstan's economy continues developing under the influence of strengthening signs of crisis in the world economy, conditioned by aggravating debt issues in the euro area, persistent high level of unemployment in the USA and slowdown of economic development in China, which is the main trading partner of our country. Despite uncertainty and instability in the development of foreign economic environment, since the beginning of 2012 positive dynamics was observed in the economy of the country. Thus, economic growth in Kazakhstan in 2012 constituted 5.0 percent. In 2012, the volume of industrial production constituted KZT 16.6 trillion in current prices, having increased by 0.5 percent compared to 2011.

There has been slight acceleration of inflation since March 2012, due to increase in prices for paid services. Besides, there was influence of high world prices on oil. In 2012, inflation constituted 6.0 percent. Generally, inflation background in 2012 was lower than the average one for a long-term period.

One of the major risks for the economy of Kazakhstan is persistent dependence of our economy on the situation in the world commodity markets. The protracted slowdown in the world economic growth poses risks of slowing the economic growth in Kazakhstan; in case of additional pressure due to reduction of prices for raw materials adverse impact of the economy of Kazakhstan may be more significant.

Economic Impact

The major channels of impact on the domestic economy on the part of Kazakhstan are:

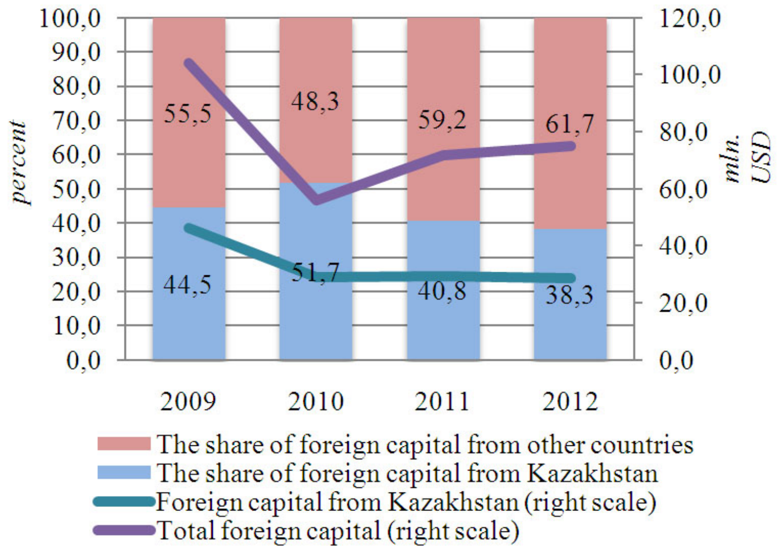
- export and import operations;
- investment activity of Kazakhstan to the Kyrgyz Republic;
- policy of parent banks in respect of subsidiary banks in the Kyrgyz Republic.

In 2012, goods turnover between Kyrgyzstan and Kazakhstan constituted USD 924.0 million, having increased, having increased by 31.0 percent compared to the similar index of 2011. At that, imports from Kazakhstan and Kyrgyzstan constituted USD 519.1 million, having increased by 26.2 percent compared to 2011. Exports from Kyrgyzstan to Kazakhstan in 2012 constituted USD 404.9 million, having increased by 39.8 percent compared to 2011. The main products imported from Kazakhstan are natural gas, coal and cigarettes.

In 2012, direct foreign investment to Kyrgyzstan from Kazakhstan increased by one third, as compared to the similar index of 2011 and amounted to approximately USD 32.0 million. This index constituted 6.0 percent of the total amount of direct foreign investment to the Kyrgyz Republic.

Financial Impact

Graph 1.1.8. The structure of foreign capital of banks



Source: NSC KR

In 2012, the share of non-performing (classified) loans remained high in the banking sector of Kazakhstan (36.7 percent of the total loan portfolio); it reflects high level of credit risk (7.5 percent in 2008). Moreover, there was increase in lending to the economy by the banks of Kazakhstan (by 13.0 percent)[3].

At the end of 2012, the share of the capital from Kazakhstan in the structure of foreign capital of the Kyrgyz banks constituted 38.3 percent, in the joint capital of the banks – 13.8 percent.

China

Macroeconomic Trends in China

In the 2nd half of 2012, there was slowdown in the economic growth of China (in the third and fourth quarters of 2012 up to 7.4 and 7.9 percent, respectively). At the end of 2012, the nominal GDP of the People's Republic of China formed at th level of USD 8.3 trillion, having increased in real terms by 7.8 percent. Among the main reasons for slowdown of economic growth in the People's Republic of China are remaining signs of crisis in the economies of the euro area and the U.S., structural and sectoral disproportions in the economy of China, as well as relatively low consumer demand in China.

The annual inflation rate in December 2012 constituted 2.5 percent due to rise in prices for food products in December 2012 (the same indicator as of the end of December 2011 was 5.4 percent).

Besides, the risks of deteriorating financial stability are increasing. International rating agencies (Moody's and Fitch) decreased their forecast for the credit rating of China from "positive" to "stable".

Economic Impact

Foreign trade still remains the main channel of influence of economic processes in China on the economy of Kyrgyzstan. There is continued dependence of textile industry of Kyrgyzstan on the supply of clothing, footwear and fabrics from China (Graph1.1.9).

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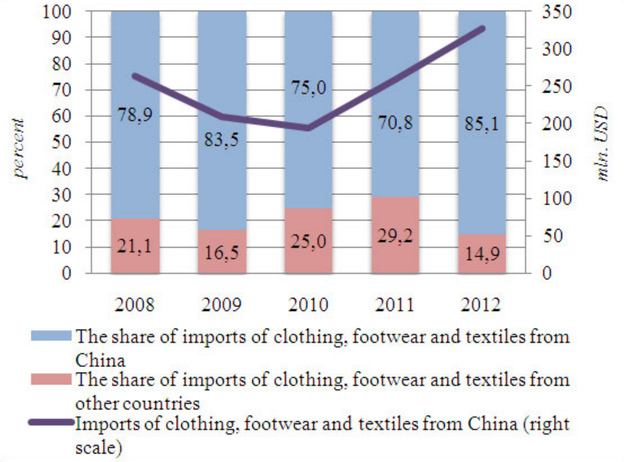
[3] The NBKR annual report for 2012

The aforementioned group of goods is the main article in the structure of goods imported from China (27 percent), imports thereof in 2012 increased by 26.4 percent and constituted USD 326.8 million.

Graph 1.1.9. Imports of clothing, footwear and textiles to Kyrgyzstan



Source: NSC KR

Graph 1.1.10. The geographical structure of foreign investments as of the end of the period

Source: NSC KR

At the end of 2012, inflow of foreign investment increased by 45.7 percent, as compared to their inflow in the previous year and constituted USD 666.5 million or 18.0 percent of the total amount of foreign investment (Graph 1.1.10).

1.2. Current Economic Climate of Kyrgyzstan

Current economic climate of Kyrgyzstan is characterized by continuous volatile economic growth, high inflation backdrop and growing deficit of the public budget.

Gross Domestic Product

In January-December 2012, there was decrease in GDP by 0.9 percent. The main contribution to decrease in GDP was made by industrial enterprises (-4.6 p.p.), mainly due to decline in production at the "Kumtor" gold deposit companies.

Nominal GDP constituted KGS 304.4 billion. According to preliminary data for 2012, GDP deflator was at the level of 7.4 percent against 22.5 percent in 2011.

Excluding "Kumtor" gold deposit companies, GDP increased by 5.0 percent based on the results of 2012. The sector of services had positive impact, the contribution thereof constituted 2.8 percentage points. Growth by 1.0 percent was observed in the "Financial activities" segment.

Table 1.2.1. Growth rate and contribution of individual activities in the growth/decline in GDP

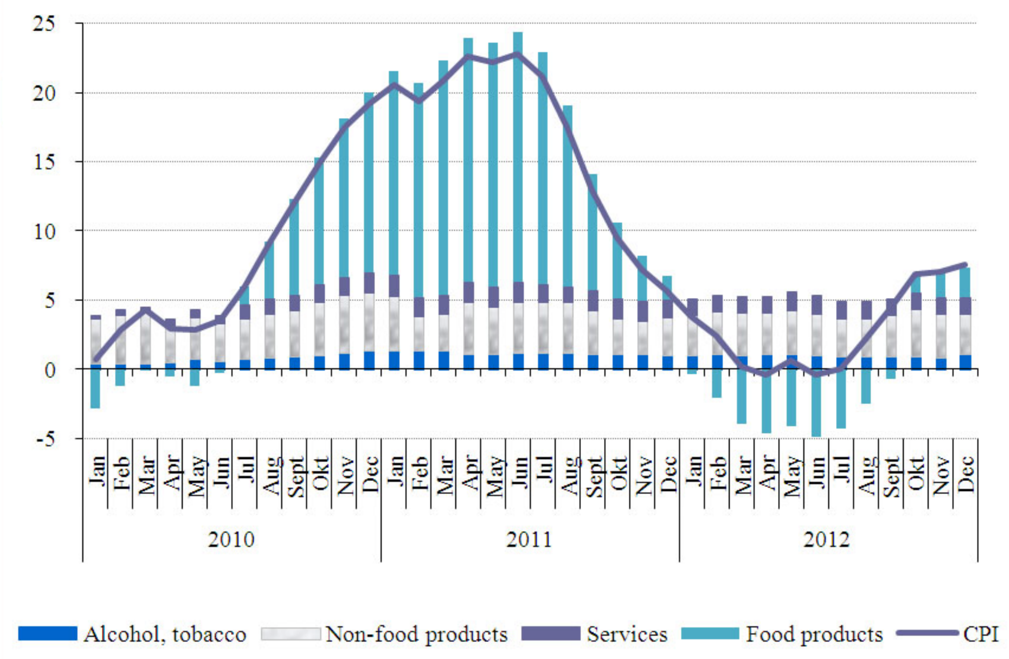
	2011		2012	
	growth rate, *percent*	contr. to gtowth, *p.p.*	growth rate, *percent*	contr. to growth, *p.p.*
Gross domestic product	**6,0**	**6,0**	**-0,9**	**-0,9**
Gross value added	6,0	5,3	-0,9	-0,8
Agriculture, hunting and forestry	1,8	0,3	1,2	0,2
Mining	19,5	0,1	22,5	0,2
Processing	5,2	0,9	-27,2	-5,0
Production and distribution of energy, gas and water	21,9	0,7	5,2	0,2
Construction	2,5	0,1	17,3	0,9
Trade, repairs	10,2	1,6	10,5	1,6
Hotels and restaurants	16,9	0,2	11,7	0,2
Transport and communication	9,5	0,8	8,9	0,7
Financial activities	10,9	0,1	1,0	0,0
Operations with real estate, renting	1,6	0,1	-1,9	-0,1
Government regulation	5,2	0,3	1,8	0,1
Education	1,3	0,1	5,1	0,3
Healthcare and social services	0,9	0,0	2,4	0,1
Utility and personal services	1,3	0,0	-3,3	-0,1
Net taxes on products	6,0	0,6	-0,9	-0,1

Source: NSC KR

Inflation

In December 2012 (by December 2011), annual inflation rates constituted 7.6 percent, meanwhile, the same index of 2011 constituted 5.7 percent. Moreover, prices for food products increased by 4.4 percent, non-food products – by 9.9 percent, alcohol drinks and tobacco – by 10.6 percent, paid services – by 10.1 percent. Core inflation, calculated according to IMF methods, was at the level of approximately 10 percent since the beginning of the year, it reflects continuous high inflation backdrop in the country.

Graph 1.2.1. Contribution to CPI growth



Source: NSC KR

Generally, dynamics of consumer prices in 2012 formed under the impact of moderate increase in prices for food products. Thus, in the 1st half of 2012, the prices for the group of food products declined on the background of high harvest of main agricultural crops in 2011-12 MY[4] (July 2011 – June 2012). In he 2nd half of 2012, acceleration of prices growth for food products was due to deterioration of estimates for expected grains harvest in 2012-13 MY both in the world and in the republic[5].

High dependence of domestic prices for food products on dynamics of world prices is mainly conditioned by high dependence of economy in Kyrgyzstan on imports of food products. Thus, according to the data of the NSC KR, the share of imports in 2012 in the structure of bakery products consumption constituted 67.5 percent, the share of imports in wheat and its derivative products consumption constituted 68.6 percent, import of vegetable fat in consumption constituted 69.4 percent, sugar consumption was provided by imports, which amounted to 83.8 percent.

Public Budget.

According to the Central Treasury of the Ministry of Finance, the public budget deficit in 2012 amounted to KGS 20.2 billion or 6.6 percent to GDP (in 2011, budget ran a deficit of 4.7 percent to GDP). At the end of the year, the level of deficit was the highest for the last years.

Current consumption expenditures were increased despite shortage of resources. Thus, budget expenditures for remuneration of labor increased by 13.5 percent and amounted to 30.6 percent of the total expenditures for operational activities, expenditures for social allowances and subsidies increased by 16.9 percent (19.0 percent of the total expenditures). Current expenditures contributed to increase of the

[4] MY – marketing year

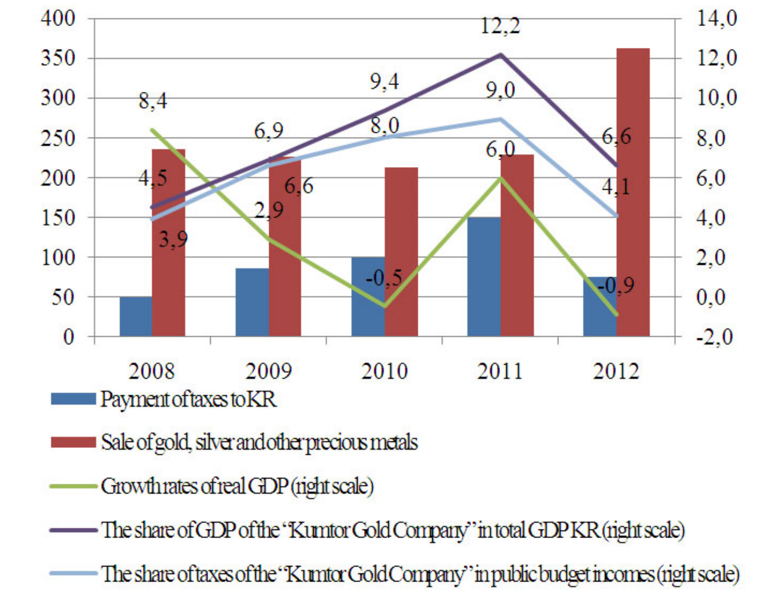
[5] For more details see publication "Inflation report in the Kyrgyz Republic", Q2 and Q3 of 2012.

demand in the country. At the end of the reporting period, real growth of the domestic demand constituted 15.0 percent, while in 2011, the similar index constituted 7.7 percent.

During the year budget spending was uneven: the main part of spending was in the fourth quarter of 2012 (30.4 percent). Moreover, a large part of the budget expenditures is still going into consumption and covering of running costs, which are not reduced in view of the availability of structural problems, which will mainly have an impact on the change in the cash component of the money supply in the country.

Effect of the "Kumtor Gold Company" CJSC on the public budget.

Graph 1.2.2 Indicators of the "Kumtor Gold Company" CJSC



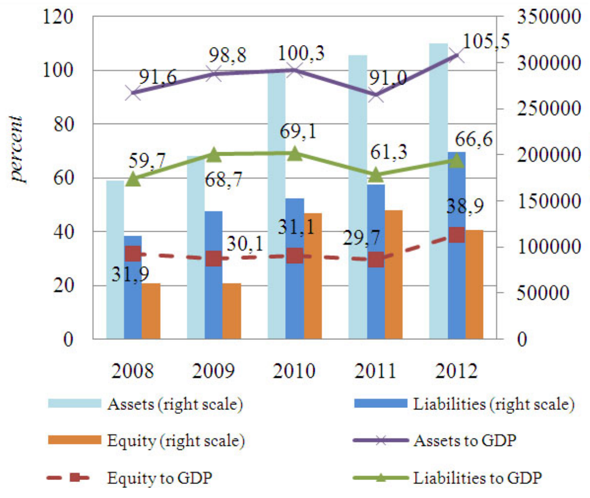
Source: NBKR calculations on the basis of "Kumtor Gold Company" data

Based on the results of 2012, the share of taxes paid by the "Kumtor Gold Company" CJSC to the public budget decrease by 49.8 percent compared to the previous year. Decrease of production output of this corporate sector strategic enterprise had a significant impact on change of its share in total GDP (Graph 1.2.2).

1.3. Corporate Sector

Indices of the enterprises profitability remain rather low, despite growth being observed in 2012. Growth of external debt and financial leverage are the risks for financial stability in the corporate sector, reflecting rather high vulnerability of enterprises to external shocks.

Graph 1.3.1. The dynamics of the corporate sector balance sheet

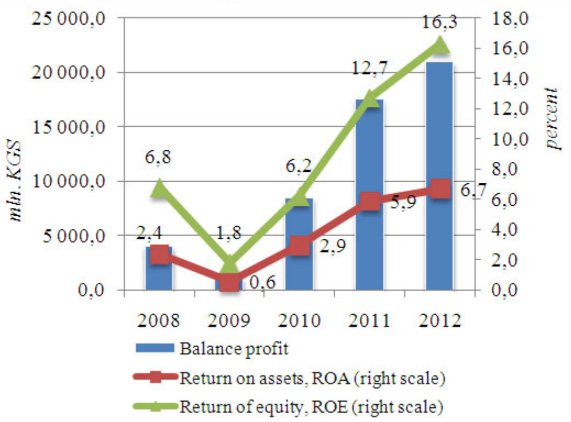


Source: NSC KR, NBKR calculations

In 2012, financial status of the enterprises in the real sector was mainly characterized by positive dynamics compared to the same indicator of 2011. The share of assets in the non-financial sector has increased significantly compared to the volumes of economy (Graph 1.3.1).

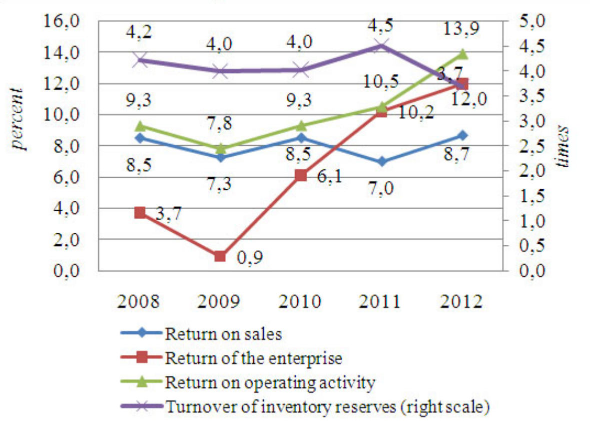
Based on the results of 2012, balance sheet profit increased by 19.5 percent compared to the profit of 2011 and constituted KGS 21 012.8 million (Graph 1.3.2). Excess of balance sheet profit over expenditures connected with sale and manufacture of products by business entities conditioned increase in profitability of enterprises of non-financial sector, which constituted 12.0 percent in the reporting period (Graph 1.3.3). In the past year, the highest coefficients of profitability were observed at the enterprises of trade (64.8 percent), sport and communication (30.7 percent) and mining (12.1 percent).

Graph 1.3.2. Financial soundness indicators at the real sector enterprises



Source: NSC KR

Graph 1.3.3. Indicators of profitability at the eal sector enterprises



Source: NSC KR

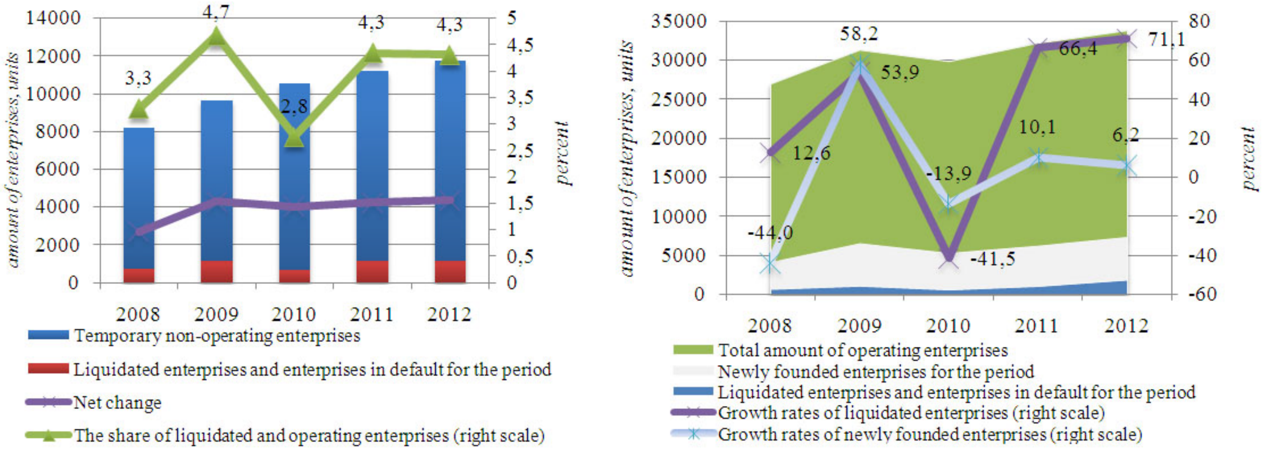
Moreover, in 2012, corporate sector business activity[6] and inventory turnover decreased by 18.0 percent compared to the previous year, reflecting low efficiency of financial and economic activity of enterprises.

[6] Business activity indices:

Temporary non-operating enterprise is an enterprise in standstill for than one year;

Net change is a gap between newly founded enterprises and the amount of liquidated enterprises and enterprises in default within a period.

Graph 1.3.4 Business activity of enterprises



Source: data of NSC KR, NBKR calculations

The share of liquidated small enterprises in the total amount of liquidated enterprises and enterprises in default constituted more than 90 percent (Graph 1.3.4). Moreover, at the end of 2012, 35.9 percent of liquidated enterprises and enterprises in default were the enterprises of trade sector. The structure of temporary non-operating (idle) enterprises comprised 60 percent of trade enterprises (21.8 percent) and enterprises involved in real estate operations, leasing, and rendering utility, social, personal and other services (38.2 percent)[7].

The analysis of financial indices of enterprises for 2012 indicated that the level of reinvestments remains low due to distribution of approximately half of profit among property owners. Investments into fixed assets constituted 51.6 percent of net profit (Table 1.3.1):

Table 1.3.1. The use of net profit of enterprises
mln. KGS

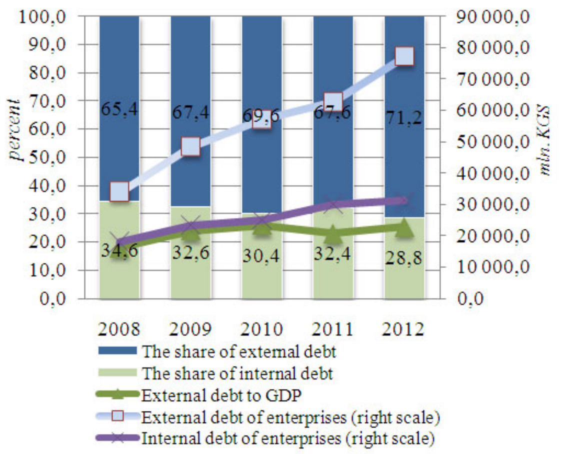
	2009	2010	2011	2012
Net corporate income (after income taxes)	996,3	7657,5	17988,7	18911,5
Property income paid	-1781,5	4703,6	8334,3	12607,4
Undistributed profit (1-2)	-2777,8	2953,9	9654,4	6304,1
Undistributed profit as % of net profit	-278,8	38,6	53,7	33,3

Source: data of NSC KR, NBKR calculations

External financing of the private sector (71.2 percent) dominate by domestic financing in the structure of financing corporate sector by sources (Graph 1.3.5). The main reason for external financing increase is shortage of working capital and limited opportunities for domestic capital market for financing real sector of economy at more affordable interest rates.

