



**NATIONAL BANK OF THE  
REPUBLIC OF KAZAKHSTAN**

**COMMITTEE ON CONTROL AND  
SUPERVISION OF THE FINANCIAL  
MARKET AND FINANCIAL  
ORGANIZATIONS OF THE NATIONAL  
BANK OF THE REPUBLIC OF  
KAZAKHSTAN**



# **FINANCIAL STABILITY REPORT OF KAZAKHSTAN**

**December, 2011**

## Foreword

Since 2006, the National Bank of the Republic of Kazakhstan (NBRK) together with the Committee of the Republic of Kazakhstan on Control and Supervision of the Financial Market and Financial Organizations (FSC) prepares the Financial Stability Report of Kazakhstan on an annual basis.

In line with the Concept for the Financial Sector Development in the Republic of Kazakhstan approved in November 2009, the government policy in the post-crisis period will aim to implement the system of macro-prudential regulation and, hence, to enhance the role of the National Bank of the Republic of Kazakhstan as a central authority responsible for ensuring financial stability and implementing macroprudential regulation.

According to the Memorandum of Financial Stability made on November 10, 2007 between the Government of the Republic of Kazakhstan, NBRK and the Agency of the Republic of Kazakhstan on Control and Supervision of the Financial Market and Financial Organizations (now - FSC):

*“financial stability shall be defined as the absence of disproportions in the economy that may result in the subsequent negative correction of financial markets, systemic crisis and inability of financial institutions to ensure an ongoing functioning of the financial system as well as to maintain business activity in the real sector of the economy”.*

As part of the Financial Stability Report of Kazakhstan representing one of the tools of the comprehensive systemic risk analysis, the following aspects determining financial stability are assessed:

- (1) how efficiently and timely financial resources are reallocated among those who save and invest money;
- (2) whether risks are adequately assessed and effectively managed;
- (3) whether financial shocks can be absorbed by the financial system without significant upsets.

The Financial Stability Report of Kazakhstan is focused on the financial market participants as well as the audience interested in the financial stability topics. The National Bank aims to disseminate the outcomes of the research and risk analysis as well as specialized studies in the area of financial stability.

<p><i>The Financial Stability Report of Kazakhstan has been prepared by the NBRK in cooperation with the FSC.</i></p>
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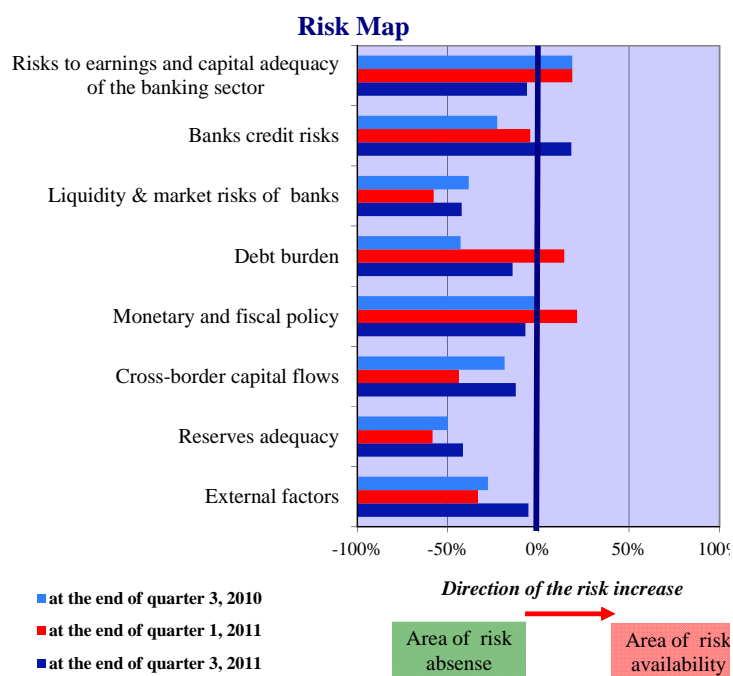
## **List of Abbreviations:**

<b>ASRK</b>	Agency of Statistics of the Republic of Kazakhstan
<b>EU</b>	European Union
<b>USA</b>	United States of America
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>KASE</b>	Kazakhstan Stock Exchange
<b>KDIF</b>	Kazakhstan Deposit Insurance Fund
<b>FSC</b>	Committee of the Republic of Kazakhstan on Control and Supervision of the Financial Market and Financial Organizations
<b>KISC</b>	Kazakhstan Interbank Settlements Center
<b>IMF</b>	International Monetary Fund
<b>EBRD</b>	European Bank for Reconstruction and Development
<b>EADB</b>	Eurasian Development Bank
<b>MOF</b>	Ministry of Finance of the Republic of Kazakhstan
<b>IFI</b>	International Financial Institutions
<b>MEDT</b>	Ministry of Economic Development and Trade of the Republic of Kazakhstan
<b>NFRK</b>	National Fund of the Republic of Kazakhstan
<b>NBRK</b>	National Bank of the Republic of Kazakhstan
<b>NWF</b>	JSC "National Wealth Fund "Samruk-Kazyna"
<b>PLF</b>	JSC "Problem Loans Fund"
<b>SPFIID</b>	State Program of Forced Industrial and Innovative Development for 2010-2014
<b>JSC</b>	joint-stock company
<b>STB</b>	second-tier bank (banks)
<b>APF</b>	accumulation pension funds
<b>GDP</b>	gross domestic product
<b>M3</b>	money supply
<b>REER</b>	real effective exchange rate
<b>SM</b>	securities market
<b>GS</b>	government issue-grade securities
<b>NGS</b>	non-government issue-grade securities
<b>CPI</b>	consumer price index
<b>CCO</b>	coefficient of continuity of operation (operational capability) of payment systems
<b>CBI</b>	composite banking stress indicator
<b>CFMI</b>	composite financial market stress indicator
<b>CCI</b>	composite coincident index
<b>CLI</b>	composite leading indicator
<b>CLR</b>	cash liquidity ratio
<b>CTR</b>	cash turnover ratio
<b>ISMT</b>	Interbank System of Money Transfer
<b>IBCS</b>	Interbank clearing system
<b>IFRS</b>	International Financial Reporting Standards
<b>PPP</b>	purchasing power parity
<b>SPV</b>	special purpose vehicle
<b>un.</b>	unit
<b>KZT</b>	Tenge
<b>thous.</b>	thousand
<b>mln.</b>	million
<b>bln.</b>	billion

<b>1<sup>st</sup> group of banks</b>	JSC “BTA Bank”, JSC “Alliance Bank” and JSC “Temirbank”
<b>2<sup>nd</sup> group of banks</b>	Second-tier banks with the market share of assets over 2% as of October 1, 2011 (excluding banks of 1 <sup>st</sup> group)
<b>3<sup>rd</sup> group of banks</b>	Second-tier banks with the market share of assets over 0.1% as of October 1, 2011 (excluding banks of 1 <sup>st</sup> and 2 <sup>nd</sup> groups)

## I. Executive Summary

1. The Financial Stability Report for 2010 outlined a number of risk factors that were expected to influence significantly the development of the financial system and the economy in 2011. The course of 2011 proved that those projections were adequate, at the same time a number of trends which were marked out in 2010 still remained viable.



The map for assessment of risks in the country's financial system shows that profitability risk and capital adequacy risk in the banking sector appeared to be the most significant risk factors at the end of the third quarter because of the increased non-interest expenses and low profitability of the banking sector. The decreased credit risk resulted from certain improvement of financial condition of the corporate sector and households. The risk of debt burden also decreased significantly due to the completed debt restructuring of 3 Kazakh banks and the decreased share of short-term liabilities in the structure of gross external debt.

Source: NBRK

2. In 2010-2011 the Kazakh economy had been demonstrating high growth rates (over 7% a year). If in 2010 the economy was growing mainly due to the development of two sectors – industry and services, in 2011 the contribution of the industrial production to the economic growth decreased significantly and, on the contrary, the contribution of the service sector increased. In terms of expenditures, the economic growth in 2011 was attributed to the household consumption (5% out of 7.5%) and government spending (1% out of 7.5%), mainly because of the extremely minor spending on fixed capital formation (0.1% out of 7.5%), which is indicative of low investment activity of economic agents. Moreover, in the structure of the state budget spending current expenditures are growing more rapidly than capital expenditures. Thus, a low level of investments in the economy may represent a factor negatively influencing the growth rates of the economy in the future.

The economy is still heavily relying on the conditions in the global commodity markets. So, in 2011 the decline in the real production was observed in the mining industry because of the domestic conditions and reduced demand for certain items of Kazakhstani exports in the global markets, however, this trend was balanced by high prices for raw materials.

The structural disproportions in the country's economy and the absence of apparent competitive advantages in pricing makes the “non-oil” exports of Kazakhstan vulnerable. Thus, in September 2011 there was a dramatic drop in the “pricing competitive position” of the Kazakh economy. An observed negative gap between the equilibrium real exchange rate of the Tenge and the actual values of real effective exchange rate (undervaluation of the exchange rate) began to shrink. The main reason for that was the decrease in net foreign assets in September as well as the deterioration of the terms of trade for domestic producers observed in the second quarter.

The above factors coupled with the drop of the financial “depth” that primarily occurred due to low lending activity of banks give rise to a high risk of the slowdown in the growth of the

Kazakh economy in the nearest term. This is already evidenced by the dynamics of the composite leading indicator which projects the slowdown in the growth of the Kazakh economy as early as from the 2<sup>nd</sup> quarter of 2012. Alongside with that, the risk becomes especially tangible in the context of negative forecasts in respect of the global economy growth.

3. The decreased reliance of banks on external funding as a result of replacement of liabilities to non-residents by the domestic liabilities helps making the banking sector more resilient to external shocks in the short run. At the same time, when the demand of the economy for credit resources increases, banks may encounter the shortage of long-term funding since the deposit base would be unable to satisfy the increasing demand of banks for such funding. The lack of adequate volumes of long-term funding may become a discouraging factor for the lending activity of banks and, hence, become the reason for the shortage of credit resources in the economy.

Relatively low lending activity of banks is caused by a low quality of their credit portfolio coupled with their conservative risk-taking policy amidst uncertain economic expectations. The process of deterioration of the credit portfolio that began in 2009-2010 was explained by two factors. On the one hand, the borrower creditworthiness deteriorated and delinquencies resulted in the deteriorated quality of credits. On the other hand, there was virtually no replacement of non-performing loans by new standard loans.

In 2011, owing to the improved overall economic situation and the borrower financial condition in particular, the absence of replacement of bad loans by new loans becomes the most significant factor of the credit portfolio deterioration. At the same time there is a tendency of maintaining the volume of “the performing portfolio”<sup>1</sup> in the system as a whole at one level – thus banks try to maintain the interest margin at an acceptable level by providing limited volumes of loans to the best quality borrowers.

The portfolio recovery through the loan restructuring was not really efficient since the banks adhered to a “soft” restructuring (accomplished primarily through the repayment schedule adjustment) and were not ready to write down a borrower’s debt and assume losses resulting from abatement of debts. As a result, the restructuring allowed mitigating the intensity of loan migrations from higher classification categories to the lower ones; however, it didn’t help recovering the credit portfolio in a cardinal way. On the other hand, banks virtually didn’t write off bad loans because there were outstanding issues in the taxation of income from recovery of provisions and due to the lack of efficient tools for the management of bank non-core assets. Thus, low credit portfolio quality of the banking system as a whole is caused by the accumulation of problem loans over a few years.

In 2011 the government undertook a set of measures intended for remediation of the balance sheets of banks. On the one hand, amendments were made to the tax legislation that proposed deductions of income from the recovery of provisions from taxable income when writing off bad loans. On the other hand, the Concept for the improvement of the quality of bank assets was developed that suggests using a centralized and decentralized approach in the process of remediation the balance sheets of banks. So, as part of its implementation, the National Bank establishes a special purpose subsidiary – JSC “Problem Loans Fund” which will be buying out troubled assets of banks and take actions to restore their quality. The Concept also suggests that special purpose subsidiaries would be established with a view to buy out bad quality assets and take actions to restore their value by the banks themselves (decentralized approach). In connection with the implementation of these measures in 2012 one may expect that the quality of credit portfolio of the majority of large and medium-size banks will improve.

A prerequisite for the mitigation of systemic risks in the financial sector is the normalization of financial condition of BTA Bank and Alliance Bank which had undergone the process of their external debt restructuring in 2010; this will depend on the efficiency of measures taken to rehabilitate these banks. In particular, another process of restructuring of BTA Bank’s liabilities is

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<sup>1</sup> The sum of standard loans and loans belonging to classification categories 1-3, i.e. loans generating cash flows.

being considered. In doing so, additional step-in measures on behalf of the government may be required.

4. Low profitability of pension funds resulting from their conservative policies may be referred to systemic risks of the financial sector that will be increasing in the long run. Low returns on pension assets do not allow compensating inflation and may lead to a significant burden on the state budget in the long run because of the need to ensure the safeguarding of pension savings with account for inflation within the existing system of government guarantees. In the event the real profitability of the pension funds fail to grow, the implications for the crisis of the entire pension system will arise.

5. Despite the observed slight price growth in the real estate market, the number of real estate transactions did not increase significantly. At the same time, the condition of the market affects both the volumes of provided mortgage loans and the dynamics in the quality of earlier loans and the condition of the insurance sector, including via the decreased volumes of sales of the so-called “packaged products”.

6. Risks of the slowdown in the economic growth and the strengthening of existing disproportions in the economy may require the adjustment of the government policy including as part of the support for top-priority sectors, with the priority shifting to the industry expansion. At present, there is a distinct need in encouraging the investment activity in the manufacture sector.

Also, if the growth in lending activity of the banking sector and lending volumes to economy do not increase, the need may arise to shift the priorities in the financial sector regulation from limiting the risks taken by the financial organizations to encouraging lending through easing of regulatory requirements.

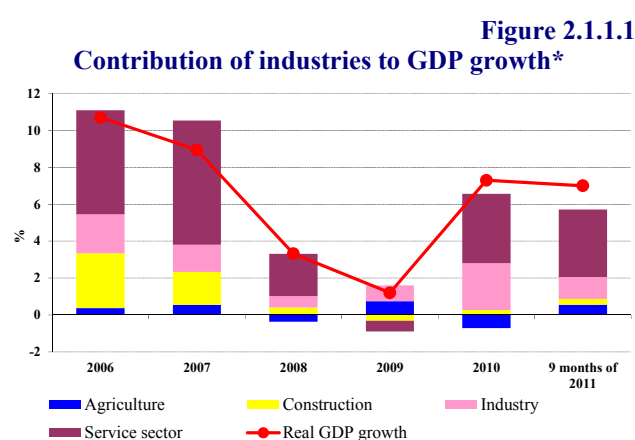


## II. Macroeconomic and Financial Environment

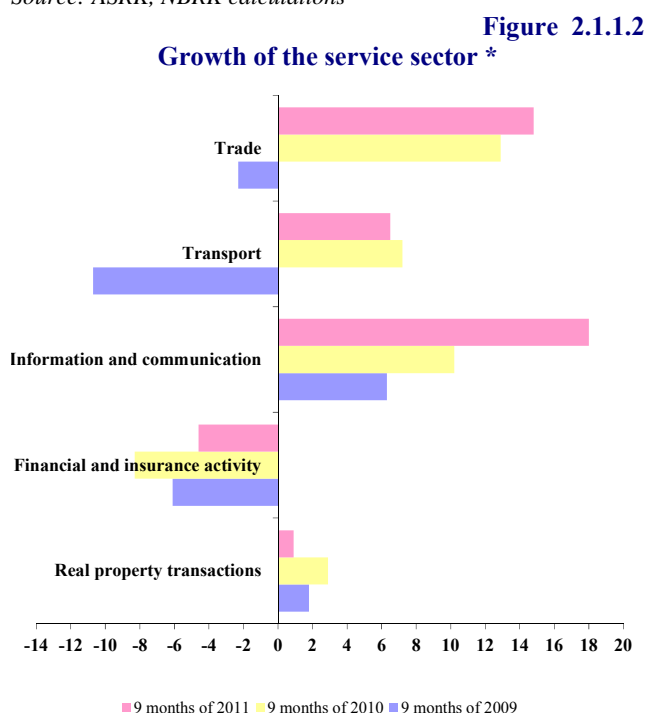
### 2.1 Macroeconomic Environment and its Sustainability Factors

#### 2.1.1 “Growth Zones” of Kazakhstan Economy and Macroeconomic Risks Determined by the Structure of Economy

*Kazakhstan’s economy structural imbalances consisting in prevalence of the non-production and primary sectors still remain the key factor of the macroeconomic risk, which is exacerbated by dependence of Kazakhstan’s economy from external conditions. The persisting low level of the investment activity, predictable global economic recession as well as reduction in the external demand may result in decline of the general economic growth and exacerbation of the current disproportions in Kazakhstan’s economy in the foreseeable future. Under such conditions the state policy is required to put emphasis on stimulation of the procession industry development*



Note: \* contribution to the growth of gross value-added  
Source: ASRK, NBRK calculations



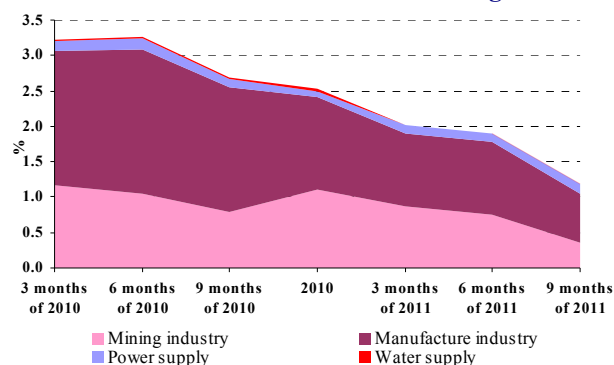
Note: \* real growth, in % on the YoY basis  
Source: ASRK

During 2011 the dynamics of Kazakhstan economy development achieved in the prior year was actually preserved. GDP growth in January-September 2011 was 7% as compared to 7.5% in the same period of 2010; at that the slowdown in the rates of industrial production was partially compensated by the positive dynamics in development of agriculture and service sector (Figure 2.1.1.1).

As in 2010 the service sector accounted for the major contribution to the economic growth. Based on the results for 9 months of 2011, the growth in the service sector was due mainly to provision of information and communication services (18%) as a result of development of modern communication facilities; due to trade (14.8%) because of realization of the deferred consumer demand as well as due to transport (6.5%), which growth was stimulated to a considerable extent at the expense of the public funds allocated for implementation of the infrastructure projects. At the same time, the financial business and insurance (-4.6%) and real estate operations (0.9%) are still in the state of recession or stagnation (Figure 2.1.1.2). Starting from the 4<sup>th</sup> quarter of 2010 there was observed a significant slowdown in the rates of industrial production. Thus, the real growth of the mining industry fell more than by half as compared to the 2010 figures, primarily due to decline in production of crude oil and metallic ores.

**Figure 2.1.1.3**

**Contribution of the industries to GDP growth\***

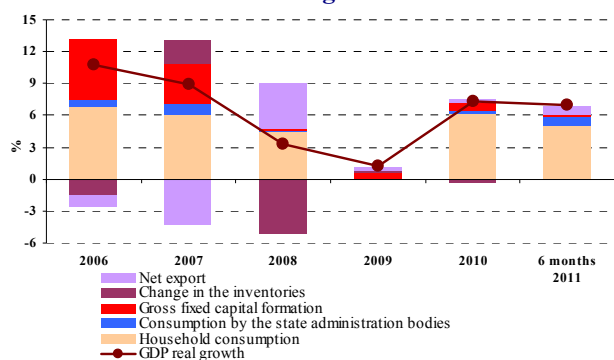


Note: \* Contribution to the growth of gross value-added, in % on the YoY basis

Source: ASRK, NBRK calculations

**Figure 2.1.1.4**

**Contribution of the aggregate demand components to the GDP growth\***

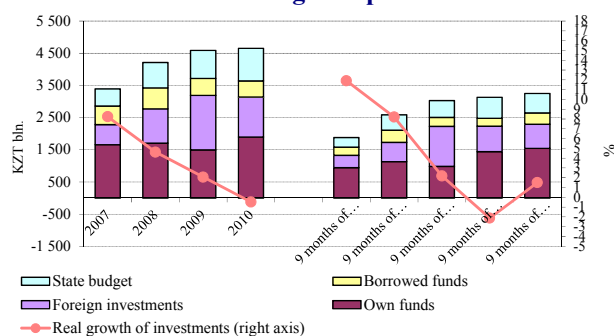


Note: \* in % on YoY basis

Source: ASRK, NBRK calculations

**Figure 2.1.1.5**

**Sources of financing of capital investments**



Source: ASRK, NBRK calculations

Even more significant decline in the growth rates – almost by 3 times – was observed in the manufacture industry, which is more vulnerable in terms of completion as compared to the mining industry and such decline has been caused mostly by the slowdown in the growth rate in mechanical engineering industry and food production (Figure 2.1.1.3).

Despite of the outrunning growth in the production of services, the share thereof in the GDP structure for 9 months of 2011 dropped to 49.3% (for 9 months of 2010 – up to 54.1%), while production of goods amounted to 45.1% (43.1%) of the nominal GDP. Such differently directed dynamics is explained by the price factor – goods prices, mostly in the mining industry and manufacture industry, are growing at a higher rate compared to the cost of services.

From the viewpoint of expenses, the key source of the economic growth, as in 2010, is the household expenses (which account for 5% contribution to GDP). There are observing some certain increase contribution of net export and expenses of the state administration bodies to the GDP. At the same time the role of capital formation in the economic growth has reduced almost to a minimum (Figure 2.1.1.4).

During 2008-2010 the growth rate of capital investments has steady decline in all sectors of Kazakhstan's economy. Nevertheless, in 2011 the situation stabilized and real growth of investments during 9 months amounted to 1.5% (Figure 2.1.1.5). However, it is early to claim that the investment activity has recovered and negative trends have been overcome. The enterprises' own funds still remain the key source of financing. Moreover, increase of financing at the expense of own funds has been noted in the

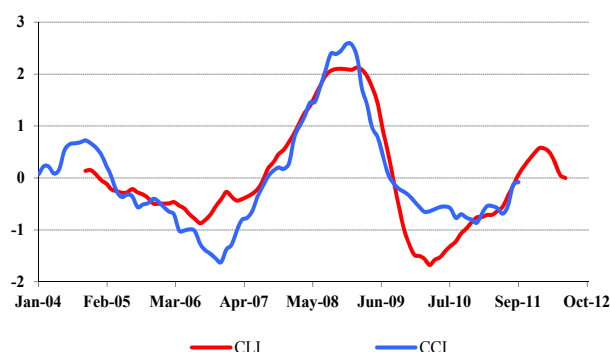
sphere of transport, information and communication. Growth of financing at the expense of the borrowed funds has been observed in the manufacture industry, as well as in transport and real property business sectors.

**Table 2.1.1.1**  
**Forecast of Kazakhstan's economy growth**

	2011	2012
International Monetary Fund	6.5%	5.6%
European Bank for Reconstruction and Development	7.0%	6.0%
Eurasian Development Bank	7.0%	5.5%
Ministry of Economic Development and Trade	7.0%	7.0%

Source: IMF, EBRD, EADB, MEDT

**Figure 2.1.1.6**  
**Leading and coincident indicators of Kazakhstan's economy**



Note: CLI is shifted to the right for 9 months to reflect its leading feature.

Source: NBRK

evidence of the possible slowdown and in some cases of even significant decline in the economic activity. In this case, according to the IMF forecasts the rates of the global economy growth will decrease from 5.1% in 2010 to 4% in 2011-2012. The alternative international sources have lowered the forecast of the global economy growth in 2012 till 2.4% (Fitch Ratings) and 3.4% (Organization for Economic Cooperation and Development), respectively. Further economic growth prospects in the leading developed economies will depend on the settlement of the budget problems. For the emerging and developing economies, the toughening of the tax and expenditure policy and decrease in the external demand may become the factors, which slowdown the economic growth.

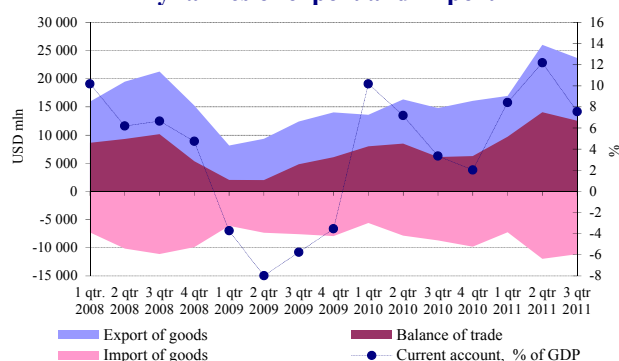
## 2.1.2 Economy Risks Stipulated by the External Factors

*High prices on commodities, which constitute items of Kazakhstani export have weakened the negative impact of other external shocks during the crisis and contributed to recovery of the economic growth rates. The pursued foreign exchange policy also contributes to support of the economy competitiveness. However, if the external factors worsen, the significant deviations of the real foreign exchange rate from the equilibrium level may undermine the economic growth in the long run.*

<sup>2</sup> The composite leading indicator (CLI) is constructed on the basis of 5 quantitative indices: oil price index, composite index of business activity in the US, IFO World Economic Survey, money supply (M2) index, asset price index; and 3 qualitative indicators characterizing expectations about the growth in the industrial output, demand for final products and goods in stock, based on the corporate polls conducted by SARK.

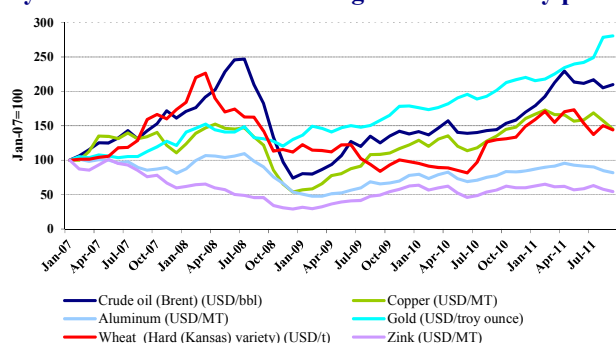
Composite coincident index (CCI) characterizing the dynamics of economic development is constructed on the basis of 4 indices: index of production, employment index, real wage index, and trade volume index.

**Figure 2.1.2.1**  
**Dynamics of export and import**



Source: NBRK

**Figure 2.1.2.2**  
**Dynamics in the indices of the global commodity prices**



Source: Bloomberg, NBRK calculations

**Table 2.1.2.1**  
**Consensus forecast for commodities\* (USD)**

Commodities	1 qtr 2012	2 qtr 2012	3 qtr 2012	4 qtr 2012
Brent. per bbl	111.3	110	108.6	107.2
Wheat. per ton	660.7	684.3	708.3	728.7
Gold. per troy ounce	1601	1604	1608	1611
Copper. per ton	7788	7798	7806	7808
Aluminum. per ton	2069	2096	2122	2146
Zink. per ton	1872	1892	1910	1923

Note: \* as of January, 4th 2012

Source: Bloomberg

weakening of tenge in real terms (Figure 2.1.2.3).

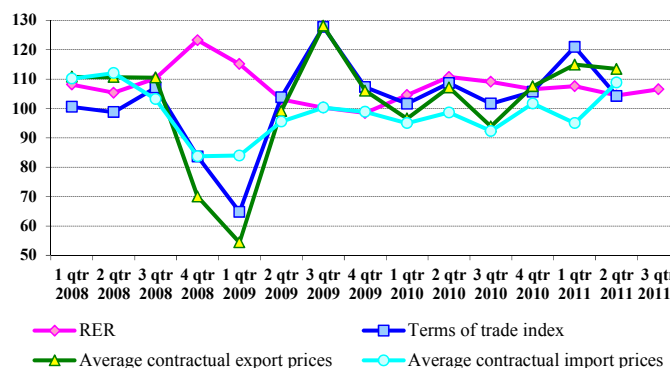
In general, during 9 months of 2011 the dynamics of the index of real effective exchange rate (REER) was differently directed. If in the first half of 2011 the weakening of tenge in real terms was due to lower rates of tenge strengthening in nominal terms against the currencies of the key trade partners countries, tenge strengthening in real terms in the 3<sup>rd</sup> quarter of 2011 is explained by increase of the inflation rate in Kazakhstan, decrease of the inflation rate in Russia and nominal depreciation of currencies of the key trade partners countries of Kazakhstan.

Pricing environment in the global commodity markets in 2011 fostered the growth of Kazakhstani exports (Figure 2.1.2.1). Growth of the export turnover for 9 months of 2011, mostly that of the minerals (oil and gas condensate, ferrous and non-ferrous metals), fully compensated the increase of the negative balance of other items of the current account. In the first half of 2011 there was growth of exports that supported by the high global prices on raw materials, whereas in the 3<sup>rd</sup> quarter of 2011 the volume of exports decreased as the result of output dropping in the extractive sector and decline of global prices (Figure 2.1.2.2).

The relatively high level of commodity prices mitigated the negative impact of the global financial crisis of 2008-2009 on Kazakhstan's economy and helped to maintain the high rates of economic growth in 2010-2011. According to the estimates of the international organizations, the prices on oil and metals, which are the key export items of Kazakhstan, will be preserved at the high level in the mid-term (Table 2.1.2.1).

