II. Macroeconomic Risks and Financial Markets Risks

1. Factors of the External Environment

1.1 Financial Crisis Typology

In the background of the financial crisis development, the value of many classes of assets was adjusted downward. Thus, correction of 'assets bubble' in the real estate market and prices for raw materials, metals, semi-conductors and foodstuff have in general created preconditions for stabilizing of the price level in the medium-term perspective. However, a low level of prices for commodities supposes reduction of currency receipts from the sale of mineral products and other raw commodities for the developing countries –their main exporters.

A sharp growth of commodity prices in 2007 continued in the first half of 2008. Thus, the highest price growth for raw commodities for the last decades was recorded in February 2008 – the dynamics of Reuters/Jefferies¹ CRB index showed a maximum historical surplus in 12% per month. At the same time, increase in price volatility fueled by speculative capital has eventually transformed into a sharp adjustment in the third quarter of this year. This was connected with the necessity of fixing the income, due to reduction of liquidity and the concerns about the world economy growth deceleration. In particular, if the index grew by 30% for the first half of 2008, the reduction for the third quarter was -25% (Figure 1.1.1).

Figure 1.1.1 Commodity Price Indices



Wheat price (No 2 Soft Red (right axis)) —— Reuters/Jefferies CRB Index

Source: Thomson Financial Ltd. (DataStream)

The price of the inflation's main trigger in the developing countries in 2007 – wheat – has also demonstrated the same dynamics. On the whole, the decrease in wheat prices amounted to 40% over the nine months of the current year. The average forecast of independent analysts² regarding to the prices for wheat has tended to be downward. Thus, in 2008 and 2009, it is expected that the wheat price will decline to USD346.6 per tonne (in the range of forecasts of 275(min); 411.19 (max)) and USD293.7 per tonne (in the range of (236; 340)) respectively.

The dynamics of the price for Brent crude oil also demonstrated an increased volatility. Although on the whole the price change was only 2% for 9 months of 2008, the quotations dropped from USD145.61 in July to USD93.84 in September and then to USD59.9 in late October 2008. The price adjustment in the second half of the year occurred for a wide range of products; however, from all commodities the petroleum market experienced the greatest pressure of speculative capital. Thus, if for the first half of the year the prices for gold, copper and zinc grew by 12.8%, 19% and 29.7% respectively, the price for Brent crude oil increased by 47.6% (Figure 1.1.2, Figure 1.1.3).

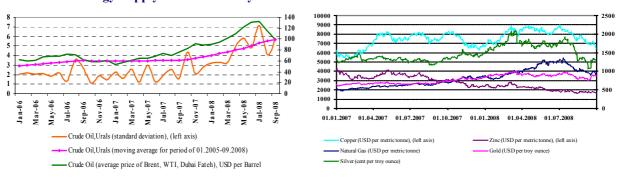
¹ The historical integral index constructed on the basis of 19 raw commodities prices.

² The consensus forecast of 10 international organizations and investments banks as of October 31, 2008. Source: RBK Consulting

Figure 1.1.2 Energy Supply Prices Volatility

Basic Metal and Gas Prices

Figure 1.1.3



Source: Thomson Financial Ltd. (DataStream), IMF

Source: Thomson Financial Ltd. (DataStream)

The current assessments indicate a low probability of renewal of rapid oil prices' growth in the short-term perspective due to substantial scale of the crisis. However, an impact of main fundamental factors such as rise in the demand for fuel, deficiency of processing capacities and reduction of production may lead to their gradual recovery in the medium-term perspective.

The forecasts on oil prices movements are heterogeneous and are primarily under the influence of such factors as oil supply regulation by OPEC, forecasts on reduction of the world reserves and petroleum production in future, adequacy of petroleum reserves in the USA, oil supply and consumption by the developing countries and the USA.

The IMF forecast on the average price for crude oil for 2009 is at the level of USD68. At the same time, investment bank Merrill Lynch, according to its forecasts made in December 2008, expects more price adjustment to USD25 per barrel due to traditionally low seasonal demand in the first and second quarters of 2009. The forecast range made by independent analysts in September through November 2008 shows substantial spread of expectations for the oil price, unexpectedness of its adjustment amplitude in the third quarter, and at the same time confidence in its further decrease (Table 1.1.1).

Table 1.1.1

Forecasts on the Oil Prices Movement for Different Grades of Crude Oil (USD/bbl)

Name of crude oil	Average value		Maximum value		Minimum value	
	2008	2009	2008	2009	2008	2009
WTI	101.3	80.74	117	125	70	50
BRENT	105.52	86.13	116	125	93	57
URALS	96.09	74.34	106.47	91.1	73	57

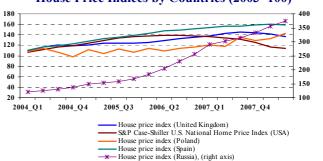
Source: consensus forecast of the investment banks under the materials of RBK Consulting, the data of Renaissance Capital, IMF, World Bank, informational materials of www.cbonds.ru, www.forexpf.ru.

In turn, a gradual adjustment of 'inflated' prices for assets as a consequence of speculative trends was also observed on the real estate markets of different countries throughout the world.

Thus, the indicative index of the US housing market – S&P 500 Case/Shiller house price index – reduced for the first half of 2008 by 8%, and by 17% as compared with the maximum value of the second quarter of 2006 (Figure 1.1.4).