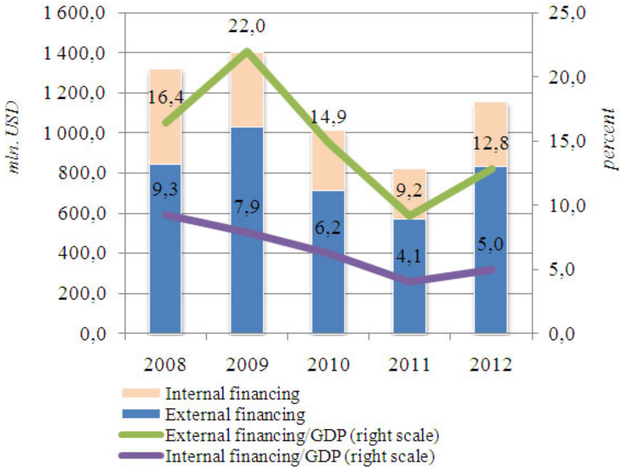
[7] According to the data submitted by NSC KR.

Graph 1.3.5. Indicators of debt sustainability of the corporate sector



Source: NSC KR, NBKR calculations

Graph 1.3.6. Sources of financing of the corporate sector



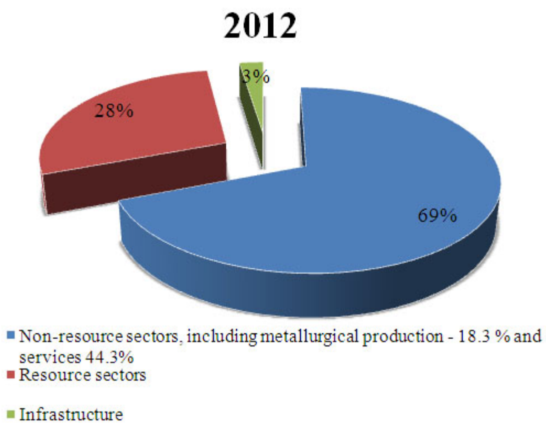
Source: NSC KR, NBKR calculations

The main part of foreign investments is directed to non-resource sectors of economy (including metallurgical production and services). Processing industry and exploration are the most attractive sectors for the foreign investors.

Based on the results of 2012, total investments into the corporate sector of economy amounted to USD 1 152.3 billion, having increased by 40.4 percent compared to the similar index of 2011 (Graph 1.3.6).

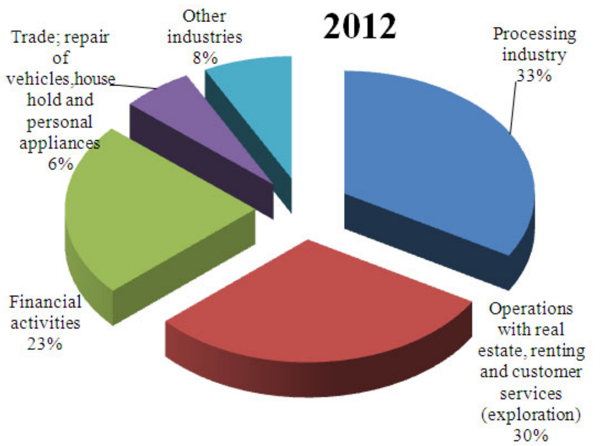
The structure of foreign investments by directions of use (Graph 1.3.7)[8] reflects high level of investment activity in the non-resource industry. The main articles of financing processing industry are metallurgical production and manufacture of finished metal products (37.9 percent), food products (9.6 percent) and textile and clothing industry (8.4 percent).

Graph 1.3.7. Structure of external financing by directions of use



Source: NSC KR

Graph 1.3.8. Sectoral structure of external financing



Source: NSC KR

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[8] *Investments into resource sectors* are approximated by the amount of investments directed into mining industry and operations with real estate (exploration).
Investments into infrastructure include investments directed into education, healthcare, rendering utility, social and personal services, transport and communication, generation and distribution of electricity, gas and water.
Investments into non-resource sectors include investments directed into agriculture, processing industry (including metallurgical production and manufacture of finished metal products), construction, trade, financial activity, hotels and restaurant.

Sustainable growth of external debt is conditioned by increase of loans and borrowings provided to the exploration enterprises. The specific activity of financing geological works involves risk-taking by foreign investors.

In the structure of external debt the major share is occupied by foreign loans and borriwings provided to the enterprises involved in real estate operations, renting and customer services (exploration)[9]. In 2012, the share of foreign borrowings in the processing sector decreased insignificantly (Table 1.3.2):

Table 1.3.2. The sectoral structure of the external debt of the corporate sector

(mln. KGS)

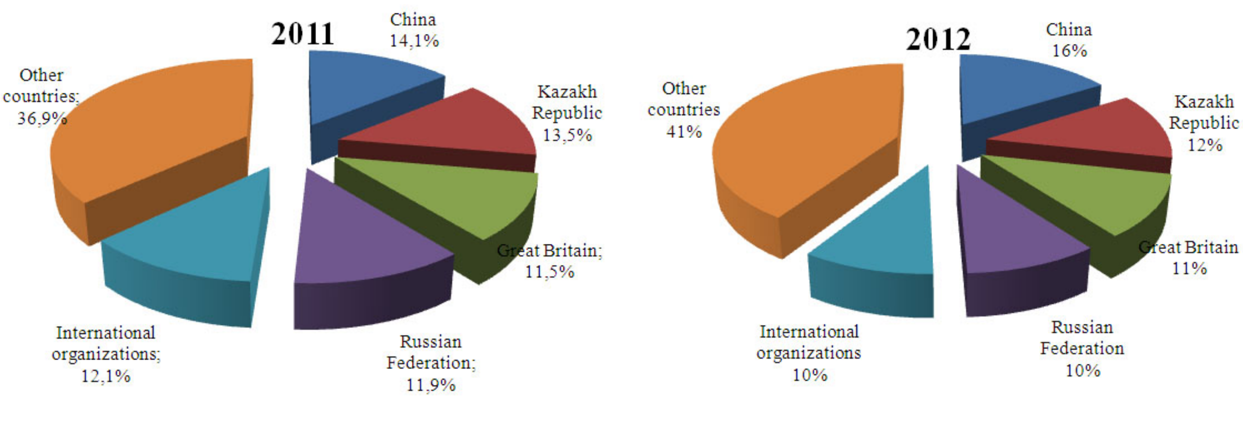
	2008	2009	2010	2011	2012
Total	**33935,7**	**48345,1**	**57017,9**	**62740,9**	**77161,4**
including, in percent:					
Operations with real estate, renting and customer services (exploration)	37,5	44,0	51,5	60,6	52,4
Industry:					
- Processing	29,2	25,2	19,7	17,3	17,1
- Exploration	0,7	0,6	0,7	2,4	9,8
Transport and communication	13,2	15,4	16,9	11,3	9,5
Trade; repair of motor vehicles, household and personal appliances	8,9	5,6	4,3	4,7	4,7
Construction	7,4	7,1	4,4	1,5	4,2
Other industries	3,2	2,1	2,5	2,3	2,2

Source: NBKR calculations on the basis of the data submitted by NSC KR

In the structure of the corporate sector external debt, processing industry is mainly represented by the articles of non-metallic mineral products manufacture (43.4 percent) and production of food products (33.3 percent).

Based on the results of 2012, the geographic structure of external debt of the corporate sector remained unchanged, the main creditors of the enterprises are China, Kazakhstan, Great Britain, the Russian Federation and international organizations.

Graph 1.3.9 The geografic structure of the foreign debt of the corporate sector



Source: NSC KR

The internal debt of the corporate sector is in its turn concentrated in the sectors of trade, industry, operations with real estate, renting and rendering services to the customers (Table 1.3.3):

[9] More than 83 percent of foreign debt of the enterprises carrying out operations with real estate, renting and customer services are accounted for the enterprises on mineral deposits exploration.

Table1.3.3. The sectoral structure of the internal debt of the corporate sector

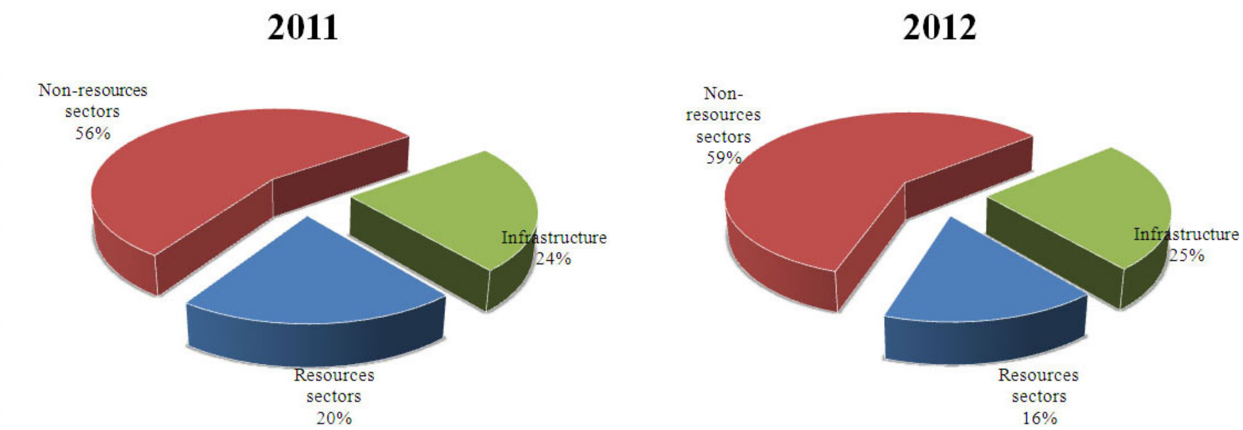
(mln. KGS)

	2008	2009	2010	2011	2012	H1 2011	H1 2012
Total	**17 920,8**	**23 347,6**	**24 904,2**	**30 009,4**	**31200,3**	**27 458,7**	**31 655,1**
including, in percent:							
Trade; repair of motor vehicles, household and personal appliances	21,6	26	21,5	23,4	24,9	22,7	24,5
Industry:							
- Processing	23,8	19,6	23,9	23,1	23,4	23,1	22,9
- Production and distribution of electricity, gas and water	6,8	4,7	14	11,5	12,7	13,5	12,7
- Exploration	2,1	1,0	0,7	2,0	1,2	1,9	0,9
Operations with real estate, renting and customer services	13,9	19,8	19,1	18,5	15,0	15,2	15,5
Construction	10,8	9,9	7,4	8,4	8,7	6,7	9,5
Transport and communication	13,7	9,3	5,9	4,6	4,4	6,9	4,3
Agriculture	0,7	0,4	0,3	0,8	2,0	1	1,8
Other industries	6,6	9,3	7,2	7,7	7,8	9,0	7,9

Source: NBKR on the basis of the data submitted by NCS KR

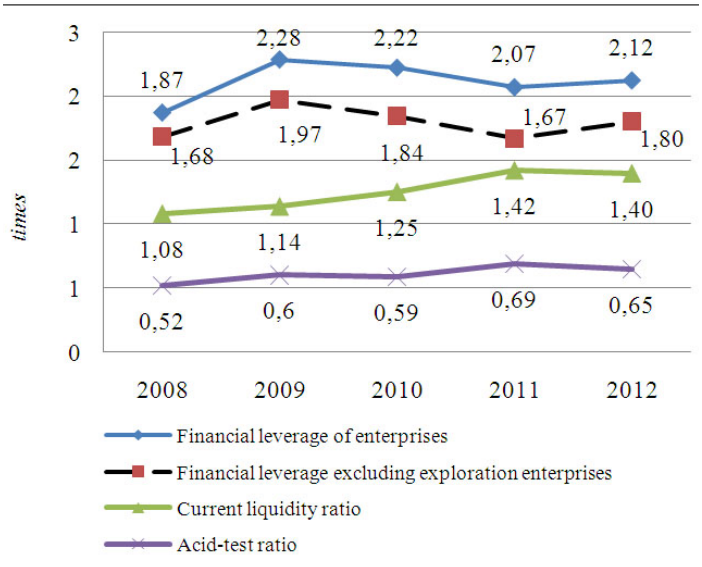
Non-resource sectors, including metallurgical production and service sector acquire the largest share in the structure of internal debt of the corporate sector (Graph 1.3.10):

Graph 1.3.10. The structure of the domestic debt by directions of use



Source: NSC KR

Graph 1.3.11. Dynamics of the enterprises solvency ratio



Source: NSC KR, NBKR calculations

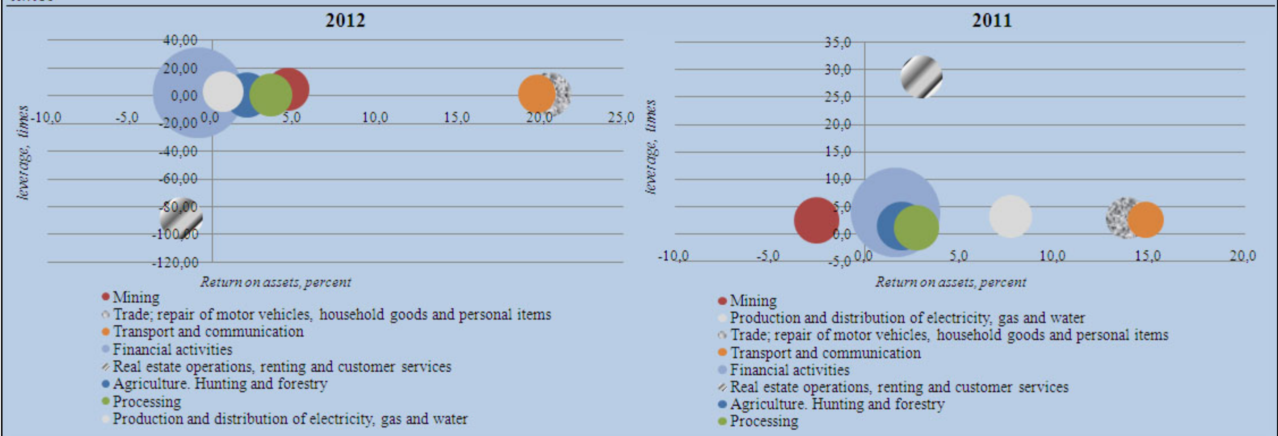
In 2012, index of financial leverage at the enterprises of real sector remains at rather high level, which is conditioned by increase in inflow of the foreign loans and borrowings exceeding growth of enterprises' equity (Graph 1.3.11).

In the reporting period, the coefficient of current liquidity preserved its value and remained at the acceptable standard level (from 1.5 to 2.5). The acid-test ratio in its turn has not reached the standard level (not below 1). It reflects insufficient liquid assets for repayment of short-term liabilities. High level of quick liquidity is generally supported by the enterprises involved in financial activities and organizations on production of textile and apparels.

Box 2. Corporate Sector Financial Stability Risk Distribution[10]

According to the combination of risk factors in respect of profitability, liquidity and leverage, there is relatively high level of risk in the following sectors: (1) “operations with real estate, renting and rendering services to the customers (exploration)”, (2) “financial activities”, (3) “mining industry”, (4) “production and distribution of electricity, gas and water” (Graph 1)[11]. At the end of 2012, enterprises involved in real estate operations, renting and customer services (exploration) showed two risk factors (negative profitability and negative leverage). The current situation is explained by increase of external debt on received loans and borrowings (52.4 percent of the total external debt of the corporate sector). At the end of 2012, the debt of this industry to the financial sector of Kyrgyzstan constituted 15.0 percent of the total internal debt of the corporate sector. The enterprises in these industries constitute 23 percent of medium- and large-sized enterprises.

Graph 1. Risk distribution by sectors for the year 2012
times



The size of the point corresponds to the level of current liquidity
Source: NSC KR, NBKR calculations

In the period under review, the enterprises involved in financial activities were characterized by negative profitability on the background of high current liquidity.

At the end of 2012, relatively high leverage index was observed at the enterprises of the mining industry, the enterprises producing and distributing electricity, gas and water showed both high level of leverage and low profitability, which is an indicator of possible financial difficulties. At that, at the end of 2012, the largest amount of debt to the financial sector of the country was accounted for the enterprises, which produced and distributed electricity, gas and water – 12.7 percent (KGS 3 959.4 million).

[10] This analysis was conducted based on the data of large- and medium-sized enterprises of the corporate sector.

[11] Sectoral distribution of enterprises is made on the basis of the groups of enterprises with high and maximum risk level.

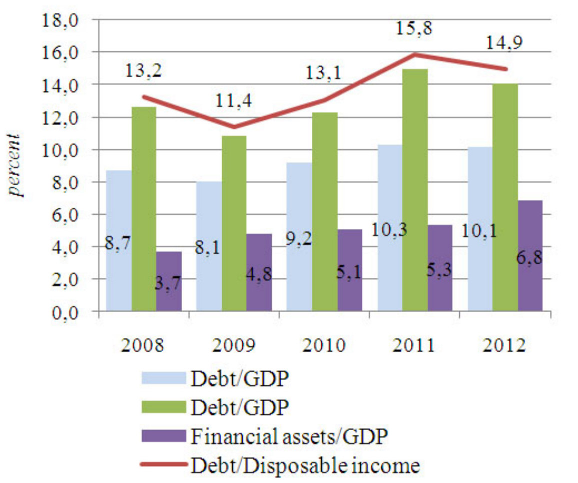
1.4. Household Sector[12]

One could observe gradual improvement of the financial soundness indicators in the households despite increase of the population debt to the financial sector.

Structural vulnerability of the household expenditures remains one of the problems of this sector. The major component of aggregate expenditures is the consumer expenditures.

Amid the growing loan portfolio of commercial banks and NBFI, debt burden of the household sector also increased (Graph 1.4.1). At the same time, amid high budget surplus (nominal incomes exceed aggregate expenditures by 36.1 percent); the overall financial position of the sector improves (Graph 1.4.2).

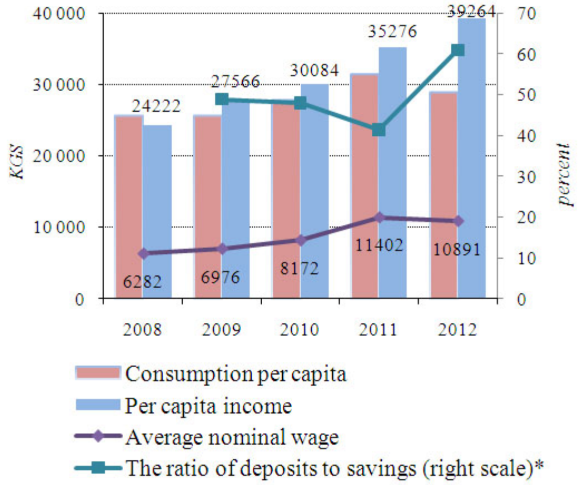
Graph 1.4.1. Financial soundness indicators of households*



Source: NSC KR, NBKR calculations

** all financial stability indicators were revised*

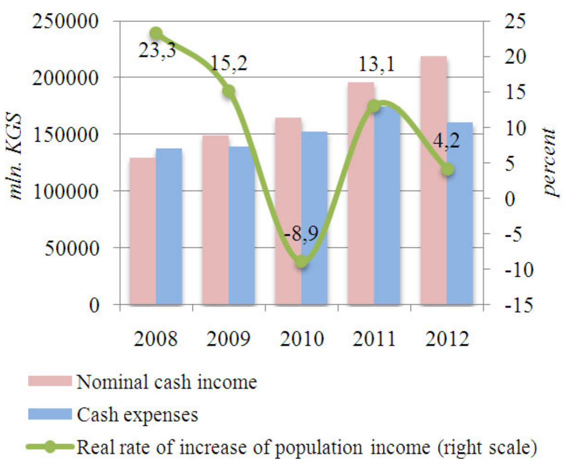
Graph 1.4.2. Factors of financial stability of the balance of the population



Source: NSC KR, NBKR calculations

** there were no data on savings until 2009*

Graph 1.4.3. Dynamics of incomes and expeniture households



Source: NSC KR

At the end of 2012[13], real incomes increased by 4.2 percent compared to the similar index of the last year, while total expenditures decreased by 7.8 percent (Graph 1.4.3).

Employment incomes, which constitute 71.4 percent of the disposable incomes of the population, are significant in the context of the financial position of the households. Therefore, the ability of the households sector to rely upon credit resources and be liable for their financial obligations is directly dependent on the dynamics of wages and employment of the population.

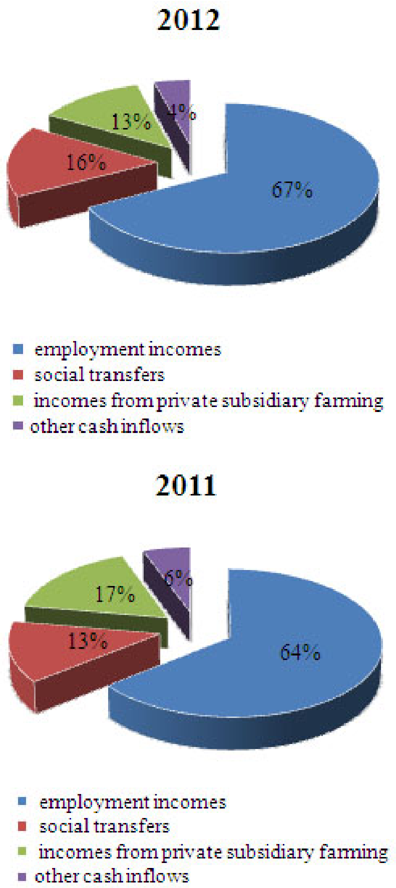
Currently, consumer structure of expenditures of the population prevents from relying upon growth of savings and spending for investment purposes. In case

[12] The analysis of the sector used the data from the NBKR and the data from the NSC KR integrated sample survey of household budgets and manpower. Hereinafter, the figures for the first quarter of 2012 are conditioned by the lack of data for the first half of 2012.

[13] The latest data of NSC KR.

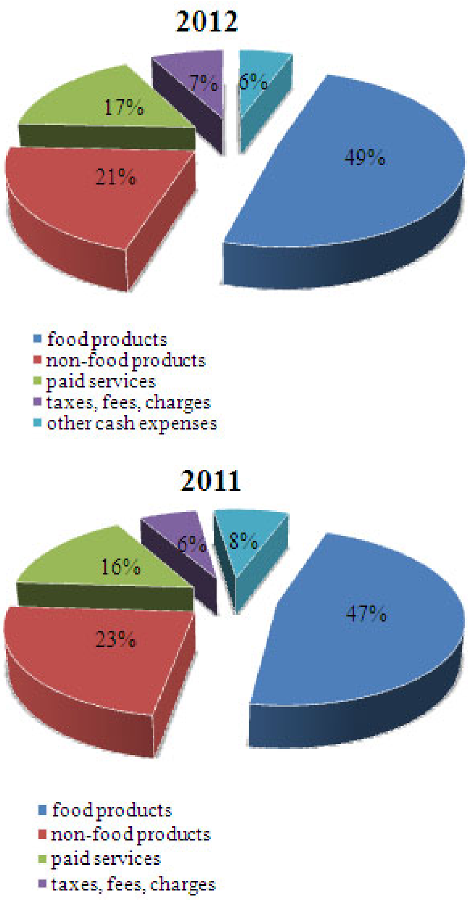
of decline in financial possibilities of the population, the ability to be liable for obligations will be restricted by large share of consumer spending constituting 86.8 percent of total expenditures (Graph 1.4.5). Therefore, rise in consumer prices is one of the factors of vulnerability; the role thereof for the credit risk of the banks may be determined by the propensity of the population to reduce expenses for goods and services in case of solvency deterioration.