At the same time, the forecast implementation relating with slowdown of the global economy growth in 2011-2012 could lead to decline the commodity prices and impact on Kazakhstan's economy, including the indexes of competitiveness. Compare with the end of 2010, in the first half of 2011 worsening trading conditions has not observed. However, in the 2<sup>nd</sup> quarter of 2011 there was noted a sharp fall of the terms of trade index by 14% as compared to the 1<sup>st</sup> quarter of 2011, due to import price rise; also noted was certain

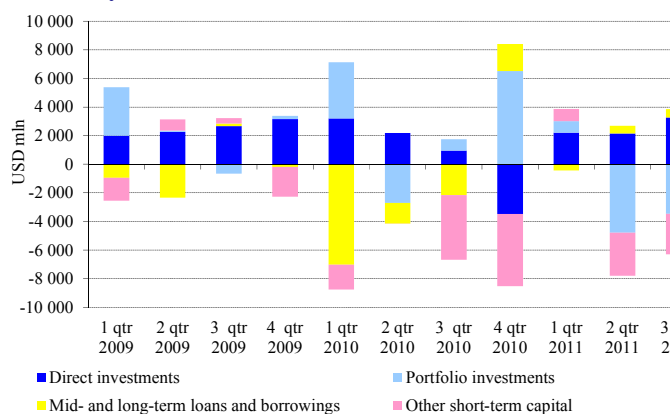
**Figure 2.1.2.3**  
**Indices of the real effective exchange rate and terms of trade, (2000=100)**



Note: \* 3 qtr 2011 - preliminary estimate

Source: NBRK

**Figure 2.1.2.4**  
**Dynamics of external assets and liabilities**



Source: NBRK

In this regard, according to the NBRK estimates, the real exchange rate of tenge as of the end of September 2011 still remained a bit underestimated as against its equilibrium value (Box 1).

If the high level of export and positive balance of the current account of the balance of payments has predetermined the growth of economy in the short run, the state of financial account will be the determinant of the economic growth in the long run (Box 2). According to the results for the period 2010 - 9 months of 2011, the financial account of the national balance of payments was characterized by net outflow of the capital as a result of increase in the external assets of the National Fund of the Republic of Kazakhstan (NFRK) as well as repayment and forgiving liabilities of the banks. The net outflow from the financial account for 9 months 2011 decreased up to USD 3.9 bln. as compared to USD 8.6 bln. on YoY basis, mostly due to repayment and forgiving of liabilities of the banks. In addition, a net inflow of USD 7.6 bln. has been observed in the structure of the financial account in terms of direct foreign investments, which is stipulated by increased of the share capital of the banks with foreign participation and decrease in the amount of repayment of the

inter-firm debt by Kazakhstani enterprises to their foreign parent companies (Fig 2.1.2.4).

## Equilibrium Real Exchange Rate

According to the available theoretical and empirical researches, the equilibrium exchange rate is an important predecessor indicator of the economic imbalances. In particular, the persistent real underestimation of the exchange rate may result in the economic overheating exerting pressure on the domestic prices and distorting distribution among the tradable and non-tradable sectors. And vice versa, the long-lasting overestimation of the exchange rate is manifested in the unstable macroeconomic conditions in the country, making it vulnerable to the speculative attacks and foreign exchange crisis.

Taking into account the international experience<sup>3</sup>, the Vector Error Correction Model (VECM) was assessed to measure the equilibrium real exchange rate (RER) of tenge and its bias. Thus, according to the results obtained, 1% increase in the government expenses (GREAL) and terms of trade (TOT) lead to the strengthening of the equilibrium real exchange rate by 0.14% and 0.21%, respectively, while 1% increase in the net foreign assets (NFA\_PROD) results in its weakening by 0.03% (Table 1).

Table 1

### Results of VECM model

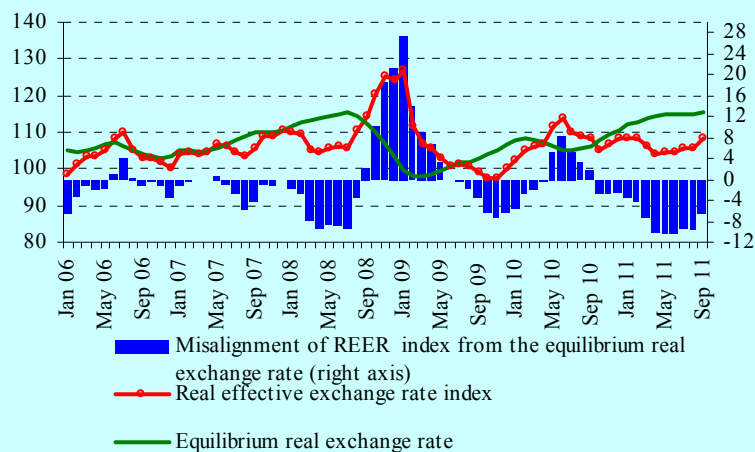
<b>RER = 3.07 + 0.21TOT – 0.03NFA_PROD + 0.14GREAL</b>
(4.69)      (-1.27)      (5.71)

*Note: statistical significance of each indicator is shown in round parenthesis. All variables are presented in logarithms.*

*Source: NBRK*

Figure 1

### Misalignment of the real effective exchange rate index



*Note: the misalignment of foreign exchange rate is determined as deviation of real effective foreign exchange rate (REER) from its equilibrium level*

The results of the model obtained show that in September 2011 the REER remained underestimated within 6% limits as compared to the equilibrium value. In this regard the highest misalignment of the REER index from the real equilibrium exchange rate was achieved in May (underestimation of 9%). During the period from July till September 2011 there was observed an actual closing of the REER actual and equilibrium values (Figure 1).

<sup>3</sup> ADB Economics Working paper series №151 «Equilibrium real exchange rate, misalignment, and export performance in developing Asia», March, 2009.



### Forecast of the Balance of Payments for 2011-2014

#### Base scenario with the oil price of USD 80/bbl in 2012 and USD 70/bbl in 2013-2014

In the forecast base scenario the balance of the current account in the forecast period is expected to be within the limits from -1.5% till 0.5% to GDP. Surplus of balance of trade will amount to USD 20-26 bln., which is partially evened by the payment of income to the foreign investors.

Capital and finance account deficit (including “Errors and Omissions”) will be reduced due to decline in the direct investment inflow to Kazakhstan, mostly due to phase-down of investments in the North Caspian Project and decrease in the rate of accumulation of the NFRK external assets.

As a result, it is assumed that the total balance of payments will be formed with a negative balance of from -2% to 0.5% to GDP and the NBRK international reserves will decrease accordingly. At the same time the international reserves will be preserved at the level above the one baseline minimum covering at least 3 month import of goods and services.

#### Pessimistic scenario with an oil price of USD 40/bbl

It is expected that the current account deficit in the forecasting period will not exceed 5%. Significant shrinkage of export of goods resultant from the fall in global prices will be leveled by the material decrease in the import of goods due to slowdown of economic growth and reduction in the economic revenues as well as decrease in revenues paid to the non-residents.

Despite the substantial worsening of the global market environment and inaccessibility of external capital markets, the first years of the forecasting period will see the significant amounts of foreign investments in Kazakhstan’s economy, provided predominantly at the expense of the contracts signed before, including those signed for the purpose of financing of the projects under the State Program on Forced Industrial-Innovative Development Program of Kazakhstan (SPFIID). Under the conditions of decrease in the net revenues to the NFRK and preservation of the level of a guaranteed transfer to the national budget, the inflow of funds from the NFRK external assets will be observed in the period under review. Combination of the above-mentioned factors will allow preserving a positive balance of the capital and finance account.

As a result, in 2012-2014 the deficit of the total balance of payments will not exceed 2.5% of GDP, which allows preserving the international reserves at the level sufficient to finance the export of goods and services.

At the same time the probability of scenario, in which the oil price will drop up to USD 40/bbl and be preserved at this level for the period more than one year, looks remote.

#### Optimistic scenario with an oil price of USD 100/bbl

Under the optimistic scenario, the positive effect is expected from the corrective measures undertaken in the global economy and preservation of the trends that commenced in 2011. In this case the significant export revenues will be leveled by the increase in revenues paid to the non-residents and growth in demand for import. Therefore, the current account surplus in 2012-2014 will be within the limits of 2.0% - 4.0% of GDP.

Growth of deficit is expected with regard to the capital and finance account (including “Errors and Omissions”) mostly due to increase in the rate of accumulation of the NFRK external assets.

As a result, it is expected that during the entire forecasting period the total balance of payments will be within the limits from -0.5% to 1.0% of GDP, which will allow preserving the NBRK international reserves at the level of the end of 2011.

Forecast of Kazakhstan Balance of Payments for 2011-2014, USD bln (as at November 2011)												Table 1
	2010	2011 estimate	2012 (forecast)			2013 (forecast)			2014 (forecast)			
			1 scenario	2 scenario	3 scenario	1 scenario	2 scenario	3 scenario	1 scenario	2 scenario	3 scenario	
A. Current account	3	40947	-7.6	0.9	41097	-7.4	-2.8	41065	-6.4	-2.9	41157	
in % to GDP	2	41064	-4.9	0.5	41124	-4.5	-1.3	41031	-3.7	-1.2	40970	
Balance of trade	29	39	13	26	39	12	21	36	13	21	36	
Export (fob)	61	78	43	66	81	44	63	82	44	65	8	
Import (fob)	-32	-40	-30	-40	-42	-31	-42	-46	-31	-44	-49	
Balance of services	-7	-5	-6	-6	-6	-6	-6	-6	-5	-6	-6	
Balance of income and transfers	-19	-26	-15	-20	-25	-14	-18	-25	-14	-17	-24	
B. Capital and finance transaction account*	41091	-6	41124	-2.7	-6.3	41094	-1	-6.2	41035	0.5	-4.7	
B-1. Capital and finance transaction account (except for short-term capital)	41092	-1.2	40976	41002	-1.4	41096	0.8	-4.2	41159	41122	-3.4	
Direct investments (net)	3	8	6	6	6	4	5	5	4	4	5	
Portfolio investments **	9	-11	0	-6	-11	3	-4	-11	3	-4	10	
Other long-term investments (net)	-9	2,0	2	3	3	0	1	1	1	1	2	
B-2. Short-term capital ***	-0.9	-4.8	-4.5	-6.1	-4.9	-2	-1.9	-2	-1.4	-1.3	-1.3	
C. Total balance	41094	40941	-3.9	-1.8	40969	-2.8	-3.8	-0.6	0.1	-2.4	40940	
in % to GDP	40942	40940	-2.5	-0.9	0.7	-1.7	-1.8	-0.3	0.04	-1,0	0.5	
NBRK reserve assets	-4.7	-2.2	41155	41122	-1.3	41123	41124	0.6	-0.1	41001	-1.2	
For reference only:												
Oil prices (USD/bbl)	80	0	40	80	100	40	70	100	40	70	100	
GDP (real growth, in %)	107	107	100	107	107	101	107	107	102	107	107	
GDP (USD bln)	148	179	155	195	201	164	213	224	176	238	252	
Note: * including errors and omissions												
** including assets of the National Fund												
*** including derivative, capital transfers and errors and omissions												

### 2.1.3 Public Finance Risks

*Despite of rather favorable level of prices in commodity markets and positive dynamics in the economic growth, no reduction of the “non-oil” deficit of the state budget till the pre-crisis level has occurred*

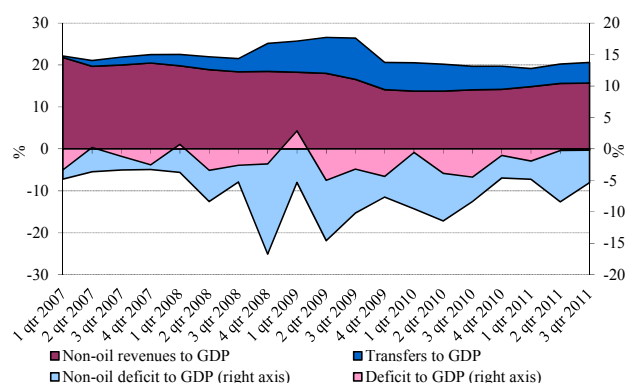
Under the conditions of the economic growth and favorable situation in the global commodity markets in the 1<sup>st</sup> – 3<sup>rd</sup> quarters of 2011, there was observed the increase in the state budget revenues, which grew by 33% as compared to the same period of 2010 mainly due to the revenues and transfers from the NFRK. It is also necessary to mention the positive effect of the Customs Union functioning on the revenue side of the state budget: according to the results for 9 months of 2011 the taxed on the international trade and external transactions increased almost by 2.9 times compare with the same period of 2010.

At the same time the middle-of-the-road policy of the public expenses increase continued. Thus, the growth in costs for 9 months of 2011 was 17% on the YoY basis. In this case the current expenses are growing at a higher rate than the capital costs, which has been caused by the social orientation of the state budget.

The relative parameters of the state budget demonstrate even higher dependence on the oil revenues as compared to the pre-crisis period.

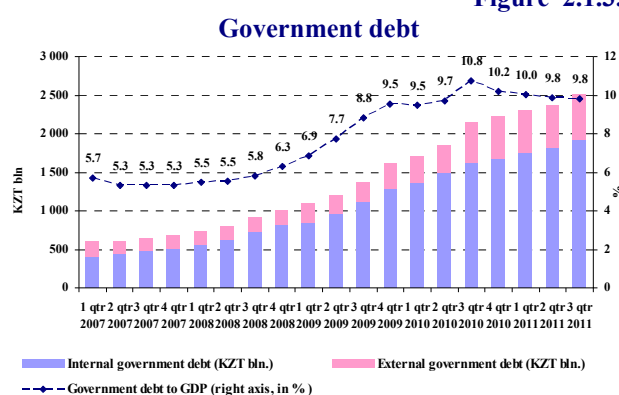


**Figure 2.1.3.1**  
**Parameters of the state budget**



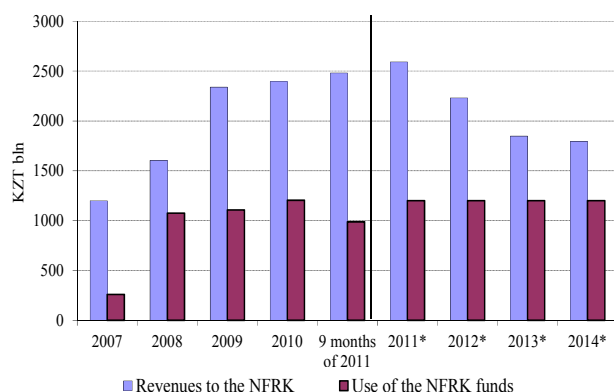
Note: \* less transfers from the NFRK  
Source: MoF, ASRK, NBRK calculations

**Figure 2.1.3.2**



Source: MoF, ASRK, NBRK calculations

**Figure 2.1.3.3**  
**Revenues and use of the NFRK funds**



Note: \* MEDT forecast  
Source: MoF, MEDT

2012-2014, which will be aimed at growth of the fiscal revenues through increase of the tax revenues and fixed use of the NFRK funds that should promote decrease of the non-oil deficit.

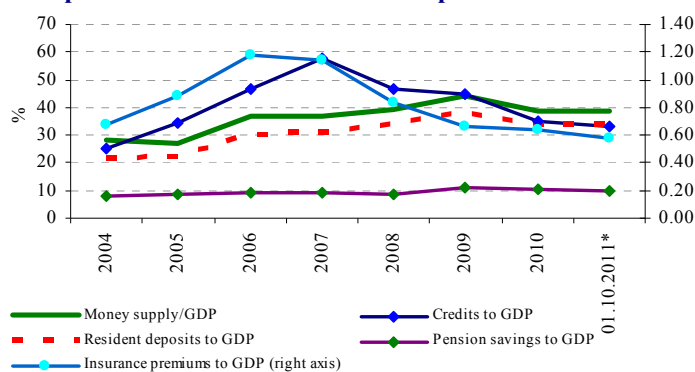
The non-oil deficit existed at the level of -6.2% of the GDP as at the end of the 3<sup>rd</sup> quarter 2011 (0.3% as of the end of the 3<sup>rd</sup> quarter of 2006) was financed through increase of the transfers from the NFRK, which, as a result, allowed decreasing the budget deficit to the minimum value -0.2% of the GDP (Figure 2.1.3.1).

In 2011 there was observed the increase of the government debt due to growth of the social expenses and implementation of large investment projects with participation of the government. In this regard the target projects were financed in many cases at the expense of the external borrowings from the international financial organizations. Starting from 2009, one could observe a significant increase in the amount of external loans that the Government attracted from the international financial organizations to implement the international project to build a motor transport corridor “Western Europe – Western China”; the estimated cost of Kazakhstani section being KZT 825.2 bln. The forecasted amount of the external borrowings from the international financial organizations required to implement this project is USD 3.4 bln. Thus, despite increase of the government debt, no worsening of the relative debt parameters has occurred (Figure 2.1.3.2).

During 2008-2011 the high oil prices promoted to increase of the oil revenues to the NFRK. Moreover, the high level of the NFRK funds employed, on the one hand, ensures coverage of the non-oil deficit and, on the other hand, preserves the state budget exposure to the risks associated with the volatility of the oil prices in the long run. According to the MEDT, decline in the global oil prices in 2012-2013 will reduce revenues to the NFRK (Figure 2.1.3.3). At the same time, in order to increase the fiscal stability it is assumed to pursue a policy of the budget balance and NFRK in

## 2.2 Structure of the Financial Sector and Concentration Risks

Figure 2.2.1  
"Depth" of financial relations development in Kazakhstan



Note: GDP data are shown on YoY basis

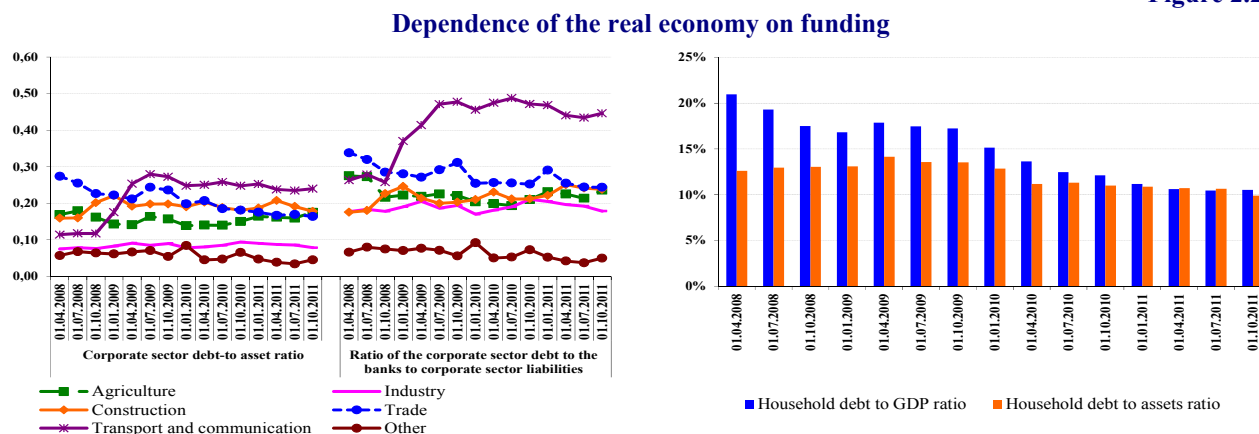
Source: FSC, ASRK, NBRK calculations

the background of the GDP growth. An important factor of decrease in the "depth" of the financial relations development is completion by the banks of the process of application of funds that the Government has allocated for development of the priority industries as a part of the bailout package. Thus, with the moderate growth of the lending activity being observed, the ratio of loans to GDP decreased from 34.8% in December 2010 to 33.2% in September 2011 and the ratio of money stock to GDP decreased from 38.8% to 38.7% during the same period. Observed was also minor reduction in the ratio of the pension assets to GDP – from 10.3% to 9.9% and decrease of the insurance premiums to GDP ratio from 0.6% to 0.5% (Figure 2.2.1). Synchronization of the monetization indicators reduces, in general, the risk of arising of imbalances in funding, which also affects the leveling of the loans-to-deposit ratio in the banking system.

In this regard, the low level of use of the borrowed funds is characteristic of Kazakhstani economy. In fact, the debt-to-asset ratio does not exceed 30%; moreover, the share of liabilities to the banks in the aggregate liabilities of the majority of industries (except for the transport and communication) varies in the 20%-30% range. Standing out of the pack the high level of the debt financing of transport and communication takes place mostly due to implementation of the infrastructure projects as a part of the state programs for support of the priority industries within the frameworks of the bailout package. Thus, if in the 3<sup>rd</sup> quarter of 2008 the ratio of the debt to the banks of the transport and communication enterprises to their liabilities was 0.26, then by the end of September 2011 this indicator increased up to 0.45.

Financing of the household consumption by the banks also remains relatively low. In this case, the tendency "to consume on credit" during the crisis period declined: while the household debt-to-GDP ratio was 15% at the end of 2009, then based on results for 9 months of 2011 this indicator dropped to 11% (Figure 2.2.2).

Figure 2.2.2



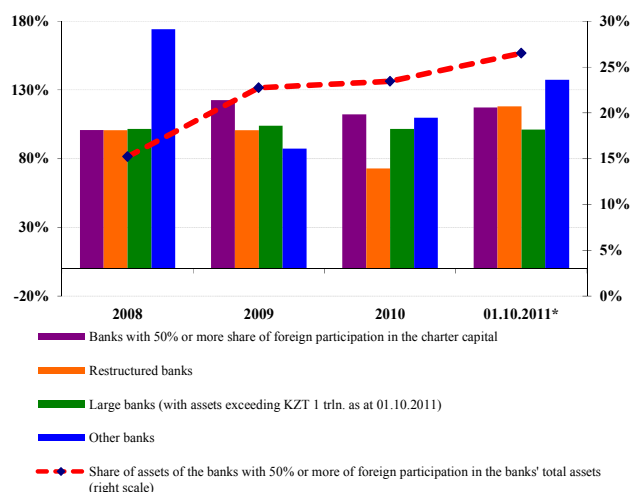
Source: ASRK, NBRK calculations

**Factors determining the lending activity of the banks.** According to the results for 9 months of 2011 the highest growth rates of the loan portfolio were demonstrated by the banks with more than 50% share of foreign participation in the equity, which have underwent restructuring of liabilities, as well as middle- and small-size banks<sup>4</sup>: growth rates for said groups of banks amounted to 17.2%, 18% and 37.3%, respectively (Figure 2.2.3).

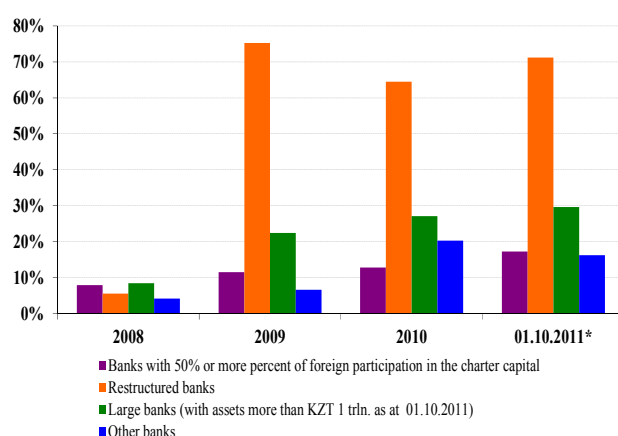
The quality of loan portfolio still remains one of the key factors determining the lending activity of the banks. Low quality of the loan portfolio of the major banks has a disincentive impact on their credit policy. Only small banks have managed to improve quality of their loan portfolios: based on results for 9 months of 2011, a share of doubtful loans of the 5<sup>th</sup> category and bad loans in the loan portfolios of said banks was 16.2% as compared to 20.3% as of the end of 2010.

As the experience of 2009-2011 shows, the banks with a dominant foreign participation (50% and more) in the charter capital demonstrate the most stable activity in the credit market largely in virtue of the higher quality of the current loan portfolios as well as availability of the more stable financing sources from the parent banks (Figure 2.2.4).

**Figure 2.2.3**  
**Dynamics in the loan portfolio growth rates by groups of banks**



**Figure 2.2.4**  
**Dynamics in the share of the doubtful loans of the 5<sup>th</sup> category and bad loans in the loan portfolio by groups of banks**



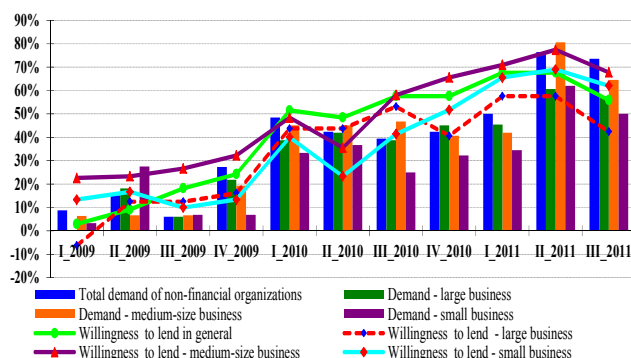
Source: FSC, NBRK calculations

In general, the banks note the higher demand on the part of the population and corporate sector. According to the evidence obtained from the banks as a part of the survey “The State and Forecast of the Credit Market Parameters”<sup>5</sup>, in 2011 one could observe the growth in demand for the credit resources caused by normalization of economic conditions. At the same time the respondents noted that the main factor impeding granting of new loans was rather tough credit policy of the banks themselves and high interest rates on loans. Therefore, the banks are not ready to satisfy the growing demand for all groups of borrowers. Under such conditions the banks’ price and non-price competition for the most qualitative borrowers toughens (Figure 2.2.5).

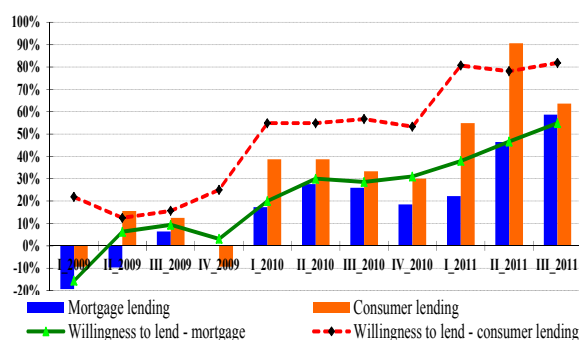
<sup>4</sup> Banks with assets less than KZT 1 trln, as of October, 1<sup>st</sup> 2011

<sup>5</sup> Survey is providing by NBRK quarterly, results are published on the site [www.nationalbank.kz](http://www.nationalbank.kz).

**Change in the demand for and supply of credit resources, % of respondents (corporate sector)**



**Figure 2.2.5**  
**Change in the demand for and supply of credit resources (market of loans for individuals), % of respondents**



Note: results are presented in the form of net percent change calculated as the difference of % of respondents that mentioned increase / easing of one or another parameter, and % of respondent that mentioned decrease/toughening of one or another parameter

Source: second-tier banks, NBRK calculations

**Structural parameters of the financial sector.** The year 2011 witnessed the decrease in the number of financial organizations in the majority of the financial sector segments caused by toughened regulatory requirements, on the one part, by increased competition in these segments of the market inciting exit of the weakest and least effective players (Table 2.2.1).

**Table 2.2.1**  
**Structure of the financial sector**

	(units)					
A number of financial institutions	01.01.2007	01.01.2008	01.01.2009	01.01.2010	01.01.2011	01.10.2011
Banks	33	35	37	38	39	39
Insurance organizations	40	41	44	41	40	38
Professional participants of the securities market <sup>1</sup> , including:	147	208	213	172	153	144
Accumulation pension funds	14	14	14	14	13	11**
Traders	1	1	1	1	1	1
Mortgage organizations	10	12	12	7	6	4
Organizations that carry out certain types of banking operations	15	22	21	8	8	9

Note: <sup>1</sup>A number of valid licenses to carry out operations in the securities market. The indicator expresses an aggregate number of brokers-dealers, registrars, pension asset management organizations, investment portfolio managers, custodians and transfer agents

\*\*A number of the operating funds, "APF "Amanat-Kazakhstan" JSC is under liquidation

Source: FSC

As a result, during three quarters of 2011 a minor decrease in the concentration was observed in the banking and insurance segments, while the concentration level in the pensions segment increased. Concentration of these segments occurred due to different causes:

A. Decrease of the market shares of the largest banks ("Kazkommertzbank" JSC, "BTA Bank" JSC, "Halyk Bank of Kazakhstan" JSC "ATF Bank" JSC and "Bank CenterCredit" JSC) has been caused by the lower credit activity thereof as compared to the middle- and small-size banks, which is stipulated by the lower quality of the assets of the large banks in general.

B. Increase in the concentration level of the insurance market has resulted from the exit of a number of weak market players due to toughening of the competitive environment.

C. Increased competition in the APF sector has taken place due to takeover of two small pension funds by the large players (Table 2.2.2).