Graph 1.4.4. The structure of the population incomes



Source: NSC KR

Graph 1.4.5. The structure of the population expenditures



Source: NSC KR

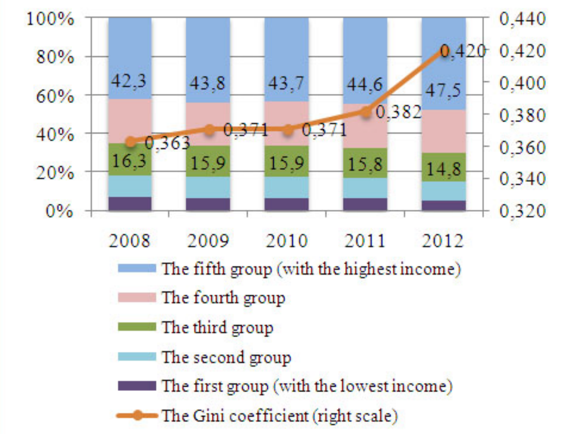
The structure of the population income by quintile groups indicates concentration of income in the most advantaged groups (Graph 1.4.6).

In the period under review, index of income inequality (the Gini coefficient) identified increase in concentration and reduction of income diversification.

Households are still the second largest borrowers of funds from the banking sector and the main borrower from the NBFI (Graph 1.4.7).

Graph 1.4.6. The structure of the population income by quintile groups

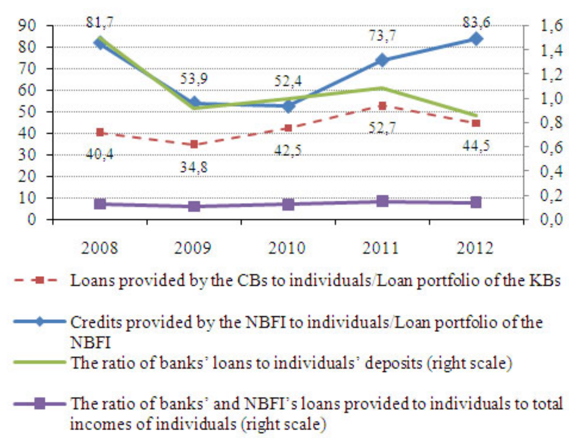
percent



Source: NSC KR

Graph 1.4.7. The share of households in the KB and NBFI loan portfolio

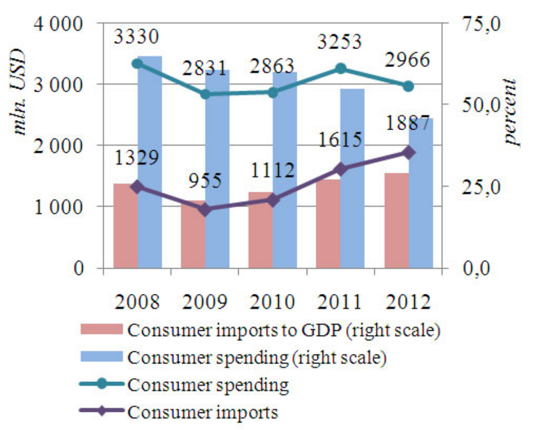
percent



Source: NSC KR

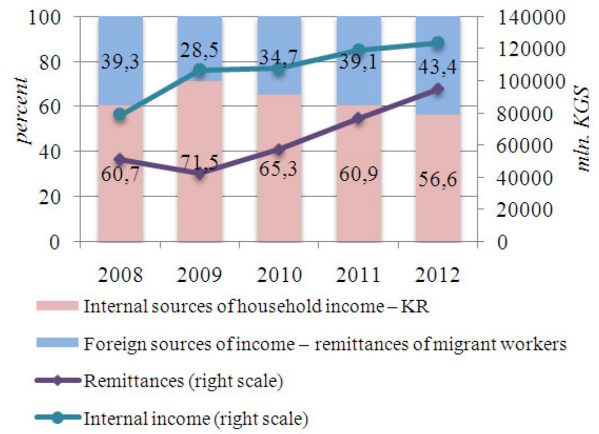
At the end of 2012, consumer import to GDP constituted 29.1 percent; it reflects growth of households' vulnerability on the part of external sector.

Graph 1.4.8. Factors of external vulnerability of the budget expenditures of households



Source: NSC KR and NBKR

Graph 1.4.9. The structure of households' incomes by sources



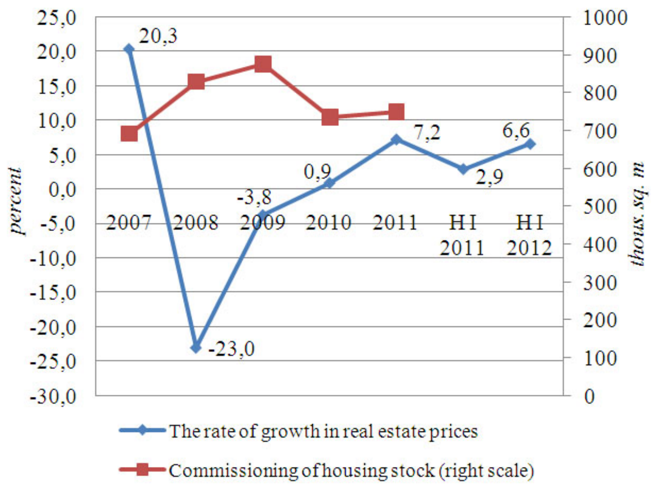
Source: NSC KR and NBKR

1.5. Real Estate Market

Low rates of new housing involvement and high demand for real estate in Bishkek city and Chui oblast contributed to rise in prices in the real estate market. The number of real estate purchase and sale transactions, as well as collateral transactions, reflect gradual recovery of the real estate market.

Since the beginning of 2012, gradual reduction of the credit risks for the financial sector was observed on the background of growth in the amount of mortgage lending and construction financing.

Graph 1.5.1. Dynamics of change in real estate prices and commissioning of housing stock in the Kyrgyz Republic



Source: SRS GKR, NBKR calculations

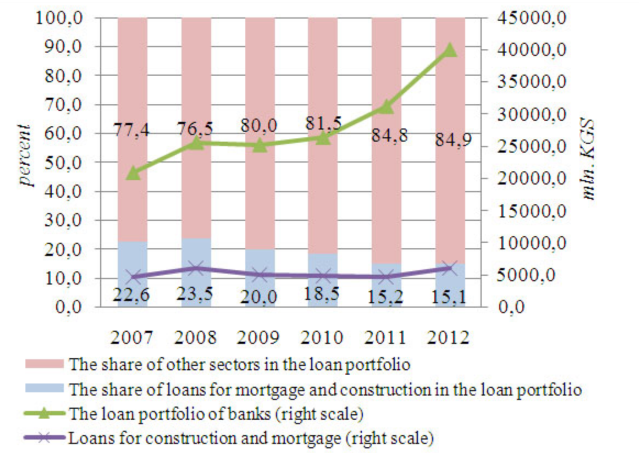
During 2012, positive dynamics of prices remained in the real estate market; it was conditioned by high demand for real estate in Bishkek city and Chui oblast accompanied by shortage of supply of new housing. These trends are expected to be the main factors of rise in prices in the near term.

Thus, the current condition in the real estate market is characterized by decline in the rates of construction and high depreciation of the real estate stock, which in the long-term is one of the main problems of the real estate market.

At the end of 2012, the major amount of purchase and sale transactions were accounted for residential real estate and constituted 56.9 percent of the total amount of purchase and sale transactions.

The major amount of transactions was conducted between individuals. The share of transactions between individuals and financial institutions constituted 5.9 percent of the total amount of purchase and sale transactions, which shows low banks' activity and other financial institutions related to providing mortgage loans.

Graph 1.5.2. The total share of loans for mortgage and construction in the loan portfolio of banks



Source: NBKR

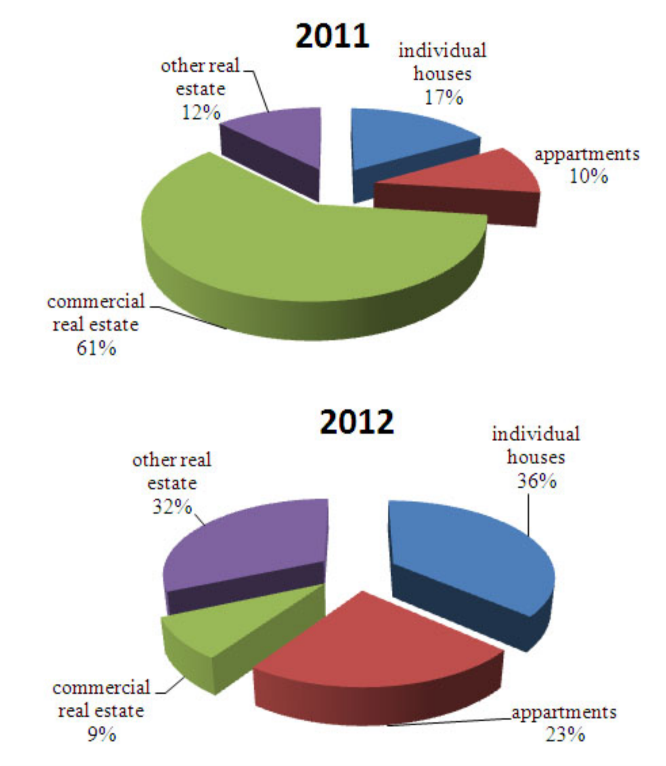
Graph 1.5.3. The structure of transactions on the security of real estate by type of security holder

Source: NBKR

The share of mortgage loans and loans for the construction in the banks' loan portfolio started decreasing gradually, having reached the peak in 2008-2009. Despite overall increase in the volume of provided mortgage loans and loans for construction at the end of 2012, their share in the loan portfolio of the banks deceased and constituted 15.1 percent. This dynamics was explained by the excess of growth rates of the banks loan portfolio over growth rates of provided mortgage loans and loans for construction.

Graph 1.5.4.The structure of the transactions on the real estate mortgage by segments

percent



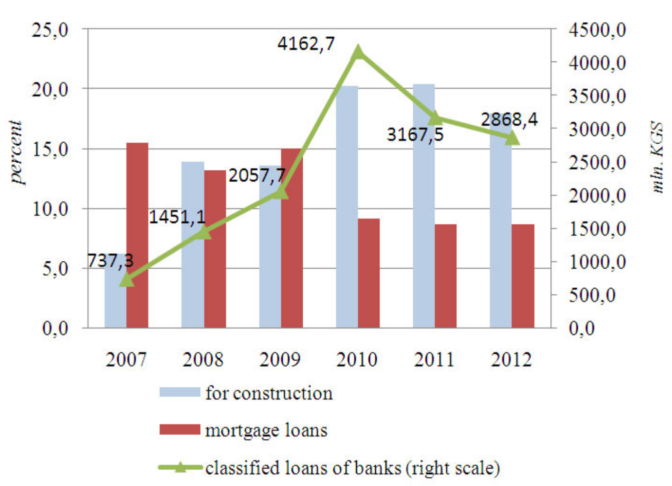
Source: SRS GKR, NBKR calculations

Since the beginning of 2012, the amount of provided mortgage loans and loans for construction showed positive dynamics of growth and constituted KGS 6.1 billion as of the end of the year. Increase in the amount of provided loans was conditioned by remaining high demand for lending resources, as well as visible dynamics of decrease in the interest rates.

At the end of 2012, the volume of mortgage loans in the banks loan portfolio constituted USD 3.9 billion (9.6 percent of the banks' loan portfolio), the volume of loans for construction – KGS 2.2 billion (5.5 percent of the banks' loan portfolio).

Increase in the amount of transactions on the security of immovable property was accompanied by rise in prices for real estate. The major amount of transactions is accounted for residential property. Thus, at the end of 2012, the amount of mortgage transactions constituted KGS 17.3 billion or 59.9 percent of the total volume of transactions on the security of real estate. Moreover, the major volume of transactions on security was accounted for the transactions with real estate, where financial institutions were the security holders. In 2012, the share of such transactions in the total volume of transactions on security constituted 67.2 percent or KGS 19.4 billion.

Graph 1.5.5. The structure of classified loans for construction and mortgage lending



Source: NBKR

Since the beginning of 2012, the dynamics of mortgage loans and loans for construction in the portfolio of the bad loans of banks was characterized by gradual reduction of credit risks to the financial sector. The amount of bad mortgage loans and loans for construction as of the end of 2012 constituted KGS 763.4 million, having decreased by KGS 155.1 million for the year. However, the major share of bed loans was conditioned by the condition in the construction sector of the country, connected with decline of profitability in 2008-2009.

Box 3. Stress Testing of the Price Volatility Impact on the Loan Portfolio of the Banks in the Real Estate Market

The following gradation of loans by the amount of loan repayment balance to the total amount of loan, including accrued interest was reviewed for conducting stress testing of the price volatility impact in the real estate market:

Table 1. Loans of banks secured by mortgaged property as of February 01, 2013.

Loan repayment balance (interest and principal amount) of the total amount of a loan *	Group 1	Group 2	Group 3	Group 4	Group 5	Total
	1 - 20 %	20 - 40 %	40 - 60 %	60 - 80 %	80 - 100 %	
Loan repayment balance (principal amount and interest), mln. KGS	1 045.2	2 607.1	5 632.5	10 190.5	20 460.7	**39 936.0**
Total amount of provided loans (principal amount and interest), mln. KGS	4 311.6	5 546.5	8 923.1	12 555.5	20 954.6	**52 291.3**
Average maturity (duration) term of a loan by the groups, months	8.4	12.4	17.5	24.4	31.6	**18.9**
Total volume of mortgaged property, mln. KGS	4 806.9	7 267.5	13 783.3	16 379.3	27 048.1	**69 285.1**

** the amount of a loan includes the amount of provided loan plus all accrued interests for the whole loan term*

The share of loans secured by mortgaged property as of February 01, 2013 constituted 85 percent of the loan portfolio in the banking sector.

Price volatility in the real estate market influences nominal volume of mortgaged property. Specifically, **group 4** and **group 5** having higher loan repayment balance and substantial duration of the loan portfolio is likely to suffer the most significant influence of price volatility, it shows relatively high level of non-payment risk.

Decline in prices for real estate is likely to result in the borrower's refusal to further repay a loan. If the value of mortgaged property is lower than the loan repayment balance the possibility of credit risks embodiment will increase.

The following possible scenarios of price volatility for real estate were reviewed:

1) "*Negative*" scenario of decline in prices by 50 percent during a year.

Generally, such change is likely to result in 50-percent decline in value of mortgaged property in each aforementioned group (Table 1). However, possible decline in value of mortgaged property below loan repayment balance will be observed in the **group 4**. Gap on this group can constitute KGS 2.0 billion, which is likely to result in refusal to repay loan balance taking into account average duration of loans in the group equal to 2 years. Decline in prices for real estate will have more negative effect on the loans of the **group 5**, where in case of this scenario implementation banks' losses from possible non-repayment of loans can constitute KGS 6.9 billion (7.9 percent of the banking sector assets). The average maturity (duration) term in this group constitutes 2.6 years, which increase the risk of non-repayment.

2) **“Historic” scenario of the most significant decline in prices in the real estate market of Kyrgyzstan (in 2008, average prices decreased by 23 percent).**

Change in prices will result in decline of the value of mortgaged property by 23 percent in each group of loans. However, decrease of value of mortgaged property below loan repayment balance is not observed in any group, therefore, materialization of non-payment risk is not expected. Thus, the banking sector shows particular sustainability in case of “historic” scenario implementation.

Within the framework of this scenario, it is necessary to estimate possible degree of decline in prices, when banks will start suffer losses. The banking sector will start suffer losses in case of decline in prices by 26 percent and more. In case of possible decline in prices by 26 percent within a year, losses from non-repaid loans can amount to KGS 450 million and will be concentrated in the **group 5**.

3) **Gradual decline in prices for real estate by 40 percent for two years (annual decline by 20 percent).**

Implementation of this stress-scenario will result in more prolonged decline in prices, thereby having more significant effect on the **group 5**, which has the longest average maturity (duration) term of loans constituting 2.6 years. Decline in prices can influence loans from the **group 4**; the average duration thereof constitutes 2 years.

Generally, possible losses, in case of this stress-scenario implementation, is likely to constitute KGS 2 billion (2.3 percent of the banking sector assets); the main concentration thereof will be accounted for the **group 5**.

Impact on individual banks and the “large” banks group

In respect of “large” banks group the aforementioned gradation of the loan portfolio was the following:

Table 2. Loans of the banks secured by mortgaged property as of February, 2013, in the “large” banks group

Loan repayment balance (interest and principal amount) of the total amount of a loan *	**Group 1**	**Group 2**	**Group 3**	**Group 4**	**Group 5**	**Total**
	1 - 20 %	**20 - 40 %**	**40 - 60 %**	**60 - 80 %**	**80 - 100 %**	
Loan repayment balance (principal amount and interest), mln. KGS	597.6	1 410.8	2 895.4	5 574.7	10 106.2	**20 584.7**
Total amount of provided loans (principal amount and interest), mln. KGS	1 497.5	2 016.8	3 889.0	6 074.7	10 251.0	**23 729.0**
Average maturity (duration) term of a loan by the groups, months	15.0	17.6	28.3	38.0	50.4	**29.9**
Total volume of mortgaged property, mln. KGS	2 018.1	3 197.7	6 206.8	9 181.2	14 288.5	**34 892.3**

Generally, the “large” banks group is characterized by long duration of provided loans and relatively higher risks of possible non-payments, respectively.

When reviewing possible stress-scenarios of change in prices for real estate, it should be noted that the “large” banks group is less sensitive to change in prices compared to the banking system in general. Materialization of possible risks for the “large” banks group can occur in case of decline in prices for real estate by 30 percent and more within a year.

In case of **scenario 1** implementation, possible losses from loan non-repayment for the “large” banks group is likely to constitute KGS 3.9 billion (8.6 percent of assets in these banks) and will be concentrated in the **group 5** (KGS 2.9 billion).

Moreover, due to high values of average duration of loans in the group 4 and 5, these loans are also exposed to risk of gradual decline in prices (scenario 3). Implementation of scenario 3 may cause losses of the “large” banks in the amount of KGS 1 billion.

Decrease in the volume of mortgaged property below loan repayment balance is not observed with implementation of the scenario 2.

Thus, dynamics of prices in the real estate market is able to have a significant impact on the loan portfolio of the banks. In case of decline in prices, it can result in non-repayment of loans and consequently embodiment of risks for the banks. However, it should be noted that possible negative consequences will be smoothed by the lending policy of the banks, when on providing loans banks diminish mortgage value of real estate approximately by 15 percent in respect of market price.

II. Financial Condition and Stability of the Financial Sector

2.1. Financial Sector Structure

The institutional structure of the financial sector of the Kyrgyz Republic is represented by commercial banks and other financial companies (non-bank financial institutions, insurance companies, investment and pension funds, stock exchanges).

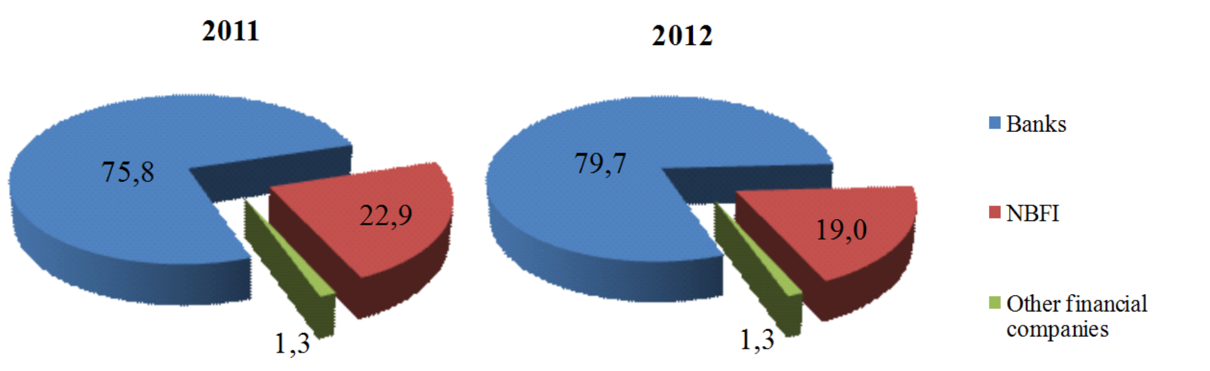
Table 2.1.1. The institutional structure of the financial sector
(the number of financial institutions)

Financial institutions	2007	2008	2009	2010	2011	I п/г 2011	I п/г 2012
Commercial banks	**22**	**21**	**22**	**22**	**22**	**22**	**22**
Other financial companies, including:	**1031**	**1117**	**1234**	**936**	**958**	**935**	**918**
Non-bank financial institutions (NBFI), including:	**1005**	**1089**	**1203**	**906**	**931**	**907**	**893**
Microfinance organizations, including:	233	291	359	397	454	424	433
microcredit companies	103	170	226	266	340	304	337
microcredit agencies	128	119	129	127	110	116	91
microfinance companies	2	2	4	4	4	4	5
SFRB LLC	-	-	1	1	-	1	-
Development Fund CJSC	-	-	1	-	-	-	-
FCCU OJSC	1	1	1	1	1	1	1
Credit unions	272	248	238	217	197	207	189
Foreign exchange bureau	318	353	372	290	279	274	270
Insurance companies	***16***	***18***	***19***	***19***	***16***	***18***	***14***
Investment funds	***5***	***5***	***6***	***6***	***8***	***6***	***8***
Stock exchanges	***3***	***3***	***3***	***2***	***1***	***2***	***1***
Pension funds	***2***	***2***	***3***	***3***	***2***	***2***	***2***

Source: NBKR, NSC KR

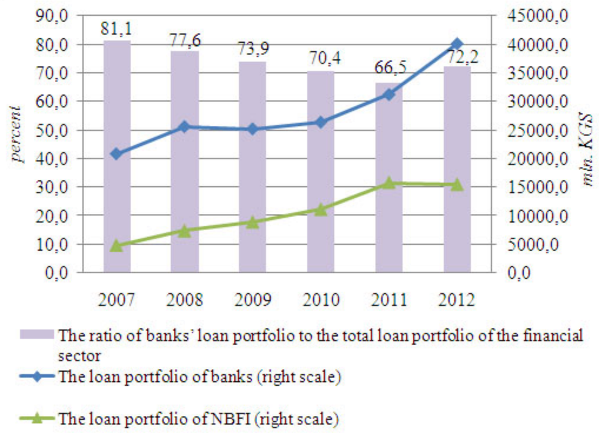
At the end of 2012, assets of the financial sector amounted to KGS 103.0 billion or 33.8 percent to GDP, having increased by KGS 21.7 billion compared to the same period of 2011.

Graph 2.1.1. The structure of the assets of the financial sector
percent



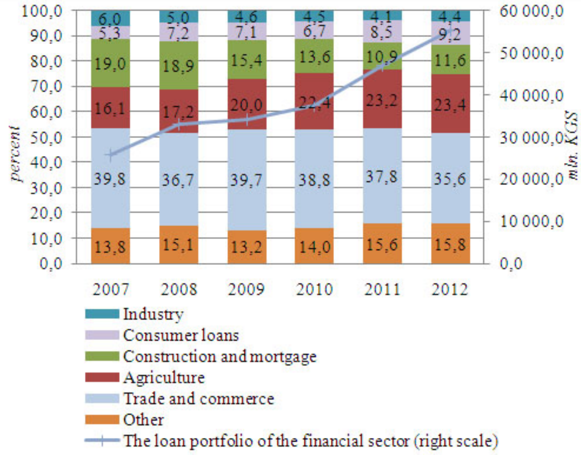
The share of the banking sector in total assets of the financial sector accounted for 80.0 percent. The share of NBFIs and other financial companies accounted for 18.7 percent and 1.3 percent respectively.

Graph 2.1.2. The structure of the loan portfolio of the financial sector



Source: NBKR

Graph 2.1.3. The sectoral structure of the loan portfolio of the financial sector



Source: NBKR

The share of banks' loans in the loan portfolio of the financial sector for the period 2007-2012 decreased and reached 72.2 percent. Also note reduction in the ratio of the loan portfolio of banks to the loan portfolio of NBFIs from 4.3 to 2.6 times.