Table 2.2.2

## Share of five largest financial institutions (in terms of assets) in each segment

(in %)

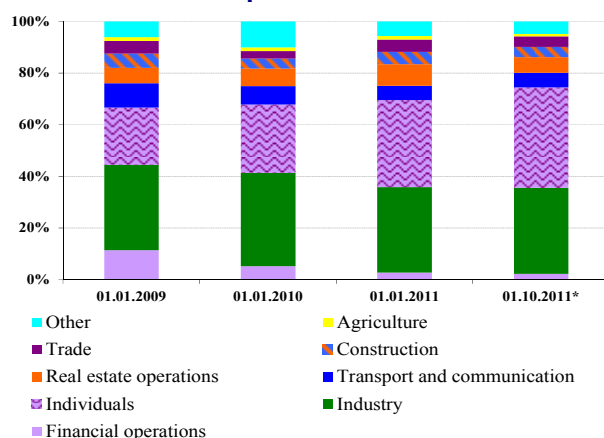
Indicator	As of 1.01.2009	As of 1.01.2010	As of 1.01.2011	As of 1.10.2011
<b>Second-tier banks by lending to the following industries:</b>				
legal entities	84.4	85.78	82.97	81.01
individuals	66.46	60.21	57.3	54.63
consumer loans of individuals	73.05	54.74	43.93	42.12
loans for construction and purchase of dwellings by individuals	63.14	61.28	66.11	63.6
mortgage residential loans for individuals	63.96	60.47	62.68	60.77
construction	87.85	91.45	86.61	87.38
trade	79.18	80.15	73.53	70.89
Share of five largest banks (in terms of assets)	74.03	73.88	71.83	66.56
<b>Insurance (reinsurance) organizations in the following industries:</b>				
general insurance	57.16	55.59	57.60	59.60
life insurance	83.04	85.97	87.00	86.50
<b>Accumulation pension funds</b>				
in terms of pension assets attracted	78.12	76.01	76.73	81.48

Source: FSC, NBRK calculations

**Sector concentration of the insurance market.** In a sign of decrease of the insurance market capacity caused by the deterioration of the general economic conditions in the country in 2008-2010, there has been observed the increase in the share of the insurance premiums from insurance of the individuals. Thus, the proportion of the individuals' insurance premiums in the total amount of the insurance premiums increased from 33.7% in 2010 to 38.9% according to the results as at September 2011. The growth of this indicator is explained by the predominant development of the obligatory social insurance in the country. The share of insurance premiums received from the industrial enterprises in 2010-2011 was stable at the level of 1/3 of the aggregate amount of the insurance premiums (Figure 2.2.6). There was also observed the decrease in the share of the insurance premiums received from the financial organizations, which decrease has been mostly due to decline in the volume of insurance of the banking lending transactions. In this regard, notable is the interrelation of the bank lending activity and profitability indicators of the insurance companies, which are the part of the bank conglomerates, which is explained by growth of the so-called "package" sales of the financial products (Figure 2.2.7).

Figure 2.2.6

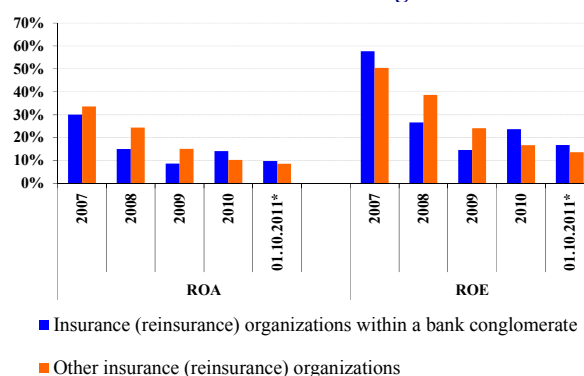
## Dynamics of the share of insurance premiums by types of economic activity in the total amount of insurance premiums



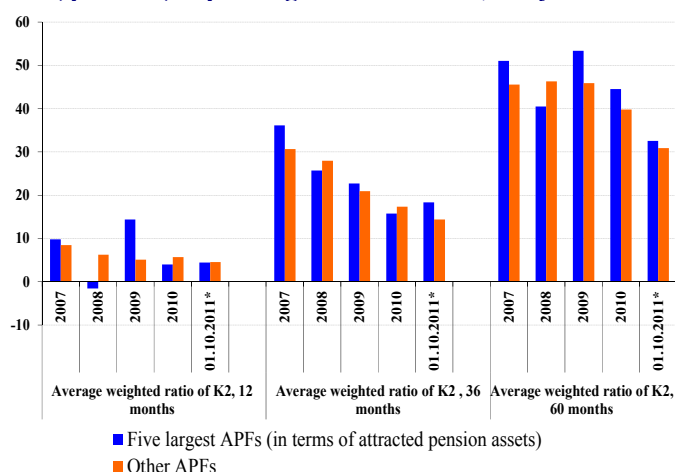
Source: FSC, NBRK calculations

Figure 2.2.7

## Dynamics of profitability ratios of insurance (reinsurance) organizations depending on their affiliation with a bank conglomerate



**Figure 2.2.8**  
**Distribution of profitability ratios of APFs by groups (quartiles) depending on the APF size, in dynamics**



Source: FSC, NBRK calculations

**Efficiency of the operation of the APFs.** In 2011 the trend towards decline in the APF average weighted profitability ratio for 5 years continued, which was due to unfavorable financial market conditions. Thus, the value of the average weighted profitability ratio for five largest pension funds dropped from 44.5% to 32.5%, and that of other pension funds decreased from 39.7% to 30.9%, respectively (Figure 2.2.8).

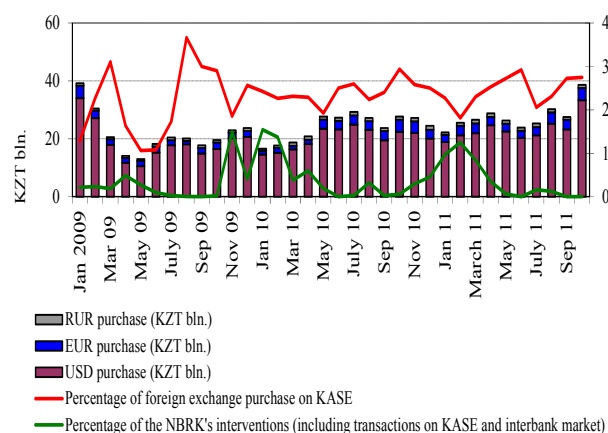
Notable remains the fact that five largest pension funds demonstrate the higher effectiveness as compared to other APFs. This fact is confirmed by the value of the average weighted K2<sup>6</sup> for 12, 36 and 60 months for the largest APFs.

## 2.3 State of the Financial Markets

### 2.3.1 State of the Foreign Exchange and Money Markets

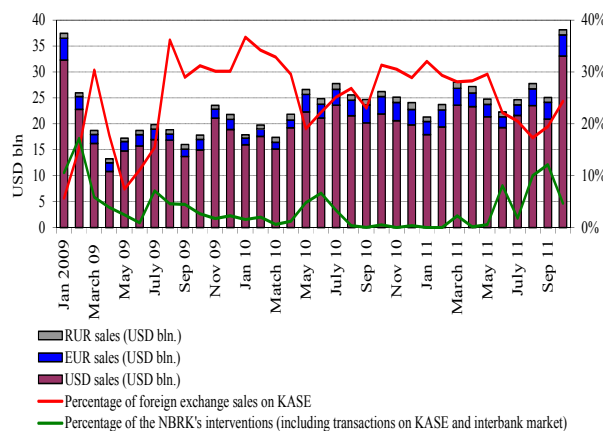
*Situation in the domestic foreign exchange market and behavior of its participants still remains dependant, to a significant extent, on the foreign economic environment and exchange rate policy pursued by the NBRK. In this case the key factor that determined the foreign currency demand and supply on the part of the economic entities in 2011 included the foreign economic activity of Kazakhstan enterprises as well as uncertainty of economic expectations with regard to the economies of the USA and EU. Volatility in the external markets promoted devaluation expectations in the second half of 2011. At the same time, with due account of the foreign exchange purchase and sale transactions carried out by the NBRK in 2011, the foreign exchange policy, based on the results for the year, was neutral.*

**Figure 2.3.1.1**  
**Volumes of the foreign exchange purchase by the banks**



Source: NBRK

**Figure 2.3.1.2**  
**Volumes of foreign exchange sales by the banks**



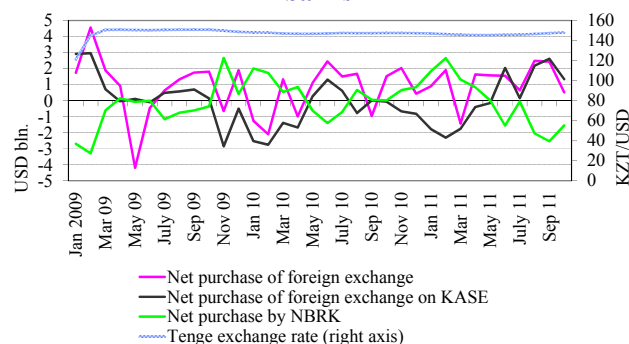
Source: NBRK

<sup>6</sup> Calculated in accordance with the clause 18 of the Chapter 3 of the Resolution of the Agency of the Republic of Kazakhstan for Regulation and Supervision of the Financial Market and Financial Organizations "On Approval of the Instruction Concerning Normative Values of the Prudential Norms, and Methods of Calculation thereof for the Organizations Carrying out Pension Asset Investment Management" No. 181 of 5 August 2009. .



Relatively favorable conditions in the global commodity markets and high level of the foreign economic activity of Kazakhstan enterprise stipulated certain growth of the total turnover of the foreign exchange market in 2011. In this regard, the NBRK, in order to sterilize the excessive offer of the foreign currency, was forced to make substantial interventions for purchase of the foreign currency at Kazakhstan Stock Exchange during the first five months of 2011.

**Figure 2.3.1.3**  
**Volumes of net purchase of foreign exchange by the banks**



Source: NBRK

Eurozone's economies triggered the growth for USD demand in August 2011. Under such circumstances, the NBRK was forced to carry out the large-scale interventions for the foreign currency sale from June to October in order to compensate pressure on the national currency exchange rate (Figure 2.3.1.3).

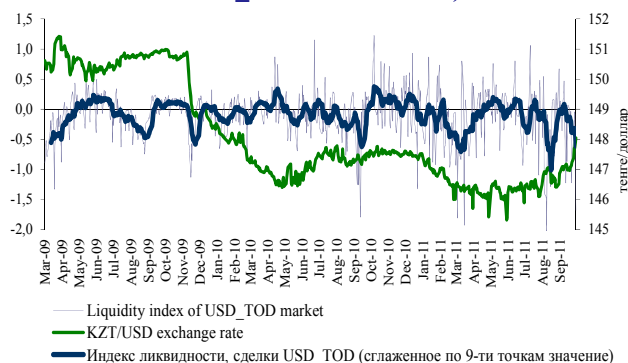
In general, during 9 months of 2011 a relatively stable situation was preserved in the foreign exchange stock market in terms of the liquidity change. Liquidity index<sup>7</sup> of the US dollar gives evidence of decline in the liquidity of the foreign exchange stock market during the period of speculative pressure on both the supply-side (February – March) and demand-side (August) due to increase of the average amount of transactions (Figure 2.3.1.4). Asymmetry index<sup>8</sup> of the foreign exchange stock market testified to moderate level of the speculative pressure on the market. In this case the NBRK participation through foreign exchange intervention has played an important role in decrease of tenge exchange rate volatility (Figure 2.3.1.5).

<sup>7</sup> Liquidity index in the USD exchange market was calculated by using series of normalized values of spread between the average weighted demand and supply prices, number of transactions, amount of an average transaction and the ratio of price differential between the first and the last transaction to the amount of the average transaction modulo. The following formula was used in the computation:  $\text{Liquidity index} = -\text{Spread} + (\text{Number of transactions} - \text{Average transaction})/2 - \text{Ratio of the of price differential between the first and the last transaction to the amount of the average transaction modulo}$ . It is assumed that the market is liquid to maximum when the spread is minimal, number of transactions is maximal, and the ratio of the price differential between the first and the last transaction to the amount of the average transaction is minimal. As part of this Report when building up an index a data series are used on the KASE trading (instrument USD\_TOD) for the period from 5.01.2009 to 30.09.2011. Series were normalized by dividing the difference between the actual value of the indicator and its average for the period by a standard deviation in a sample. The structure of the liquidity index includes the market resistance determined as the ratio of the price differential between the first and the last transaction to the amount of the average transaction.

<sup>8</sup> Asymmetry index is calculated as the difference between aggregate volumes of bids for USD purchase and sale divided by the aggregate volume of transactions in the market. This index is used to estimate the pressure on the price by the market players and allows assessing possible changes in the trend. Positive values indicate the pressure on price by demand and negative values – by supply.

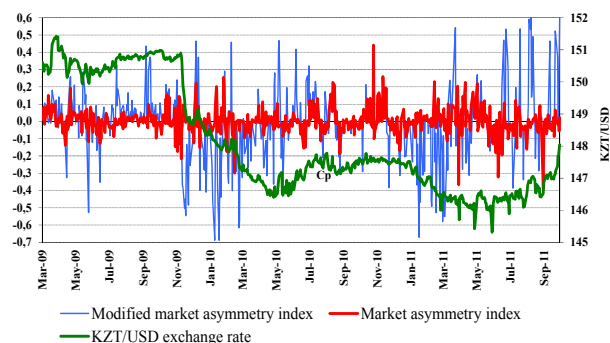
Modified asymmetry index is computed similar to asymmetry index but transactions and bids of the NBRK are not taken into account. The use of two indices allows assessing the role of the NBRK's interventions as the factor of shock absorptions.

**Figure 2.3.1.4**  
**Liquidity index of the USD stock exchange market (on USD\_TOD transactions)**



Source: KASE, NBRK calculations

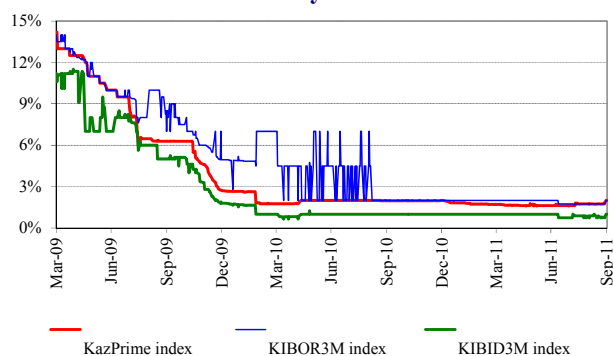
**Figure 2.3.1.5**  
**Skewness of the USD stock exchange market**



Source: KASE, NBRK calculations

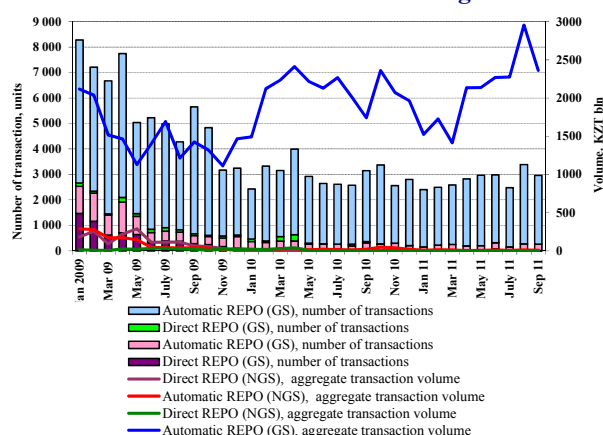
*High liquidity of the banking sector keeps determining the low cost of the borrowings in the money market.* Since 2011 the KazPrime index has not exceeded 2% (Figure 2.3.1.6). At the same time no significant changes have been observed in the REPO market; the total amount and number of REPO transactions for all sectors remain approximately at the level of 2010. In this

**Figure 2.3.1.6**  
**Interbank money market indices**



Source: KASE

**Figure 2.3.1.7**  
**Structure of the REPO stock exchange market**



Source: KASE, NBRK calculations

regard, the highest activity with relation to the REPO transactions is observed, as before, in the sector of automatic REPO with the government securities (Figure 2.3.1.7).

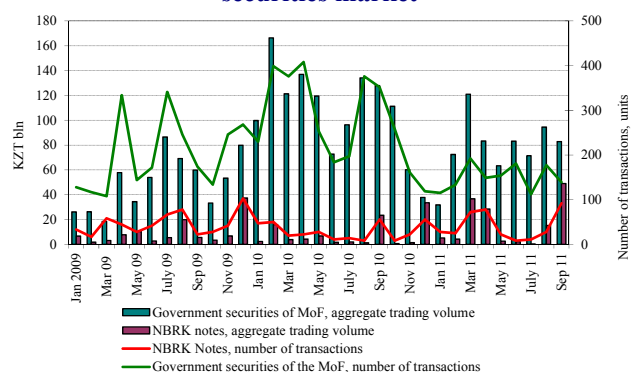
## 2.3.2 State of the Securities Market

*Dynamics of the securities market gives evidence of the continued conservatism of the investors and their intention to reduce risks through purchase of the government securities.*

During 9 months of 2011 a certain decrease of the amount of investments in the securities of the Ministry of Finance of the Republic of Kazakhstan (MoF) was observed on the YoY basis. Change in the trading volumes took place due to reduction in the amount of issues of the MF government securities, which was caused by shrinkage of the non-oil deficit and lowering the need to finance it at the expense of increase of the government debt. In this regard, during the first half of 2011 the NBRK increased the amounts of note issues with a view to tie the liquidity of the banks and prevent promotion of the inflation process. Therefore, there was a redistribution of the funds of investors in the government securities sector in favor of the short-term notes of the NBRK. At the same time, as a result of changes in the expectations concerning stability of the global reserve

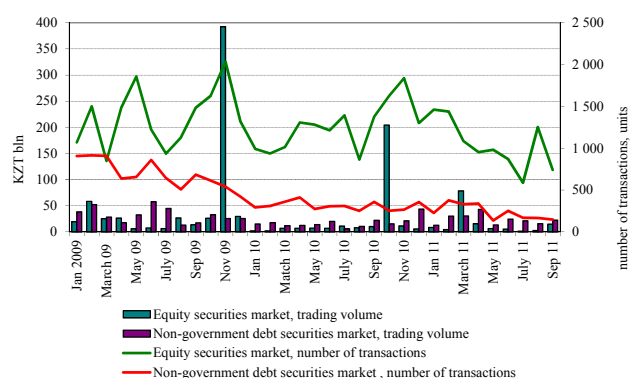


**Figure 2.3.2.1**  
**Dynamics of the total turnover of the government securities market**



Source: KASE

**Figure 2.3.2.2**  
**Dynamics of the total turnover of the non-government securities market**

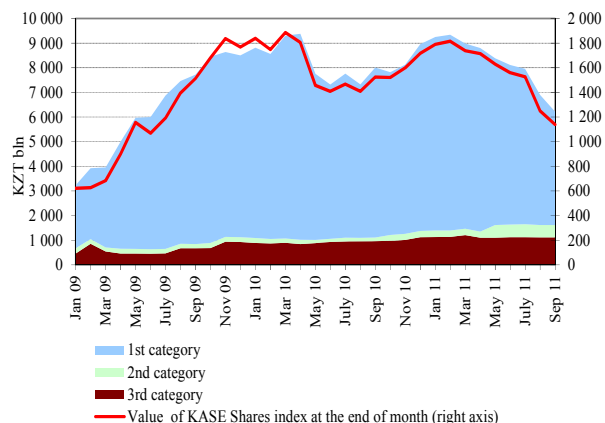


Source: KASE

related to unstable situation in the European countries (Figure 2.3.2.3).

Jump-type growth of capitalization of the debt securities market in December 2010 – February 2011 (from KZT 3 trln to KZT 5.7 trln.) was caused by the issues of bonds by some large corporate issues, including “Development Bank of Kazakhstan” JSC. Once the level of KZT 5.7 trln. was achieved, no sharp fluctuations of this indicator was observed during 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2011 (Figure 2.3.2.4).

**Figure 2.3.2.3**  
**Capitalization and yield of the equity securities market**

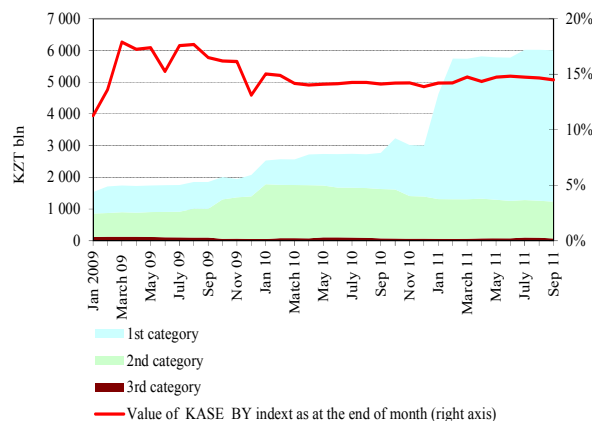


Source: KASE

currencies, the NBRK started to act as a net seller of the foreign currency, which was accompanied by the decrease of the number of outstanding notes. In this case, the aggregate turnover of the market decreased a bit: while the trading volume in the government securities segment for January-September 2010 was as high as KZT 1,136.2 bln., it decreased to KZT 847.3 bln. for the same period of 2011 (Figure 2.3.2.1).

There was a growth in the aggregate trading volume in the stock exchange market of non-government securities: for 9 months of 2011 the trading volume increased up to KZT 349.8 bln., which was almost twice as large on the YoY basis (Figure 2.3.2.2). It is necessary to note that large amounts of transactions in October 2010 and March 2011 were due mostly to trading of the common shares of “Kazakhmys” JSC and preferred shares of “Exploration and Production “KazMunayGas” JSC. These tradings stipulated the growth of capitalization of the equity securities market during the period from December 2010 till February 2011. Subsequently this indicator went down significantly (from KZT 9.2 trln. in January to KZT 6.2 trln. in September) due to uncertainty of the investors’ expectations

**Figure 2.3.2.4**  
**Capitalization and yield of the non-government debt securities market**



Source: KASE

### III. Risks of the Financial Intermediation Institutions

#### 3. Risks of the Banking Sector

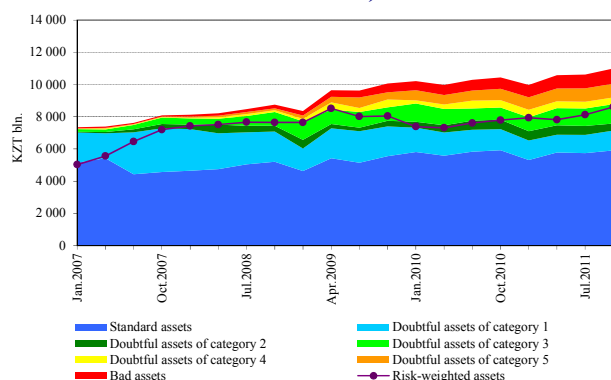
##### 3.1 Risk Profile of the Banking Sector

*Low quality of assets caused by materialization of credit risk in 2008-2010 and low volumes of replacement of problem loans by new loans still represent a major problem of the banking sector. Alongside with that, a high liquidity level of banks and their conservatism in lending are the factors causing the decreased profitability of banks.*

*At the same time, a high liquidity level and adequate capitalization of banks (except those that had undergone their debt restructuring in 2009-2010) allow the system to absorb the shocks which may arise as a result of a “new wave” of the global financial crisis. In the meantime, the policy of banks to maintain hyper-liquidity may have a negative impact on the return on bank assets in the short run.*

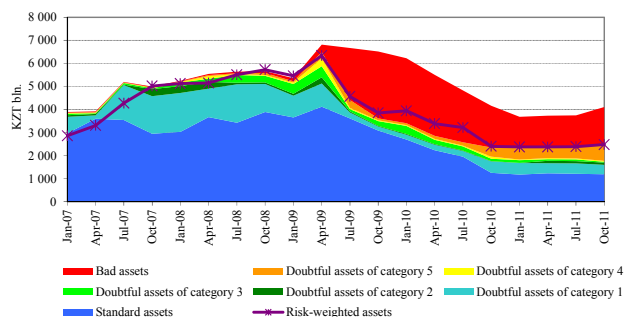
The growth in the total volume of assets of banks which was observed in 2010-2011 (except those banks that had undergone their debt restructuring<sup>10</sup>) was accompanied by the deterioration in their quality. The dynamics in the quality of assets and contingent liabilities were primarily determined by migrations of loans in the credit portfolio from the higher classification categories to the lower ones. So, during 9 months of 2011

**Figure 3.1.1**  
Assets and contingent liabilities and risk-weighted assets of banks (excl. banks which completed restructuring of liabilities)



Source: FSC

**Figure 3.1.2**  
Assets and contingent liabilities and risk-weighted assets of banks (in banks which completed restructuring of liabilities)



Source: FSC

there was a growth in assets classified as assets of categories 3 and 5 and bad assets by 38.5%, 11% and 23%, respectively, within classified assets and contingent liabilities of banks (except those banks that had undergone their debt restructuring). At the same time, there was a decline in the volume of assets and contingent liabilities of the 2<sup>nd</sup> category – by 24% and the 4<sup>th</sup> category – by 11%. The main reasons for the deteriorated quality are:

a) deterioration in the financial condition of borrowers (migration of loans from the category of standard loans and category 1 to the 3<sup>rd</sup> category);

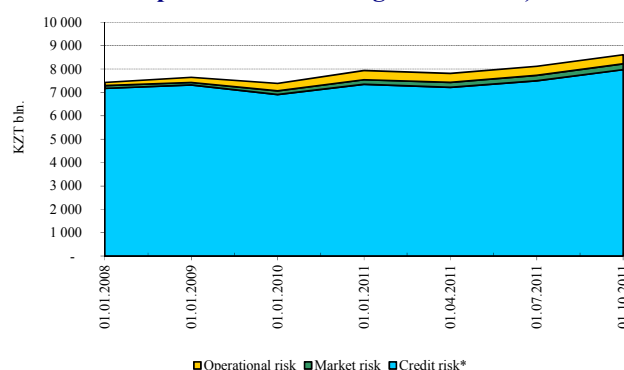
b) increased overdue debt (migration of loans to the 5<sup>th</sup> category and category of bad loans).

The deteriorated quality of the loan portfolio and decreased volumes of cash flows as a result of delinquencies on problem loans are offset by maintaining the so-called “performing portfolio”<sup>11</sup> which includes cash generating assets (appr. KZT 8 bln.) at the same level. Meanwhile, banks try to avoid writing off bad assets (Figure 3.1.1).

<sup>10</sup> JSC “BTA Bank”, JSC “Alliance Bank”, and JSC “Temirbank”.

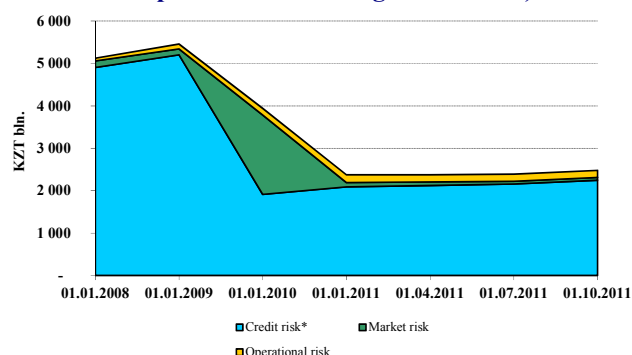
<sup>11</sup> Includes standard assets and classified assets of categories 1-3.

**Figure 3.1.3**  
**Components of risk-weighted assets (excl. banks which completed restructuring of liabilities)**



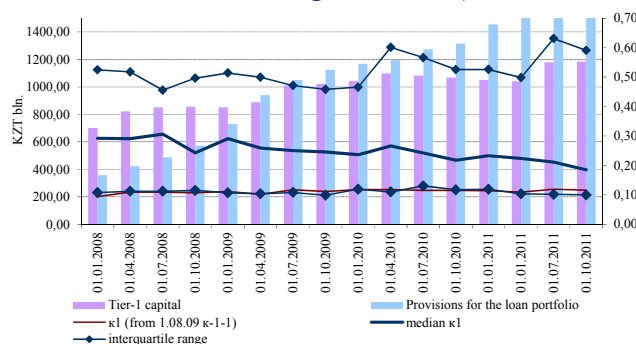
Source: FSC

**Figure 3.1.4**  
**Components of risk-weighted assets (in banks which completed restructuring of liabilities)**



Source: FSC

**Figure 3.1.5**  
**Capital adequacy ratio (excl. banks which completed restructuring of liabilities)**



Source: FSC

and its ability to absorb shocks. Thus, in the banking sector as a whole (excluding banks which had undergone their debt restructuring) the k1-1 ratio was 0.114 with its standard regulatory value of 0.06 as of October 1, 2011 (Figure 3.1.5). This fact is also supported by the conducted stress-testing (Box 3).

The total volume of assets of banks that had completed their debt restructuring decreased during April 2009 - October 2011 from KZT5 332.6 bln. to KZT 2 485.6 bln. due to the revaluation of significant volume of assets and their writing off. Meantime, there was a dramatic increase in the share of non-performing assets and contingent liabilities: the share of assets of category 5 and bad assets increased from KZT 751 bln. to KZT 1806 bln. during the period, mainly as a result of detection of a number of violations of regulatory requirements in the process of asset placements and their subsequent classification. Based on the conducted audits, BTA Bank had to recover a part of assets written off in the second quarter of 2011 in order to ensure consistency of its financial statements with the IFRS. This resulted in the undercapitalization of the bank (Figure 3.1.2).

Risk-weighted assets of banks (excluding the restructured banks) increased by 13% from the beginning of the year mainly due to the growth in credit risk-weighted assets. The growth in credit risk-weighted assets and contingent liabilities occurred primarily as a result of the growth of the bank credit portfolios in the absence of bad loan write offs (Figure 3.1.3).

A dramatic drop in risk-weighted assets in the three banks which had undergone their debt restructuring during 2009-2010 was related to revaluation of assets and contingent liabilities and their subsequent writing off because of the violation of the banking legislation. So, in 2009 and in 2010 the decrease in risk assets of the three banks accounted for 39% and 66%, respectively (Figure 3.1.4).

A high capitalization level of banks speaks for the strength of the banking sector

### Box 3

#### Stress-testing

With a view to assess vulnerability of banks, the NBRK has conducted the stress-testing as

of 01.10.2011 and as a projection to the 3<sup>rd</sup> quarter of 2012. A multifactor portfolio model and the model based on the panel data<sup>12</sup> was used for stress-testing. The first model has the following advantages:

- assessment of the change in the loan portfolio by economic sectors taking account of relationship within the sectors, which allows assessing the impact of macroeconomic parameters on the credit risk of banks;
- consideration of the systemic and specific risk.

However, one of its disadvantages is a possible underestimation of losses because of the change in the real estate prices which also have impact on the loan portfolio of banks but are not used as a model variable. Thus, in order to assess the impact of the change in the real estate prices, the second model is used. The advantage of the second model is the consideration of the impact of the real estate prices and the Kazakhstan's GDP on the loan portfolio of banks. Its disadvantage is a possible underestimation/overestimation of losses when charging to the bank's capital, because of the use of the average of the percentage of provisioning of the loan portfolio classified as doubtful loans of categories 2, 4, and 5 and bad loans over the period of qtr.1 2003 through qtr.3 2011.

The following assumptions are used in these models in the process of stress-testing:

- Assets, owners' equity and loan portfolio are assumed to be equal to the data at 01.10.2011 and remained unchanged until the end of the projection period.
- Risk-weighted assets remained unchanged during the entire period of stress-testing and are equal to the values at 01.10.2011 r. (the standard approach is used).

*Multifactor portfolio model:*

- The sectoral structure of credits and the probability of their default<sup>13</sup> remain unchanged throughout the entire projection period and will be equal to the value at 01.10.2011.

*Panel model:*

- The ratio of expenses to income of banks will be at the level of the 3<sup>rd</sup> quarter of 2011.
- Credits to the economy to GDP will be in line with the trend.

The stress-testing was conducted for 18 banks, whose share of assets accounts for 72.6% of total assets of banks and which provide credits to the sectors that are exposed to the shock (industry, construction and trade).

The main scenario is the change in the oil price (Brent) based on which the rest of the indicators are projected (Table 1).

**Table 1**

**Stress-testing Scenarios<sup>14</sup>**

Scenarios	Baseline	Stress	Shock
Oil price (Brent) (USD, average for the period)	Current trend – gradual decrease to USD105 in Q3 2012.	gradual decrease from Q4 2011 till Q3 2012 to USD40.	A drop in Q4 2011 to US40 and remaining so until Q3 2012.
<b><i>Multi-factor Portfolio Model</i></b>			
Nominal exchange rate (Tenge versus the US Dollar)	depreciation by 0.6%	decrease by 7.2%	decrease by 16.4%
Russia's GDP in 2003 prices (for the period, in RUR bln.)	growth by 5.2%.	insignificant growth by 0,1%	decrease by 3.6%
Kazakhstan's GDP in the "industry" sector	growth by 2%	decrease by 2.9%	decrease by 5%
Kazakhstan's GDP in the "construction" sector	growth by 14.9%	insignificant growth by 3%	decrease – 6.9%
Kazakhstan's GDP in the "trade" sector	growth by 7.1%	insignificant growth by 1.1%	decrease – 3.2%
<b><i>Panel Model</i></b>			
Kazakhstan's GDP (in 2005	growth by 6.8%	growth - 3.1%	growth by 1.0%

<sup>12</sup> The multifactor portfolio model for the stress-testing of banks was developed in cooperation with Deutsche Bundesbank, with the description of the model in IFO Working Papers No. 85 "Methodology of stress test for the Kazakh banking system", April 2010.

<sup>13</sup> The average of the share of classified loans as doubtful of category 5 and bad loans in the loan portfolio of banks is taken for the probability of default.

prices for the period, KZT bln.)			
Actual prices for real estate <sup>15</sup> (KZT)	decrease by 3.1%,	decrease by 9.3%	decrease by 17.3%

Source: NBRK

Three development scenarios are considered:

- baseline scenario where a current trend of the change in the oil price is reflected;
- stress scenario where a probable change in the oil price is anticipated given a possible second wave of the global crisis as well as the global recession and the drop in prices for raw materials;
- shock scenario where the extent of vulnerability of banks' capital under the unfavorable circumstances in the event of the worst-case scenario is assessed.

We should mention that the baseline scenario differs from those scenarios that were developed as part of the forecasts of social-economic development of Kazakhstan and Monetary Policy Guidelines of the NBRK. Moreover, the stress scenario is regarded as the main scenario for the assessment of deterioration in the banks' condition whereas the shock scenario shows a maximum possible hypothetical loss of capital and has solely theoretical value.

After the change in the indicators was analyzed, their impact on the credit risk of banks is assessed by making estimates of expected losses and reduction in capitalization. So, the number of

**Table 2**

**Number of banks\* which violated their capital adequacy ratios under the multifactor portfolio model**

	stress		shock	
	k2	k1-1	k2	k1-1
4 qtr. 2011	0	0	1	1
1 qtr. 2012	1	1 [1]**	3 [1]	2 [1]
2 qtr. 2012	2	1 [1]	7 [1]	3 [1]
3 qtr. 2012	4 [1]	3 [2] (2)***	9 [2]	10 [3]

**Number of banks\* which violated their capital adequacy ratios under the panel model**

	stress		shock	
	k2	k1-1	k2	k1-1
4 qtr. 2011	0	0	0	1
1 qtr. 2012	0	0	1	2
2 qtr. 2012	0	1	2	3 [ ]**
3 qtr. 2012	2	2 (3)***	11 [2]	10 [5]

Note: \*Derived for 18 banks;

\*\*The brackets show the number of banks which violated the capital adequacy requirement out of the total number of banks, with a negative value of the respective capital;

\*\*\* The parentheses show the number of banks whose capital adequacy ratio exceeds the required value but is close to it.

Calculations: by NBRK.

banks which violated capital adequacy ratios as the result of conducted stress-testing under the multifactor portfolio model and panel model are reflected in Table 2.

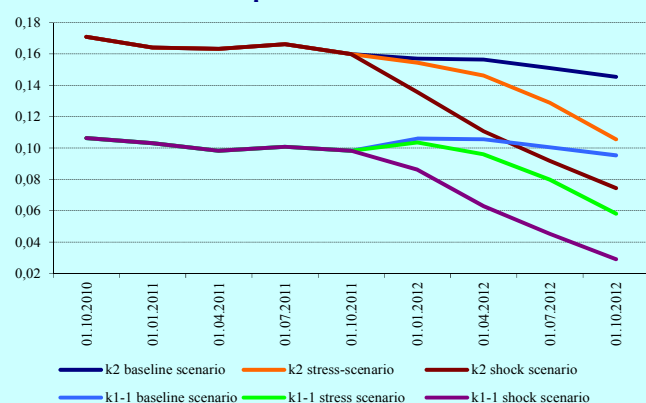
While assessing the results on 18 banks, we would like to mention that the losses of notional capital in the stress-scenario under the multifactor portfolio model account for 34% in annual terms, under the panel model – 24.6%, and in case of the shock-scenario – 53.4% and 60.1%, respectively, thus leading to a significant drop in the capital adequacy ratios. So, k2 in the stress-scenario under the multifactor portfolio model drops to 0.106 in the 3<sup>rd</sup> quarter of 2012, and under the panel model – 0.119. Meantime, k1-1 decreases to 0.058 and 0.072, respectively (Figure 1). In the shock scenario a k2 capital adequacy ratio at the end of the projection period is equal to 0.074 under the multifactor portfolio model, and to 0.063 – under the panel model. In this case the k1-1 is equal to 0.029 and 0.019, respectively.

<sup>14</sup> The changes are presented as the ratios of indicators for Q3 2012 to Q3 2011.

<sup>15</sup> Actual prices for real estate were derived as the ratio of the average of 4 prices divided by the CPI (the number for the 4<sup>th</sup> quarter of 2000 is taken as 100%).



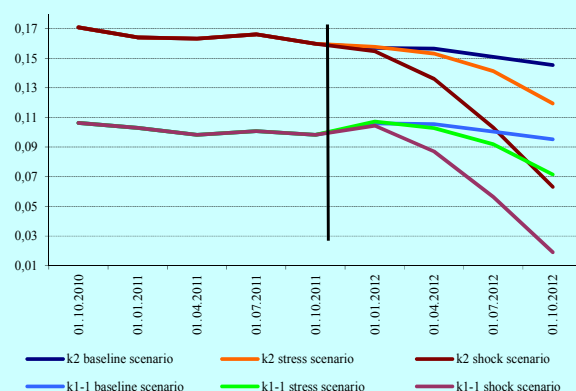
**The change in the capital adequacy ratios k2 and k1-1 under the multifactor portfolio model**



Note: Derived for 18 banks

Source: FSC, NBRK calculations

**Figure 1**  
**The change in the capital adequacy ratios k2 and k1-1 under the panel model**

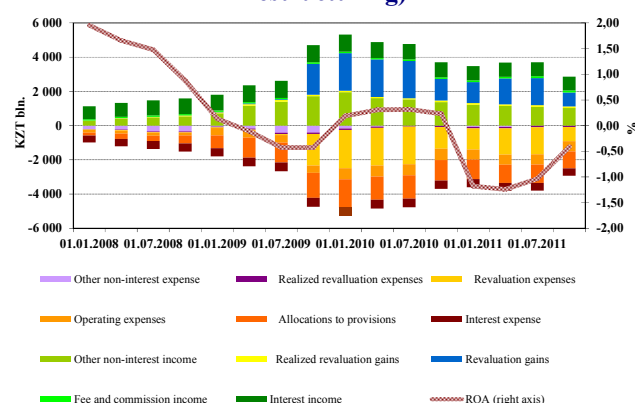


Thus, despite violations of the ratios by some banks, in case of the stress-scenario and in order to strengthen financial soundness of banks in the sample the tier-one capital should be increased by KZT1011.2 bln. or only 9.2% of the tier-one capital of reviewed banks.

In 2011 the absolute measures of bank profitability were growing due to the decreased expenses for provisioning. So, bank income before tax (excluding the banks which had completed their debt restructuring) amounted to KZT 82.3 bln. during 9 months of 2011<sup>16</sup> as compared to the loss of KZT 113.5 bln. in 2010.

In its turn, interest income of banks (excluding the restructured banks), decreased during 9 months of 2011 by 4% as compared to the respective period of the previous year (Figure 3.1.6). The policy of banks was aimed at maintaining a stable interest income: in 2009-2010 it accounted for approximately 30% of the total income of banks.

**Figure 3.1.6**  
**Dynamics of bank income and expenses<sup>17</sup>**  
**(in annual terms, excl. banks which completed their debt restructuring)**



Source: FSC

decreased by 28% as compared to the respective period of the previous year because of the slowdown in the rates of asset deteriorations. On the contrary, provision expenses of the

Non-interest income of banks (excluding the restructured banks) received in the first-third quarters of 2010-2011 decreased by 31% as compared to the respective period of the previous year. The change in their structure occurred due to the decreased revaluation gains – in 2009 it increased significantly as a result of revaluation of foreign currency denominated assets (3% in 2008, 51% in 2009 and 35% at 01.10.2011).

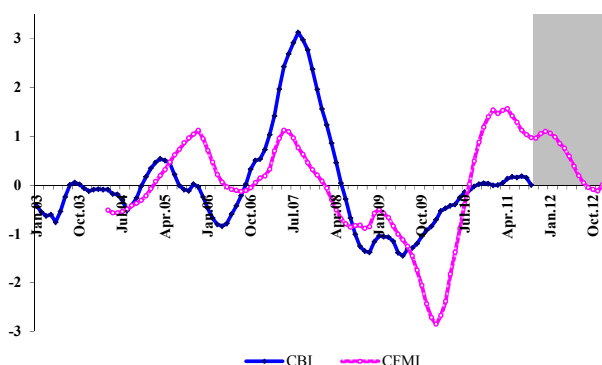
In the first-third quarters of 2011 operating expenses of banks increased (excluding the restructured banks) by 14% as compared to the respective period of the previous year, mainly as a result of the decrease in the provision expenses which

<sup>16</sup> For all banks including those which accomplished their debt restructuring, KZT 14.8 bln. and KZT 1421.1 bln., respectively.

<sup>17</sup> ROA – the ratio of net income before tax and the average value of assets. Intra-annual numbers for income before tax were annualized by multiplying the numbers for the 4 quarters. Average assets value was calculated as the average of assets at the end of the respective period.

restructured banks increased during 9 months of 2011 by 121% as compared to the respective period of the previous year as a result of moving back to the balance sheet bad loans which were incorrectly written off.

**Figure 3.1.7**  
**Composite financial market and banking stress indicators**



Note: CFMI is shifted to the right for 15 months in order to reflect its forward-looking nature.

The forecast is marked with the highlighted area.

Source: NBRK

However, despite a significant decrease in profitability of the banking sector in early 2011, the increased income at the end of 3 quarters had positively affected its dynamics.

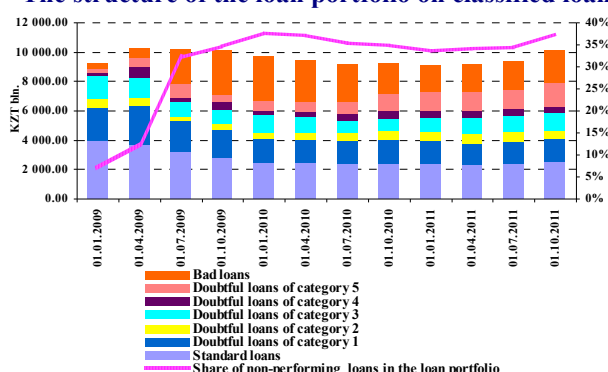
A high level of capitalization and liquidity of banks is conducive to the decrease in the composite risk of the banking sector. So, the composite banking stress indicator (CBI)<sup>18</sup> in the third quarter of 2011 gives evidence of the enhanced soundness of the banking system (Figure 3.1.7). At the same time, projections for the composite financial market stress indicator (CFMI)<sup>19</sup> which outruns the dynamics of the composite banking stress indicator with a time lag of 15 months indicates that a relatively high level of risk in the banking sector remained till the end of

2011; the level of the composite risk is assumed to start going down gradually in 2012.

### 3.2 Credit Risk

*In 2011 the share of non-performing loans in the total credit portfolio continued to grow mainly due to the lack of replacement of bad loans by new standard loans. Banks preferred to keep these loans on their balance sheets primarily because of outstanding issues regarding taxation of income from recovery of provisions while writing off bad loans. In the context of implementation of a number of measures on tax incentives for problem loan write offs as well as the establishment of a centralized subsidiary of the NBRK which will be specializing in buying out problem assets of banks, some improvement in the quality of bank loan portfolios may be expected in 2012.*

**Figure 3.2.1**  
**The structure of the loan portfolio on classified loans**



Source: FSC, NBRK calculations

If in 2008-2010 there were minor growth rates of the credit portfolio caused by an extremely conservative credit policy of banks, in 2011 the lending processes started to recover in some way. However, the increase in the loan portfolio which accounted for 11.4% at the end of three quarters combined with tangible deterioration of its quality: the share of non-performing loans<sup>20</sup> in the total credit portfolio increased from 33.8% at the beginning of the year to 37.6% as of the end of the 3<sup>rd</sup> quarter (Figure 3.2.1). The share of loans more than 90 days past due increased

<sup>18</sup> Composite banking stress indicator (CBI) is built on the basis of 6 indices: the ratios of foreign liabilities of banks to foreign assets, bank credits in the industry, construction and trade to total credits, growth rate of bank credits, real interest rate of banks, profitability of banks, bank credits to GDP and money supply to total credits.

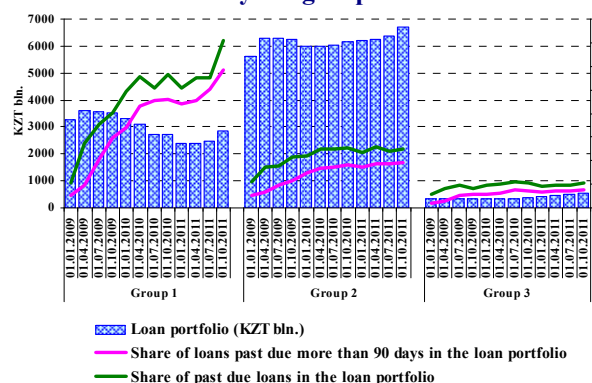
<sup>19</sup> Composite financial market stress indicator (CFMI) is built on the basis of 5 indices: money supply to foreign currency reserves, the inverse of the real exchange rate, real interest rate, interest rate differential and the ratio of trade deficit.

<sup>20</sup> According to the established practice in Kazakhstan, non-performing loans mean the sum of loans classified as doubtful of category 5 and bad loans and provisions created for individually assessed loans. Therefore, the definition of non-performing loans used in Kazakhstan is broader than that used internationally (loans past due more than 90 days).

from 23.7% to 29.4% mainly because of the growth in the share of these loans in the credit portfolios of banks which had completed the external debt restructuring in 2010 (Figure 3.2.2). The contribution by the first group of banks to the growth of non-performing loans and loans more than 90 days past accounted for 58.9% and 73%, respectively.

Figure 3.2.2

The share of past due loans in the loan portfolio broken down by the groups of banks



Source: FSC, NBRK calculations

The resulting dynamics in the quality of the loan portfolio was caused not only by the migration of loans from high classification categories to lower ones due to reduced creditworthiness of borrowers but also by an extremely low intensity of the process of replacement of non-performing loans with new standard loans. With the growth of the overall volume of non-performing loans the volume of “performing” credit portfolio i.e. a credit portfolio which generates steady cash flows<sup>21</sup> actually hadn’t changed since the start of 2010. So, the growth in the overall volume of loans classified as standard loans and doubtful loans of categories 1-3 has accounted for less than 1.5% since the start of 2010.

At the same time the volume of bad loans written off by banks was very low due to a number of factors, *inter alia* as follows:

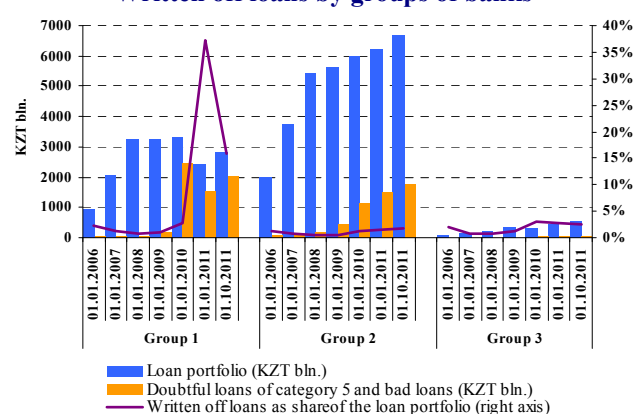
1) *Outstanding issues with the taxation of income from recovery of provisions.* Until recently the Kazakh tax legislation hadn’t provided for deductions of income from recovery of provisions from the amount of taxable income when writing off bad loans. The Law of the Republic of Kazakhstan “On Amendments to Some Legislative Acts of the Republic of Kazakhstan on Taxation” No.467-VI of July 21, 2011 provided amendments to the taxation framework.

2) *Lack of effective tools for the management of non-core assets of banks which are carried to their balance sheets as a result of alienation of collateral.* Under the existing regulatory requirements, the volume of non-core assets on the bank balance sheets cannot exceed 0.5 of their equity<sup>22</sup>. Bank cannot keep a large volume of alienated collateralized property on their balance sheet, alongside with that there are no effective mechanisms for enforcement of collateral at fair value.

3) *The price growth is anticipated in*

Figure 3.2.3

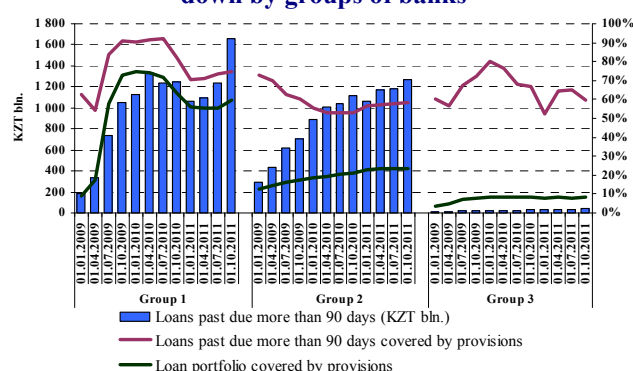
Written off loans by groups of banks



Source: FSC, NBRK calculations

Figure 3.2.4

Volume of provisions for the credit portfolio broken down by groups of banks



Source: FSC, NBRK calculations

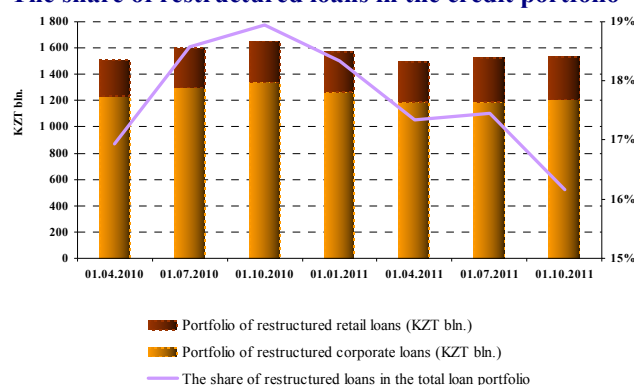
<sup>21</sup> “Performing portfolio” includes loans which are classified as standard and doubtful loans of categories 1-3.

<sup>22</sup> Ratio k-6.



the real estate market, in the context of which banks would benefit more if they keep bad loans on their balance sheets since a real estate serving as collateral may be sold at much higher prices in medium-term.

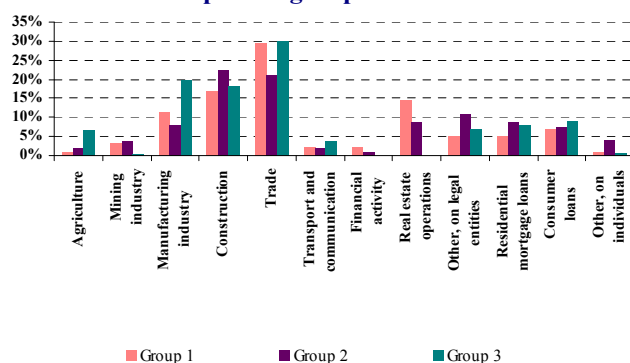
**Figure 3.2.5**  
**The share of restructured loans in the credit portfolio\***



Note: The analysis of loan restructuring is presented based on the information provided by 15 largest banks at the request of the NBRK. Banks are responsible for reliability of the information provided.

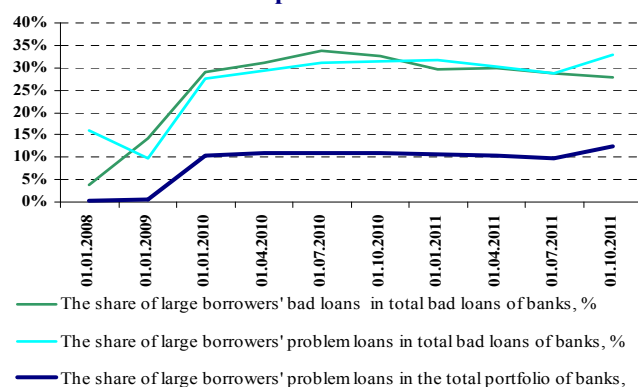
Source: STB, NBRK calculations

**Figure 3.2.6**  
**The share of non-performing loans by the sector of a group in the total volume of non-performing loans of the respective group at 01.10.2011**



Source: FSC, NBRK calculations

**Figure 3.2.7**  
**The share of problem loans to 25 largest borrowers in the loan portfolio of banks**



Source: FSC, NBRK calculations

The volume of written off bad loans in the banks of group 2 and 3 accounts for 1.7% and 2.5% of their loan portfolio, respectively. The situation in the first group of banks is somewhat different: in July 2011 the largest bank in the group had to move back to the balance sheet a significant volume of previously written off loans in order to comply with the IFRS (Figure 3.2.3).

During two years (from October 1, 2009 to October 1, 2011) there was some decrease in the coverage of the loan portfolio by provisions associated with the reclassification of loans past due more than 90 days as a result of their restructuring. As a whole, the banks demonstrated the decrease in this indicator from 0.79 to 0.67 during this period (Figure 3.2.4).

With a view of improving the quality of their loan portfolios, banks are actively using the process of loan restructuring. So, the share of restructured loans in the total loan portfolio exceeds 18% at October 1, 2011 (Figure 3.2.5). It should be noted that banks prefer to implement a “soft” restructuring of problem loans, mainly based on the change of the payment schedules. So, based on the information provided by banks, in more than 75% cases the restructuring is conducted in the form of the change in the loan repayment schedule whereas a partial waiver of debt was only applied to 2.5% of the total volume of restructured loans. In the total non-performing loan portfolio of all three groups of banks the highest percentage falls on the loans provided to enterprises in the manufacturing industry (11.3%, 8.1%, 19.8% in the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> group of banks, respectively), construction sector (16.9%, 22.7% and 18.3%) and trade (29.7%, 21.3% and 30.1%) (Figure 3.2.6).

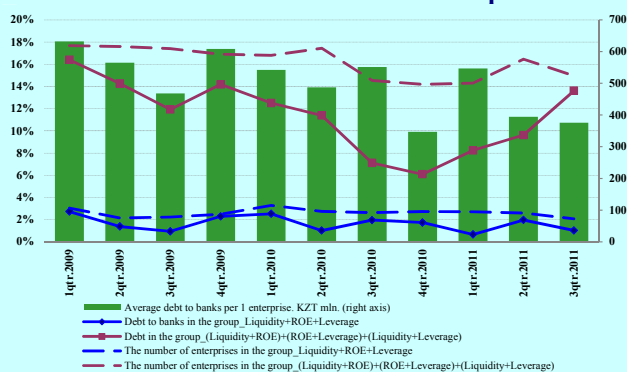
Also, concentration risks associated with the provision of large loans somewhat increased: if at the end of the 3<sup>rd</sup> quarter of 2010 the percentage of loans provided to 25 largest borrowers accounted for 33.2%, by the end of the 3<sup>rd</sup> quarter of 2011 this indicator reached 35.6% (Figure 3.2.7).

One of the major risk factors for the banking sector is an increase of the corporate sector's indebtedness (Box 4).

## Financial Soundness Risks of the Corporate Sector (large and medium-size enterprises)<sup>1</sup>

Figure 1

### Indicators of default risk of enterprises

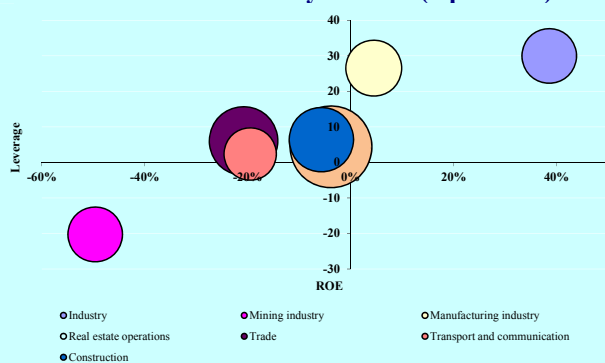


Note: Indicators were derived based on low indicators of liquidity and ROE falling under the group of below 25 percentile, and a high leverage indicator falling under the group of above 75 percentile

Source: ASRK, NBRK calculations

Figure 2

### Risk distribution by sectors<sup>4</sup> (3qtr. 2011)



Note: the size of a point corresponds to the current liquidity level. Agriculture was not reflected in the comparative analysis area due to a significant overrun of the numerical values of indicators as compared to other sectors

Source: ASRK, NBRK calculations

The increased level of indebtedness of enterprises belonging to the group of a high<sup>2</sup> and maximum<sup>3</sup> level of default risk represents the growth factor of the credit risk in the banking sector. So, during the period from 4<sup>th</sup> qtr. 2010 to 3<sup>rd</sup> qtr. 2011 the ratio of indebtedness to the banking sector from the enterprises with a high and maximum level of risk and total liabilities to banks from large and medium-size enterprises increased from 9.1% to 14.6%. The growth in the indicator was mainly caused by the financial condition of the group of enterprises with a high risk level against an insignificant decrease in the indebtedness of the group of enterprises with the maximum risk level (Figure 1). At the same time, the highest increase in indebtedness occurred among the enterprises in the mining sector (169%), trade (158%), and transport and communications (135%).