With the increase in the loan portfolio of the financial sector, the concentration of the loan portfolio is still preserved in the trade sector (banks) and agriculture (NBFI). The total share of the loan portfolio of the financial sector in trade and agriculture as at the end of 2012 amounted to 59.0 percent of total loans issued. At the same time, main growth can be seen in agriculture due to increase in the lending to this industry by NBFIs. For the period 2007-2012, the share of agriculture in the loan portfolio of the financial sector increased by 7.4 percent and totaled 23.4 percent by the end of 2012.

2.2. Banking Sector

2.2.1. Major Trends

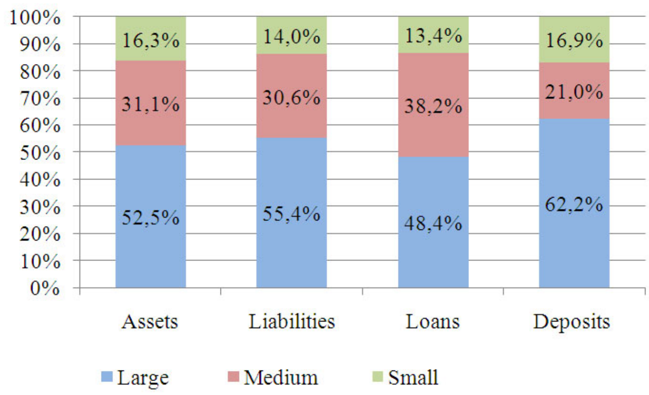
Amid deterioration of the macroeconomic environment and remaining disproportions in the economy, there was the trend of gradual expansion of the banking sector.

Increase in lending to the economy continued mainly due to growth of short-term lending. The majority of term deposits is mainly accounted for the household sector.

As of December 31, 2012,[14] 23 commercial banks (including the Bishkek branch of the National Bank of Pakistan) and 279 of their branches worked in the territory of the Kyrgyz Republic. Among which there are 14 banks with foreign participation in the capital, including 9 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.

Three banks Manas Bank CJSC, KyrgyzCredit Bank OJSC, Issyk-Kul IB OJSC operated in the preservation regime.

Graph 2.2.1.1. Balance indices of the banking sector by market segments as at the end of 2012



The major share of the banking system was still occupied by "large" banks represented by four banks. Assets of "large" banks constituted 52.5 percent of the banking sector assets. The major share of the resource base was also occupied by "large" banks. At that, 11 banks of the group of "small" banks occupied 16.3 percent of the banking sector assets and 13.4 percent of all loans issued by the banks.

Assets

In 2012, assets of the banking system increased by 29.5 percent and amounted to KGS 86.7 billion. Moreover, in 2012, increase in assets was due to growth of the loan portfolio (KGS 8.9 billion), securities portfolio (KGS 3.1 dillion) and deposits in other banks (KGS 2.1 billion).

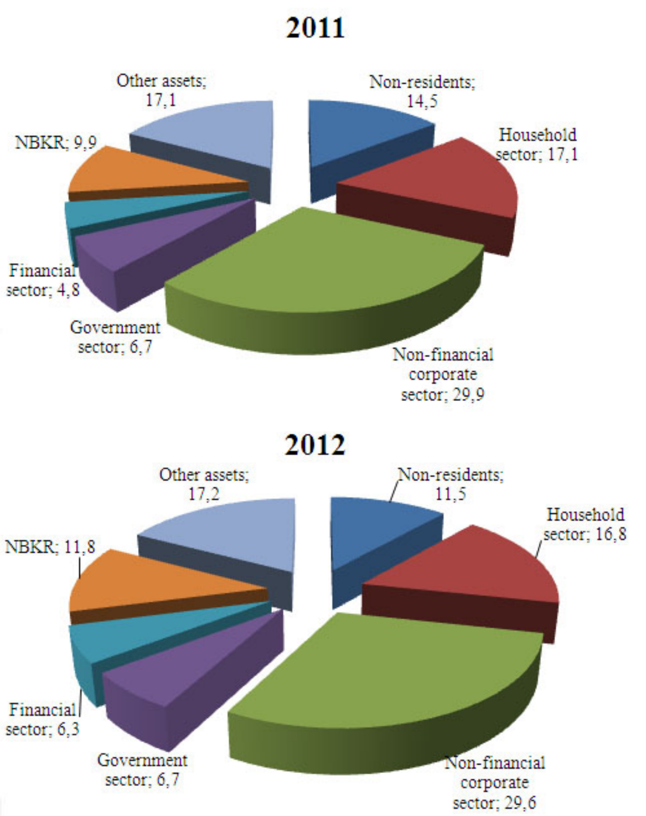
In the strucutre of total assets, the share of loan portfolio remained at the level of 45.4 – 45.8 percent. The significant share in the assets is occupied by cash, which constituted 26.0 of assets at the end of 2012.

The structure of total assets of the banking system by economic sectors is by 29.6 percent represented by assets attributable to the corporate (real) sector (Graph 2.2.1.2). At the end of the period under review, the household sector was accounted for 16.8 percent of the banks' assets.

Increase in the share of the financial sector in the banks' assets should be noted. However, the share of non-residents' assets decreased.

[14] Data are given according to the Periodic Regulatory Reporting of commercial banks

Graph 2.2.1.2. The structure of the total assets of the banking sector
percent



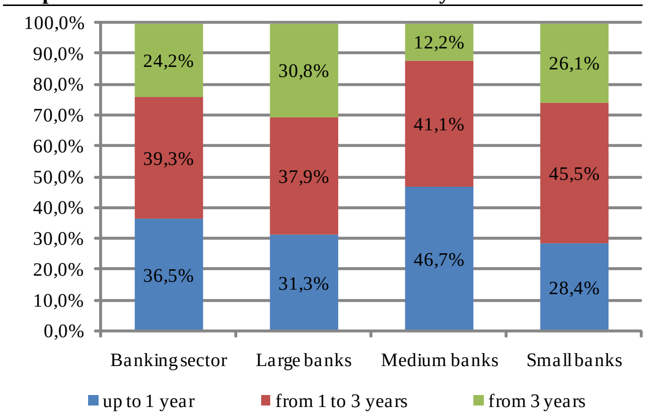
The total loan portfolio[15] of the banking system increased by 28.4 percent and amounted to KGS 40.0 billion in 2012. The average weighted loan term has not changed and constituted 20.5 months (1.7 year).

As at the end of 2012, the loan portfolio was represented by short-term loans (up to 1 year) – KGS 14.6 billion, medium-term loans (from1 to 3 years) – KGS 15.7 billion and long-term loans (more than 3 years) – KGS 9.7 billion. Short-tem lending is conditioned by high demand of the customers for "short" loans (trade, agriculture, consumer needs), as well as shortage of "long" resources with the banks.

In the structure of loan portfolio of the "large" banks the share of long-term loans constituted 30.8 percent. Meanwhile, the share of long-term loans constituted 12.2 percent in the structure of loan portfolio with "medium" banks. The basis of loan portfolio with "medium" banks was represented by the short-term loans, which constituted 46.7 percent.

Generally, the structure of the loan portfolio of commercial banks by sectors remained the same. The major share of issued loans was sill accounted for the trade sector (40.9 percent). Meanwhile, the share of agriculture in the loan portfolio increased from 13.0 to 15.4 percent, due to implementation of the government program for concessional lending to farmers (the amount of lending to the sectors of agriculture increased from KGS 4.0 to 6.2 billion). As at the end of 2012, loan portfolio included 148 thousand of loans, including in agriculture – 56 thousand of loans, in consumer sector – 43 thousand of loans, in trade - 31 thousand of loans.

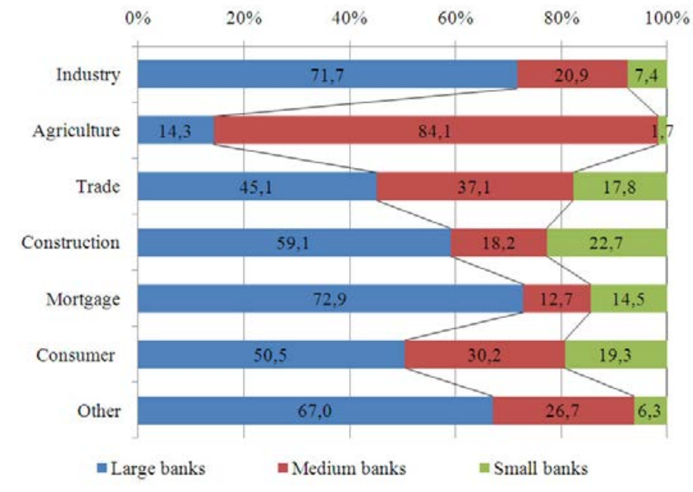
Graph 2.2.1.3. Loans in the context of maturity



In the institutional breakdown, the major share of loans in the loan portfolio was still accounted for the corporate sector mainly due to the group of "large" banks. Meanwhile, lending to the households continued increasing, generally on the part of the group of "medium" banks (85.3 percent of loans issued by this group of banks). Generally, decrease of the loan portfolio concentration by types of borrowers was observed in the banking sector.

[15] Hereinafter this category does not include corresponding discount on all loans, as well as loans issued to the banks and other financial institutions.

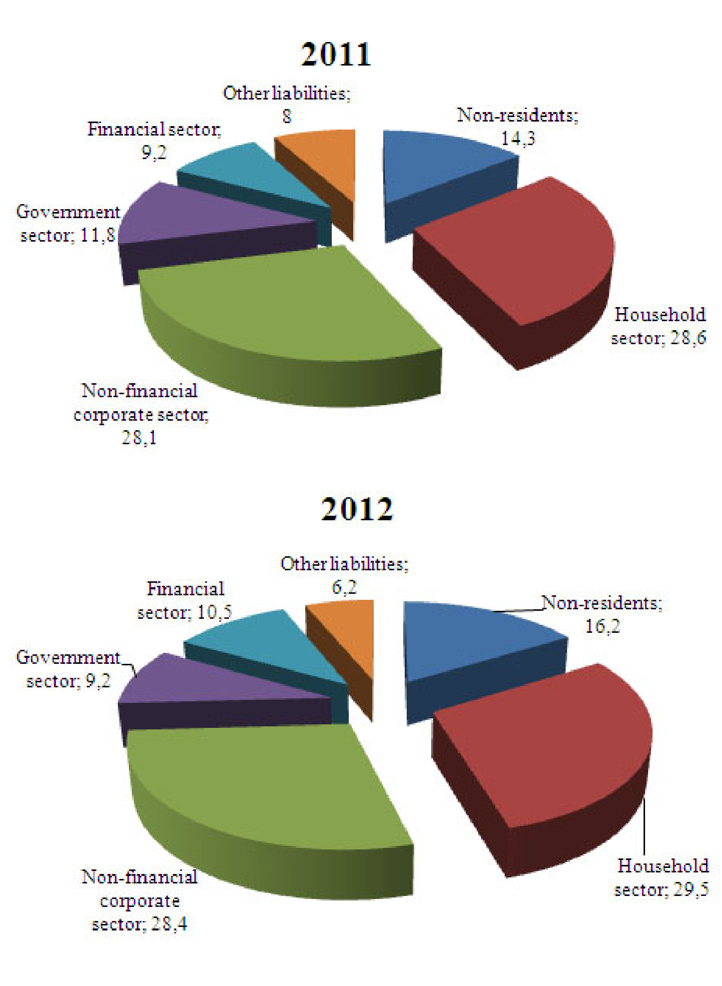
Graph 2.2.1.4 The sectoral structure of loan portfolio by segments



At the end of 2012, the major share in the mortgage, industrial and construction markets was attributed to "large" banks, which is explained by demand for large amounts of loans in these sectors. "Medium" banks are oriented for issuing loan resources to the sector of agriculture.

Resources

Graph 2.2.1.5. The structure of total liabilities in the banking sector
percent



In 2012, increase in liabilities of the banking sector constituted 33.5 percent. At the end of the period under review, the banks' liabilities constituted KGS 69.8 billion.

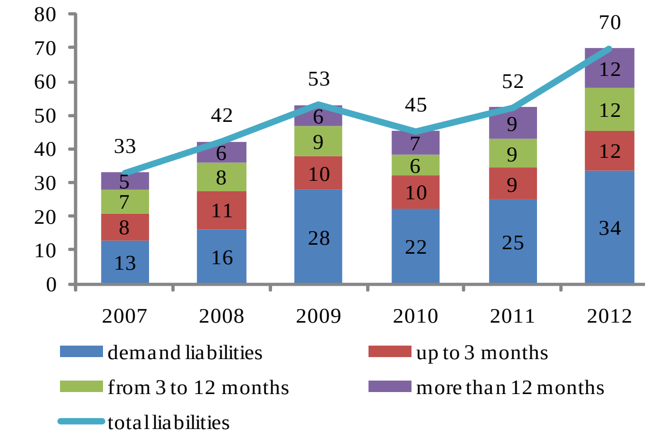
In the structure of banks' liabilities the major share was attributed to the household sector (29.5 percent) and non-financial corporate sector (28.4 percent). In its turn, in the structure of banks' term resources the major share of the total amount of liabilities was accounted for the deposits of households (17.2 percent), loans and deposits of non-residents (13.9 percent).

In 2012, growth of the depositary base in the banking system constituted 36.4 percent and amounted to KGS 48.4 billion. In the structure of deposits of enterprises and population, the share of individuals' deposits constituted 50.9 percent, moreover, growth in the volume of individuals' deposits constituted 50.9 percent, however, growth in the volume of individuals' deposits in 2012 constituted 36.3 percent.

In 2012, the share of legal entities' deposits reduced from 49.8 percent to 49.1 percent and amounted to KGS 21.3 billion. Growth of legal entities' deposits constituted 33.0 percent.

Thus, the structure of depositary base by sectors of economy indicated gradual smoothing and decrease of imbalances in functioning of the banking sector in the part of attracting funds. Generally, in the structure of attracted resources the share of demand deposits constituted 47.5 percent of the total volume of liabilities or KGS 34.2 billion, forcing banks to keep a high volume of funds in the most liquid assets.

Graph 2.2.1.6. The structure of liabilities by maturity
bln. KGS



The share of long-term deposits (over 1 year), which have a positive effect on the long-term development of the banking system, constituted 9.5 percent of the depositary base on average for the period under review, having decreased by 2.8 p.p. compared to the same period in 2011.

At the end of 2012, significant increase of demand deposits concentration (61.9 percent) was observed in the structure of liabilities of the large and medium banks.

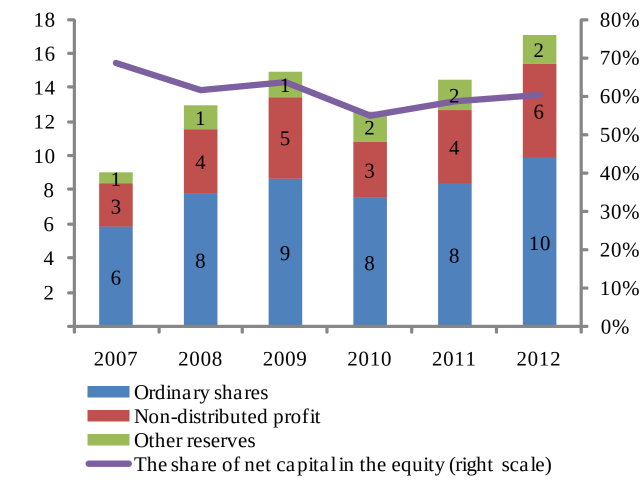
Thus, short-term liquidity remained in the banking sector with the shortage of long-term resources (more than 12 months).

Equity of the banking sector increased in 2012 by KGS 2.6 billion or by 18.3 percent and amounted to KGS 17.1 billion. Growth of the equity was mainly provided by increase in undistributed profit (KGS 1.3 billion). In the period under review, increase in the authorized capital amounted to KGS 1.1 billion.

Financial Results

Graph 2.2.1.7. The structure of capital[16]

bln. KGS



In the reporting period, banks' spending exceeded banks' profit. The main structural component of the banks' incomes was interest yield, which constituted 58.2 percent of the gross income.

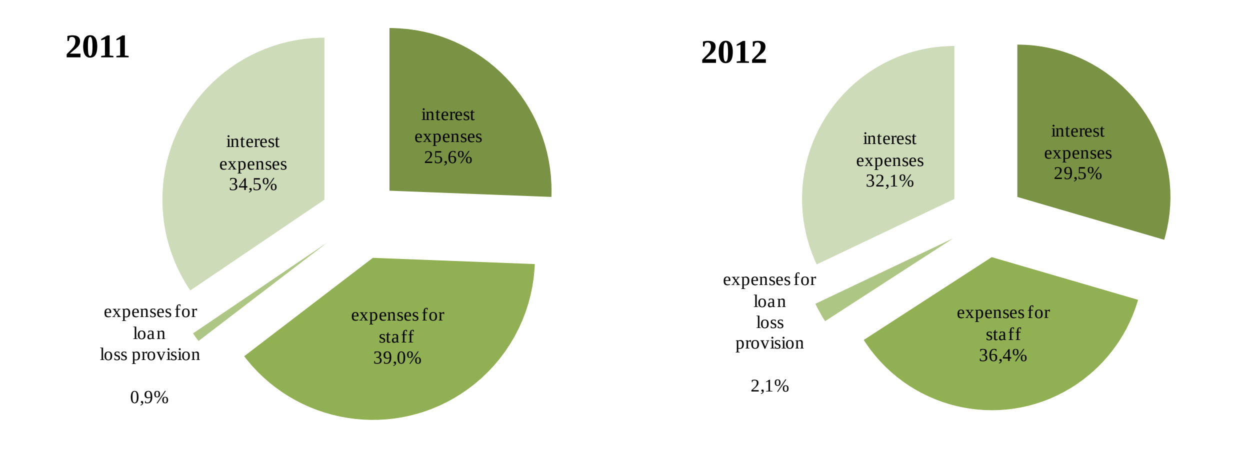
Thus, the structure of small banks' incomes was also characterized by significant share of commission incomes, which in 2012 constituted 19.2 percent of the gross income and incomes from transactions with foreign currency (13.1 percent of the gross income).

Generally, in respect of the banking system, gradual increase in the share of incomes from the transactions with securities was observed in the structure of banks' incomes.

[16] *Net capital* is the equity of the bank excluding the value of fixed assets, total loss provision, property of the borrower accepted for retirement of assets.

In 2012, banks expenditures constituted 79.7 percent of earned income, including spending for wage (36.4 percent of the total expenditures) and interest costs (29.5 percent of the total expenditures). The share of other operational costs constituted 32.1 percent of the total expenditures.

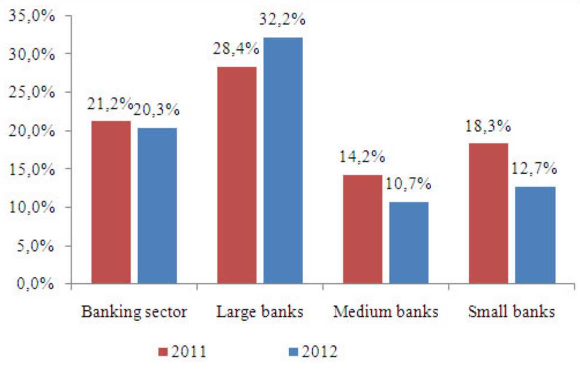
Graph 2.2.1.9. The structure of expenses



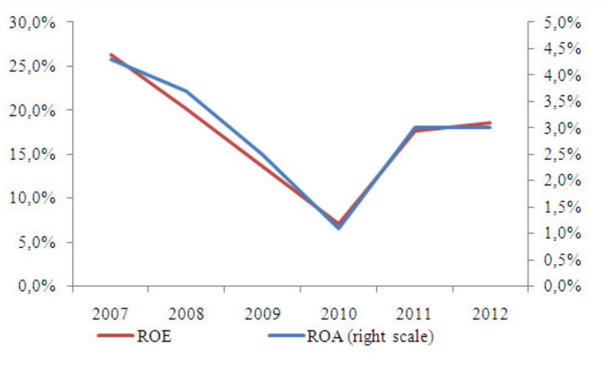
The share of staff costs in the small and medium banks exceeds expenditures of large banks, which is explained by issued loans of relatively small amount requiring more loan officers compared to large banks. However, this gap is partially smoothed by lower average level of staff's wages in the small and medium banks. Thus, in 2012, the index of return on labor in the banks[17] constituted 70.2 percent. In the large banks, return on labor constituted 135.4 percent, in small banks – 34.1 percent.

In 2012, profitability of banks' incomes (ratio of net profit to total income) remained unchanged and constituted 20.3 percent. However, there was significant difference on this index of large banks from medium and small banks.

Graph 2.2.1.10. The ratio of net profit to total income by groups



Graph 2.2.1.11. The indices of return on assets and return on equity



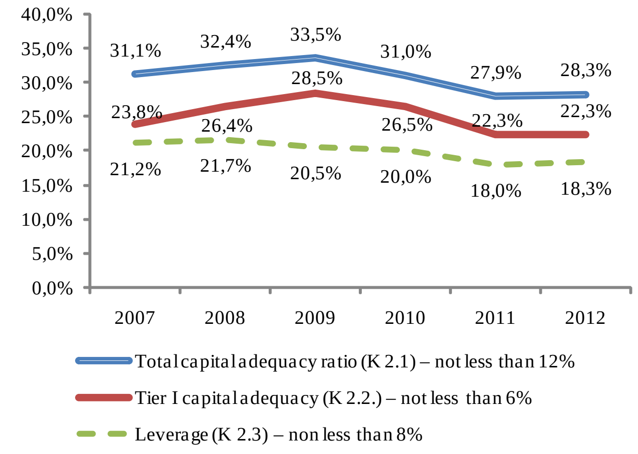
In 2012, return of equity (ROE) index constituted 18.5 percent, remaining at the level of 2011.

After significant decline in 2010, the dynamics of return on assets (ROA) index showed sufficient sustainability, which mainly reflects increase of banks' efficiency in use of assets.

[17] Return on labor is a ratio of net profit to staff costs.

Capital Adequacy

Graph 2.2.1.12. Capital adequacy



At the end of 2012, the ratio of net total capital (NTC) to net risky assets (NRA) (K 2.1.) constituted 28.3 percent, having exceeded by 16.3 p.p. the minimum value established by the NBKR. Decrease of this index in the period 2007-2012 was conditioned by excess of the growth rates of active bank operations over growth rates of the banks' equity. Net total capital increased by 1.8 times since 2007. Moreover, total assets net of intangible assets increased as well.

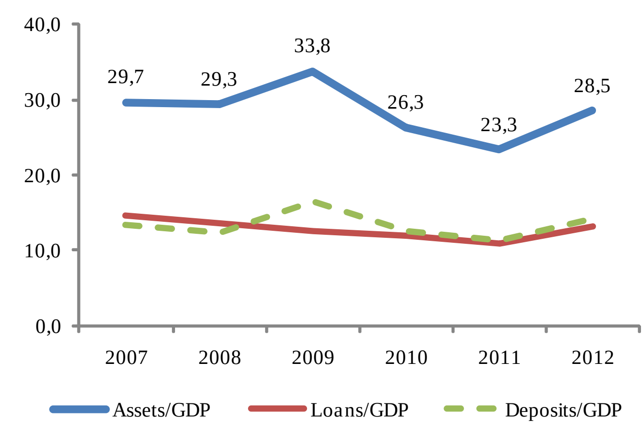
Financial leverage (additional index of banks' capital adequacy), indicating the level of assets financing by means of other sources besides banks' equity, constituted 18.3 percent, having exceeded the NBKR standards by 10.3 p.p..

2.2.2. Banking Sector Risks and Problems

The development of the situation in the banking sector in 2012 determined the following risks, which occurred in the past years: short-term character of the majority of attracted resources, risks of sectoral, geographic and institutional concentration, gaps in maturity payment.

Indicators of Financial Intermediation

Graph 2.2.2.1. The indicators of financial intermediation
percent



At the end of 2012, the ratio of deposits[18] to GDP[19] volume constituted 14.2 percent (at the end of 2011 – 11.2 percent).

Increase in this index was conditioned by rapid growth rates of deposits in the banking system (34.8 percent) compared to the growth rates of nominal GDP (6.4 percent[20]).