Alongside with the decreased level of debt in the group of enterprises with the maximum risk level, their number is also decreasing mainly because of the decreased number of enterprises in the agricultural sector and mining industry comprising the group. At the same time, the default risk among those enterprises remains higher as compared to the enterprises in other sectors (Figure 2).

<sup>1</sup> A more detailed review of the methodology was presented in the Financial Stability Report for 2007 in the Special Research Section.

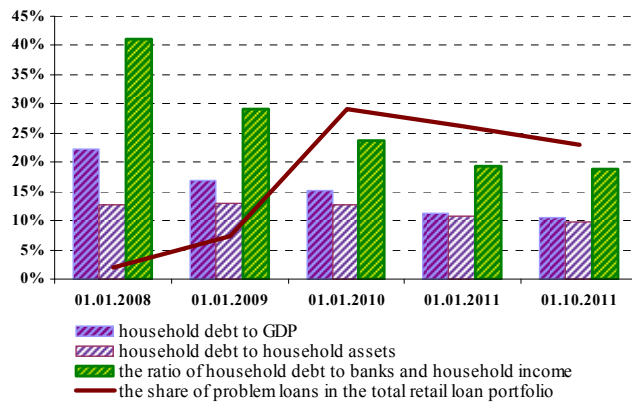
<sup>2</sup> Group of enterprises with a high level of default risk – a combination of two out of three indicators with the worst numerical values (low liquidity + low ROE or low ROE + high leverage or low liquidity + high leverage).

<sup>3</sup> Group of enterprises with the maximum level of default risk – an area of increased default risk combining enterprises with low liquidity, low return on equity and high leverage.

<sup>4</sup> Sectoral distributions of risks were calculated based on the groups of enterprises with a high and maximum level of risk.

Figure 3.2.8

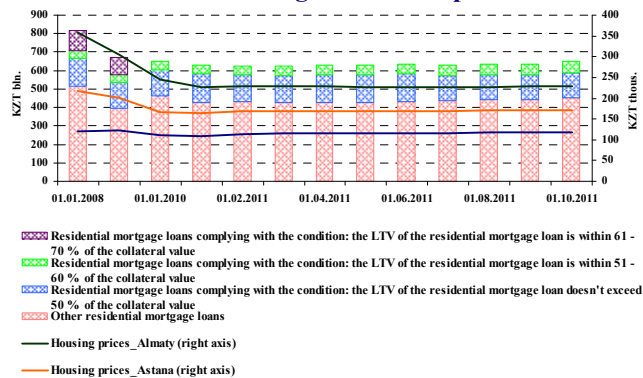
## Factors of the household creditworthiness



Source: ASRK, FSC, NBRK calculations

Figure 3.2.9

## Collateral coverage of the loan portfolio



Source: ASRK, FSC, NBRK calculations

in the mortgage loan portfolio exceeded 39%. At the same time, more than half of these loans have the LTV exceeding 70%, which might represent a significant risk factor for banks given that the collateral value of security may be different from its market value. Nonetheless, price stabilization in the real estate market and their outlined upward trend represent the factor positively influencing the quality of loan portfolio and the ability to recover the value of loans in the event of borrower defaults (Figure 3.2.9).

### 3.3 Liquidity risk and foreign exchange risk of the banking sector

*A high level of the bank liquidity makes banks more sustainable to potential shocks associated with cash outflows as a result of external and domestic economic instability. At the same time, the policy of maintaining hyper-liquidity affects income of banks in a negative way. The decrease in the percentage of assets and contingent liabilities denominated in foreign currency decreases the level of direct and indirect foreign exchange risk related to the exchange rate volatility.*

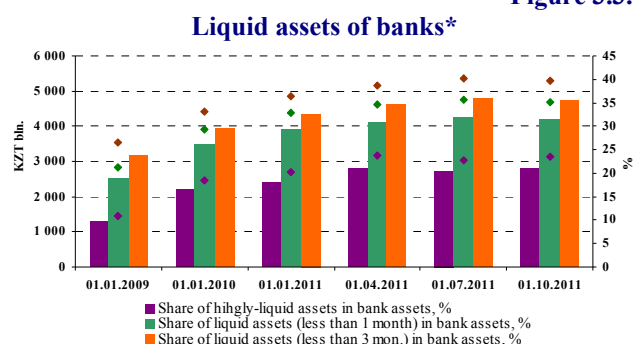
**Dynamics of the bank liquidity.** In 2011 Kazakh banks continued adhering to the policy of maintaining a high level of liquidity: the share of highly-liquid assets in the total bank assets didn't go below 20%. Hyper-liquidity of banks was caused, on the one hand, by their conservative lending policy and, on the other hand, by their attempt to have a "safety cushion" in the event of new shocks. As a whole, during 9 months of 2011 highly-liquid assets of banks increased by 17%, and their share in total assets of banks amounted to 24%. A similar trend is observed in respect of broader liquidity ratios: liquid assets with maturities less than 1 month and 3 months used in the

In 2010-2011 the trend of decreased share of non-performing loans in the retail loan portfolio had outlined. The situation improved due to the actions intended to recover the value of such assets by means of alienation of collaterals in the course of loan charge offs and restructuring. At the same time, low activity of banks and the change in the consuming pattern due to uncertain economic expectations resulted in the decreased consumption by households at the expense of credit resources. Thus, since 2008 there had been a significant decrease in such ratios as household debts to GDP (from 22.3% at the beginning of 2008 to 10.5% at the end of the 3<sup>rd</sup> quarter of 2011), household debts to household assets (from 12.7% to approximately 9.9%) and household debts to banks and household debts to income (from 41% to 18.8%) (Figure 3.2.8). The decreased debt burden serves as an indirect evidence of the growth in the number of individual creditworthy borrowers and potential expansion of the capacity of this market in the nearest term.

The share of mortgage loans in the loan portfolio as of October 1, 2011 accounted for 32.8%, the share of non-performing loans

calculation of prudential liquidity ratios accounted for 40% and 35% in the total assets, respectively (Figure 3.3.1).

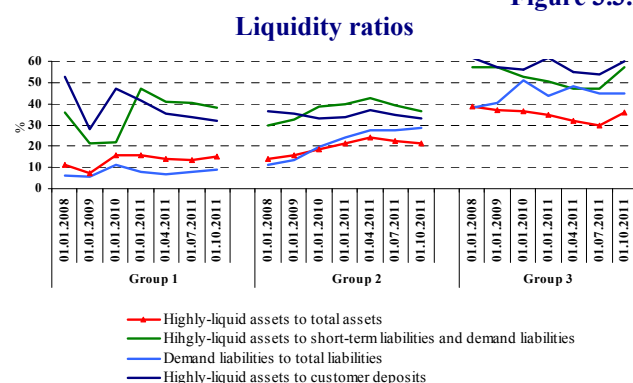
Figure 3.3.1



Note: \* - the information on highly-liquid assets is presented for the last day of the reporting period

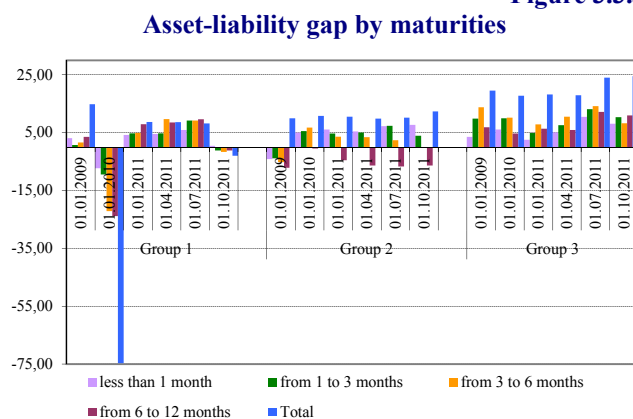
Source: FSC, NBRK calculations

Figure 3.3.2



Source: FSC, NBRK calculations

Figure 3.3.3



Source: FSC, NBRK calculations

insignificantly in the 1<sup>st</sup> group of banks. As for the banks in the 3<sup>rd</sup> group, the structure of their highly-liquid assets demonstrates the redistribution of funds from the category of correspondent accounts and deposits with the NBRK to the category of government securities which generates relatively more income (Figure 3.3.4).

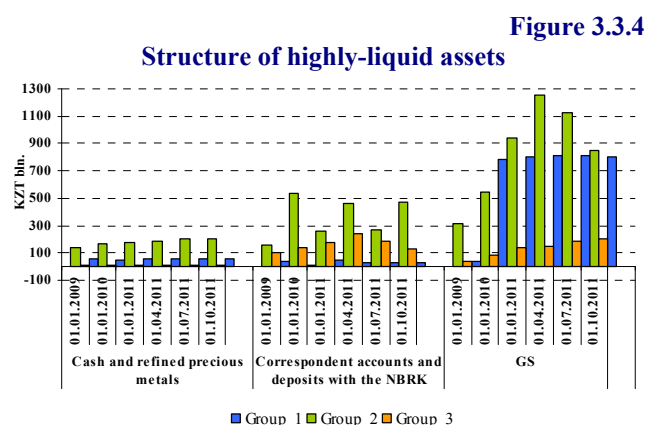
Due to the increase in the share of deposits in the structure of bank funding, the extent of coverage of short-term liabilities and demand liabilities by highly-liquid assets decreased (from 42% at end-2010 to 39% at 01.10.2011). The dynamics in the extent of coverage differs from group to group:

1) *In the 1<sup>st</sup> group of banks* the level of coverage of liabilities by liquid assets increased significantly after the completion of the restructuring process due to the change in the maturities and structure of liabilities, however, by the end of the third quarter coverage ratios had decreased as a result of the external debt service payments and because of the absence of sources for bringing in the liquidity besides the repo operations with the NBRK.

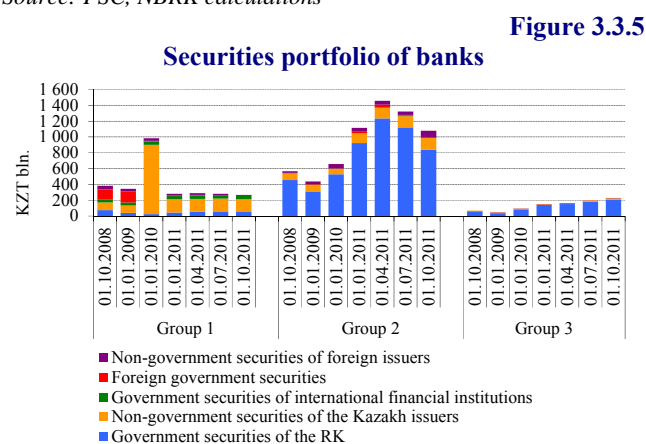
2) *In the 2<sup>nd</sup> group of banks* there is the decrease in the extent of coverage of liabilities by assets with maturities from 6 to 12 months as a result of the increased share of deposits with relatively short maturities and slightly increased lending activity of these banks.

3) *The 3<sup>rd</sup> group* has been historically maintaining a high level of coverage due to the necessity to handle transactions of their large customers (Figures 3.3.2 and 3.3.3).

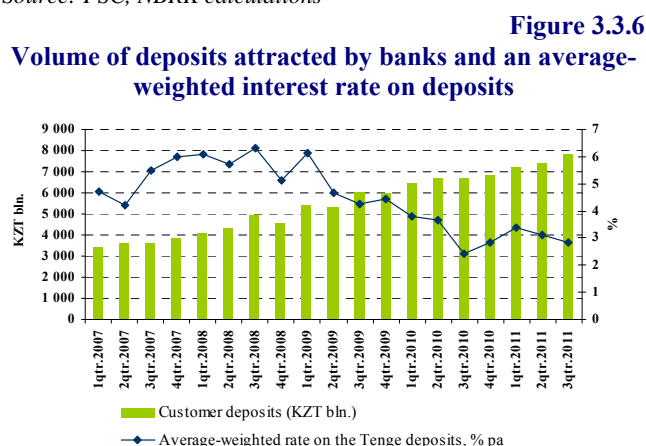
*The structure of liquid assets of banks.* The revival of the bank lending market in 2011 resulted in redistribution of funds from liquid assets to credit assets. So, during 9 months of 2011 the volume of cash and refined metals in the structure of highly-liquid assets of banks increased by 10.4%, the volume of correspondent account balances and deposits with the NBRK – by 30%, and the volume of GS decreased by 1.6%. Apparent is the redistribution of funds from government securities to credit assets in the 2<sup>nd</sup> group of banks while their volume decreased quite



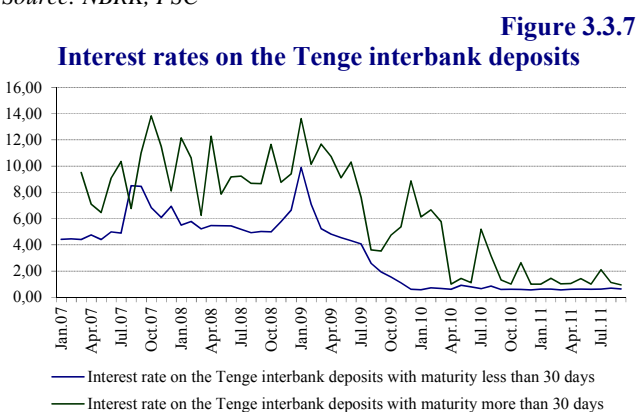
Source: FSC, NBRK calculations



Source: FSC, NBRK calculations



Source: NBRK, FSC



Source: NBRK

In the structure of the securities portfolio government issue-grade securities of the Republic of Kazakhstan and non-government securities of the domestic issuers prevail, with their share accounting for 70.5% and 20.1%, respectively as of October 1, 2011. At the same time, GS mostly prevail in the portfolios of bank groups 2 and 3 and the portfolio of banks in group 1 mainly contains domestic NGS whose main issuer is the National Wealth Fund “Samruk-Kazyna” (NWF) (Figure 3.3.5). The share of other categories of securities in the bank portfolios is insignificant: securities issued by IFI account for 2.8%, NGS of foreign issuers – 6.1%. At the same time, against the backdrop of the evolving global financial crisis, realization of sovereign risk in certain European countries and the US sovereign debt crisis, foreign GS have virtually disappeared from the bank portfolios, accounting for 0.5% in 2011 versus 17.6% in 2008.

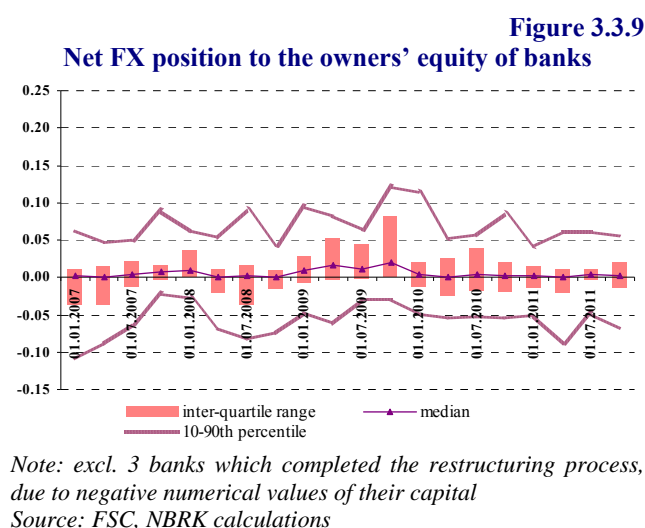
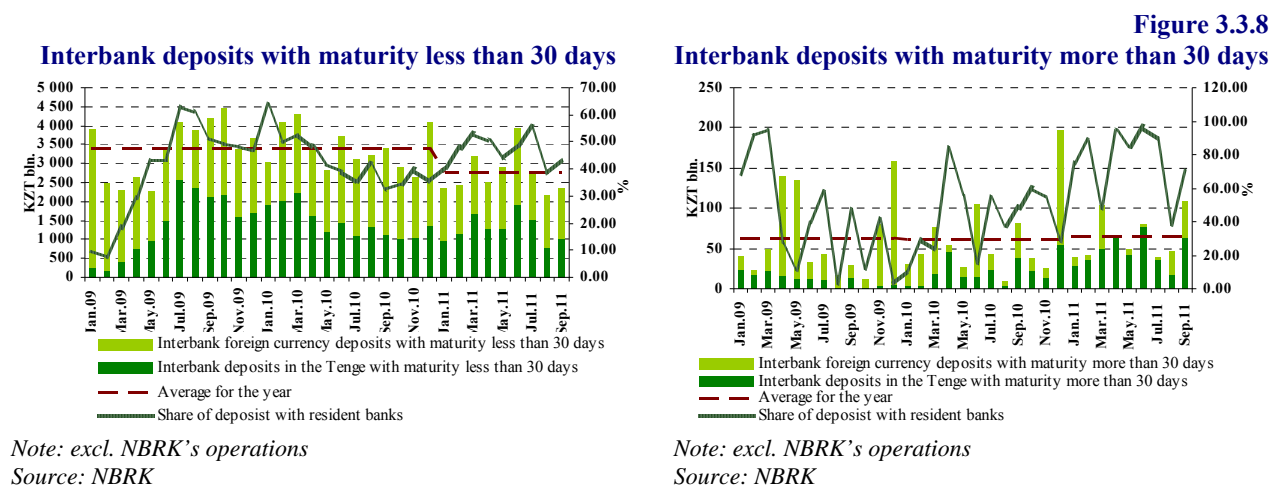
**The state of the interbank liquidity market.** A high level of liquidity in the banking sector has impact on the gradual decrease in the cost of resources borrowed by banks. So, with the growth in customer deposits by 15% over 9 months of 2011 average-weighted interest rates on the Tenge deposits decreased from 3.4% to 2.8% per annum (Figure 3.3.6). A similar trend is also observed in the interbank market where the cost of placed funds is steadily going down (Figure 3.3.7).

In the interbank market of deposits with maturity less than 30 days the decreased activity of banks on the placement of available liquid funds is observed. So, during 9 months of 2011 the volume of placed deposits with maturity less than 30 days decreased by 21% as compared to the respective period of the previous year including the decrease in the Tenge deposits by 18% and in foreign currency deposits – by 23.6% (Figure 3.3.8).

At the same time, non-resident banks are noted to play a higher role in the deposit-pacing in this segment.



On the contrary, the market of interbank deposits with maturity more than 30 days showed some revival during the reviewed period. During 9 months of 2011 the growth in the volume of placed deposits in this market segment accounted for 23.4% as compared to the respective period of the previous year. The volumes of Tenge deposits notably increased (by 60.5% as compared to 2010) while foreign currency deposits decreased (by 65.4%). However, despite the increased activity in the segment, its importance remains low because of its minor share in the total volume of interbank deposits (2.3% of the total interbank deposits placed during the reviewed period).



**Foreign exchange risk of banks.** As a whole, banks are balancing their positions in foreign currency and try to maintain their FX position much lower than the established regulatory ratios, with the trend to increase the long position (Figure 3.3.9).

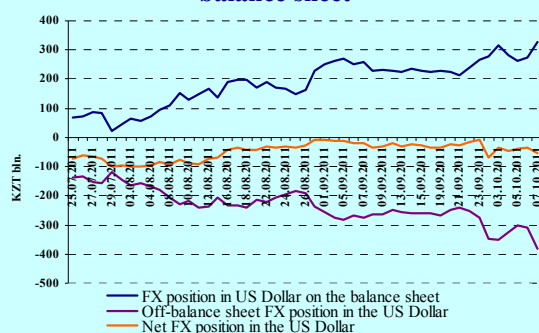
As of the end of the 3<sup>rd</sup> quarter of 2011, banks had short FX position, mainly because of the increase in the short position among the group of restructured banks and the decreased long position in a number of large banks comprising the 2<sup>nd</sup> group. Alongside with that, banks try to override foreign exchange risks on their balance sheets by contingent assets /liabilities (Box 5).

## Box 5

### Foreign currency position in the balance and off-balance sheet accounts

According to the prudential requirements, banks need to account for contingent assets and liabilities while calculating their FX position. The calculation of FX position on the US Dollar both in respect of balance sheet and off-balance sheet accounts enables the bank to “override” the existing foreign exchange risks on the balance sheet accounts by contingent liabilities/assets (Figure 1).

**Figure 1**  
**FX position\* in the balance sheet and off-balance sheet**

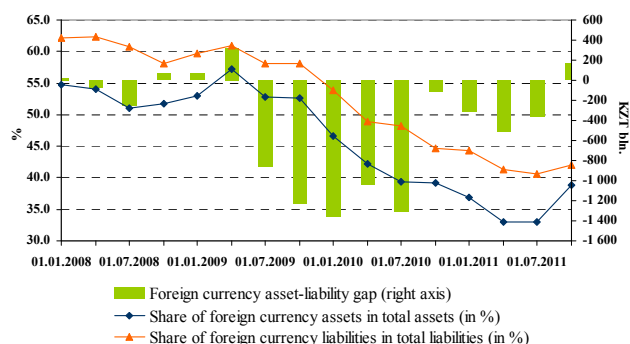


Note: \* - calculated based on the data provided by 19 banks

Source: FSC, NBRK calculations

In terms of the methodology used to record financial derivatives in the books, it is worth mentioning that contingent assets/liabilities are recorded in the off-balance sheet accounts in their nominal terms that do not reflect the actual foreign exchange risk. For instance, if a bank entered into a 3-month forward contract for the purchase of USD 10 mln., the amount equal to USD 10 mln. would be reflected in contingent assets at the contract date whereas only the exchange difference at the settlement date is taken into account at the actual settlement.

**Figure 3.3.10**  
**The share of foreign currency assets and liabilities in the total assets and liabilities of banks**



Source: FSC, NBRK calculations

Given the lack of opportunity to borrow in the international capital markets, the restructuring of liabilities of the three banks in 2010 was conducive to a significant decrease in foreign currency liabilities and gradual shrinkage of gap between foreign currency assets and liabilities (Figure 3.3.10). So, at the end of 9 months of 2011 the share of foreign currency liabilities accounted for 42% versus 57% at the beginning of 2010 and the share of foreign currency assets – 40% versus 47% over the same period. The redistribution of deposits from foreign currency to the domestic currency as well as the growth in foreign

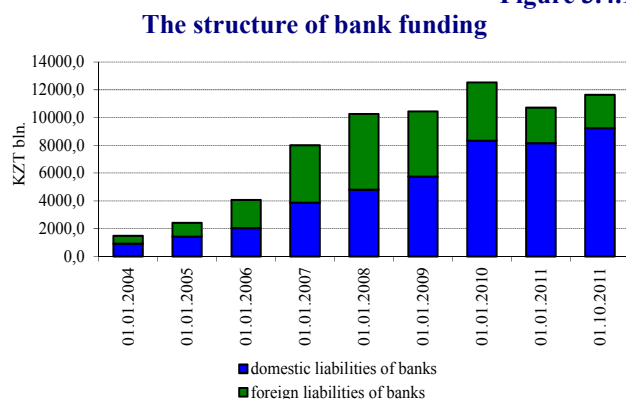
currency assets was conducive to the shrinkage in the gap between foreign currency assets and liabilities.

### 3.4 Risks Associated with the Bank Funding Structure

*The decreased reliability of banks on external funding as a result of the replacement of liabilities to non-residents with the domestic liabilities helps increase sustainability of the banking sector to external shocks. At the same time, if the macroeconomic environment in the country improves and the economy's demand for credit resources increases, banks will have to look for alternative sources of long-term funding since the deposit base would not be able to satisfy the growing demand of banks in long-term funding.*

In 2011 the process of replacement of foreign liabilities of banks by the domestic liabilities, which started in 2008, has been continuing. If at the end-2008 the share of liabilities to non-residents in the total liabilities of banks accounted for 44.9%, at the beginning of 2011 this ratio decreased to 23.9%, and at the end of the 3<sup>rd</sup> quarter of 2011 – to 20.6%.

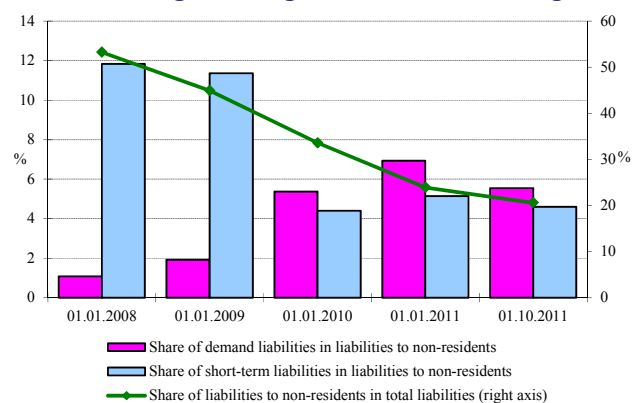
Figure 3.4.1



Source: FSC, NBRK calculations

Figure 3.4.2

**Trends of foreign funding in the Kazakh banking sector**

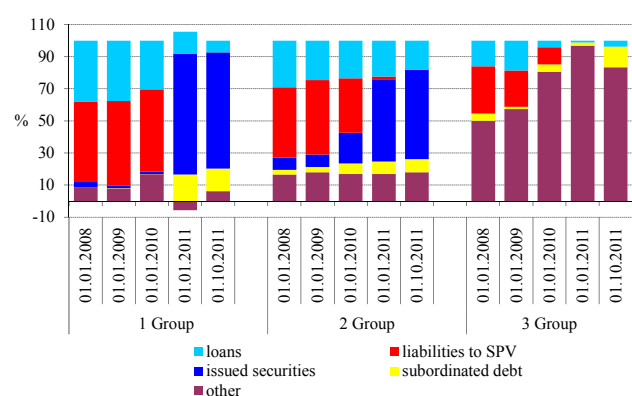


Note: short-term liabilities are foreign liabilities with remaining maturity of 6 to 12 months

Source: FSC, NBRK calculations

Figure 3.4.3

**Dynamics and structure of external funding by groups of banks**



Note: item "Other" includes interbank deposits, customer deposits, repo operations, non-financial liabilities and other financial liabilities

Source: FSC, NBRK calculations

During the period the change in the bank funding structure was affected by a number of factors, alongside with unfavorable situation in the global capital markets. In 2010, an abrupt (from 33.6% to 23.9%) decrease in the share of foreign liabilities in the total liabilities of banks was due to the restructuring of liabilities of three Kazakh banks<sup>23</sup>. In 2011 the reasons for the change in the bank funding structure were both the global capital market environment and the policy of asset/liability management held by Kazakh banks. Lending conservatism of banks still determine their limited demand for borrowing of a relatively "expensive" money from foreign sources at the rates that demonstrate a heavy volatility because of sovereign crises in a number of European countries and problems with the US government debt. Thus, the volume of external debt of banks in 2011 was decreasing due to the repayment of existing liabilities alongside with low volumes of new borrowings. Thus, while the total volume of the domestic liabilities of banks increased by 13.2% during 9 months of 2011, the volume of foreign liabilities decreased by 6.6% (Figure 3.4.1). At the same time, during the period there was a decrease in the share of demand liabilities (from 7.0% to 5.5%) and short-term liabilities (from 5.1% to 4.6%), and the decreased demand of the Kazakh banks for "short" money because of their high liquidity<sup>24</sup> (Figure 3.4.2).

The decrease in the volumes of the external funding in January-September 2011 broken down by the group of banks was uneven. The share of liabilities to non-residents in the total liabilities in the 1<sup>st</sup> group of banks decreased from 36% to 31%, in the 2<sup>nd</sup> group – from 22% to 19%, and in the 3<sup>rd</sup> group – from 16% to 8%. Foreign liabilities of large banks (groups 1 and 2) mainly represent long-term liabilities in the form of loans and debt securities; small banks (group 3) are mainly actively operating in the interbank market (Figure 3.4.3).

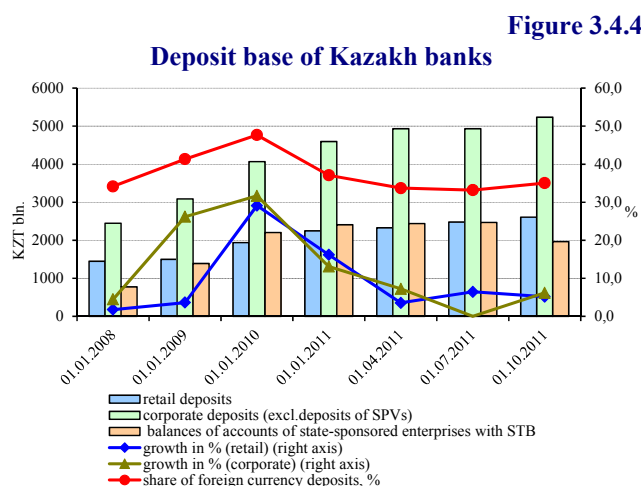
<sup>23</sup> JSC "BTA Bank", JSC "Alliance Bank" and JSC "Temirbank".

<sup>24</sup> The share of highly-liquid assets in the total assets during the first-third quarters of 2011 was in the range of 20-25%.