The ratio of total loans issued to clients to GDP was 13.2 percent, having increased by 2.3 p.p. compared to the results of 2011, which was the consequence of a rapid growth of the loan portfolio in the banking system, as compared to the growth rate of GDP.

However, despite positive dynamics of balance indices growth in the banking sector, the current level of performance of financial intermediation in the Kyrgyz Republic is still relatively low, and, therefore, there is a possibility for further expansion of active operations of the banking system with the preservation of financial risks at an acceptable level.

In general, some safety margin available in the commercial banks suggests that, in the short run, there is a potential for expansion of operation.

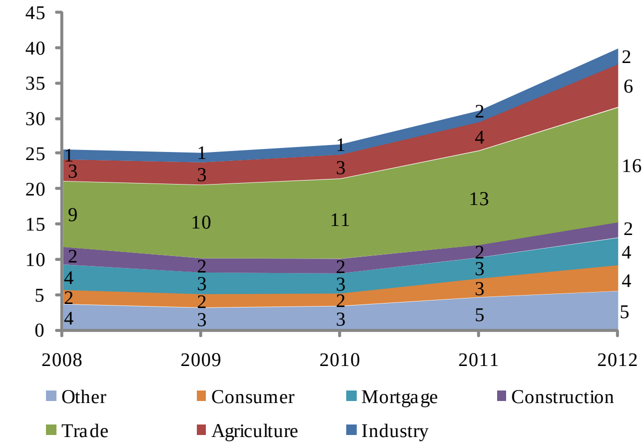
[18] In this chapter, by deposits we shall mean deposits of enterprises and population

[19] Data on the nominal GDP for the last 12 months are used in calculations

[20] Estimate is made on the basis of data on growth rates of the nominal GDP

The Risk of Concentration

Graph 2.2.2.2. The sectoral structure of the loan portfolio
bln. KGS



The risks of sectoral, geographic and institutional concentration remained in the loan portfolio of banks. The major share of banks' loan portfolio was accounted for the sector of trade. At the end of 2012, the loan portfolio of trading sector amounted to KGS 16.3 billion or 40.8 percent of the banks' loan portfolio.

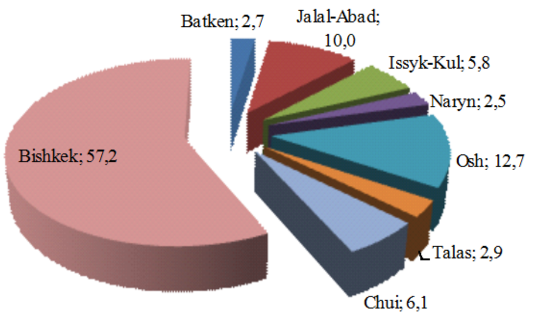
In the geographic breakdown, the maximum share of loans in the banking sector was accounted for Bishkek city and Chui oblast (57.2 percent of the loan portfolio).

In the regions, in the loan portfolio of banks, the major share was occupied by loans to agriculture (33.7 percent of loans issued in the regions) besides loans to trade.

The institutional concentration of loan portfolio was characterized by significant share of five large borrowers in the loan portfolio (13.5 percent of the total loan portfolio in the banking sector).

The resource base of the banks was also characterized by institutional concentration. At the end of 2012, debt to five largest borrowers constituted 26.5 percent of the deposits of population and enterprises.

Graph 2.2.2.3. Lending to the regions of the Kyrgyz Republic
percent



Liquidity Risk

Increase of the liquidity risk in the banking sector was conditioned by growth of gaps by maturity of assets and liabilities. The negative gap of financial assets and liabilities of the banks was observed by maturity up to 1 year. Moreover, relatively higher gaps were in demand assets and liabilities. Besides, rather high risks of gaps on assets and liabilities were in the foreign currency. As a result of existing gaps of demands and liabilities, the banks held significant volume of low-yielding highly liquid assets in the structure of assets.

Thus, the banking sector had high level of demand deposits in its liabilities with insufficient medium- and long-term resources.

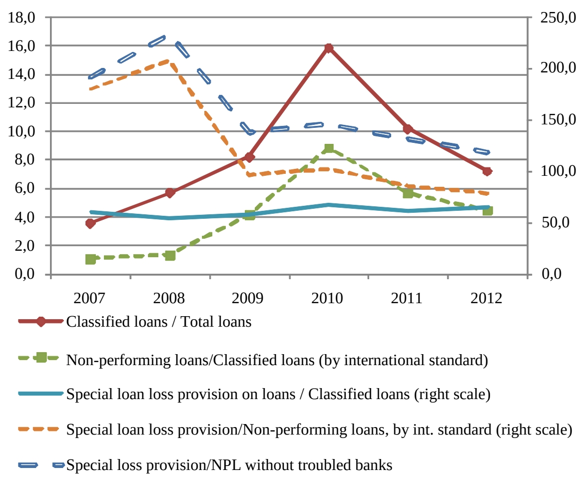
Table 2.2.2.1. Cumulative gap[21] by maturity of financial assets and liabilities

Cumulative gap by maturity of financial assets and liabilities			mln. KGS		
Total	**Instant**	**up to 1 month**	**up to 3 months**	**up to 1 year**	**total**
Total financial assets	21 268	36 329	41 105	57 739	92 063
Total financial liabilities	30 593	41 705	46 887	59 478	71 973
Gap (gap interval)	-9 325	-5 377	-5 781	-1 739	20 090
Gap in % of assets	-10.1%	-5.8%	-6.3%	-1.9%	21.8%
Gap in % of net total capital	-57.5%	-33.2%	-35.7%	-10.7%	124.0%
Cumulative gap by maturity of financial assets and liabilities					
in foreign currency	**Instant**	**up to 1 month**	**up to 3 months**	**up to 1 year**	**total**
Total financial assets	12 180	18 713	20 309	26 699	43 063
Total financial liabilities	16 129	22 513	26 034	32 561	39 409
Gap (gap interval)	-3 949	-3 800	-5 725	-5 861	3 653
Gap in % of assets in foreign currency	-9.2%	-8.8%	-13.3%	-13.6%	8.5%
Gap in % of net total capital	-24.4%	-23.4%	-35.3%	-36.2%	22.5%
Cumulative gap by maturity of financial assets and liabilities					
in national currency	**Instant**	**up to 1 month**	**up to 3 months**	**up to 1 year**	**total**
Total financial assets	9 087	17 616	20 797	31 039	49 000
Total financial liabilities	14 464	19 192	20 853	26 917	32 563
Gap (gap interval)	-5 377	-1 576	-56	4 122	16 437
Gap in % of assets in national currency	-11.0%	-3.2%	-0.1%	8.4%	33.5%
Gap in % of net total capital	-33.2%	-9.7%	-0.3%	25.4%	101.4%

Credit Risk

Generally, stable dynamics of decrease in the share of classified assets in the assets of banks and classified loans in the loan portfolio indicated reduction of credit risks. At the end of 2012, classified assets amounted to KGS 4.5 billion or 5.8 percent of the banks' total assets, classified loans – KGS 2.9 billion or 7.2 percent of the total loans.

Graph 2.2.2.4. The quality of loan portfolio
percent



Decrease of classified loans was observed in all sectors of economy. Relatively larger share of non-performing loans in the total volume of non-performing loans was attributed to the sector of trade (35.9 percent) and construction (18.0 percent). Moreover, inside sectors of the loan portfolio, relatively higher share of classified loans was observed in the sector of construction. However, However, having reached its peak in 2010 (41.1 percent of the loan portfolio in construction), the share of classified loans decreased gradually in this sector and constituted 23.0 percent at the end of 2012.

[21] *Cumulative gap* is the amount of possible expenses for support of solvency (the value of resources insufficiency or excessive liquidity), estimated for each range of maturity.

Box 4. Method of "Reverse Stress Testing" of Credit Risk

The results of reverse stress test on credit risk sensitivity indicate that banks will stop performing minimum requirements to capital adequacy (12.0 percent) with increase in the share of classified loans in the loan portfolio from 7.2 to 29.0 percent.

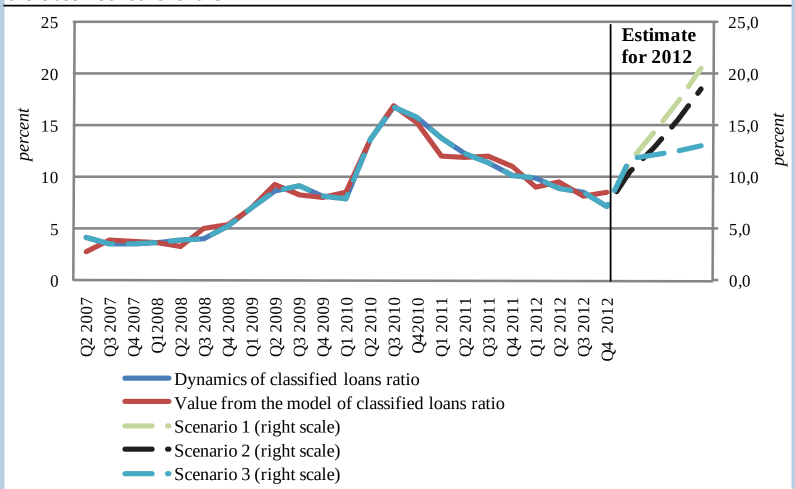
Besides, there are three most vulnerable banks. If the current share of non-performing loans (NPL) in the banks' loan portfolio exceeds 1-14 percent, the aforementioned banks will breach the requirements of capital adequacy.

Box 5. Stress Testing of the Credit Risk in the Banking Sector

Stress testing was conducted on the basis of economic model, which characterized dynamics of the share of classified loans in the loan portfolio and impact factors.

The following possible stress scenarios were reviewed:

Graph 1. The forecast for the dynamics of change of the classified loans' share



1. *Significant increase of the trade loans share in the loan portfolio by 10 percent during the year, accompanied by simultaneous devaluation of the national currency exchange rate by 20 percent.*

Implementation of this stress scenario may result in increase of the classified loans' share by 13.4 percent to 20.6 percent.

2. *Decrease of the loans' share in the assets by 10 percent, accompanied by gradual growth of leverage by 150 percent during the year.*

Implementation of this stress scenario may result in increase of the classified loans' share by 11.3 percent to 18.5 percent during the year.

3. *Devaluation of KGS exchange rate to USD by 30 percent against gradual decrease in the volume of loans in the banking sector by 20 percent.*

Implementation of this stress scenario may result in increase of the classified loans' share by 5.9 percent to 13.1 percent during the year.

Box 6. Estimate of the credit risk by means of Monte-Carlo technique

This analysis is conducted for the group of loans which according to the Regulation on classification of assets and appropriate allocations for loan loss provisions are classified as "pass" loans.

Not less than 2 percent of reserves should be created according to the documents on loans qualified as "pass". Such requirements for reserves calculation reflect risk of borrower's solvency occurrence, i.e. pass loans may not be repaid with a probability of 2 percent.

Such banks reserve requirements are selected as a threshold value for risk occurrence.

Table 1. Credit risk estimate

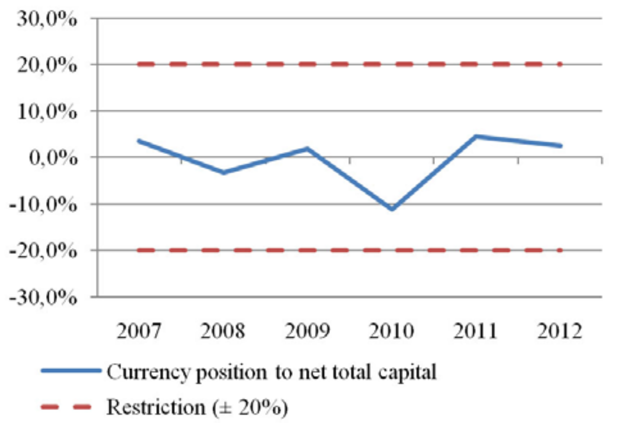
	VaR[22], mln. KGS	Losses from pass loans portfolio, %	adequacy K.2.1 after shock, %
probability 5%	7,016	20.2	15.4
probability 3%	8,185	23.6	13.4
probability 1%	15,201	43.7	1.7

Thus, total credit risks of the banking sector may exceed 20.2 percent of the pass loans portfolio with a probability of 5 percent, meanwhile, capital ratio K2.1. is likely to decrease below 15.4 percent. Total credit risks may exceed 23.6 percent of the pass loans portfolio with a probability of 3 percent, meanwhile, capital ratio K2.1. is likely to decrease below 13.4 percent. Losses may constitute 43.7 percent of the pass loans portfolio with a probability of 1 percent; as a result, capital ratio is likely to decrease below threshold level.

Market Risk

Market risk is represented by currency and interest rate risks.

Graph 2.2.2.4. The dynamics of the currency position



Currency Risk

Generally, banks held currency positions of assets and liabilities at the level of requirements set below.

Total open currency position as at the end of 2012 was short and constituted KGS 693.1 million or -4.3 percent of net total capital of the banking sector (at the end of 2011, currency position was long and constituted KGS -594.6 million or 4.4 percent of net total capital).

Stress Testing of Currency Risk Evaluation

As a result of **shock 1** (direct impact of 5-percent devaluation of the national currency) will be no major change in the ratio of assets share and liabilities of the commercial banks in national and foreign currency. Capital adequacy in the banking sector as a whole and in separate banks did not change.

As a result of **shock 2** (indirect impact on the quality of loans in foreign currency, if 30 percent of loans in foreign currency become classified), two banks may not survive such shock.

Generally, impact of the currency risk on the revaluation of assets and liabilities showed that in case of change in the exchange rate of national currency to USD within ± 30.0 percent, the banking system is likely to suffer loses/make profit in the amount of KGS 285 million.

[22] VaR – maximum possible losses in monetary terms for definite period

Interest Risk

Analysis of "gaps" between assets and liabilities that are sensitive to changes of interest rates showed sufficient sustainability of the banking sector in case interest rates are materialized. At the end of 2012, total cumulative negative "gap" on all maturities of "up to 365 days" was observed in the banking system:

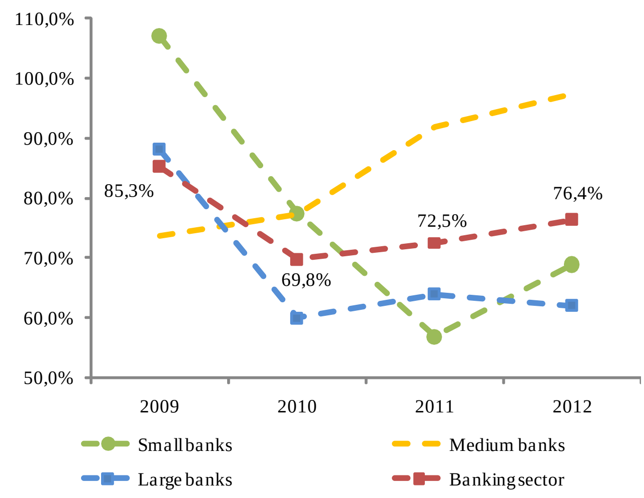
- «*demand*» - KGS 7.1 billion;
- «*up to 90 days*» - KGS 3.4 billion;
- «*from 91 to 180 days*» - KGS 3.4 billion;
- «*from 181 to 365 days*» - KGS 0.1 billion.

Relatively high level of interest risks with maturity "up to 90 days" was observed with four banks, which share constituted 85.9 percent of the total cumulative negative "gap" in the banking system with maturity of "up to 90 days". Generally, 15 banks of the banking system showed negative cumulative "gap" with maturity "up to 90 days".

Increase in the interest rate on deposits by 300 percentage points in national currency and by 180 percentage points in foreign currency (USD) was used as a stress test of banks' sensitivity to interest risk. As a result, the stress test showed that the banking system is sustainable to this shock; possible value of the capital adequacy in the banking sector did not change.

Provision with Resource Base for Lending

Graph 2.2.2.5. Provision of loans with term liabilities



In 2012, the dynamics of gradual recovery of the level of provision with term liabilities[23] was observed in the banking sector after significant decline. At the end of 2012, the level of banks' provision with term liabilities constituted 76.4 percent of the loan portfolio.

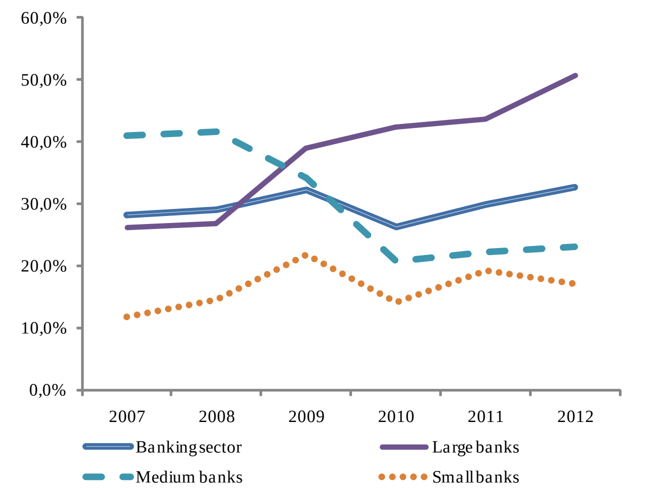
At the end of 2012, large banks were least provided with term liabilities, their main sources of resource base formation were household deposits, banks' equity, loans and deposits of non-residents.

Medium banks were provided with term liabilities to a greater extent; their main source of resources was the capital of non-residents. Moreover, 6 commercial banks suffered shortage of stable resources.

The basis for financing of the loan portfolio in the banking sector formed households' term deposits (30.3 percent), non-residents' loans and deposits (24.5 percent), as well as banks' equity (24.0 percent). While households' term deposits and demand deposits were the main resources for short-term lending, the banks' equity (72.2 percent of the long-term loans portfolio) was the basis of the resources for long-term lending (more than 3 years).

Sources of Capital Formation

Graph 2.2.2.6. The share of undistributed profit in the banks' equity



In the period 2007 – 2012, decrease in the share of authorized capital in the total equities on the background of rapid growth rates of accumulated profit was observed in the banking sector. Meanwhile, if increase in the share of undistributed profit is the characteristic of the capital increase policy pursuing the objective of expanding the range of banking services, in respect of the medium and small banks decrease in the share of undistributed profit reflects the policy of "decumulation" of profit.

Thus, relatively low level of recapitalization was observed in the medium and small banks due to undistributed profit.

[23] The ratio of term liabilities to the amount of loan portfolio

Box 7. Stress Testing of Sensitivity of Capital Adequacy Ratio to Macroeconomic Shocks

This stress testing was conducted for the purposes of estimating sensitivity of capital adequacy ratio in the banking sector, in case of implementing macroeconomic shocks, which result in materialiazation of credit, interest risks, risks of liquidity and risk from change in the exchange rate of the national currency.

The following macroeconomic shocks were rewiewed:

1) *decrease in GDP by 5 percent*

Decrease in GDP by 5 percent may result in decline in the level of banks[24] capital adequacy from 28.3 percent (as at the end of 2012) to 25.5 percent. Moreover, the capital adequacy ratio did not decrease below threshold level in any of the banks' groups (large, medium and small). Small banks are the most sustainable. Shock 1 may result in decrease of the level of capital adequacy below threshold level in one banks, its share in the total assets of the banking sector constitutes 3.8 percent.

2) *change in the short-term interest rates by 3 percent, long-term interest rates – by 5 percent*

The impact of this shock on the capital adequacy ratio is more significant. The CAR is expected to decrease by 6.0 percent and constitute 22.3 percent. Thus, the implementation of this shock will not result in decrease of CAR below the threshold level. Besides, the CAR in the group of middle banks may decrease up to 17.0 percent. As a result of this shock implementation, the CAR decrease may be observed in two banks, their share in the total assets of the banking sector constitutes 7.5 percent.

Possible change of interest rates was determined within the framework of this shock-scenario implementation, it is likely to result in the CAR decrease below the threshold level. In case of change in short-term interest rates by 7 percent and long-term interest rates by 9 percent, CAR decrease below the threshold level is observed in the group of "medium" banks.

3) *decrease of KGS exchange rate by 30 percent*

The capital adequacy ratio of banks decreased from 28.3 to 26.3 percent. The CAR, which decreased below the threshold level, was observed in one bank.

The impact of the total macroeconomic shocks shows the following results.

Generally, the CAR of in the banking sector may decrease by 11.5 percent and constitute 16.8 percent. It means that implementation of the total macroeconomic shocks will not result in decrease of the CAR below the threshold level. Buffer capital stocks are at the adequate level and there is no need in additional investing of capital.

Moreover, the CAR in the group of "middle" banks may decrease from 23.5 percent to 11.5 percent, having decline below the threshold level. The CAR decrease below the threshold level may be observed in five banks, their share in the total assets of the banking sector constitutes 28.9 percent. Finally, it will result in necessity to invest additional capital in the banking sector in the amount of 0.3 percent of GDP.

Table 1. Impact of macroeconomic shocks on the capital adequacy ratio
percent

	Banking sector	Large banks	Medium banks	Small banks
Shock 1 – decrease in GDP	25.5	23.1	20.5	42.0
Shock 2 – change in interest rates	22.3	21.3	17.0	36.3
Shock 2 – critical change of interest rates	17.6	17.7	**11.7**	30.4
Shock 3 – change in exchange rate	26.3	23.6	21.8	42.9
Total influence of shocks	16.8	14.8	**11.5**	33.3

[24] Threshold level of capital adequacy ratio (CAR) constitutes 12 percent

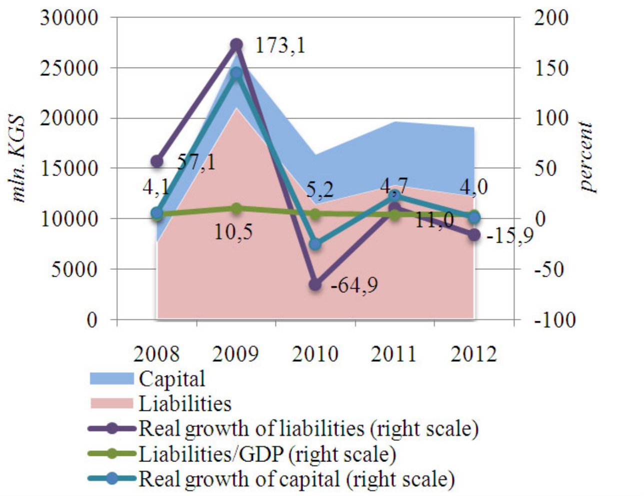
2.3. Non-Bank Financial Institutions

The loan portfolio of non-bank financial institutions is still insufficiently diversified in the sectoral and institutional context, interest rates remain high. Besides, there was growth of classified loans due to degradation of financial discipline of borrowers and low level of population's financial literacy.

As of December 31, 2012, the system of the non-bank financial institutions, which was subject to licensing and monitoring by the NBKR, included: specialized financial institution – "FCCU" OJSC; 183 credit unions; 320 microfinance institutions (including 242 microfinance companies and 74 microcredit agencies) and 306 foreign exchange bureaus.

Resources of NBFIs

Graph 2.3.1. The dynamics of NBFI's liabilities and capital

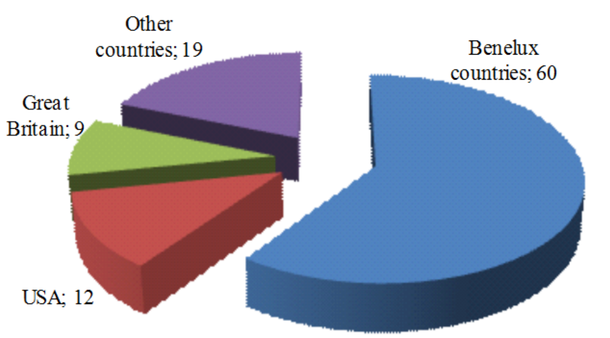


Source: NBKR

At the end of 2012, total liabilities of NBFIs constituted KGS 12 266.0 million or 17.2 percent of the commercial banks' liabilities (the liabilities of the commercial banks for this period constituted KGS 71 433.2 million). The index of NBFI/GDP ratio decreased by 14.0 percent, compared to the similar index in the previous year. The largest share in the total volume of liabilities is occupied by loans (Table 2.3.1).

The loans received from the Benelux countries, the USA and Great Britain were represented in the geographic structure of the NBFI's external debt. In case of the debt crisis development in the euro area, the partners of the non-banking sector from Western Europe, being major sources of foreign borrowings, are likely to run into the problems of liquidity. It may contribute to withdrawal (outflow) of foreign capital from the non-banking sector and result in decline of lending to the economy of the Kyrgyz Republic (small business) by the non-banking sector.

Graph 2.3.2. The gepographic structure of the NBFI's NFD



Source: NBKR

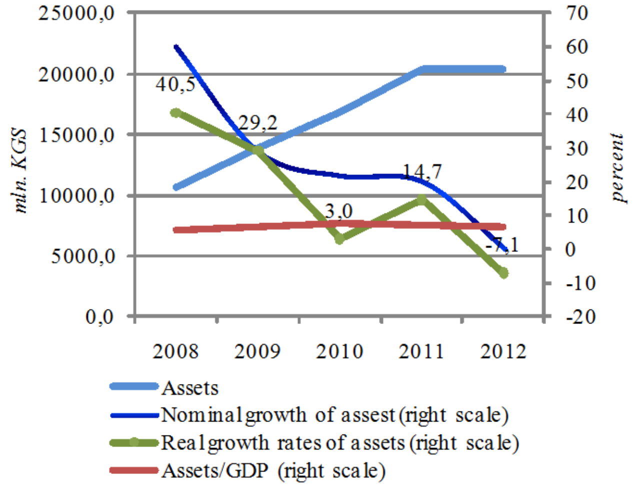
Table 2.3.1. The structure of NBFI's liabilities

Category of liabilities	2012	
	mln. KGS	share, %
a. received loans:	10616,3	86,6
from residents	*1890,9*	*17,8*
from non-residents	*8725,4*	*82,2*
b. other liabilities	1649,7	13,4
Total liabilities	**12266,0**	**100,0**

Source: NBKR

Assets of NBFIs

Graph 2.3.3. The dynamics of NBFI's assets



Source: NBKR

At the end of 2012, NBFI's total assets[25] amounted to KGS 20 440.4 million, while their share in the financial sector constituted 19.1 percent.

Financial assets occupy the major share in the structure of NBFI's share. Traditionally, loan portfolio is the main structural component of the financial assets and the most significant indicator of NBFI development (Table 2.3.2):

Table 2.3.2. The structure of NBFI's assets

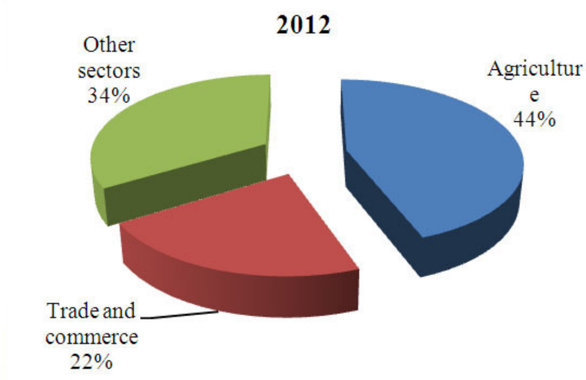
Category of assets	2011		2012	
	mln. KGS	share, %	mln. KGS	share, %
a. financial assets, including:	20 803,5	90,7	19 597,8	95,9
loans and borrowings	*17 493,3*	*84,1*	*15 405,5*	*78,6*
correspondent accounts in the commercial banks	*1 527,7*	*7,3*	*2 265,1*	*11,6*
other financial assets	*1 782,5*	*8,6*	*1 927,2*	*9,8*
b. non-financial assets	2 136,8	9,3	842,6	4,1
Total assets	**22 940,3**	**100,0**	**20 440,4**	**100,0**

Source: NBKR

Agriculture and trade remain the major sectors of lending (Graph 2.3.4). Meanwhile, lending to agriculture is connected with rather high risks of dependence on environmental conditions, and lending to trade and commerce – with risks of decline in trade turnover and population's business activity.

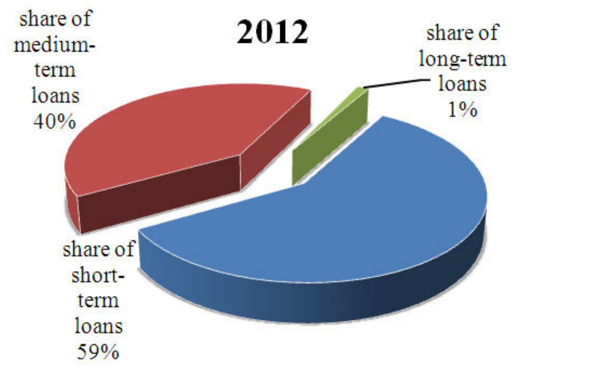
[25] Hereinafter for the purposes of avoiding double-entry accounting, NBFI's assets and loan portfolio are represented excluding data of "FCCU" OJSC as loans are issued to the credit unions.

Graph 2.3.4. The structure of NBFI's loan portfolio by economic sectors



Sorce: NBKR

Graph 2.3.5 The structure of NBFI's loan portfolio by maturity



Source: NBKR

It should be emphasized that lending to the agriculture is mainly focused on the regions of the Kyrgyz Republic, thereby bearing significant risks of non-repayment of loans conditioned by relatively small income of the population in the regions compare to Bishkek city and Chui oblast and rather high dependence of remittances.

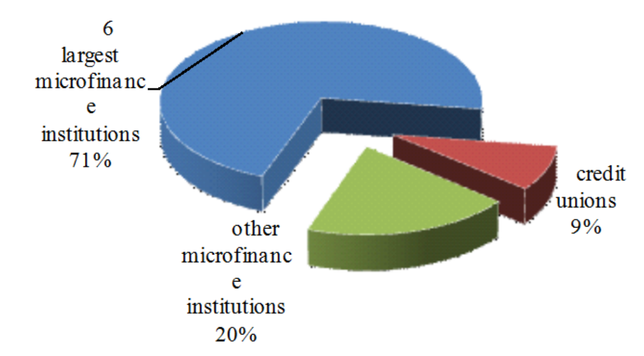
Significant diversification of the geographic structure should be noted on the background of NBFI's loan portfolio growth. Thus, besides Bishkek city and Cui oblast, significant share of lending is accounted for the regions of the country (Table 2.3.3):

Table 2.3.3. The geographic structure of NBFI's loan portfolio

	2011		2012	
	mln. KGS	share, %	mln. KGS	share, %
Bishkek city and Chui oblast	4701,9	29,9	5639,0	36,6
Jalal-Abad oblast	2904,4	18,5	2230,8	14,5
Osh oblast	2718,8	17,3	2245,1	14,6
Batken oblast	1264,0	8,0	1460,2	9,5
Issyk-Kul oblast	1581,9	10,1	1544,6	10,0
Naryn oblast	1167,3	7,4	1076,8	7,0
Talas oblast	1240,0	7,9	1064,6	6,9
Territories beyond the Kyrgyz Republic	152,2	1,0	144,3	0,9
Total	**15730,4**	**100,0**	**15405,4**	**100,0**

Source: NBKR

Graph 2.3.6. The structure of the loan portfolio by NBFI's types



Source: NBKR

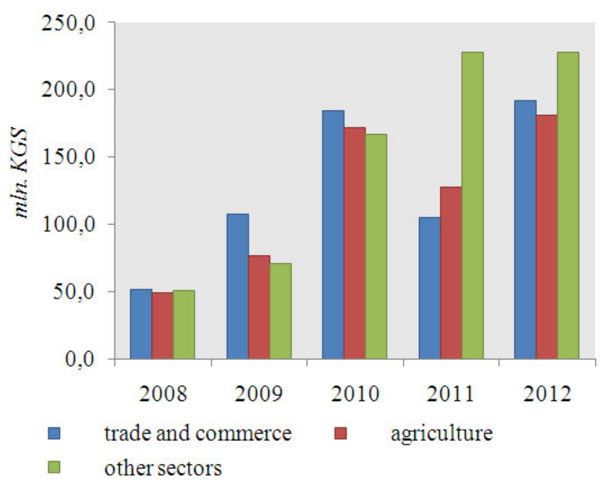
Despite large amount of NBFIs, 6 large microfinance institutions are the major players in the non-banking market, which shows high institutional concentration of NBFI's loan portfolio.

Non-banking business of the Kyrgyz Republic is characterized by presence of several sustainable microfinance institutions financed by foreign donors and hundreds of small local organizations. (Graph 2.3.6).

Growth of the classified loans was observed in the period under review, however, their share in the total volume of NBFI's loan portfolio remain rather low.

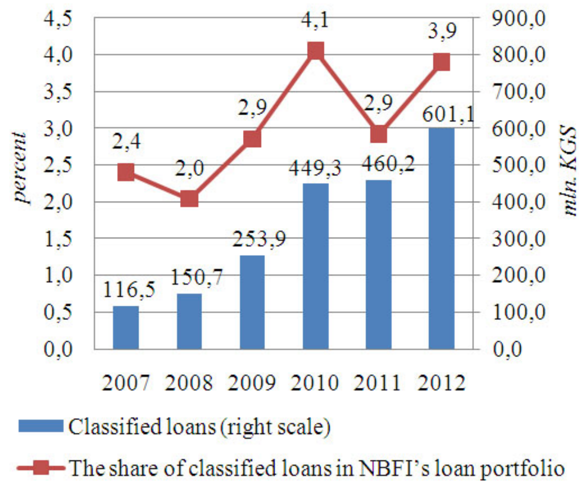
At the end of 2012, increase of the classified loans by 1.0 p.p. was observed in NBFI's loan portfolio. At the end of 2012, the share of classified loans in the loan portfolio totaled 3.9 percent (Graph 2.3.8). The volume of special reserves, allocated for classified loans, constituted KGS 568.8 million. Thus, the provision of classified loans with special reserves amounted to 94.6 percent, having increased by 43.7 percent compared to the previous year. This growth is due to the amendments introduced into the normative legal acts regulation the operation of NBFIs.

Graph 2.3.7. The structure of classified loans by economic sectors



Source: NBKR

Graph 2.3.8. The dynamics of classified loans



Source: NBKR

The considerable share of NBFI's classified loans is concentrated in the sphere of trade (30.2 percent) and agriculture (31.9 percent), as the major amount of loans is issued to this particular sectors of economy.

Table 2.3.4. The geographic structure of NBFI's classified loans

	2012	
	mln. KGS	share, %
Bishkek city and Chui oblast	466,4	77,6
Other regions of the Kyrgyz Republic	134,7	22,4
Total in the regions of the Kyrgyz Republic	**601,1**	**100,0**

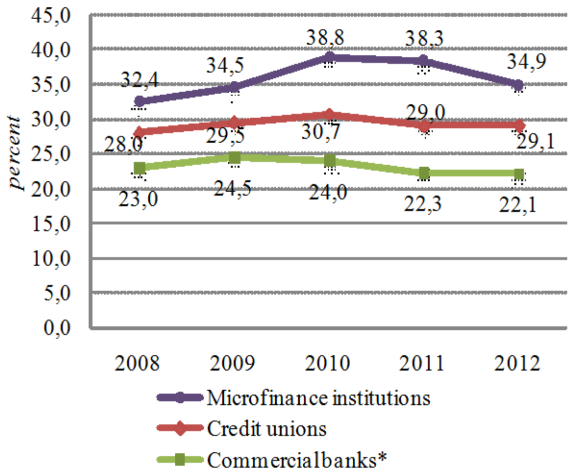
Source: NBKR

One of the main reasons for increase in the share of bad loans is degradation of financial discipline and leading-strings mentality of borrowers, which may result in serious problems in the microfinance market of the country.

Interest rates on the loans of non-bank financial institutions remain high.

The major reason for high interest rates on the loans of non-bank financial institutions is high risks connected with unsecured lending, and still strong demand on the part of the population in the regions of the Kyrgyz Republic, having no opportunity to receive loans in the banks.

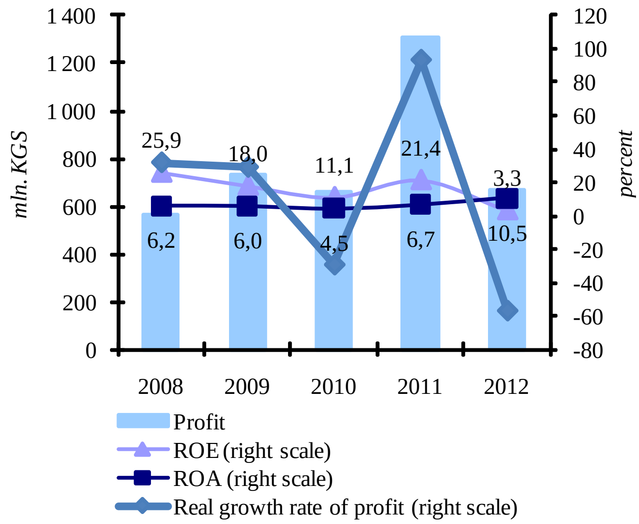
Graph 2.3.9. The dynamics of interest rates on lending resources



Source: NBKR

** Interest rates of the commercial banks are given in the national currency*

Graph 2.3.10 The dynamics of returns of NBFIs



Source: NBKR

Profitability of NBFI

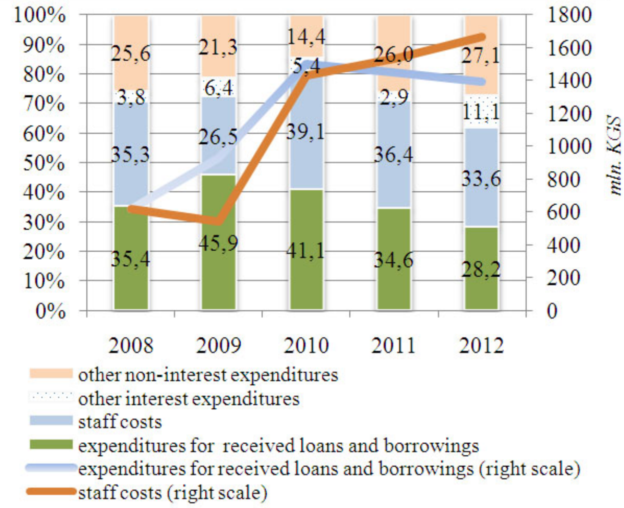
At the end of 2012,[26] there was decrease of the main indicators of profitability, except for (Graph 2.3.10). One of the reasons for reduction of profitability indicators is transformation of one of the systematically important NBFI (MFC “Bai Tushum and Partners” CJSC) into the banking system, as well as increase in special reserves on potential losses and loss on loans.

More than one third of NBFI’s expenses (33.6 percent) are the staff costs (in the banking sector – 36.4 percent of total spending).

The analysis of NBFI’s incomes at the end of 2012 showed that the main source of income is interest income on issued loans and borrowings (Graph 2.3.12). The major share in the structure of spending is occupied by the staff costs; they are followed by other expenditures for received loans and borrowings service.

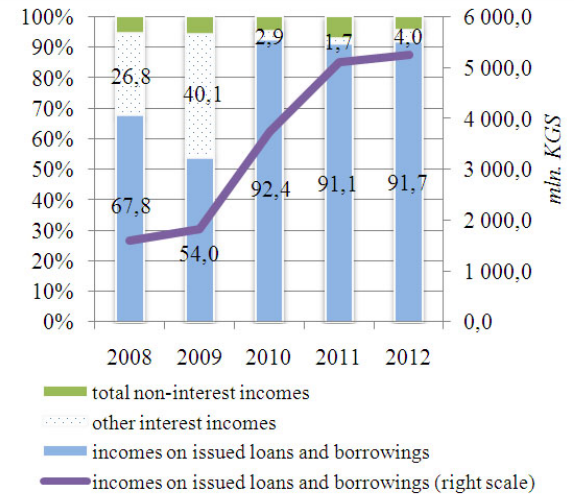
[26] Excluding the data of MFC “BTiP” CJSC.

Graph 2.3.11 The structure of NBFI's expenditures



Source: NBKR

Graph 2.3.12 The structure of NBFI's incomes

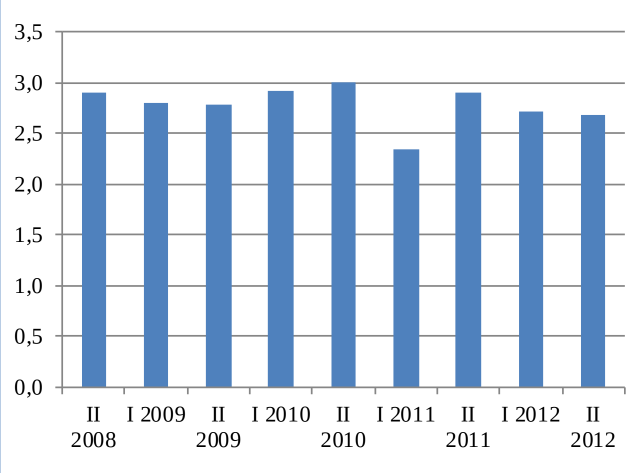


Source: NBKR

Box 8. Z-Score Methodology-Based Stability Review of Non-Banking Sector

This analysis was conducted to define the vulnerability degree of the financial condition of both individual NBFIs, and the banking sector as a whole. Z-index, which indicates the distance to default, is used to define stability of the financial institutions.

Graph 2.3.13 Z-index dynamics



Source: NBKR calculations

High z-index reflects long distance to default, and, consequently, shows high stability of NBFIs and low possibility of NBFI's non-solvency.

At the end of 2012, calculations of z-index value showed relatively stable condition of the banking sector in the Kyrgyz Republic (Graph 2.3.13)[27]. Rather stable index, observed in the second half of 2012, suffered the impact of stable growth in the values of NBFI's profitability, which characterized stability in profit received by NBFIs.

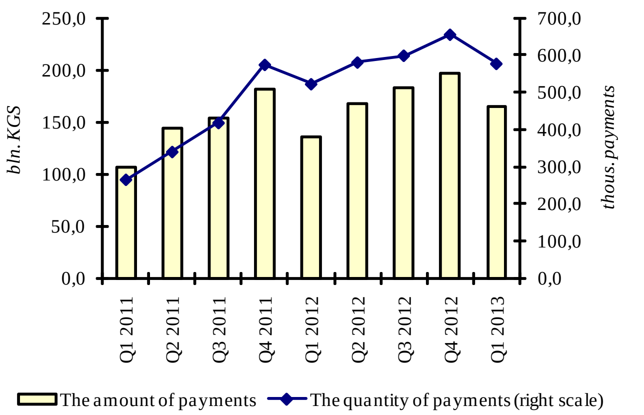
[27] The data of six largest NBFIs were used for this analysis.

2.4. Payment Systems

The National Banks has still been conducting analysis and assessment of problems and risks in the payment system, as well as events for development of retail payment systems. Particular attention is focused on the Gross Settlement System in Real Time (GSSRT), the System of Batch Clearing of Retail and Regular Payments (SBC) and the national card payment system "Elcard". The results of analysis of systemically important systems operation showed that the level of financial risks remained rather low.

The national payment system is a set of payment systems operating in the territory of the Kyrgyz Republic for the implementation of the payment settlements in accordance with the legislation of the Kyrgyz Republic, the operators of which may be residents or non-residents of the Kyrgyz Republic.

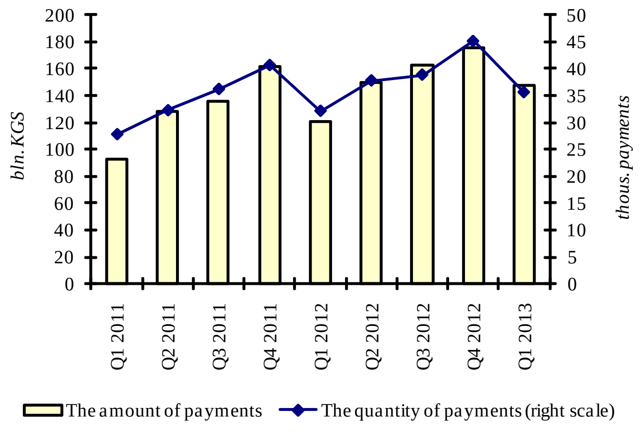
Graph 2.4.1. The dynamics of the volume and number of interbank payments



At the end of the 1st quarter 2013, the following components of the payment system functioned in the Kyrgyz Republic:

1. Large Express Payment System – the Gross Settlement System in Real Time (GSSRT);
2. Clearing Payment System – the System of Batch Clearing of Small Retail and Regular Payments (SBC);
3. The System of Payment Cards Settlement;
4. Money Transfer Systems.

Graph 2.4.2. The dynamics of volume and quantity of payments based on the gross system



At the end of the 1st quarter of 2012, 577.3 thousand payments totaling KGS 164.2 billion were made through the payment systems of the Kyrgyz Republic. Compared to the index of the similar quarter of 2012, the volume of payments increased by 21.3 percent, while the number of payments increased by 10.5 percent (Graph 2.4.1.).

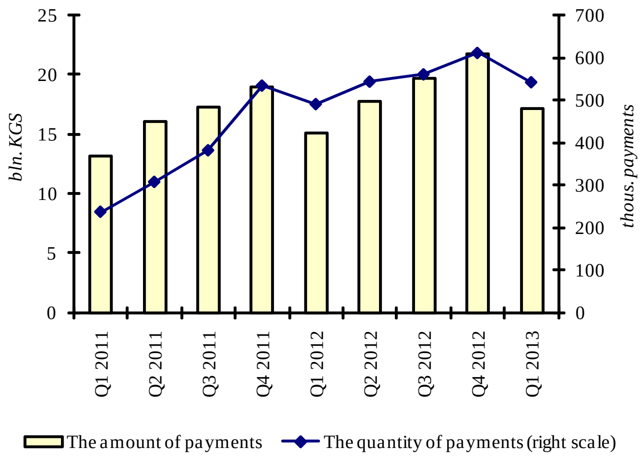
The major volume of payments in the interbank payment system is processed through the Gross Settlement System (89.6 percent of the total volume of payments).

The major number of payments in the interbank payment systems was processed in the System of Batch Clearing (93.8 percent of the total number of payments).

The total volume of gross payments in the 1st quarter 2013 amounted to KGS 147.1 billion, having increased by 22.3 percent compared to the same period of the past year.

In the 1st quarter of 2013, 35.6 thousand payments were made through the GSSRT. This index increased by 11.0 percent compared to the same period of the past year (Graph 2.4.3.). At the end of the 1st quarter of 2013, the volume of clearing payments totaled KGS 17.1 billion, having increased by 13.4

Graph 2.4.3. The dynamics of volume and quantity of payments based on the clearing system

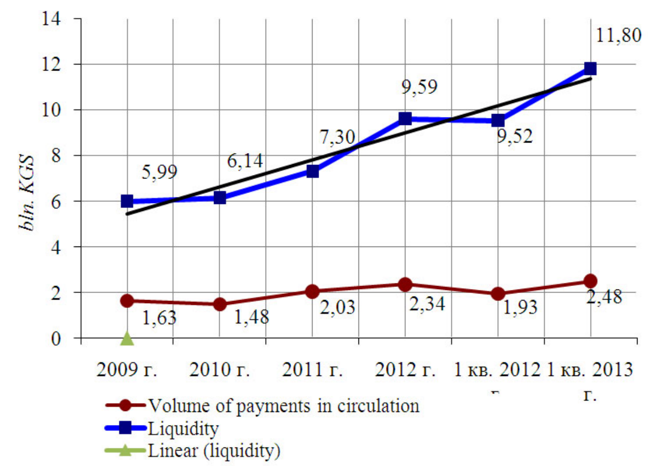


percent compared to the similar period of the past year. The number of clearing payments in the 1st quarter of 2013 constituted 541.7 thousand payments, having increased by 10.5 percent, compared to the similar period of the last year (Graph 2.4.4.).