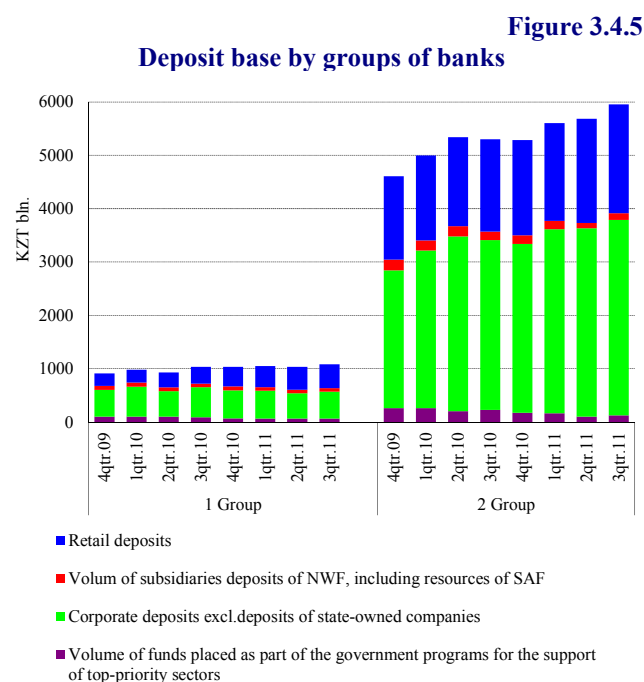


At the end of 2010 liabilities to SPVs were actually excluded from foreign liabilities of group 1 and 2 because of the conversion of such liabilities into the liabilities of the banks themselves. This was caused, in the first instance, by the accomplished external debt restructuring of the banks from the 1<sup>st</sup> group and, secondly, by the exclusion of liabilities to SPVs from the regulatory capital calculation from July 15, 2010.

The replacement of the external funding by the domestic funding occurred mostly due to the attraction of deposits from residents. In 2011 the deposit base of Kazakh banks increased by 14.5% and accounted for 2/3 of the total funding volume. At the same time, the volume of retail deposits



Source: FSC



Source: FSC, NBRK calculations

relevant government programs at the end of the 3<sup>rd</sup> quarter accounted for 1.9% of total liabilities of banks involved in the implementation of such programs.

Moreover, in the 1<sup>st</sup> quarter of 2011 the shareholders of JSC “Halyk Bank Kazakhstan” exercised their pre-emption right in respect of repurchase of its stock from the NWF. As a result,

grew by 5.2%, corporate deposits – by 6.2% (Figure 3.4.4). A high growth rate in the volume of the domestic deposits occurred due to two major factors: retention of confidence in the banks as a result of measures taken to support the banking sector and the absence of alternatives to deposits as the means of available cash placement as a consequence of underdeveloped funding market and the decreased speculative attraction of the real estate market.

In 2011 the trend for replacing the funds obtained by banks under the government support programs of the top-priority sectors with the non-public sector deposits continued. In the structure of corporate deposits the public funds allocated under the government support programs accounted for 10.6% in the 1<sup>st</sup> group of banks and 3% in the 2<sup>nd</sup> group of banks at October 1, 2011 (Figure 3.4.5). Alongside with that, from the beginning of 2011 the withdrawal of the government support financial resources in these groups of banks accounted for 6.2% and 26.3%, respectively.

In spite of recovery of the economy and the financial sector after the period of instability in 2008-2010, in the banking sector as a whole the share of deposits of subsidiaries and associates of the NWF placed with banks<sup>25</sup> in their total liabilities decreased from 10.3% to 7.6%. In 2011 a gradual repayment of funds provided as part of support for the top-priority sectors also continued: the percentage of funds provided under the

<sup>25</sup> 20 STB

the percentage of the shares of Halyk Bank Kazakhstan owned by the NWF decreased to 11.6% at 01.10.2011 versus 26.8% at 01.01.2011.<sup>26</sup>

Retail deposits are placed mainly for short terms, therefore they cannot be regarded as a stable source of long-term funding for the banks. So, in the structure of retail deposits time and conditional

deposits are prevailing as well as the customer checking accounts.

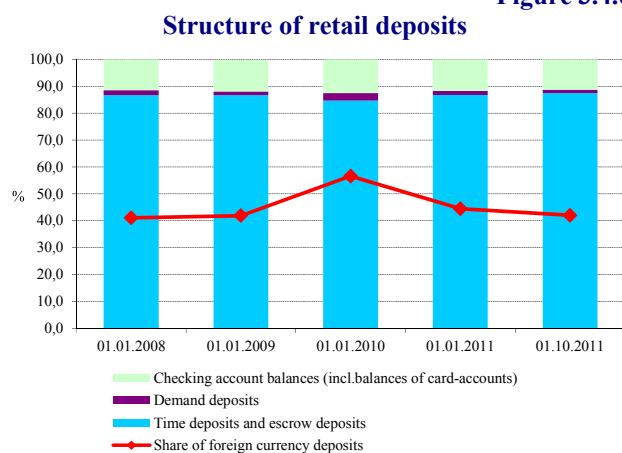
A relatively high share of foreign currency deposits (42% of the total volume of retail deposits as of 01.10.2011r.) is predetermined by uncertain expectations about the domestic currency exchange rate in the environment of instability in the global financial markets (Figure 3.4.6).

In the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2011 there was a stable increase in the savings by the population in the structure of household spending against the increased amount of average wage. So, the level of savings by the population increased from 20.5% to 21.7% during 9 months of 2011. Alongside with that, the deposit base has been increasing not only due to the growth in the deposit amounts but also owing to the increase in the number of deposits of the population (Figure 3.4.7).

The replacement of foreign liabilities with the domestic liabilities resulted in the change in the funding structure in terms of maturities. Thus, virtually 75.0% of customer deposits are short-term whereas 78.3% of foreign liabilities have the maturity exceeding one year (Figure 3.4.8).

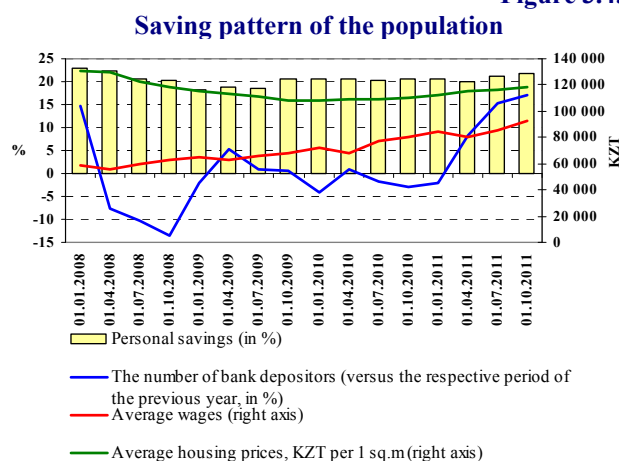
The existing structure of liabilities with the prevalence of short-term domestic liabilities is optimal when banks held a

Figure 3.4.6



Source: FSC, NBRK calculations

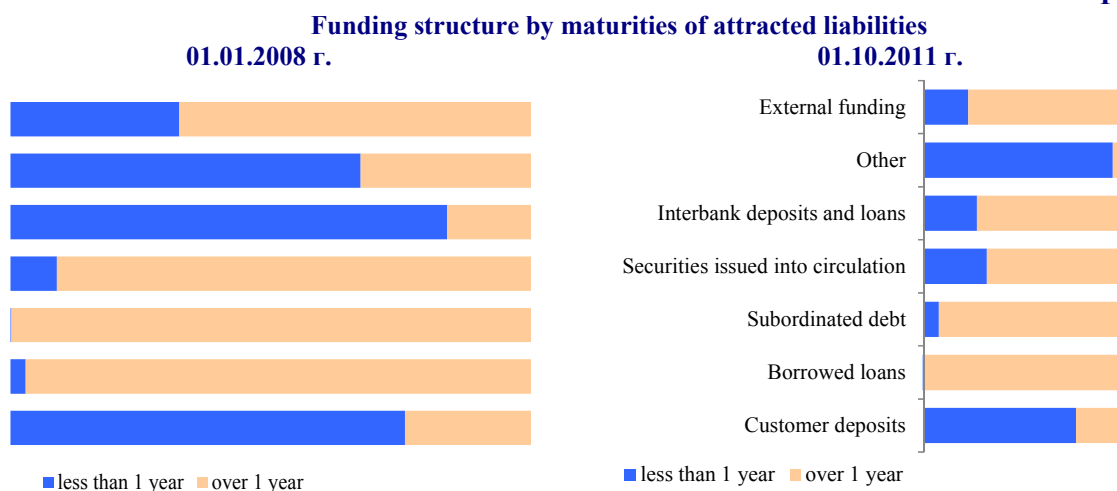
Figure 3.4.7



Note: The share of savings of the population is calculated as the ratio of retail deposits to gross disposable income of households.

Source: FSC, KDIF, ASRK, NBRK calculations

Figure 3.4.8



Source: FSC

<sup>26</sup> Based on unaudited financial statements of JSC "Halyk Bank Kazakhstan"

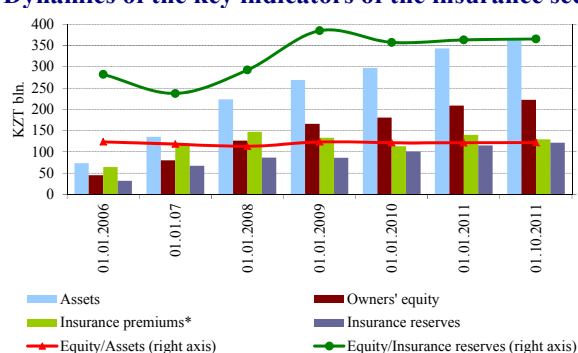
conservative lending policy, however, when the economy enters the phase of sustainable economic growth the problem of absence of the long-term sources of funding will be appreciable. In this case, borrowing in the domestic stock market by issuing debt securities may be an alternative to raising “long” money in the global financial markets. At the same time, an increasing role of debt securities in the bank funding to a great extent will be depending on how successfully the domestic stock market will be developing.

## 4. Risks of the Non-Banking Sector

### 4.1 Insurance Sector

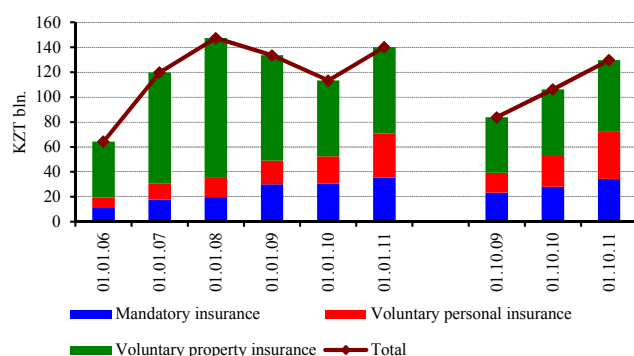
*In 2011 the soundness of the insurance sector was ensured owing to obligatory insurance lines as well as the life insurance business. An unstable situation in the non-life insurance business remains, with a low recovery of the real estate market and the financial sector. Actively growing premiums under the retirement annuity contracts and high percentage of premiums of insurance (reinsurance) organizations affiliated with the banking sector result in enhanced vulnerability of the insurance market to the financial risks of the banking sector including credit risk and market risk. The share of foreign reinsurance is still significant, which indicates the persisting high level of exogenous reinsurance risks. At the same time, activation of the domestic reinsurance market and the decrease in the volume of defaulted securities in the investment portfolio of insurance organizations make positive contribution to the increased financial sustainability of the insurance sector.*

**Figure 4.1.1**  
Dynamics of the key indicators of the insurance sector



Note: \* insurance premiums written under insurance contracts  
Source: FSC, NBRK calculations

**Figure 4.1.2**  
The structure of insurance premiums by lines of business

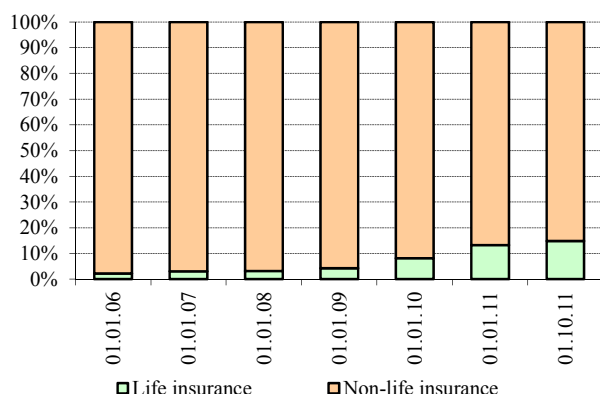


Note: \* insurance premiums written under direct insurance contracts  
Source: FSC, NBRK calculations

Progressive development of the insurance sector is proved by the positive dynamics of its key indicators (Figure 4.1.1). As the insurance market develops, the amount of capital is brought by the regulator in line with the dimension and nature of risks taken by insurance organizations. During 9 months of 2011 owners' equity increased by 6.4%, total assets of the insurance market increased by 6.1% and insurance reserves – by 5.7%. At 01.10.2011, owners' equity to assets accounts for 61% and owners' equity to insurance reserves – 183%, which indicates a high capitalization of the insurance sector as well as the existence of the required capacity for absorption by the insurance sector of losses associated with financial and economic risks.

As of 01.10.2011, total insurance premiums written under direct insurance contracts increased by 22.1% as compared to the respective period of 2010. The increase in insurance premiums in the class of voluntary property insurance accounted for 9.4% and in voluntary personal insurance - 48.6% (Figure 4.1.2). This trend indicates the increased activity in the insurance market mainly owing to the life insurance business.

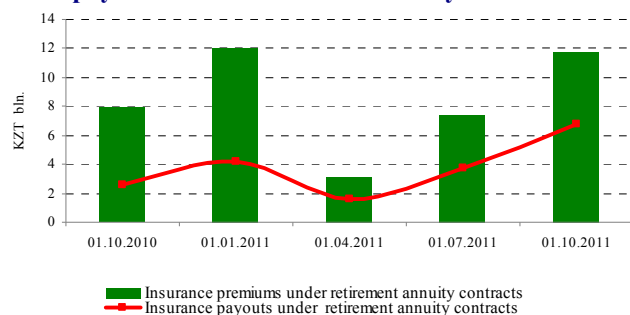
**Figure 4.1.3**  
**Distribution of insurance premiums by branches of insurance\***



Note: \* insurance premiums written under direct insurance contracts

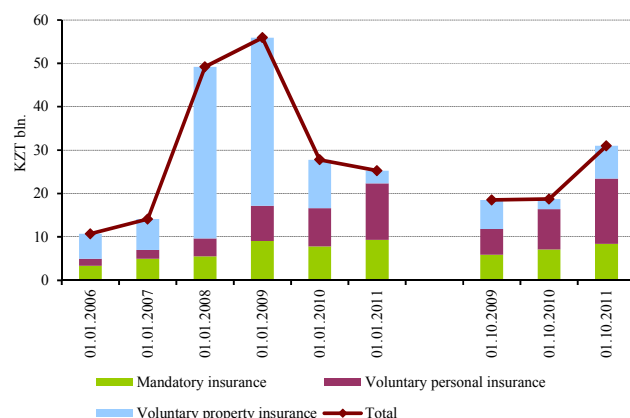
Source: FSC

**Figure 4.1.4**  
**Dynamics of insurance premiums and insurance payouts under retirement annuity contracts**



Source: FSC

**Figure 4.1.5**  
**Dynamics of changes in insurance payouts by lines of business\***



Note: \*expenses related to insurance indemnity payments under direct insurance contracts

Source: FSC

In the structure of insurance premiums by insurance branches the decrease in the share of insurance premiums in the non-life business is associated with the remaining tension in the real estate market. The observed growth in the share of the life insurance business is associated with the development of annuity insurance (the increase in the number of retirement annuity contracts and as part of obligatory accident insurance of an employee while on duty) (Figure 4.1.3).

It should be noted that voluntary personal insurance is growing at the expense of retirement annuity insurance which was determined by the opportunity for the pension fund contributors to get a major part of their insured amount (pension savings) in the form of a lump sum payment. However, this leads to the increased risks in connection with the increased volumes of liabilities of insurance companies under annuity contracts (Figure 4.1.4).

The total volume of insurance payouts increased by 65.7% during January-September 2011 as compared to the respective period of 2010 (Figure 4.1.5). Such situation is related to the realized risks of the real estate market as well as the rapid rates of development of retirement annuities which also absorb underwriting risks and market risks. So, the growth in voluntary property insurance payouts by 2.3 times is related not only to the growth of insured events but also to the termination of voluntary property insurance contracts. The increase in payouts on voluntary personal insurance by 4.3 p.p. occurred in connection with the increase in the lump sum payments on retirement annuities.

## Insurance of Banking Risks

In 2011 in connection with the financial sector recovery the market of banking insurance revives. 31 insurance organizations out of 38 are engaged in captive insurance. As of October 1, 2011 volumes of transactions with affiliates of three largest insurance organizations in this line of insurance ranges between 15.0% and 94.0% of the total volume of insurance premiums received by these organizations. The share of captive insurance in other insurance organizations ranges between 0.01% and 8%.

Risks associated with banking operations are hedged through the insurance by insurance classes presented in Table 4.1.1.

**Table 4.1.1**  
**Premiums and payouts received by insurance classes ancillary to the banking operations\*, KZT mln.**

Insurance Classes	Premiums / Payouts	01.01.2011	01.04.2011	01.07.2011	01.10.2011
Motor insurance	Premiums	3 206	835	1 837	2 919
	Payouts	1 213	294	631	944
Property insurance	Premiums	32 734	17 038	23 252	28 832
	Payouts	616	693	972	1 132
Civil liability insurance	Premiums	16 583	2 363	5 903	8 481
	Payouts	71	114	306	383
Insurance of loans	Premiums	427	181	288	491
	Payouts	18	50	77	78
Insurance of guarantees and sureties	Premiums	3	0	4	4
	Payouts	0	0	0	0
Insurance from other financial losses**	Premiums	6 282	788	7 991	9 558
	Payouts	173	52	106	4 271

Note:

\* insurance premiums and insurance indemnity payments under direct insurance contracts

\*\* before enactment of the Law of the Republic of Kazakhstan No.128-III of February 20, 2006 " On amendments to certain legislative acts of the Republic of Kazakhstan regarding insurance" - insurance from the business risk

Source: FSC

**Table 4.1.2**  
**Share of premiums and assets of insurance (reinsurance) organizations within a bank conglomerate, %**

	Share of premiums of insurance (reinsurance) organizations within a bank conglomerate in the total insurance premiums	Share of assets of insurance (reinsurance) organizations within a bank conglomerate in the total assets of the insurance sector
01.01.06	64.8	70.3
01.01.07	58.3	67.5
01.01.08	59.7	62.5
01.01.09	43.9	35.7
01.01.10	31.7	47.0
01.10.10	24.0	33.1
01.01.11	35.3	32.3
01.04.11	2.9	33.0
01.07.11	37.3	32.5
01.10.11	36.9	33.6

Source: FSC

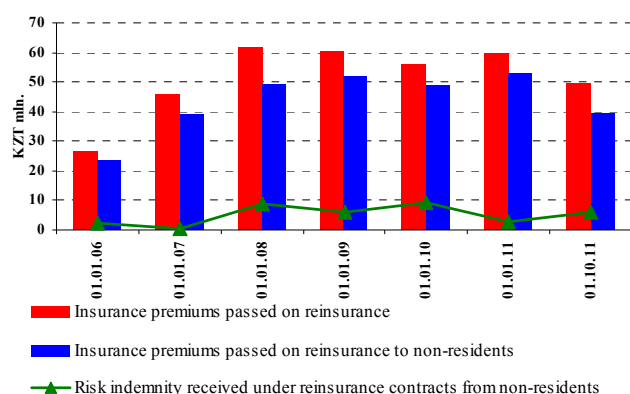
the insurance sector, having increased by 0.5 p.p. during September 2010 - September 2011. (Table 4.1.2). At the same time, the dynamics of the recent years show the decrease in the share of insurance organizations within a bank conglomerate in overall indicators of the insurance market.

In doing so, the highest level of risks in the insurance of banking operations is retained in the class of insurance from other financial losses where the loss ratio accounted for 44.7% at 01.10.201. The trend of increased indemnity payments under this line of insurance observed in 2011 is related to the revived consumer lending in affiliated banks that is accompanied by the increased insurance by banks of risks of borrower insolvency. As of 01.10.2011 the share of premiums of insurance (reinsurance) organizations within a bank conglomerate accounted for 36.9% of the total insurance premiums in the market, which is by 12.9 p.p. higher as compared to the respective period of 2010. A similar trend is being observed in relation to the share of assets of insurance (reinsurance) organizations within a bank conglomerate, – 33.6% of the total assets of



Figure 4.1.6

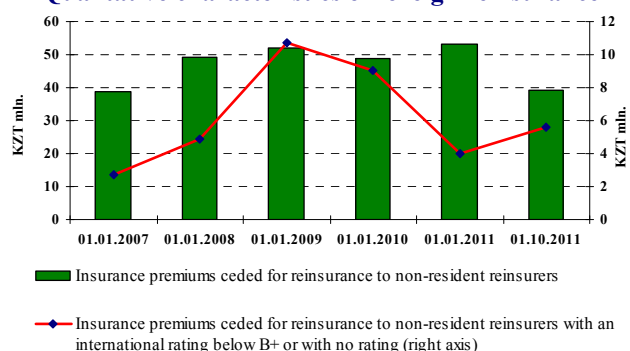
### Dynamics in the insurance premiums passed on reinsurance



Source: FSC, NBRK calculations

Figure 4.1.7

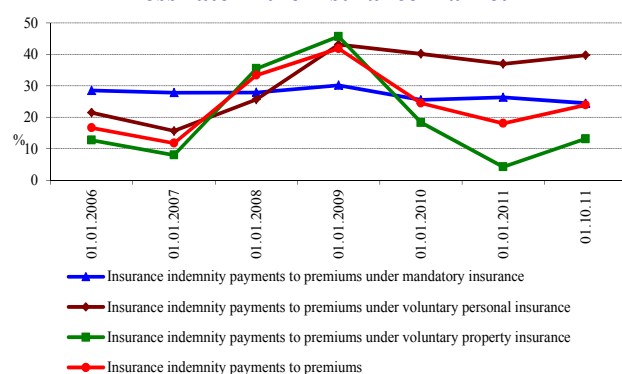
### Qualitative characteristics of foreign reinsurance



Source: FSC, NBRK calculations

Figure 4.1.8

### Loss rate in the insurance market



Source: FSC, NBRK calculations

Moreover, active development of a relatively new insurance line – retirement annuity – may also lead to inadequate assessment of insurance risks by insurance organizations in their pursuit of short-term profitability.

Since the beginning of 2011 the total volume of investments in financial instruments by insurance organizations increased by 15.2%. In the structure of investments non-government securities of the Kazakh issuers account for 36.6%, deposits in the second-tier banks – for 32.1%, government securities account for 17.7%. As a whole, the share of the Kazakh banking sector accounted for 50.6% of the total volume of investments, which indicates that insurance organizations are still heavily exposed to banking risks (Figure 4.1.9).

## Reinsurance

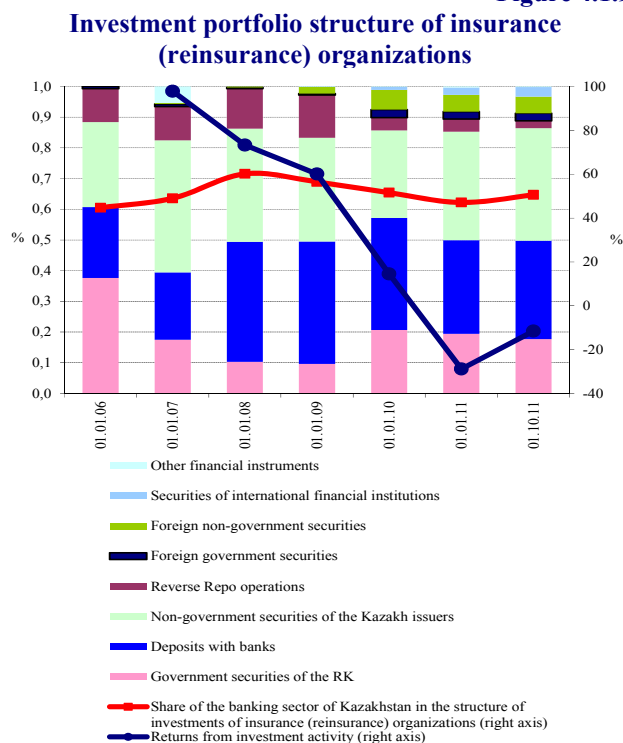
The efficiency of the reinsurance policy depends on the soundness and solvency of insurance organizations which underwrite risks for reinsurance, as well as on the purposes of reinsurance. The ratio of the indemnity amount received from non-resident reinsurers and the volume of insurance premiums passed on reinsurance to non-residents (indemnity ratio) made up 15.3%, which may indicate low efficiency of reinsurance policy implemented by the Kazakh insurance organizations and, respectively, increased risks of reinsuring abroad. However, in 2011 an increase up to 21% of the Kazakh content in the structure of the reinsurance sector was observed (Figure 4.1.6).

In 2011 there was almost a double increase in the share of insurance premiums passed on reinsurance to foreign reinsurers with an international rating of less than B+ or non-rated reinsurers (from 7.5% to 14.1%); this fact is related to deterioration of situation in the US and EU financial markets. The total of KZT 23 656 bln. or 54.0% of all assumed liabilities were passed on reinsurance. The share of liabilities of non-resident reinsurers accounted for 46.0% of the total volume of liabilities; therefore the situation in the external market makes the domestic insurance market vulnerable to external reinsurance risks (Figure 4.1.7).

## Soundness and Profitability of the Insurance Sector

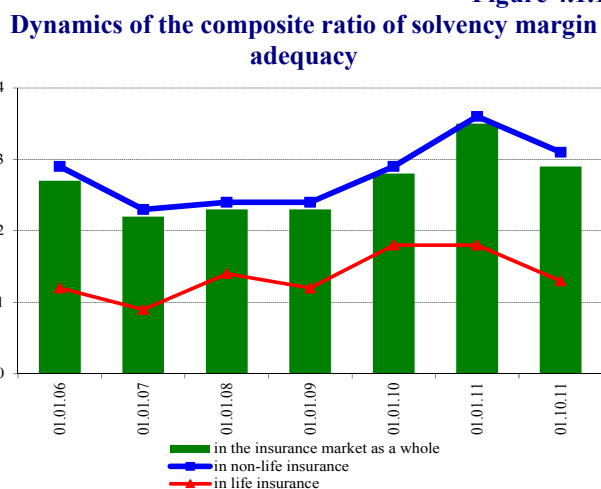
In 2011 there was an increase in the loss ratio in the insurance market including the reinsurer's share from 17% to 24%. Such increase in the loss ratio of the sector is related *inter alia* with realization of mortgage risks which resulted in increased payments under voluntary property insurance by 2.6 times versus September 2010 (Figure 4.1.8).

Figure 4.1.9



Source: FSC, NBRK calculations

Figure 4.1.10



Source: FSC, NBRK calculations

In 2011 the share of delisting securities decreased by 2 p.p. At the same time, return on investments in the insurance sector decreased by 11.6% during 9 months of 2011 as compared to the respective period of the previous year; such decrease is related to the decreased rates on corporate time deposits with banks as well as to the volatility in foreign stock market.

There was an increase in returns from the insurance business by 30.7%. However, due to decreased returns on investment activity, high percentage in the structure of general and administrative expenses (34.5%), as well as fee and commission expenses (16.1%), net profit decreased by 7.7% during 9 months of 2011 as compared to the respective period of the previous year.

Solvency margin in the insurance sector is still higher than required, this factor indicating that an adequate capital base is maintained despite some decrease in the ratio in a sectoral breakdown (Figure 4.1.10). The main factor that causes the decrease in this ratio of insurance organizations is a stage-by-stage increase of the minimum amount of the guarantee fund from April 1, 2010 to January 1, 2012 (by 20% each year for non-life insurance organizations and 30% for life insurance organizations). It should be noted that there is a number of insurance organizations whose solvency margin is at a threshold. A further increase of the guarantee fund amount may lead to inadequate actual solvency margin of some insurance organizations the majority of which operate in the non-life insurance business.

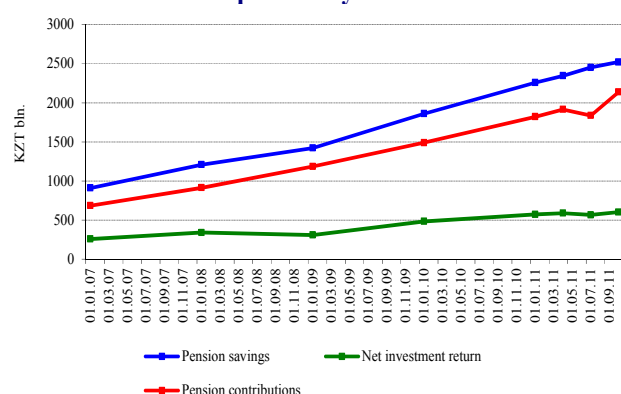
## 4.2 Accumulation Pension System

*In 2011 the investment policy of accumulation pension funds and organizations engaged in investment management of pension assets appeared to be conservative due to limited investment opportunities in the real sector and underdeveloped domestic capital market, continuing shocks at exchange marketplaces abroad as well as low activity in the investment portfolio management. All of these factors negatively affected investment profitability of accumulation pension funds.*

In 2011 the development of accumulation pension system was exposed to the impact of financial and economic risks. A further expansion of the active base due to regular pension contributions puts permanent pressure on the domestic stock market creating a steady demand for good-quality instruments eligible for investment (Figure 4.2.1).

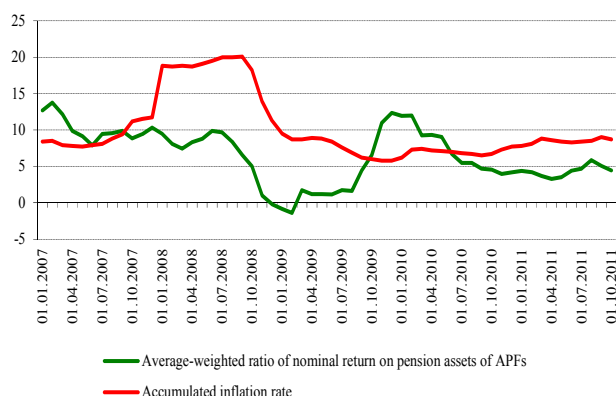


**Figure 4.2.1**  
**Dynamics in the key indicators of the accumulation pension system**



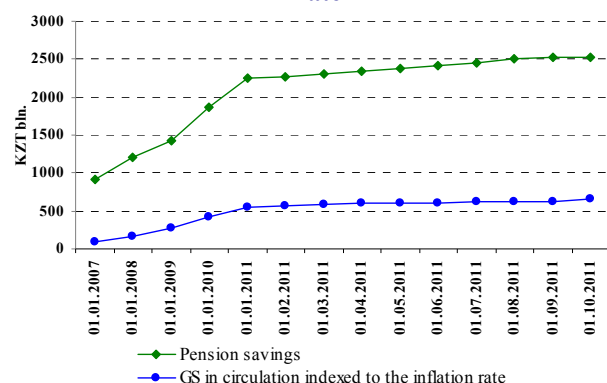
Source: FSC

**Figure 4.2.2**  
**Dynamics of investment return in the accumulation pension system**



Source: FSC

**Figure 4.2.3**  
**Dynamics in the volume of GS indexed to the inflation rate**



Source: FSC

Since the beginning of the year pension contributions increased by 17.3% and pension savings of contributors (beneficiaries) – by 11.7%, this being related to low investment returns of the APFs which increased by 5.1% only during January-September 2011. To a great extent the reason for the slowdown in the rates of growth of investment returns and, thus, of pension savings is explained by the impact of such factors as the financial crisis of 2008, a succession of subsequent defaults in the securities market and the tightening of requirements to reserving (provisioning) against potential losses as a result of pension asset impairments in 2010-2011. The risk of inability to ensure real returns on pension assets in the long run is associated with low liquidity of the domestic stock market and, as a result, a shortage of good-quality financial instruments as well as persistently high inflation rate. The inflation rate exceeds nominal returns on pension assets starting from mid-2007. So, as of October 1, 2011 the level of inflation accumulated over 5 years accounted for 61.6% (in average annual terms – 12.3%), the average-weighted ratio of nominal returns on pension assets of the APFs for 60 months accounted for 32.3% (in average annual terms – 6.5%) (Figure 4.2.2).

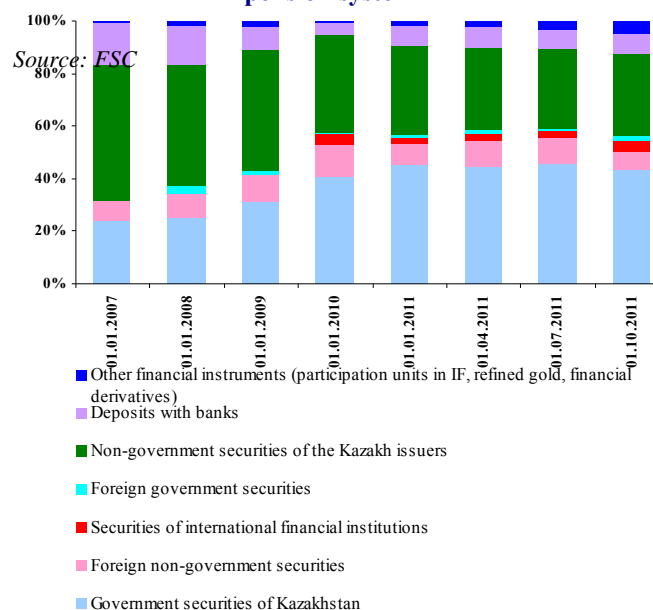
It should be noted that the volume of issued government long-term saving securities which are indexed to the inflation rate (MEUZHKAAM) is not sufficient to change the situation with the yield of government bonds since their share accounts for approximately one fifth of the total volume of securities circulating in the GS market. Moreover, the volume of these securities is not sufficient to satisfy the demand on the part of APFs (Figure 4.2.3).

So, the ratio of the volume of MEUZHKAAM issued in October 2011 and the existing demand for such debt securities made up 12.7%. The overall rates of return in the

market of government bonds were negative in real terms (for instance, the yield on long-term bonds of the MOF – MEUKAM – was 5.3% in October 2011).

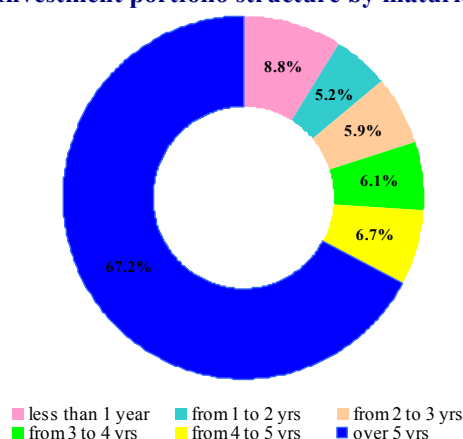
The dynamics in the change of the investment portfolio structure of APFs on account of pension assets shows that during the reviewed period APFs were adhering to a more conservative policy of pension asset investments. The volume of investments in government securities of the Republic of Kazakhstan increased, despite the fact that less tightened requirements were introduced from April 1, 2011 to the minimum level of investments in government securities in the amount of

**Figure 4.2.4**  
**Dynamics of investment returns of the accumulation pension system**



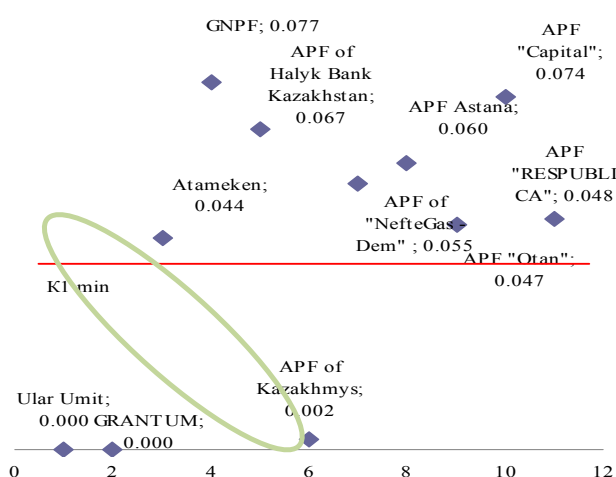
Source: FSC

**Figure 4.2.5**  
**Investment portfolio structure by maturities**



Source: FSC

**Figure 4.2.6**  
**Capital adequacy ratio of accumulation pension funds**

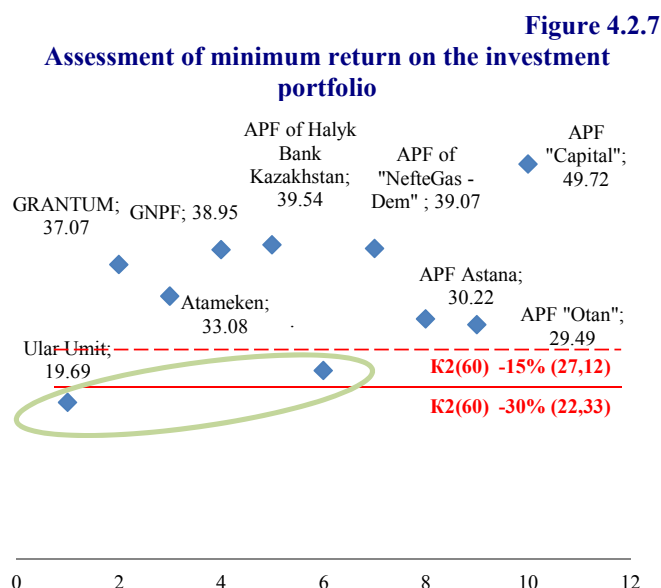


20% of the total pension assets. Besides, the volume of investments in the corporate sector of the economy, foreign securities and deposits with banks decreased (Figure 4.2.4).

The decreased investment of pension assets in the corporate sector of the economy is related to the remaining excessive risk of default on transactions as well as to the risk of default on the part of issuers placing their securities in the domestic stock market, since 32 issuers defaulted on 54 issues of debt securities as of October 1, 2011. As of October 1, 2011, the share of financial instruments with the 5-year maturity in investment portfolios of APFs accounted for 2011 32.8%, where the government securities of the RK accounted for 6.9%. The share of government securities with maturities over 5 years is about 42.9% (Figure 4.2.5). The reduced ratings of major issuers resulted in the increased pressure on equity of APFs, therefore in 2011 more than a quarter of investments were made into short-term and medium-term non-government financial instruments with a lower market risk-weighting. However, investments in such financial instruments are less efficient in terms of their returns as compared to long-term instruments. At the same time, those Kazakh companies that are the most profitable and attractive in terms of long-term investments mainly make their placements in the external markets such as the London Stock Exchange, Hong Kong Stock Exchange, etc. Given a narrow range of financial instruments which could provide the returns in excess of the inflation rate, APFs are rather constrained in their investment strategies related to investments in the domestic market.

At present total owned assets of APFs amount to about KZT 90 bln., total owners' equity – KZT 80 bln. and authorized capital – KZT 46.8 bln..

APF have recapitalized in line with the requirements for recapitalization in case of the growth in pension assets under management as well as based on credit, market and operational risks assumed when investing pension assets. As of October 1, 2011 the capital adequacy ratio was complied with by all APFs except the APF "Kazakhmys" (Figure 4.2.6).



Source: FSC

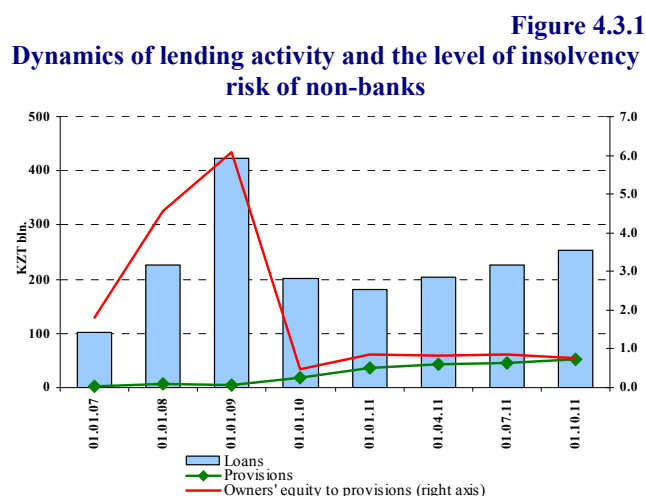
In this connection, given the increase in pension assets, shareholders of APFs try to streamline their activities and the structure of their business. So, in 2011 the APF "BTA Kazakhstan" was merged with the APF "Ular Umit" and the APF "Amanat Kazakhstan" was merged with the "Eurasian APF" (now – APF "Astana"). The process of merging of APFs which is underway is aimed at increasing competitiveness in the pension market including by increasing financial soundness of APFs.

### 4.3. Other Financial Organizations

*A stable development of agricultural business and anticipations of high grain crop yields stimulated organizations engaged in certain types of banking operations to expand crediting of agricultural producers in 2011. At the same time, the consequences of the crisis in 2008 continued to have a negative impact on mortgage organizations in 2011 because of the slow recovery of the real estate market.*

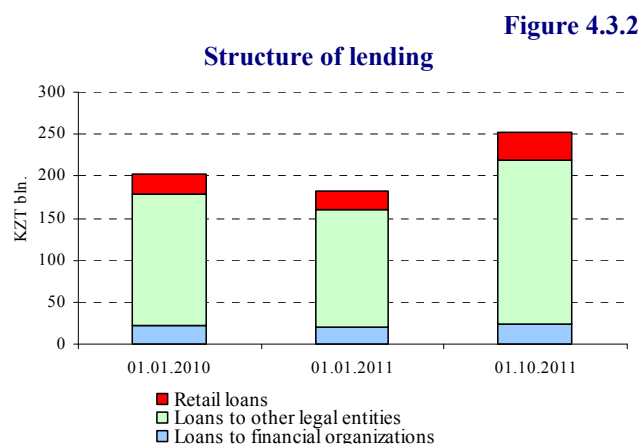
#### Organizations Engaged in Certain Types of Banking Operations

In 2011 the activity of organizations engaged in certain types of banking operations demonstrated increased lending activity that is related to measures taken to adequately assess risks as well as to the favorable situation in the agricultural sector and a gradual recovery of the financial sector (Figure 4.3.1). During January-September 2011 as a whole, the loan portfolio of non-banks increased by 40%. Insolvency risk is maintained at a low level and is covered by the adequate level of created provisions, with the provisioning requirements being similar to those for the banking sector.



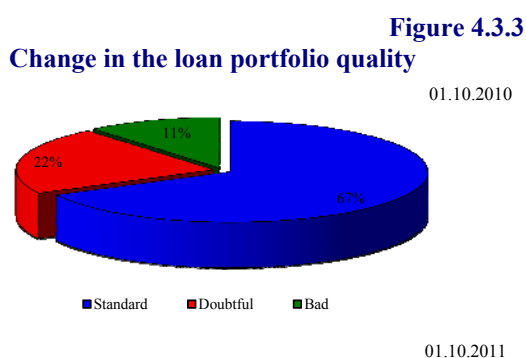
Source: FSC, NBRK calculations

There were no significant changes in the structure of lending: loans to other legal entities prevail – 77% (Figure 4.3.2). At the same time, in monetary terms, all three lines of lending demonstrated growth in 2011: retail



Source: FSC, NBRK calculations

making losses throughout 2011 (Figure 4.3.4).

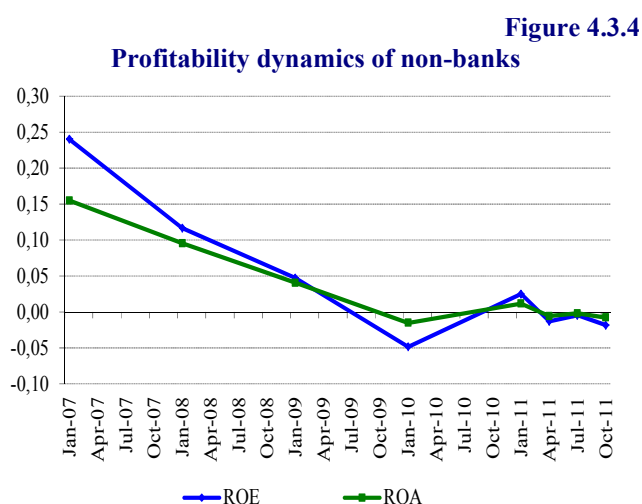


Source: FSC, NBRK calculations

loans increased by 51%, loans to financial organizations – by 39%, and loans to other legal entities – by 27%.

The trend of deteriorating quality of the credit portfolio is still persisting, alike in the banking sector (Figure 4.3.3). During January-September 2011 the share of bad loans increased from 11% to 13%, and the share of doubtful loans – from 22% to 29%; this indicates a further realization of borrower fatigue which heightened after financial and economic turmoil of 2008.

This trend is negatively affecting profitability of non-banks which have been

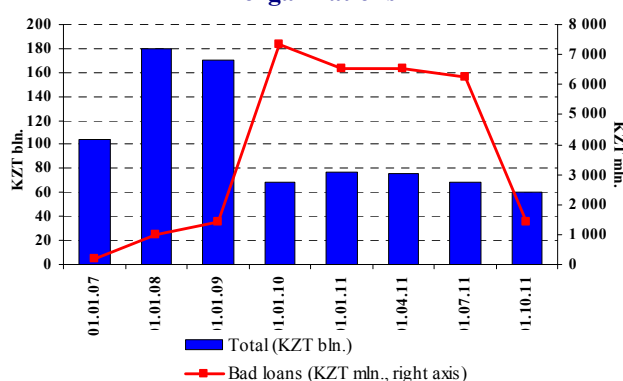


Source: FSC

## Mortgage Organizations

In 2011 the activity of mortgage organizations was influenced by the situation in the real estate market that appeared to be one of the reasons for the decrease in the loan portfolio by 21.1%.

**Figure 4.3.5**  
**Dynamics of the loan portfolio of mortgage organizations**

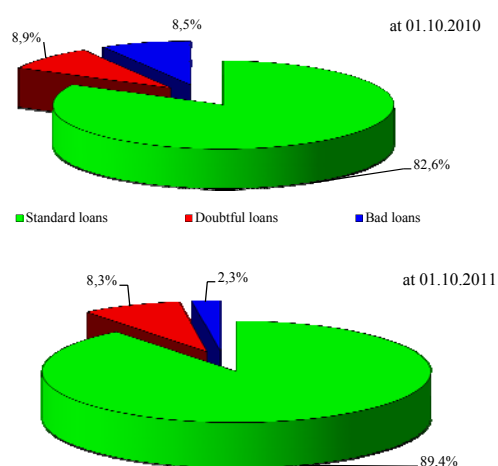


Source: FSC

Mortgage organizations were pursuing a conservative credit policy and were making active efforts to solve the problems of “bad debts”; this allowed reducing the level of bad debt by 3.6 times since the beginning of the year (Figure 4.3.5). This is related to the specifics in the operation of the Kazakhstan Mortgage Company which minimizes its risks by issuing securitized securities as well as by returning earlier repurchased loans whose quality deteriorated significantly to the second-tier banks

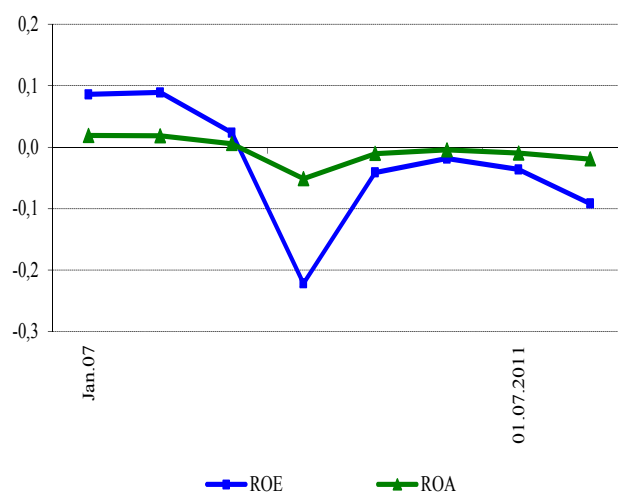
As of October 1, 2011 the total loan portfolio accounted for KZT 60.6 bln. Standard loans prevail in the structure of loans accounting for 89.4% (Figure 4.3.6). Doubtful debts have decreased to 8.3% over the reviewed period, and bad debts decreased from 8.5% to 2.3%. At the same time, not all mortgage organizations could withstand the financial turmoil. As of 01.10.2011, only 4 organizations were functioning out of 6 operating at the beginning of 2011, in which case licenses were given back by the two organizations on a voluntary basis. In the system as a whole, the activity of mortgage organizations is regarded as unprofitable which is proved by the numerical values of ROA and ROE (Figure 4.3.7). Since the beginning of 2011 net loss after income tax increased by 55.2% and amounted to KZT 2.1 bln.

**Figure 4.3.6**  
**Change in the loan portfolio quality of mortgage organizations**



Source: FSC, NBRK calculations

**Figure 4.3.7**  
**Profitability dynamics of mortgage organizations**



Source: FSC

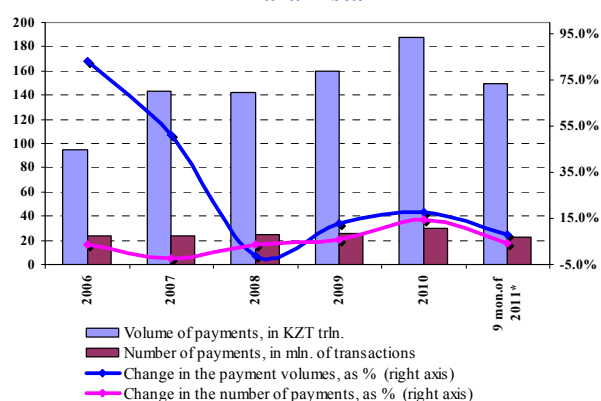
## 5. Payment Systems

*In 2011 the NBRK has continued to further develop the payment systems of Kazakhstan and streamline the regulations in the area of payments and money transfers. There have been positive dynamics in the growth of payment volumes and liquidity of the payment system user that generally characterizes the efficient development of the systems and helps mitigating liquidity risk and systemic risk.*

### 5.1 Development of the Payment Systems in Kazakhstan

In 2011 the dynamics of growth in the number of payments and their volume in the payment systems of Kazakhstan retained (Figure 5.1.1). During 9 months of 2011, 22.7 mln. transactions amounting to KZT 149.2 trln. were made through the payment systems of Kazakhstan. 98.2% of

**Figure 5.1.1**  
Payment flows in the payment systems of Kazakhstan



Note: \* 9 mon. of 2011 as compared to the respective period of the previous year

Source: NBRK

the total volume of non-cash payments in Kazakhstan and 37.5% of their total number (8.5 mln. of transactions totaling KZT 146.5 trln.) were made through the Interbank System of Money Transfer (ISMT) which is a systemically important system of the country and is oriented at the large priority payments across the country related to the financial sector transactions. In the Interbank Clearing System (ICS), where processes retail payments in small amounts less than KZT 5 mln., were made 62.5% of the total number of all non-cash payments in the country and 1.8% of their total volume (14.2 mln. payment documents for KZT 2.7 trln.).

Compare with same period in 2010, the number of payments in the payment systems increased by 4.4% (947,100 transactions), and

the amount of payments increased by 7.7% (KZT 10.7 trln.). The growth of the payment volumes was mainly due to the increase in the amount of payments on foreign currency transactions and transactions with precious metals – by 33.2% (Table 5.1.1).

**Table 5.1.1**

#### Amounts of Payments Broken Down by Types of Payment Purposes

Item	9 mon. of 2010		9 mon. of 2011		Change	
	KZT bln.	as % of the total volume	KZT bln.	as % of the total volume	KZT bln.	%
Foreign currency transactions and precious metals transactions	14 548.4	10.5	19 385.8	13.0	4 837.3	33.2
Deposits	37 422.7	27.0	34 818.4	23.3	-2 604.3	-7.0
Loans	1 077.7	0.8	1 241.6	0.8	163.9	15.2
Securities, bills and certificates of deposit issued by non-residents of the RK	64.0	0.05	107.3	0.1	43.3	67.7
Securities and bills issued by residents of the RK	64 144.1	46.3	66 030.6	44.3	1 886.5	2.9
Goods and intangible assets	5 705.6	4.1	7 812.8	5.2	2 107.2	36.9
Services	4 966.0	3.6	5 705.9	3.8	739.9	14.9
Other payments*	10 546.3	7.6	14 103.4	9.5	3 557.1	33.7
<b>Total</b>	<b>138 474.8</b>	<b>100.0</b>	<b>149 205.8</b>	<b>100.0</b>	<b>10 730.9</b>	<b>7.7</b>

Note: \* include pension payments and benefits, specific transfers, payments to and payouts from the budget.

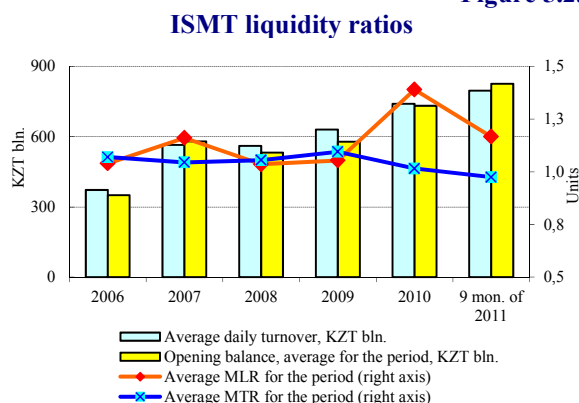
Source: NBRK



## 5.2 Liquidity Risk and Systemic Risk

In order to manage liquidity risk<sup>27</sup> and systemic risk<sup>28</sup>, which may have a significant impact on the stability of the country's financial system, the NBRK and the payment system users perform an ongoing monitoring and control of the user positions in the systems. To manage these risks, the ISMT uses the queue management technique (identifies priority in the execution of payment documents and changes their order), makes additional money transfers from the user's correspondent account to his position in the system. In 2010-2011 the growth of payments volume in the payment systems of Kazakhstan was accompanied by the increased liquidity of users that reduced liquidity risk and systemic risk considerably.

Figure 5.2.1



Source: NBRK

During 9 months of 2011 the average daily liquidity volume of the system users (opening balance with the ISMT<sup>29</sup>, based on which users make their payments) amounted to KZT 825.9 bln., which having increased by 113.5 bln. (15.9%) compare with the same period of 2010 (Figure 5.2.1). The average daily liquidity volume of the ISMT users exceeds by 3.7% the average daily amount of payments (whose numerical value was KZT 796.3 bln.) that shows the system users have liquidity sufficient to make their payments.

In addition, the NBRK, for manage liquidity risk and systemic risk and daily makes calculations of the money turnover ratio (MTR)<sup>30</sup>, the money liquidity ratio (MLR)<sup>31</sup> of the ISMT as well as analysis of its compliance with the specified values<sup>32</sup>. On average, during 9 months of 2011, an MLR in the ISMT was equal to 1.17, MTR – to 0.97, which complies with the values at which the liquidity risk and systemic risk are considered to be minimal.

In addition, an analysis is performed of the payment documents which have been in the queue during the ISMT operating day, were rejected (recalled by users) due to insufficient liquidity. During 9 months of 2011, 6 329 payment documents amounting to KZT 296.2 bln. were recorded in the queue where 18 payment documents in the amount of KZT 23.4 bln. were rejected (recalled) due to insufficient liquidity accounting for 0.2% of the total number and 0.02% of the total amount of payment documents processed in the ISMT (Figure 5.2.2).

<sup>27</sup> Liquidity risk is a payer's risk caused by its inability to discharge its obligations under the money transfer.

<sup>28</sup> Systemic risk is the risk that a failure of one user of the payment system to discharge its obligations under the money transfer will cause failures to discharge their obligations by other (one or more) users of the payment system.

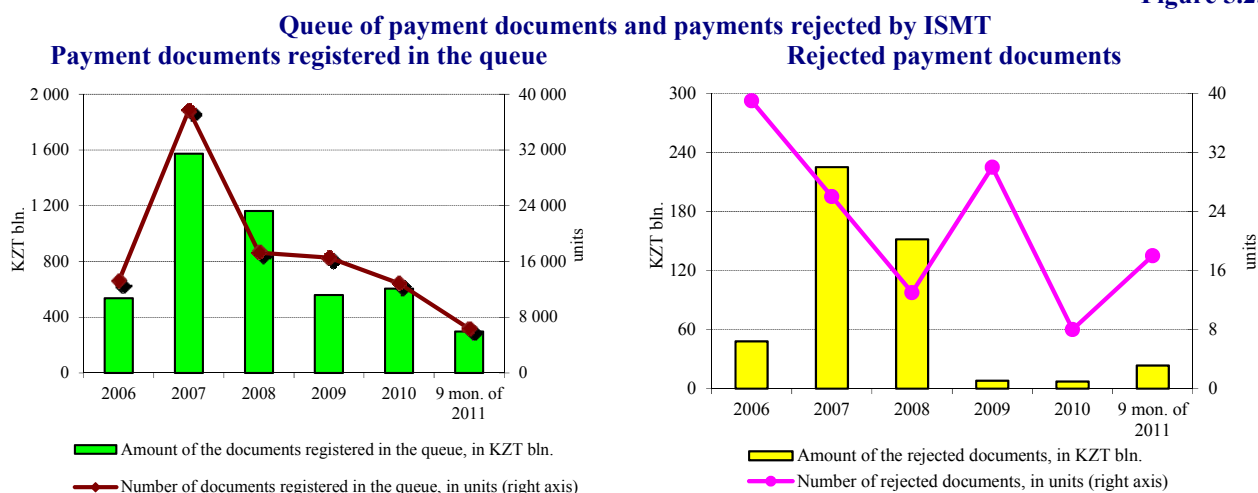
<sup>29</sup> User's opening balance is a cash amount that a user transfers from its correspondent account to the position in the system.