The total number of payment cards issued as of the end of the 1st quarter of 2013 amounted to 480,986. The number of cards increased by 73.7 percent compared to the same period of the last year.

Money transfers were made through international and local money transfer systems. The total number of incoming transfers was 1,376.9 thousand for a total of KGS 21.7 billion, the number of outgoing transfers amounted to 68.5 for a total of KGS 4.8 billion.

Graph 2.4.4. The dynamics of changes in the average daily volume of payments and liquidity of the GSSRT



By region of the Kyrgyz Republic, the largest share in terms of incoming and outgoing transfers was accounted for Bishkek city – 32.9 percent of total incoming transfers and 55.6 percent of total outgoing transfers.

For international payments, the total volume of incoming payments at the end of the 1st quarter amounted to KGS 166.8 billion (this index increased by 11.8 percent compared to the 1st quarter of 2012), the volume of outgoing payments totaled KGS 180.0 billion (this index increased by 11.0 percent compared to the 1st quarter of 2012).

At the end of 1st quarter of 2013, the liquidity ratio in the GSSRT amounted to 4.75, having decreased by 3.49 percent compare to the indices of the same period in the previous year. This decrease is due to growth by 28.4 percent in the volume of participants' payments. The turnover ratio in the system demonstrated increase and amounted to 0.2 in the reporting period.

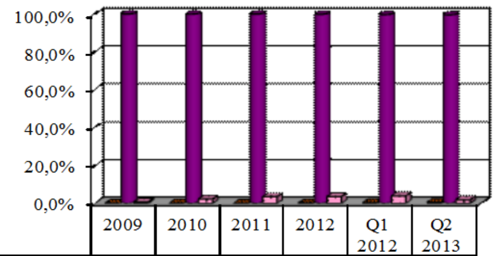
The indices ratio characterizes high degree of liquidity (more than 70 percent of liquid resources remain unutilized). Thus, during the 1st quarter of 2013, the GSSRT rejected no payments due to a lack of liquidity with the participants.

The level of risk in the GSSRT was immaterial, since, according to the rules of the system. If individual participants don't have sufficient liquidity, their payments are rejected by the system at the end of the trading day.

Table 2.4.1. Aggregate data on payments in the GSSRT

Name	*2009*	*2010*	*2011*	*2012*	*Q1 2012*	*Q1 2013*	*Growth, %*	*Increase*
Payments in queue:								
- Quantity	46	40	204	215	47	30	*-36,17*	*-17,00*
- The total time (minutes)	1987	1312	6904	11469	1941	1277	*-34,21*	*-664,00*
Outstanding payments for lack of liquidity:								
- Quantity	2	3	8	4	1	-	-	-
- Amount (mln. KGS)	185,37	22,04	32,30	1,34	0,00	-	-	-

Graph 2.4.5. The ratio of affordability and the operational risk in the GSSRT

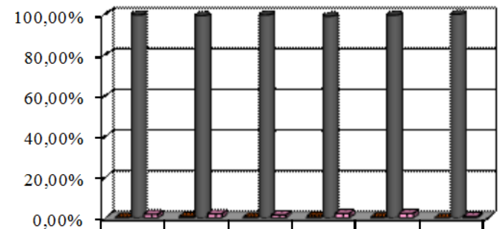


	2009	2010	2011	2012	Q1 2012	Q2 2013
Technical failure	0,10%	0,17%	0,13%	0,22%	0,42%	0,57%
Affordability ratio	99,90%	99,83%	99,87%	99,78%	99,58%	99,43%
The level of operational risk	0,83%	2,30%	3,57%	3,63%	3,99%	1,90%

Monitoring and analysis of the SBC showed high level of liquidity in the system (as for the final settlement in the SBC, the participants allocate more funds that is actually needed). During the reporting period, reserves of the participants for the provision of net debit provision exceeded the required level almost 2.5 times.

The level of *operational risks* in the system was defined by the presence of abnormal situations in their functioning (technical failures, violation of the rules of the system, human error, force majeure).

Graph 2.4.6. The ratio of affordability index and the operational risk



	1	2	3	4	5	6
Technical failure	0,39%	0,76%	0,40%	1,03%	0,54%	0,05%
Affordability ratio	99,61%	99,24%	99,60%	98,97%	99,46%	99,95%
The level of operational risk	1,94%	2,05%	1,49%	2,30%	2,30%	0,82%

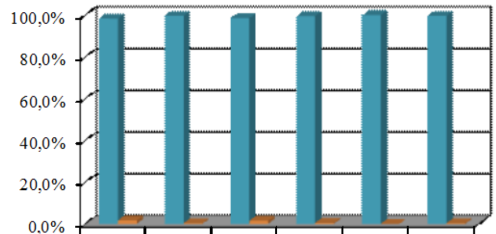
According to the monitoring of the operation of systems, operational risks remained low during the 1st quarter of 2013.

In GSSRT and SBC systems, operational risks were largely characterized by violation of regulations of the system's operation (the extension of the system's operation by request of participants), as well as problems related to communication channels.

Analysis of GSSRT's operation has shown that, given the extended working day as a risk factor, and a fixed technical failure in the payment system, the system availability index[28] in the 1st quarter of 2013 constituted 99.4 percent.

Despite the high level of system availability, operational risk was 1.9 percent, due to technical failures in the communication channel, as well as violation of regulations of the system's operation by participants.

Graph 2.4.7. The ratio of affordability index and the operational risk in the Unified Interbank Processing Center



	2009	2010	2011	2012	Q1 2012	Q1 2013
Affordability ratio	98,35%	99,68%	98,52%	99,58%	99,99%	99,70%
Operational risk	1,65%	0,32%	1,48%	0,42%	0,01%	0,30%

According to the results of monitoring the SBC's operation for the 1st quarter of 2013, the system availability index amounted to 99.95 percent. Operation risk in the system was 0.8 percent, which was due to lack of access for the system's participants and extending the work of the system by participants. These violations are governed by the tariff policy of the National Bank.

The monitoring and analysis of the functioning of important payment system (IPS) has shown that the Elcard national payment system for the reporting period functioned in accordance wit the rules of procedure. The coefficient of system availability was 99.7 percent.

The indicator of operational risk amounted to 0.3 percent and was due to server's technical failures.

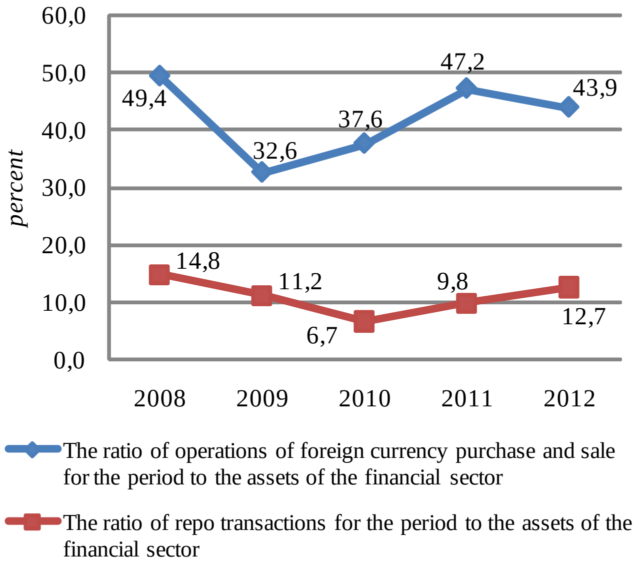
[28] Affordability ratio is an index, which characterizes system availability as a possibility of access to services and information for the system users by their request. System downtime due to technical failures, power failure, late opening or close of business day of the system cuts the time of system availability.

III. Financial conditions

3.1. Foreign Exchange and Money Market Condition

During 2012, the foreign exchange and money market were characterized by sufficient stability. Increase in the volume of transactions was observed in the foreign exchange and money market compared to decrease in 2009-2010. Amid growth of liquidity, there was decrease in the value of funds attraction.

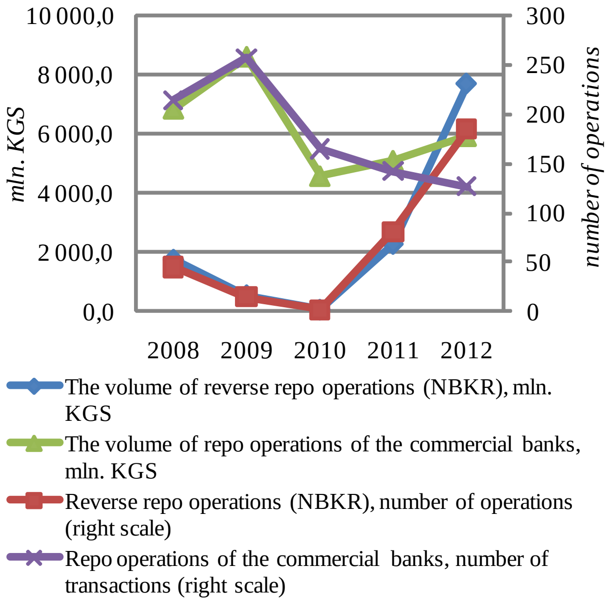
Graph 3.1.1. The relative indicators of the financial market volume



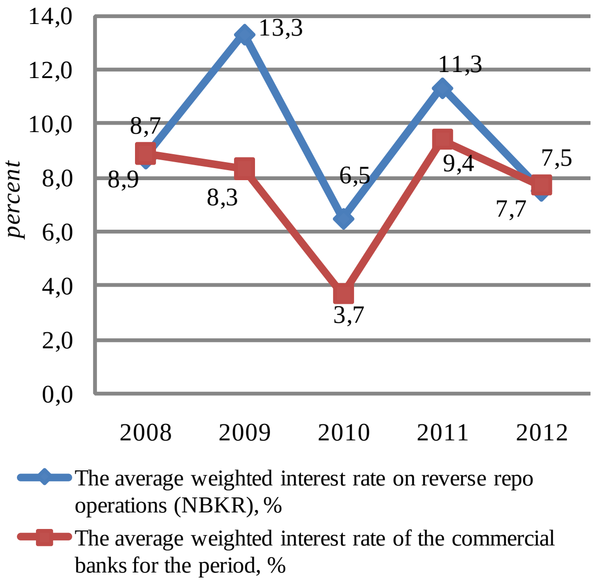
The situation in the interbank borrowings market in the second half of 2012 was characterized by slight decline in business activity compared to the first half of the year amid growth in the volume of excessive reserves average daily index in the commercial banks. Remaining demand for liquidity was mainly due to irregular distribution of excessive reserves in the banking system among dominating banks and other market participants. The major part of transactions in the interbank lending market was still accounted for repo operations.

In the repo market in 2012, changes were generally due to increase in the volume of reverse repo operations conducted by the NBKR, which constituted KGS 7.7 billion (growth by KGS 5.4 billion compared

Graph 3.1.2. The structure of repo market



Graph 3.1.3. The interest rate on repo operations in the commercial banks



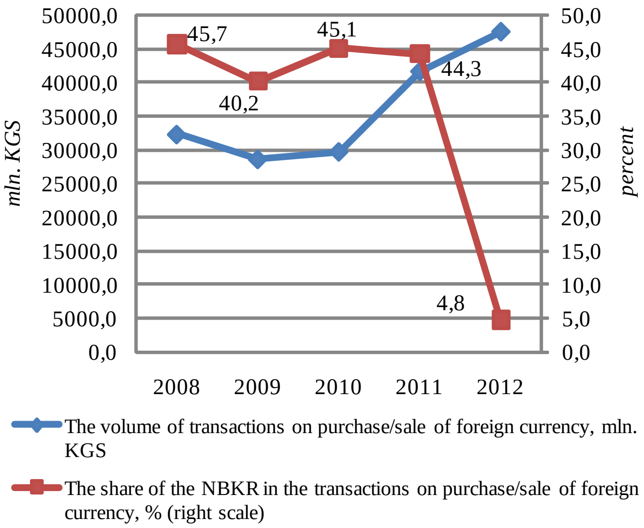
to the same index of 2011). The volume of repo operations in the commercial banks remained almost the same (KGS 5.9 billion in 2012). Growth in the volume of repo operations was accompanied by decrease in the interest rates. The average weighted interest rate on repo operations decreased by 4.1 percentage points, up to 6.4 percent compared to the interest rate in the second half of 2011. The interest rate on lending transactions conducted in the national currency decreased by 1.6 percentage points, up to 7.9 percent. Simultaneously, there was decrease in spread, which showed positive dynamics of market tightness.

Moreover, significant growth was observed in "overnight" loans, which reflected the availability of market demand for borrowed funds in order to support short-term liquidity in the national currency. In 2012, the average weighted value of "overnight" loan decreased by 10.8 p.p., up to 5.2 percent.

Relative stability remained in the foreign exchange market amid increase in the volume of incoming money transfers, which provide demand for the foreign currency on the part of the importers.

Thus, growth of the total volume of transactions in the interbank foreign exchange market was generally due to increase in the flow of import supplies to the country. The transactions were conducted particularly between commercial banks. The structure of foreign exchange market was characterized by transactions conducted between resident banks.

Graph 3.1.4. The volume of foreign currency purchase/sale

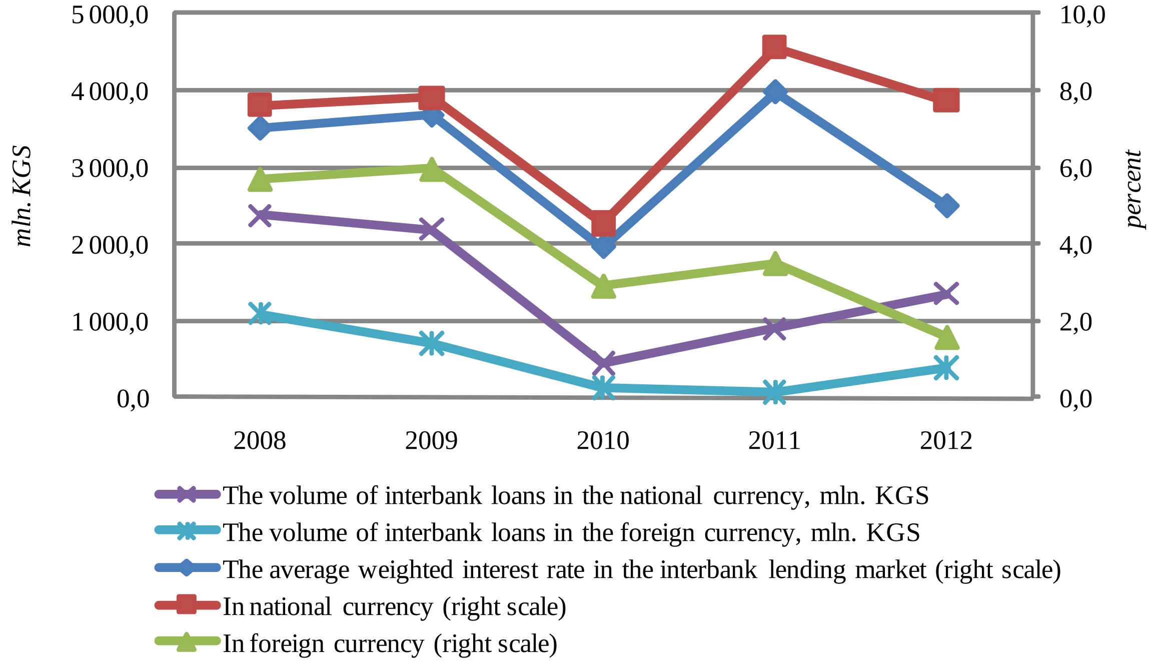


Particularly, change of liquidity in the interbank foreign exchange market was rather stable. The dominating position was occupied by the U.S. dollar and the Russian ruble transactions (85.5 percent of the total volume of foreign currency transactions). The U.S. dollar was characterized by net sales, while dynamics of growth in net purchase of currency remained in respect of the Russian ruble. The transactions conducted with the euro and tenge occupied insignificant shares in the volume of the foreign exchange market.

The share of the NBKR decreased significantly in the volume of transaction on foreign currency purchase and sale (4.8 percent – 2012, 44.3 percent – 2011) amid excessive demand and supply of the foreign currency.

In the interbank lending market, the major volume of transactions was conducted in the foreign currency with resident banks. In 2012, the volume of interbank loans amounted to KGS 29.6 billion (KGS 27.9 billion – the interbank loans in the foreign currency with resident banks). The loans in the national currency constituted KGS 1.4 billion. The trend of previous years on decrease in the volume of interbank loans in the foreign currency with non-resident banks remained.

Graph 3.1.5. Transactions in the interbank lending market

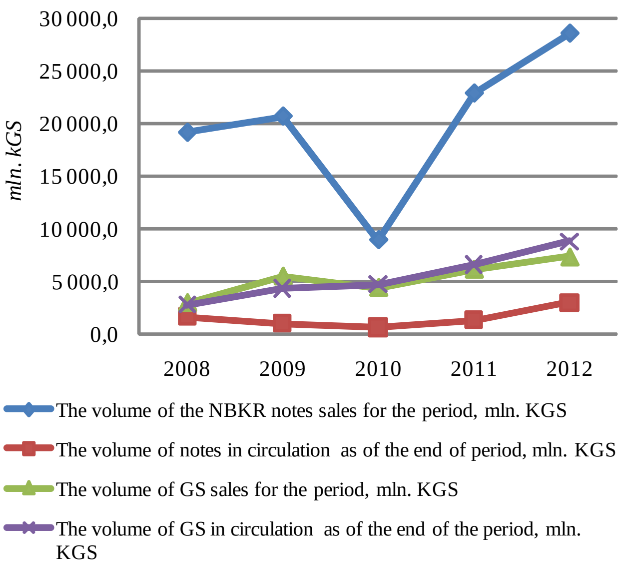


Decrease of interest rates (both in the national and the foreign currency) was observed in the interbank lending market accompanied by decrease in spread of the interbank interest rates. This dynamics reflected gradual decrease in the level of credit risk among commercial banks and growth of liquidity.

Increase was observed in the volume of swap transactions conducted both in the domestic market and with the resident banks.

3.2. Securities Market Condition

Graph 3.2.1. The dynamics of the aggregate turnover of the GS market



Government securities (GS) remained the main structural component of the securities market. The turnover of equity instruments, secondary securities market and derivative financial instruments market are almost not developed. The major volume of transactions conducted in the securities market was accounted for the commercial banks.

Stability was observed in the upward trend of trading in the government securities. The volume of the NBKR notes sales increased (2012 – by KGS 28.5 billion, 2011 – by KGS 22.9 billion). The volume of the government securities sales increased by 19.1 percent and amounted to

KGS 7.4 billion.

Increase in the supply of ST-Bills and ST-Bonds issued by the Ministry of Finance of the Kyrgyz Republic caused decline in the yield of these instruments.

At the end of 2012, the average turnover index[29], which characterized the volume of the government securities market, was 3.6, having decreased by 0.7 compared to the similar index of 2011. The reason for decrease of the index, which characterized the ability of the government securities market to conduct large volumes of transactions on securities purchase-sale, was growth of the market turnover.

Decline in trading volume, which started in 2008, continued in the Kyrgyz Stock Exchange. Decline by 22.6 percent compare to trading volume in 2011 was conditioned by decrease of trading volume in the primary market.

Attraction of financial resources by two commercial banks (to the amount of KGS 227.0 million), directed for increase in the volume of the authorized capital was due to primary placing. Generally, the banking sector occupied leading position in trading volume on KSE. The share of four banks in the total turnover constituted 43.9 percent.

Generally, the basis of trading on KSE was represented by equity securities (shares), which constituted 91.2 percent. The share of debt securities remained the same. However, despite decrease in trading volume, dynamics of growth of the KSE index and market capitalization remained positive.

[29] *Average turnover index* is a ratio of the number of securities sold/purchased during the particular period to the number of outstanding securities as of the end of particular period.

IV. Improvement of the Control over the Financial Sector

The National Bank took measures on improvement of regulatory and legal base governing the activity of the banks and non-bank financial institutions for improvement of the banking supervision system, development of the banking system and microfinance sector of the Kyrgyz Republic, as well as bringing the norms in compliance with amendments introduced in the banking legislation.

Risk Management

Amendments and additions introduced to some regulatory and legal acts were approved for the purposes of risk reduction, connected with lending activity of the banks and other financial institutions licensed and governed by the National Bank. Changes were aimed at strengthening the requirements to assets cassification in the financial institutions for the purposes of limiting negative experiense of loans repayment in one financial institutions by means of loans received in another financial institution. Moreover, the minimum volume of the authorized capital was increased for newly established microfinance and microcredit companies and restriction was imposed on the minimum amount of the loand issued to one individual.

In the first quarter of 2013, the National Bank introduced amendments and additions in the Regulation “On minimum requirements to the external audit of banks and other financial institutions licensed by the National Bank of the Kyrgyz Republic” for the purposes of banks risks reduction and determination of additional requirement to carrying out audits, including unscheduled ones.

Protection of Financial Services Consumers

For the purposes of protecting the rights of financial services consumers and elimination of abuse on the part of financial institutions, the National Bank adopted resolutions, which set requirements in respect of the banks and other financial institutions licensed and governed by the National Bank on limiting the amount of fines (penalties) which may be imposed on the individual borrowers, as well as in respect of information disclosure about the amount of effective interest rate and overall loan value in absolute terms. Besides, the requirement was approved in respect of the microfinance institutions, whereby the right of the borrower for prescheduled loan repayment should be specified in the loan agreement. Financlly, such measures will contribute to reduction of credit risks both in the banking, and in the microfinance sector.

Moreover, the amendments and additions introduced in the regulatory and legal acts strengthened the responsibility of the Board of directors in the banks on transborder lending, the requirements were set for development of detailed rules aimed at accounting ornanization, as well as for the internal documents of the banks regulating the activity of all commities established in the bank. The requirements also refer to the responsibility of each member in the committee for the decisions made.

In the first quarter of 2013, within the framework of antitrust regulation improvement, the National Bank approved amendments introduced in the policy and basic principals of antitrust regulation, development of competition and protection of consumer rights in the market of banking services in the Kyrgyz Republic rendered by the commercial banks and other financial institutions, licensed and regulated by the National Bank.

Intensification of Transparency and Safety of Banks

In 2012, the National Bank approved a number of regulatory documents aimed at regulating particular issued connected with banks' operation for the purposes of transparency and safety intensification. Thus, the Instruction on submission of an individual bank safe for the purposes of keeping valuables by the commercial banks of the Kyrgyz Republic to their clients. Amendments were introduced in the requirements to the procedures conducted by the banks on identification/verification of the client, his/her trustee and identification of beneficial owner (beneficiary) against Anti Terrorist Financing/Money Laundering.

The procedure of operation with mortgaged property on the part of the commercial banks and other financial institutiones licensed and regulated by the National Bank of the Kyrgyz Republic was approvedforthe purposes of strengthening lending discipline and provision of issued loans perayment. The Regulation "On separate transactions/operations with real estate consucted by the commercial banks and microfinance companies of the Kyrgyz Republic" was approved for the purposes setting requirements for the terms of other property ownership, as well as record keeping, appraisal and sale of other property. The rules of money transfers carrying out via money transfer systems without account opening were amended in accordance with the legislation of the Kyrgyz Republic.

The Instruction on operation with banking and deposit accounts intended for strengthening requirements to identification of clients and beneficial owners (beneficiaries) within the framework of bringing the regulatory acts of the National Bank in compliance with amendments introduced in the legislation.

Licensing of Banks' Operation

The National Bank adopted amendments and additions in the Regulation "On licensing of bank's operation" in respect of minimum requirements to the candidates to the position of the member of the banks' Board of directors within the frame of providing efficient work on licensing of banks, including the agreement procedure in respect of office holders in the commercial banks. Introduced amendments refer to the procedure of funds flowing from the foreign banks to the Kyrgyz Republic for the purposes of formation and increasing the authorized capital of the resident banks.

Commercial Banks Inspecting

The amendments introduced into the instruction on conducting inspection checks on sites determined the procedure of instructions appealing, the terms of conducting audit, preliminary and final meetings were revised, as well as the terms of making and forwarding the report on the audit carried out in the bank.

Regulation of Non-Bank Financial Institutions

Due to transformation of the "Financial company on support and development of credit unions" LLC to the "Financial company of credit unions" OJSC, the regulatory and legal acts governing the procedure of its licensing, control, reorganization and liquidation were approved.

The Instruction "On requirements to operations of the microfinance companies attracting deposits with insiders and affiliated entities" was approved for the microfinance companies, which attract deposits.

Due to adoption of the Law "On the state bank for development of the Kyrgyz Republic", the National Bank introduced amendments and additions to the regulatory and legal acts for the purposes of bringing them in compliance with the aforementioned law.

Islamic Principles of Financing.

A number of regulatory and legal acts were adopted for the purposes of complying with the Law “On amendments introduced in the Law “On banks and banking activity in the Kyrgyz Republic”” approved for proviving equal conditions for all participants of the banking sector, as well as creating conditions for promotion of Islamic banking in the Kyrgyz Republic. Approved documents refer to the issues of reducing banking risks, corporate management, development of the system of internal control and audit in the banks, which conduct operations in accordance with the Islamic principles of banking and financing.

The System of Deposits Protection

In the first quarter of 2013, amendments and additions were introduced in the Methodological instructions on keeping a database with the bank’s liabilities to a borrower, for the purposes of improvement of maintaining the database of the commercial banks for record keeping on deposits of individuals subjected to compensation in compliance with the Law of the Kyrgyz Republic “On protection of bank deposits”.

V. Analysis of Special Financial Stability Issues

A. Assessment of the Banking Sector Stability on the Basis of the Z-score Methodology

This analysis contributes to determining the degree of the financial condition vulnerability of one individual bank and of the banking sector as a whole. Z-index, which determines the distance to default, is used to assess the stability of the financial institution. This index reflects standard deviation of the bank's equity (profit and capital) from the average index for a number of years, provided that bank incomes[30] are constant.

Z-index[31] was calculated as follows:

$$z = \frac{(\mu + k)}{\delta}$$

where,

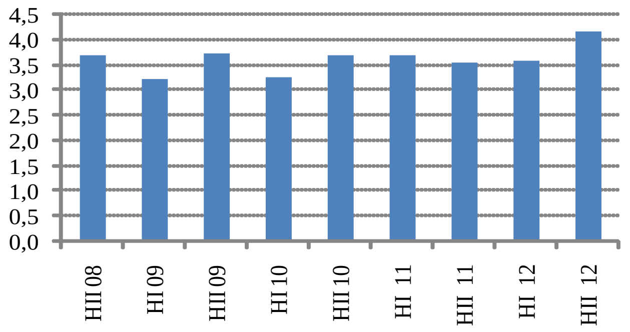
μ – a mean value of ROA for the entire analyzed period;

k – the percentage ratio of equity to assets;

δ – the standard deviation of return on assets for the same period, which is also seen as a measure of income volatility.

The level of the banking sector stability increased in the second half of 2012 (Graph 1) due to decrease in volatility in the indices of the banks' profitability and growth of the average banks' volatility for the period (the last 4 periods of observations were used for calculations)[32].

Graph 1. The dynamics of z-index



Source: NBKR calculations

Note: Absolute value of the logarithm of the banking system stability index

Regression model[33] was assessed for z-index on the basis of time data of bank financial and economic variables. The dependence of bank sustainability on different financial risks and environmental factors was assessed on the basis of econometric analysis.

A set of macroeconomic indicators, which are able to show which environmental factors may impact on the decrease in the bank's stability and which external factor may be a potential shock for loss of the bank's stability, was the most difficult to determine among all other indicators.

A number of independent variables, grouped in indicators of the current banks' status, banking risks and macroeconomic indicators were determined for developing z-index model.

[30] Or their standard distribution

[31] High value of z-index reflects long distance to default, and, consequently, high stability of banks, in other words long distance to capital depletion and low probability of the bank's insolvency. The advantage of this index is that calculation comprises all components directly connected with the bank's solvency and statistically it is a number of standard deviations when decline in profitability, i.e. risk of bank's unprofitability, is likely to result in capital depletion.

[32] For the purposes of this analysis, extreme indices of profitability for separate banks recorded in 2010 due to social and political events were excluded from calculating z-index values.

[33] For the purposes of assessment the degree of the banking system sustainability in Kyrgyzstan, z-score approach was used to determine the financial risks and economic environmental conditions make banking sector more vulnerable.

A. Indicators of the current bank's status

Table 1. Indicators of the current bank's status

№	Name of variable	Presentation format
1	Liabilities of the commercial banks	Nominal volume of banks' liabilities, mln. KGS

B. Variables reflecting banking risks[34]

Table 2. Indicators reflecting banking risks

№	Name of variable	Representation format
1	Current liquidity[35]	Ratio of high liquid assets to short-term liabilities
2	Classified loan ratio	The share of classified loans in the loan portfolio
3	Standard deviation of the exchange rate[36]	Standard deviation of changes in the weekly exchange rate
4	Ratio of net interest incomes to gross income[37]	Ratio of net interest incomes to gross income

C. Indicators of macroeconomic environment[38]

Table 3. Indicators of macroeconomic environment

№	Name of variable	Representation format
1	Intensity of financial relations	Ratio of loans in the economy to GDP
2	Level of financial system credibility	Ratio of banks' depositary base to GDP
3	Inflation	CPI, to the corresponding period of the previous year

Regression model assessed the impact of independent variables on z-index value. The following result was obtained on the basis of z-index assessment:

Table 4. Statistical parameters of z-score model

Variables	Statistical parameters
Ratio of loans to GDP (-1)	1.33*** (2.13)
Ratio of deposits to GDP	1.18* (3.57)

[34] The indicators reflecting major financial risks for a bank: credit risk, liquidity risk, market risk and risk of profitability decrease were selected as variables of bank risks.

[35] Adequate level of liquid assets intended for timely covering of current liabilities is very important for bank's sustainable development, and a priori expected value should be positive. Despite this fact, excessive liquidity may have negative effect due to inadequate management of money flows, which is surely to result in decrease of z-index.

[36] Market risk is very significant for the bank's profitability. High volatility of the exchange rate is the factor of vulnerability provided that the bank has significant negative net foreign exchange position.

[37] The index of ratio of interest incomes to gross income, the value thereof is likely to suffer the impact of the ratio of the bank's equity to its shares was involved in the system of model indices for the purposes of assessing the impact of banks' activity on lending and attraction of deposits. The impact of this parameter on z-index is expected to be positive, as with established level of assets higher volume of capital will result in decline in the demand for borrowed funds thereby decreasing interest expenses and increasing net interest incomes.

[38] Impact of the macroeconomic environment of the stable bank operating is rather diversified. If the effect of impact of the banking risks variables may be determined in advance, due to understanding the nature of threat on the part of these risks, meanwhile, the influence of economic factors of the bank's stability is very difficult to define in advance. Macroeconomic environment creates appropriate conditions and trends for further development of banks, which may be a stabilizing factor in strengthening stability of the banking sector, and vise versa.

Inflation	-0.01* (-3.53)
Liabilities of the commercial banks (-1)	0.87*** (1.81)
Standard deviation of the exchange rate (-3)	0.24** (2.82)
Ratio of net interest incomes to gross income	-3.65*** (-2.01)
Classified loans ratio	-0.60* (-3.51)
Liquidity ratio (-3)	1.33* (3.14)
R^2 (average)	**0.91**

*Note: * - statistical significance at 1%, ** - statistical significance at 5%, *** - statistical significance at 10%. In the column "Variables", impact logarithm is indicated in brackets. T-statistics is indicated in brackets in the column "Statistical parameters".*

Results description:

Generally, the results, which were received on the basis of z-index model, reflected the following factors directly influencing the stability of the banks.

1. The indicator assessing the quality of bank's assets – "bad" loans reflected high statistical importance and economic reasonability of elasticity coefficient for the banks. **It means that the distance to banks' default decreases with growth of banks' credit risks (increase in the classified loans ratio).**

2. The indicator of interest incomes reflected impact on z-index dynamics. However, it has a negative value, which is likely to show less efficiency from use of its possibilities for business universalization, **thereby reducing potential incomes.** Statistical significance of this indicator is lower than other indices of this model.

3. Indicator of the liquidity risk showed expected positive importance for z-index (influence lag of 3 quarters). **Increase of the liquid funds by the banks for the purposes of covering current liabilities is not efficient, as it comes laden with direct costs of lost profit. Effective policy, directed for regulation of liquid funds flows including short-term liabilities, is more significant for strengthening positions of the bank.**

4. Impact of the market risk (volatility of the exchange rate) on the banks' stability is not categorical due to weak statistical significance and rather low coefficient of the variable. **The banks stand to conducting conservative policy in respect of net foreign exchange positions.**

5. The volume of liabilities in the banking sector influences the value of z-index. **Increase in the liabilities of the commercial banks, which basis is accounted for the depositary base (with the lag of 1 quarter) has a positive impact on z-index dynamics reducing possible risks of banks' default.**

6. Intensity of financial relations (lending in the economy to GDP), degree of the banking sector credibility (banks' depositary base to GDP), and inflation were reviewed as economic variables. **Indicator reflecting the degree of economic relations intensity is positively dependant on the z-index as environment favorable for business development decreases the probability of any significant risks, threatens stabilization of the financial sector. The ratio of deposits to GDP has a positive dependence on z-index, i.e. growth in the decree of the banking system credibility reflects expected growth of the bank's stability.** In its turn, another economic variable – inflation has rather low coefficient, which reflects weak dependence of this index dynamics on z-index. Thus, growth of inflation rates as the index of assessment of the monetary policy in the country has a negative effect on the decrease in the value of assets in real terms; however, it is generally characterized by weak influence on the banks' stability.

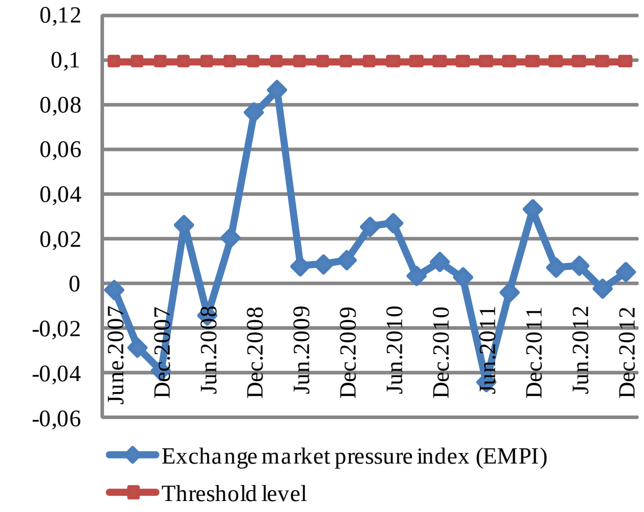
B. Determination of foreign Exchange Risk via Index of Pressure in the Exchange Market[39]

Exchange market pressure index reflects stability of the KGS exchange rate and is calculated by the following formula:

$$\mathrm{EMPI} = \left(\frac{e_t}{e_{t-1}} - 1\right) - \frac{\sigma_e}{\sigma_{Res}} \cdot \left(\frac{Res_t}{Res_{t-1}} - 1\right)$$

where,
e – official exchange rate;
Res – international reserves;
σ_e, σ_{Res} – standard deviation of exchange rate and international reserves

Graph 1. Exchange market pressure index (change quarter to quarter)



Foreign exchange crisis is determined by the event, when EMPI exceeded defined threshold level calculated as an arithmetic mean value of index plus three its standard ratios.

EMPI was calculated on the basis of quarterly data for the period 2007-2012 on gross international reserves of the NBKR (excluding gold) and the KGS/USD exchange rate as at the end of the period.

The results of calculations reflected significant index fluctuations in the period from the 3-rd quarter of 2008 to the 1st quarter of 2009, when the EMPI value was closely approaching established level. However, it should be noted that excess of established level indicates the foreign exchange crisis.

C. Assessment of the vulnerability factors via balance sheet approach

Determination and assessment by means of analyzing the balance of the major sectors of economy, vulnerable places and internal risks, which become in future threats for the financial stability of the Kyrgyz Republic and crisis in the financial system.

The following risks for the cross-sectoral balance were found:
- *risk on maturity,*
- *foreign exchange risk,*
- *risk for the capital structure,*
- *solvency risk.*

Determination and analysis of risks is carried out on the basis of matrix of the economy position on assets and liabilities[40] as of January 01, 2013 (Table 1), which reflects mutual requirement and liabilities of the economic sectors.

[39] Concentration of so called "speculative pressure" is used in the empiric studies to determine currency crisis, thereby the crisis as well as speculative attack as determined as a period when the speculative pressure in the exchange market reaches criticality.

Matrix reflects quantitative cross-sectoral links, as well as discrepancy in currencies, liabilities' maturity and capital structure.

Financial Links between the Banking Sector and Balance Sheet Risks

As of the end of 2012, the major share of the banking sector liabilities was accounted for the corporate sector and households, debts to the aforementioned sectors constituted KGS 27.6 billion and KGS 20.8 billion, respectively.

The major share of debt is represented by short-term liabilities, their share occupied 90.7 percent. In its turn, short-term financial claims of the banks constituted KGS 12.9 billion and were generally nominated in the national currency, while, short-term liabilities to the corporate sector and households are almost in equal shares nominated in the national and foreign currencies.

Thus, there are gaps between the short-term claims and the liabilities of the banking sector.

Besides, gap between the bank's assets in the foreign currency and the liabilities in the foreign currency amounted to KGS -6.7 billion. This dynamics indicates the availability of *risks on maturity and the currency risks* in the banking sector.

Financial Links of the Households

Generally, there was gradual increase in the debt of households to the financial sector. At the end of 2012, the total debt to the financial sector amounted to KGS 31.6 billion (banks – KGS 21.4 billion, NBFI – KGS 10.2 billion) and was mainly presented by medium- and long-term loans.

Moreover, growth in debts of households increases the *risk of insolvency* on loans, which is likely to result in instability and low incomes of households, as well as impact of negative factors, both internal (improper use of loans, unfair performance of debt service obligations), and external (decrease in the amount of remittances, possible restrictions in the trade sector).

Financial Links of the Corporate Sectors

Growth of risks for the corporate sector reflects gradual increase in the volume of external debt. At the end of 2012, the debt of enterprises to non-residents constituted KGS 77.1 billion. Moreover, the debt of enterprises is represented by the loans of the public sector (loans of the State fund for economic development), which constituted KGS 37.6 billion and bank's loans amounted to KGS 18,5 billion.

The debt of enterprises to the banking sector is represented by 80.8 percent of medium- and long-term loans. **Thus, amid remaining dynamics of gradual increase in the volume of the corporate sector debt, the ratio of the enterprises debt to the amount of equity constituted 164.5 percent, which reflects increase of the *capital structure risks*, as well as the risks of *the corporate sector debt sustainability*.**

Financial Links of the Public Sector

The major share of the public sector liabilities is occupied by the debt to non-residents (public external debt), which at the en of 2012 constituted KGS 148.5 billion (including corporate debt – KGS 4.8 billion).

Growth in the volume of public debt reflects increase in the sovereign risks, as well as the maturity risks and currency risks. Increase of the maturity risks is indicated in the dynamics in the indicator of the public sector debt (internal and external) in respect of the liquid assets of the country (international reserves). At the end of 2012, this index constituted 12.1 percent and in expected to grow amid forecasted growth in the volume of costs for the foreign debt service.

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[40] Borrowers are indicated in this matrix. In respect of each borrower, the liabilities are divided by maturity (the remaining maturity) and currencies; the amount of equity is also specified. Creditors by economic sectors are indicated in the matrix columns.

Growth of the currency risk in indicated in the positive dynamics of the ratio of public debt to the foreign currency (internal and external) to the public assets in the foreign (convertible) currency (international reserves). This index at the end of 2012 constituted 151.6 percent.

Table 1. Matrix of cross-sectoral economic position on assets and liabilities as of January 01, 2013
mln. KGS

Creditor	**Public sector (including NBKR)**	**Sector of deposit takers**	**Corporate sector**	**Sector of other financial corporations**	**Households**	**Non-residents**	**Total**
Borrower							
Public sector (including NBKR)							
In national currency		**8 899.3**	**34.3**	**2 958.4**	**7.1**	**1.1**	**11 900.2**
Other total liabilities, including:		**8 899.3**	**34.3**	**2 958.4**	**7.1**	**148 468.8**	**160 367.9**
- *short-term:*		**6 412.9**	**31.1**	**697.5**	**7.1**	**4 755.4**	**11 904.0**
а) in foreign currency						4 754.3	4 754.3
б) in national currency		6 412.9	31.1	697.5	7.1	1.1	7 149.7
- *medium- and и long-term:*		**2 486.5**	**3.2**	**2 260.9**		**143 713.4**	**148 463.9**
а) in foreign currency						143 713.4	143 713.4
б) in national currency		2 486.5	3.2	2 260.9			4 750.6
Sector of deposit takers							
Total liabilities, including:	**7 175.8**		**27 646.3**	**2 565.0**	**20 805.2**	**6 654.7**	**64 846.9**

Creditor / **Borrower**	**Public sector (including NBKR)**		**Corporate sector**	**Sector of other financial corporations**	**Households**	**Non-residents**	**Total**
- deposits and other *short-term:*	**7 175.8**		**25635.2**		**18333.6**	**2 039.0**	**53 183.6**
a) in foreign currency			11109.5	n/a	9195.4	1 805.7	22 110.6
б) in national currency	7 175.8		14525.8	n/a	9138.2	233.3	31 073.0
- medium- and и long-term:			**2011.0**		**2471.6**	**4615.7**	**9 098.3**
a) in foreign currency			233.7	n/a	1250.9	4583.4	6 067.9
б) in national currency			1777.4	n/a	1220.7	32.3	3 030.4
Equity	**16 011.4**		**16011.4**	**16011.4**	**16011.4**	**16 011.4**	
Corporate sector							
Total liabilities, including:	**37 584.7**	**18519.8**		**5.0**		**77161.4**	**133270.8**
- short-term:		**3557.5**		**0.8**		**0**	**3558.4**
a) in foreign currency	n/a	2803.1		0.0		0	2803.1
б) in national currency	n/a	754.4		0.8		0	755.3
- medium- and и long-term:		**14962.2**		**4.1**		**77161.4**	**92127.8**
a) in foreign currency	n/a	10897.6		0.0		77161.4	88059.0
б) in national currency	n/a	4064.6		4.1			4068.7
Equity	**96 717.5**	**96 717.5**		**96 717.5**		**96 717.5**	

Creditor / Borrower	Public sector (including NBKR)	Sector of deposit takers	Corporate sector	Sector of other financial corporations	Households	Non-residents	Total
Sector of other financial corporations							
Total liabilities, including:	**361.1**	**821.4**			**51.0**	**11732.3**	**12965.8**
- short-term:	**361.1**	**0.0**			**51.0**	**0.0**	**412.1**
a) in foreign currency							0.0
б) in national currency	361.1				51.0		412.1
- medium- and u long-term:	**0.0**	**821.4**			**0.0**	**11732.3**	**12553.8**
a) in foreign currency		17.0				11732.3	11749.4
б) in national currency		804.4					804.4
Equity	**6422.2**	**6422.2**			**6422.2**	**6422.2**	
Households							
Total liabilities, including:		**21378.8**		**10265.2**			**31643.9**
- short-term:		**2918.2**		**7594.9**			**10513.1**
a) in foreign currency		788.5		0.0			788.5
б) in national currency		2129.7		7594.9			9724.5
- medium- and u long-term:		**18460.6**		**2670.3**			**21130.9**
a) in foreign currency		6886.3		0.0			6886.3
б) in national currency		11574.2		2670.3			14244.5
Savings	**20805.2**	**20805.2**	**20805.2**	**20805.2**			
Non-residents							
Total liabilities, including:	**97 958.7**	**58.3**		**0.0**			**98016.9**
- short-term	97 958.7	11.6		0.0			97970.2
- medium- and u long-term:		46.7		0.0			46.7

Financial Soundness Indicators of the Kyrgyz Republic[41]

(in percent)

	2010	*2011*	*2012*
Banking sector			
Indicators of the capital adequacy			
Regulatory capital to assets, weighted by risk	30.5	30.3	28.3
Tier I capital to assets, weighted by risk	26.0	24.6	22.3
Equity to total assets	21.7	21.6	19.7
Ratio of non-performing loans* to equity	33.1	21.9	16.8
Equity to total liabilities	27.7	27.6	24.4
Quality of assets			
Ratio of non-performing loans* to loan portfolio	15.8	10.2	7.2
Generated provisions to loan portfolio	12.8	8.4	6.7
Generated provisions on non-performing loans to Non-performing loans	67.7	61.6	64.9
Ratio of currency loans to loan portfolio	55.7	55.2	53.7
Returns indicators			
Return of assets (ROA)	1.2	3.0	3.0
Return of equity (ROE)	7.1	17.7	18.5
Interest margin to total income	48.9	45.0	44.7
Non-interest expenditures to total income	68.4	56.3	54.5
Ratio of staff costs to non-interest expenditures	43.9	53.3	51.8
Spread between reference rate on deposits and loans	8.2	9.4	8.0
Liquidity indicators			
Ratio of high liquid assets to total assets	36.1	35.0	36.8
Ratio of high liquid assets to short-term liabilities	72.8	74.9	80.0
Ratio of clients' deposits to total loans (excluding interbank)	67.1	67.8	68.8
Sensitivity to market risk			
Ratio of net foreign exchange position to equity	-10.3	4.1	2.4

Other financial corporations**			
Ratio of assets to total assets of the financial system	9.5	8.5	9.2
Ratio of assets to GDP	7.7	7.1	6.7

[41] Indicators of financial stability are calculated according to the methodology of the IMF ("Instruction on identification of financial soundness indicators", IMF, 2007).

continued

	2010	*2011*	*2012*
Corporate sector (medium- and large-sized enterprises)			
Return on assets (ROA)	2.9	5.9	6.7
Return on equity (ROE)	6.2	12.7	16.3
Ratio of total liabilities to equity (leverage)***	2.2	2.1	2.1
Current liquidity ratio	1.3	1.4	1.4
Households sector			
Ratio of the households' debt to GDP	9.2	10.3	10.1
Ratio of households' debt to disposable income	13.1	15.8	14.9

Source: NBKR, NSC KR, calculations: NBKR

** - under non-performing loans are meant classified loans*

*** - other financial corporations are presented by NBFI*

**** - equity of the corporate sector is represented excluding shares"*

Glossary and Abbreviations

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.

Bank loan is money provided by a bank for a fixed period under the terms of repayment and payment of loan interest.

Demand deposits are made without specifying the shelf life, and time deposits are made for a certain period.

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

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.

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

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

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

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.

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.

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).

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

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.

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

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.

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.

Real interest rate is the nominal interest rate adjusted for inflation

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.

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 stock 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.

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

ADB – the Asian Development Bank
CBRF – the Central Bank of the Russian Federation
CIS – Commonwealth of Independent States
CJSC – Closed Joint-Stock Company
CPI – Consumer Price Index
FAO – Food Agriculture Organization of the United Nations
GDP – Gross Domestic Product
GS – Government Securities
IMF – International Monetary Fund
KR – Kyrgyz Republic
KSE – Kyrgyz Stock Exchange
LP – Loan Loss Provisions
MF KR – the Ministry of Finance of the Kyrgyz Republic
NBFIs – Non-Bank Financial Institutions
NBKR – the National Bank of the Kyrgyz Republic
NGS – Non-Government Securities
NSC KR – the National Statistical Committee of the Kyrgyz Republic
OJSC – Open Joint-Stock Company
POL – Petroleum and Oil
SRC GKR – State Registration Service under the Government of the Kyrgyz Republic
SFBR – Specialized Fund for Banks Refinancing
USA – United States of America
bln. – billion
mln. – million
p.p. – percentage points
thous. – thousand