<sup>30</sup> Money Turnover Ratio (MTR) is a ratio of debit turnover in ISMT to the system's liquidity.

<sup>31</sup> Money Liquidity Ratio (MLR) is a ratio of the system's liquidity (opening balances of all users) to the sum of debit turnover in ISMT and rejected (recalled) payments in the ISMT.

<sup>32</sup> To regulate the liquidity risk the following corridors of the liquidity ratio limits and money turnover have been set in the system: MLR upper limit > 1.5 at MTR < 0.5; MLR lower limit < 0.5 at MTR > 1.5.

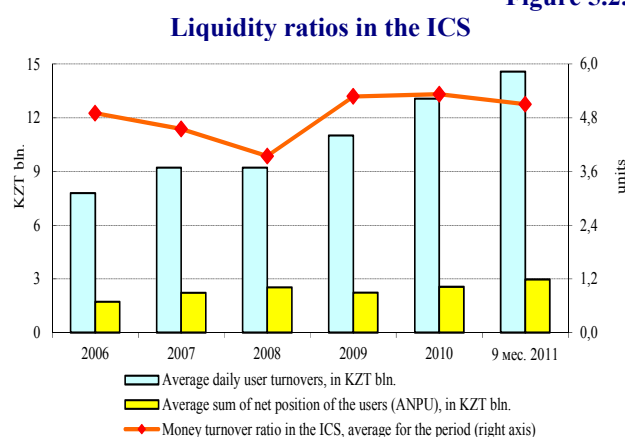
Figure 5.2.2



Source: NBRK

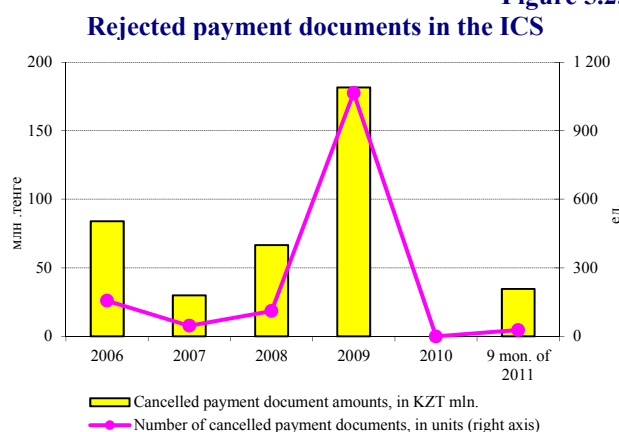
Source: NBRK

Figure 5.2.3



Source: NBRK

Figure 5.2.4



Source: NBRK

All payment documents which rejected or recalled were passed by the users through the system again on the same operating day or interbank transactions related to such payments were cancelled.

For manage liquidity risk and systemic risk, in the ICS use calculation of the MTR (money turnover ratio in the ICS) as well as the analysis of the sum of net position of the users. During 9 months of 2011 the average daily money turnover ratio in the ICS was equal to 5.10, which indicates a high turnover of the system (Figure 5.2.3). The average daily sum of net position of the users as a result of clearing equaled to KZT 2.98 bln. (0.4% of the amount of average daily turnover of the users in the ISMT) that contribute to reduction of the liquidity risk when calculating the net position through the ISMT. Moreover, 28 payment documents in the amount of KZT 34.6 mln were rejected due to insufficient liquidity (Figure 5.2.4). All rejected payment documents were successfully passed by the users again and settled in the ISMT.

### 5.3 Operational and Technical Risk

To manage the operational risk<sup>33</sup>, the payment system operator and payment system users carry out activities aimed at improving the personnel's qualification and use the mechanism for

<sup>33</sup> Operational risk is the risk of errors that can be made by the user's personnel while performing their duties.

separation of the personnel operations (access) according to their functions. For managing the technical risk<sup>34</sup> those methods were applied as the use of the backup center, user inspection and continuous monitoring of the hardware and software complex of payments system.

To permanently maintain the backup center of the payment systems fully operational, the Kazakhstan Interbank Settlements Center (KISC) transferred the payment systems to the software and hardware complex of the backup center on June 17, 2011; the payment systems were run on the basis of the backup servers until June 24, 2011. As part of the payment systems supervision (oversight), during 9 months of 2011 the NBRK had conducted 7 inspections of banks and 2 inspections of organizations engaged in certain types of banking operations for the safety of workplaces of the payment system users (approval of payments and software reliability) in compliance with the requirements of the Instruction No.95<sup>35</sup>.

For the effective development indicators of the interbank payments systems the KISC is the maintenance of high coefficient<sup>36</sup> of uninterrupted operation (operability) of the payment systems (UOC) that ensures timely payments within the Republic of Kazakhstan. To ensure that the operability coefficient of the payment systems corresponds to the statutory numerical value of at least 90%, the KISC performs an ongoing monitoring of the payment systems operation and manages operational and technical risks. In case of any failures in the operation of payment systems timely actions were taken to restore their operability. Generally during 9 months of 2011 the average monthly operability coefficient of ISMT was 99.85% and that of ICS – 99.96%, which corresponds to the established goal and characterizes the efficiency of the payment systems operation.

## **6. Financial System Regulation and Risk Management**

### **6.1 National Bank Measures as Part of its Monetary Policy Implementation to Maintain Stability of the Financial System**

*In January-October 2011 activity of the NBRK in the foreign exchange market was mainly determined by the need to eliminate dramatic fluctuations of the exchange rate of the Tenge as a result of speculative surges which were observed amidst the periods of unstable situation in the US and EU. Because of a high level of liquidity in the banking system there was no need to provide liquidity to the banking system (except for BTA Bank and Alliance Bank which had undergone the restructuring of their liabilities in 2010).*

A favorable external environment amidst high prices for the commodity component of the Kazakhstani exports determined the inflow of foreign currency to the domestic market and its excessive supply over demand in November 2010 – April 2011. The NBRK, in order to sterilize excessive supply, made interventions at the KASE, with the total foreign exchange purchase volume amounting to USD 8.1 bln. during those months. However, in May-October 2011 the situation changed dramatically given uncertainty of expectations about a number of the European countries associated with a probability of sovereign defaults. So, during May-October 2011 there was a gradual increase in the demand for the US Dollar, with the volumes of net purchases of the US Dollar at the KASE by banks amounting to USD 8.2 bln. during the period. In this connection the NBRK was ensuring the supply of foreign exchange at the foreign exchange market to prevent

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<sup>34</sup> Technical risk is the risk of defects and errors in the hardware and software and telecommunication.

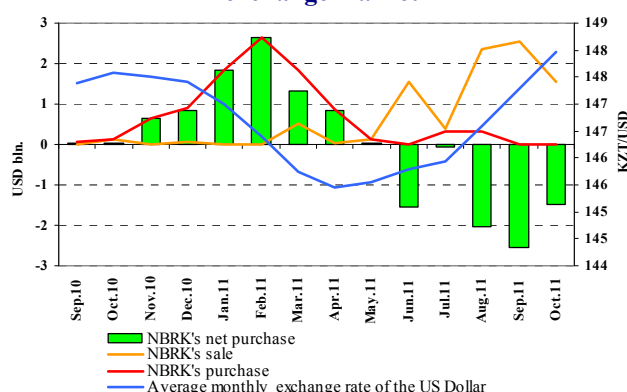
<sup>35</sup> Instruction with requirements to arrangements and software and hardware facilities providing access for banks and organizations engaged in certain types of banking operations to the payment systems of the State Enterprise “Kazakhstan Interbank Settlement Center of the National Bank of the Republic of Kazakhstan», approved by the resolution of the NBRK’s Managing Board of November 28, 2008 No. 95.

<sup>36</sup> Payment system’s operability coefficient for year is calculated as the ratio of real time of operations (period of time from opening of a business day till closing of a payment system’s business day, less the time when a payment system was suspended) to the total time of operation of a payment system (period of time from opening of the payment system business day till closing of its business day).

an excessive pressure on the exchange rate of the domestic currency. The volumes of net sales of the US Dollar at the KASE by the NBRK amounted to USD 7.7 bln. during the period. (Figure 6.1.1).

**Figure 6.1.1**

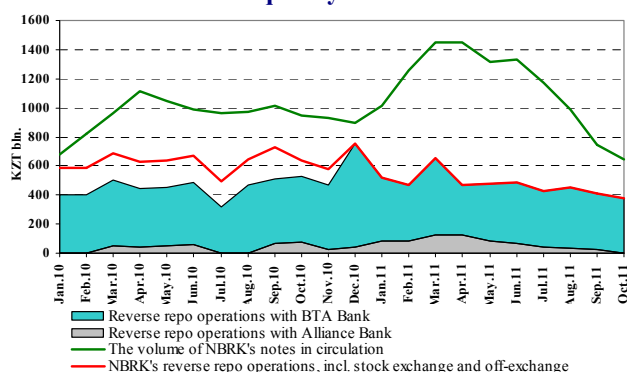
**Volumes of the NBRK's interventions in the foreign exchange market**



Source: NBRK

**Figure 6.1.2**

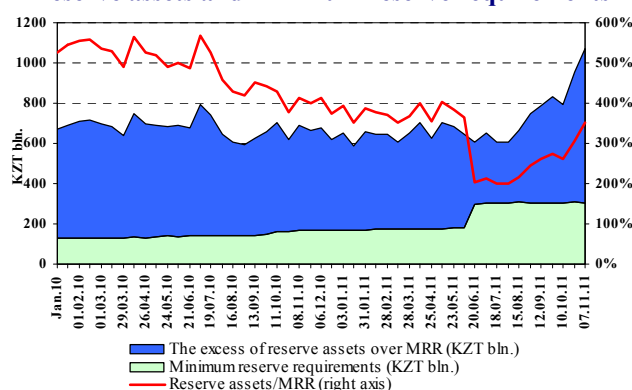
**NBRK's operations related to the regulation of the liquidity level**



Source: NBRK

**Figure 6.1.3**

**Reserve assets and minimum reserve requirements**



Source: NBRK

the volumes of short-notes in circulation. Given a low cost of liquidity attraction in the domestic stock exchange market of repo and interbank market, the interest rate on short-term notes during January-October 2011 didn't exceed 1.45%.

A low quality of the credit portfolio and the conservatism exercised by banks in their lending effort as well as uncertain expectations about the overall economic environment resulted in the bank policy of maintaining a high level of liquidity in 2010-2011. Nonetheless, the NBRK continued to provide liquidity to some banks that had conducted the restructuring of their foreign liabilities in 2010 (Figure 6.1.2).

With the view to reduce risks of the inflationary processes development in the Kazakh economy, the NBRK had been conducting operations for tying up free liquidity of the banking sector throughout 2011.

The NBRK has increased its minimum reserve requirements from 1.5% to 2.5% on the domestic liabilities of banks and from 2.5% to 4.5% on other liabilities of banks from May 31, 2011.

This caused some decrease in the ratio of reserve assets and minimum reserve requirements in mid-2011. Nonetheless, banks continued to accumulate liquidity restoring the existing gap, this fact being proved by the growth in reserve assets accounting for 46.5% at the end of 10 months of 2011 (Figure 6.1.3).

In addition, the NBRK increased the volumes of issuing of short-term notes: if in 2010 the average monthly volume of notes in circulation amounted to KZT 945.7 bln., during 10 months of 2011 this indicator amounted to KZT 1137.1 bln. The NBRK was especially active in issuing short-term notes in the first half of 2011 in order to neutralize the excessive supply of the domestic currency as a result of foreign exchange purchases. From the second half of 2011 foreign exchange sales by the NBRK resulted in the decreased volumes of issues of instruments in the domestic currency that were accompanied by a drop in

## **6.2 Financial Condition of JSC “BTA Bank”, JSC “Alliance Bank” and JSC “Temirbank” and Their Compliance with the Terms of Restructuring**

*Low assets quality of banks that had undergone the restructuring of their liabilities in 2010 may require additional interference on the part of the government. In particular, in case of BTA Bank the Board of Directors suggested that an additional restructuring of liabilities should be performed.*

**JSC “BTA Bank”.** Completion of the process of foreign debt restructuring of the JSC “BTA Bank” in the second half of 2010 allowed reducing the total debt of the bank from USD 12 bln. to USD 4.4 bln. In doing so, the share of foreign liabilities within total liabilities decreased from 43.4% at 01.08.2010 to 33.8% at 01.10.2011. Nonetheless, the bank is still facing serious difficulties caused by low asset quality, high cost of funding, and significant operating expenses and capital deficiency.

Low quality of its credit portfolio still represents the most pressing problem for the bank. At October 1, 2011 the share of non-performing loans<sup>37</sup> in the credit portfolio reached 77.4%, loans past due more than 90 days accounted for 61.1%, respectively. In the second half of 2011 the bank moved back to the balance sheet those loans that were previously written off, pursuant to the IFRS requirements; this was accompanied by significant additional creation of provisions which amounted to KZT 1.3 trln. by the year-end, having increased by 42.5% since the beginning of the year. A significant volume of provisions is the major factor which caused the resulting capital deficiency of the bank.

The main source of funding for the bank is its deposit base whose growth accounted for 16.5% at the end of 9 months of 2011. A relatively high cost of funding against the backdrop of limited cash flows from the loan servicing creates certain difficulties in ensuring the adequate level of short-term liquidity for the bank. Repo operations with the NBRK serve as a key source of the short-term liquidity for the bank.

**JSC “Alliance Bank”.** JSC “Alliance bank” was the first out of the three Kazakh banks that had completed their external debt restructuring (on March 30, 2010), as a result of which the external debt of the bank was reduced from USD 4.5 bln. to USD 1.1 bln., and the term of debt servicing was extended from 1-7 years to 7-20 years. The decrease in foreign liabilities resulted not only in the reduced debt burden but also predetermined changes in the bank’s resource base. So, if before the liability restructuring the funding was mainly based on foreign borrowings, the funding structure at October 1, 2011 is characterized by the prevalence of the domestic sources, mainly customer deposits (over 50% of the bank total liabilities). Alongside with that, the bank is currently making full payments of accrued interest on the restructured debt.

Recovery of the credit portfolio, whose quality is unsatisfactory despite some improvement based on 9 months of 2011, remains a top-priority task for the bank. So, at October 1, 2011 loans past due more than 90 days account for over a half of the credit portfolio (53.9%), and the share of bad loans reaches 40% of the credit portfolio. A large volume of created provisions, on the one hand, and negative profits as a result of high operating expenses at the end of 9 months of 2011, on the other hand, are the key factors negatively affecting the bank capital. At the same time, in order to eliminate the deficiency of capital calculated under the IFRS, the bank has devised the action plan to restore its capital including the decrease in dividends on preferred shares of the bank, sale of the problem loan portfolio to investors at discount as well as the credit portfolio recovery through the loan restructuring, sale of collateral, and other actions.

**JSC “Temirbank”.** As a result of restructuring of JSC “Temirbank” completed on July 1, 2010, the bank’s external debt was reduced from USD 770 mln. to USD 61 mln., and the term of debt servicing was extended from 1-4 years to 10-12 years. Significant reduction in the debt burden

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<sup>37</sup> When accounting for non-performing loans in the loan portfolio, loans classified as doubtful loans of category 5 and bad loans as well as provisions created for similar loans are included.



on the bank allowed creating required pre-requisites to recover its financial condition. Thus, at present the bank doesn't have any problems with short-term liquidity whose level is sufficient to serve its short- and medium-term liabilities on a timely basis. Low quality of its credit portfolio remains as a key vulnerability factor for the bank: at October 1, 2011 the share of credit past due more than 90 days accounted for 45.7% and the total volume of created provisions reached KZT 118.1 bln.

### **6.3 Measures of the National Bank Intended to Improve the Quality of the Banking Sector's Credit Portfolio**

*Low quality of the credit portfolio still remains as the most significant and until now unsolved problem of the banking sector. At present the NBRK implements a set of measures intended for rehabilitation of credit portfolios of banks.*

The Council for Financial Stability and Financial Sector Development of the Republic of Kazakhstan, at its meeting on March 11, 2011, approved the Concept for Improving the Quality of Bank Assets which suggests a number of measures to be taken to clean up the balance sheets of banks from non-performing loans. As part of the Concept implementation, the NBRK establishes a subsidiary – JSC “Problem Loans Fund” (PLF) – which will be buying out problem loans<sup>38</sup> from banks for subsequent recovery of their value. The intended source of funding for the PLF will be the issue of bonds whose maturity will be matching the expected period of the recovery of value (full or partial) of assets bought out by the PLF. The bonds issued by the PLF will be sold to accumulation pension funds, banks and the NBRK.

The Concept also suggests that banks themselves will establish subsidiaries to manage, sell, restructure and securitize problem assets. Such subsidiaries will be buying out doubtful and bad assets secured by real estate including the real estate under construction and loans to corporate customers.

### **6.4 Improving Regulation of Financial Organizations**

*In 2011 the NBRK<sup>39</sup> continued to improve the process of regulation of financial organizations. A set of amendments to the regulatory framework was prepared based on risks which were identified during 2008-2010 and was intended for rehabilitation of the financial system and creation of incentives for its further development.*

**Banking Sector.** During the 4<sup>th</sup> quarter of 2010 – 3<sup>rd</sup> quarter of 2011 a number of amendments were made to the regulations<sup>40</sup> governing the banking sector operations, with a view to encourage the curing of the balance sheets of banks from bad quality assets. In particular, these amendments provide for the tax incentives to recognize losses on problem debts via deductions the income from provision recovery from the taxable income when writing off bad loans. In addition, as an interim measure, the maximum of the ratio of the total bad loan debts waived to an aggregated indicator and the procedure for the bad debt waiver.

<sup>38</sup> Under the Concept, loans classified as loans of category 5 and bad loans, except loans secured by real estate.

<sup>39</sup> Pursuant to the Presidential Edict of the Republic of Kazakhstan No.25 of 12.04.2011 the Agency of the Republic of Kazakhstan on Regulation and Supervision of the Financial Market and Financial Organizations was abolished and its key powers were delegated to the National Bank.

<sup>40</sup> Resolution of the Managing Board of the National Bank of the Republic of Kazakhstan of November 25, 2011 No. 185 “On approval of the Rules for determining an aggregate indicator and the maximum of the ratio of the total bad loan debts waived to an aggregate indicator, the procedure for determination of a calculation index and its amount, the grounds and the procedure for bad debt waivers and making amendments to the Resolution of the Managing Board of the Agency of the Republic of Kazakhstan on Regulation and Supervision of the Financial Market and Financial Organizations dated December 25, 2006 No. 296 “On Approval of the Procedures for Classification of Assets, Contingent Liabilities and Creation of Provisions (Allowances) for Them”.



In order to enhance transparency of the banking sector and harmonize the regulatory framework with the international standards a number of measures were undertaken including:

- imposing prohibition to provide bank loans to entities incorporated in the off-shore zones listed by the competent body;
- updating the methods for identifying the factors which cause deterioration in the bank's financial position;
- improving the methodology for owners' equity calculation of the second-tier banks for its harmonization with the IFRS by including a deferred tax liability in the calculation of the tier-one capital;
- updating the methods for calculation of the ratio of placing of a part of the bank funds in the domestic assets.

**Insurance Sector.** A set of amendments to the legal framework regulating the insurance sector was primarily intended for strengthening the risk management and internal control systems in insurance (reinsurance) organizations, improving regulation of the reinsurance business as well as for increasing protection of interests of insurance services consumers. Particularly, for these purposes the following regulations were amended in the 4<sup>th</sup> quarter of 2010 – 3<sup>rd</sup> quarter of 2011:

- requirements for having risk management and internal control systems in place by introducing the gap analysis for life insurance organizations and revising the stress-testing formats;
- regulation of reinsurance business by establishing limits of insurance premium retentions, maximum volume of insurance premiums ceded abroad, designing the criteria for including the reinsurer's share into the calculation of actual solvency margin;
- liquidation procedures in respect of insurance (reinsurance) organizations with regard to the procedure for a transfer of the insurance portfolio of an insurance (reinsurance) organization under liquidation.

Also, the frameworks of regulation and supervision of the insurance groups and holding companies were set forth in 2010.

**Pension Sector and Securities Market.** With a view to resolve the existing problems in the accumulation pension system and the securities market (low returns on pension savings, absence of a sufficient number of good-quality financial instruments, further incentives for issuers and investors to enter the domestic stock market, etc.), the "Road Map for the Development of the Accumulation Pension System and the Securities Market of the Republic of Kazakhstan" was approved. The Document identifies priority areas for the improvement of the securities market and pension system regulation in 2011. Particularly, in the 4<sup>th</sup> quarter of 2010 – 3<sup>rd</sup> quarter of 2011, a top priority goal in the framework of improving the regulation of these segments of the financial market was to enhance their stability and ensure an appropriate level of protection of the rights and interests of depositors and investors. To that end, a set of amendments was made to the legal framework that intends for:

- creating adequate allowances (provisions) for potential impairment losses from the issuers' shares and bonds by accumulation pension funds and asset management companies;
- designing risk management mechanisms for the risks associated with the conflict of interests in the accumulation pension funds and professional players in the securities market;
- introducing delayed prudential requirements for accumulation pension funds and asset management companies in building a conservative, moderate and aggressive investment portfolios;
- expanding the list of highly-liquid assets and updating the procedure for calculation of liabilities when determining the current liquidity ratio.

**Protection of rights of financial service consumers and improvement of regulatory processes.** On February 10, 2011 the Law of the Republic of Kazakhstan "On amendments to some

legislative acts of the Republic of Kazakhstan on mortgage lending and protection of rights of financial service consumers and investors” was passed. The provisions of the Law provide for:

- enhancing protection of the investor rights, including by determining personal responsibility of officials of joint-stock companies for the decisions they made, in case of damages caused to the public;
- enhancing protection of rights of mortgage borrowers including by introducing the institute of banking ombudsman for the settlement of disputes between banks and mortgage borrowers;
- enhancing protection of rights of the financial service consumers, including by enhancing the transparency of lending terms and conditions and improving the procedures governing the maintenance of loan documents.

As part of the improvements in the regulation of financial organizations, on December 28, 2011 the Law of the Republic of Kazakhstan “On Amendments to Some Legislative Acts of the Republic of Kazakhstan Related to Regulation of Banks and Financial Organizations with Regard to the Risk Minimization” was passed providing for:

- increasing consolidated supervision of bank conglomerates by minimizing risks in financial organizations that arise from transactions with affiliates;
- introducing the transparency mechanisms in the activities of financial organizations, large participants and bank holding companies;
- improving the capital quality of financial organizations by establishing additional requirements to the transparency of sources for the shareholders’ equity of financial organizations and its major shareholders;
- introducing the early warning signals in respect of bank holding companies, bank conglomerates and professional players in the securities market;
- improving the corporate governance system in financial organizations, bank holding companies, and joint-stock companies as well as attaining the transparency of the corporate governance system ensuring timely and accurate information disclosures as provided for by the laws of the Republic of Kazakhstan;
- improving legal mechanisms of restructuring in respect of banks within bank conglomerates as well as updating the procedures for restructuring of liabilities of issuers;
- further developing the system of regulation of financial organizations and supervisory practices based on the international standards;
- establishing an effective system for protection of the investor rights and interests in the securities market, including through the fine-tuning of the disclosure procedures in respect of the activities of securities issuers and the financial market licensees to investors;
- increasing the responsibility of financial organizations for the failure to meet their commitments to customers as well as of executives and large participants of financial organizations for the failure to ensure compliance with the legal requirements of the Republic of Kazakhstan;
- improving the financial market infrastructure to prevent fraud including manipulations in the securities market and increasing the investor confidence in the professional players of the securities market;
- further developing collective forms of investments by improving the laws of the Republic of Kazakhstan governing the procedure of establishment, operation and termination of operations of accumulation pension funds and investment funds in the Republic of Kazakhstan.

## IV. Appendices

### Financial Stability Indicators of Kazakhstan <sup>1</sup>

### Appendix

(as percentage)

	2008	2009	2010	6 months of 2011	9 months of 2011
<b>Banking Sector <sup>2</sup></b>					
<i>Capital Adequacy Ratios</i>					
Regulatory capital to risk-weighted assets	14.9	-8.1 (18.4)	17.6 (17.5)	18.5 (18.8)	17.5 (18.0)
Tier-1 capital to risk-weighted assets	11.6	-9.3 (14.1)	13.8 (13.2)	14.6 (14.5)	13.6 (13.8)
Capital to assets	12.2	-8.5 (11.5)	10.9 (18.8)	11.3 (12.1)	10.8 (13.3)
Past due loans over 90 days net of specific provisions to capital	10.2	-52.2 (39.3)	60.2 (27.1)	58.5 (42.2)	68.6 (39.9)
Capital to total liabilities	13.9	-7.8 (13.0)	12.3 (16.4)	12.7 (13.6)	12.1 (11.8)
<i>Asset Quality</i>					
Past due loans over 90 days to total loans	5.2	21.2 (14.4)	23.8 (16.4)	26.3 (17.7)	29.5 (18.1)
Provisions to total loans	11.1	31.5 (20.7)	30.9 (21.8)	31.1 (22.5)	32.9 (22.3)
Provisions on past due loans over 90 days to past due loans over 90 days	68.9	74.9 (55.9)	63.2 (56.3)	65.8 (58.3)	67.5 (58.3)
Foreign currency loans to total loans	52.2	57.2 (54.2)	50.2 (46.8)	46.5 (42.7)	45.6 (39.9)
<i>Profitability Ratios</i>					
Return on assets (ROA) <sup>3</sup>	0.2	-24.1 (0.2)	12.0 (5.9)	0.3 (0.6)	0.2 (1.1)
Return on equity (ROE) <sup>3</sup>	1.9	-1192.5 (1.9)	843.9 (51.2)	2.8 (4.9)	1.4 (8.5)
Interest margin to total income*	68.7	92.9 (10.0)	16.4 (72.8)	69.2 (72.1)	75.9 (72.1)
Non-interest expenses to total income*	98.7	145.4 (99.6)	21.1 (47.1)	61.9 (44.9)	67.7 (44.6)
Personnel expense to non-interest expense*	4.6	1.0 (1.4)	26.3 (34.1)	31.4 (36.6)	31.4 (36.3)
Spread between reference rates on deposits and loans* <sup>4</sup>	756.5	509.2 (745.9)	393.6 (635.4)	246.7 (321.5)	354.9 (481.1)
<i>Liquidity Ratios</i>					
Highly-liquid assets to total assets	13.6	19.2 (20.3)	21.2 (22.8)	20.0 (21.3)	21.3 (23.3)
Highly-liquid assets to short-term liabilities <sup>5</sup>	49.5	53.1 (64.9)	63.3 (64.8)	59.6 (60.2)	57.7 (59.2)
Customer deposits to total loans (excl. interbank loans)	53.4	67.2 (82.1)	76.7 (88.8)	80.8 (93.2)	79.5 (93.6)
<i>Market Risk Sensitivity</i>					
Net FX exposure to capital	5.2	177.3 (1.3)	-3.2 (-3.7)	0.6 (0.9)	2.0 (4.0)
<b>Other Financial Corporations<sup>6</sup></b>					
Assets to total assets of the financial system	38.1	19.9	23.4	24.3	24.2
Assets to GDP	45.5	16.9	16.8	16.9	18.3
<b>Corporate Sector</b>					
<b>(large and medium-size enterprises)</b>					
Return on assets (ROA)	17.9	11.3	14.7	16.0	17.1
Return on equity (ROE)	43.2	29.8	39.6	41.8	44.4
Total liabilities to capital (leverage)	1.5	1.7	1.6	1.6	1.6
Net FX exposure to capital	-40.8	-55.1	-61.1	-60.1	104.1
Current liquidity ratio	1.4	1.3	1.4	1.4	1.4
<b>Households Sector</b>					
Debt of households to GDP	16.9	15.2	11.2	10.4	10.5
Debt of households to disposable income	32.9	27.5	22.1	21.5	20.0

Source: FSC, ASRK, derivations by the NBRK

\* - data differ from the data of the Financial Stability Report for 2010 due to changes in methodology for generating data.

<sup>1</sup> – financial soundness indicators were calculated under the methodology (FSI Compilation Guide. IMF. 2007) and explanations provided by the IMF. Therefore, values of indicators may be different from those calculated by the supervisor.

<sup>2</sup> – numbers provided in brackets represent the banking system of Kazakhstan excluding BTA Bank, Alliance Bank and Temir Bank.

<sup>3</sup> – net income before tax to average assets. Intra-annual numbers for income before tax were annualized by multiplying a current number for the indicator by a numeric value inverse to the respective period of the year. Average assets value was calculated as the average of positions at the beginning and end of the period. Average capital was calculated as the average of positions at the beginning and end of the period.

<sup>4</sup> – reference rate on loans is calculated as the ratio of the sum of interest income on loans (interest income on bank loans to customers) to the average position on loans. The reference rate on deposits represents the ratio of interest expense on deposits (interest expense on attracted deposits) to the average position on deposits. The average position on loans and deposits represents the average of positions at the beginning and end of the period on loans and deposits, respectively. The numbers are given as percentage points.

<sup>5</sup> – short-term liabilities are calculated based on the net position on transactions with financial derivatives.

<sup>6</sup> – when calculating the indicators, only data on the sector of non-banking financial institutions were used.