The deepest adjustment of real estate prices has been observed in the developed

Figure 1.1.4 House Price Indices by Countries (2003=100)



Source: Thomson Financial Ltd. (DataStream), web-sites of the national statistical agencies

countries. In comparison with the developing countries, the largest economies experienced the first wave of mortgage crisis to the largest degree as a result of:

- tightening of the terms on lending of mortgage loans;
- decrease of consumers' expenditures;
- economic growth deceleration;
- lack of consumers' confidence in the prospects of housing market, and
- reduction of speculative operations in these markets.

The real estate market trends in the developing countries had different directions. Some countries have experienced decline in the real estate market as a result of restriction of external resources which in the past years were significantly invested in the real estate market. Other countries have so far demonstrated a growth of prices for real estate related to maintenance of the demand for dwellings, overflow of resources from stock markets to the real estate market as result of the world financial crisis and decrease in the volumes of new supply because it has become more difficult for builders to get financing.

Gradual worsening of the financial and economic conditions as result of increased tension on the world financial market from the beginning of 2008 have became the main factors of the global growth decline. A wide scope of anti-crisis measures taken by state should contribute to changing of the trend for improvement in the medium-term perspective. However, in order to overcome and reduce a negative effect of the financial crisis upon the real economy it may be required a greater volume of financial injections from the government, which actual scale is difficult to assess at the current moment.

The combination of numerous negative shocks as a result of the global financial crisis development since early 2008 has caused by ascending trend a gradual deceleration and then decline of business activity in many countries of the world.

Gradual occurrence of such consequences of the crisis development as:

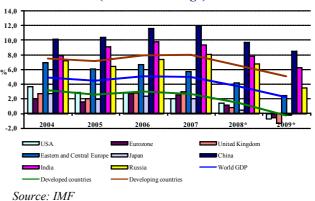
- reduction of the real estate prices;
- substantial growth of commodities prices at the world market;
- tightening of credit standards;
- decrease of the level of consumer expenditures and investments;
- substantial losses and bankruptcy of financial institutions;
- gradual reduction of the domestic demand and business activity

adjusted downward the world economy development perspectives and increased the deep recession probability of a number of developed economies in 2009 (Figure 1.1.5).

As the events developed in the second half of this year, international financial institutions revised their forecasts of the growth rates of economic development in the countries and regions

toward worsening of the world economy development in the medium-term perspective. Thus, according to the IMF forecasts revised on November 6, 2008, a global growth for 2008 will be at 3.7%. At the same time, in 2009 the world economy growth will continue to go down, primarily due to deceleration of economies of the developed countries, and is predicted only at 2.2% (for the developed countries: -0.3%, for the developing countries: 5.1%). The forecasts of analysts of other international organizations and financial institutions for the world economy development in 2009

Figure 1.1.5
Real GDP Growth of Certain Countries and Regions,
(annual % change)



*- forecast

are in the range of 4.3% to 0.9%, which is on the average at 2.6%. The largest deceleration in 2009, according to the IMF forecasts, is expected in the United Kingdom – its economic growth reduction

is predicted at -1.3%. In turn, the economic decline in the USA, Europe and Japan may be at -0.7%, -0.5% and -0.2% respectively.

The average forecast based on the national sources and other international institutions for 2009 is 0% for the United Kingdom in the range of $(-1.9\%; 3\%)^3$, 0.9% for the USA in the range of (-1.2%; 2.4%), 0.6% for Europe in the range of (-0.6%; 1.4%), 1.0% for Japan in the range of $(0.4\%; 1.8\%)^4$.

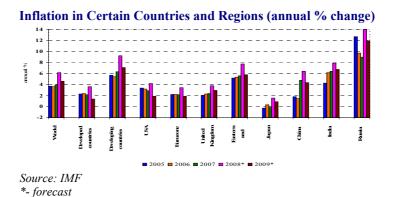
Although the economic growth rates in the developing countries have remained higher than the average value of 5.8% that has been recorded since 2000, as the financial crisis is worsening, there is noted a gradual deceleration of their economies. The determining role has a deterioration of the terms for external resources attraction, reduction of international investments inflow and demand from the side of the main export consumers, also decrease in the prices for raw material resources. Thus, IMF predicts the growth of China in 2009 at 8.5% (the average forecast of independent analysts⁴ is 8.4% in the range of (7.2%; 9.5%)). However, more new signs of the economic growth deceleration have appeared at the current moment there. Thus, the Fitch international rating agency predicts the reduction of the growth of China to 7.2% in 2009.⁵

With regard to Russia, the revision of IMF forecasts in November strongly deteriorated the prospects of the country's economic development. Thus, if the forecast for 2008 is at 6.8%, then in 2009 it is expected at 3.5%. The average forecast of international institutions and national agencies for 2009 is at the level of 4.7% in the range of (2.5%; 6.7%).⁶ At the same time, according to estimates of the national sources, such sharp reduction will occur under a substantial reduction of oil prices with their long fixation on low levels and reduction of raw materials export.

The reduction in the second half of the current year of the prices for the commodities – both foodstuff and raw materials, as well as deceleration of the economic growth are weakening a risk of global inflation.

In the first half of 2008, the threat of stagflation of the world economy seemed to be more than evident in the background of economic growth reduction and high level of inflation as a result of high prices for mineral resources and foodstuff on the world markets. Along with that, in the third quarter of 2008 due to the decrease in economic activity and demand reduction throughout the world as result of deepening of the financial crisis and a sharp turn of the prices on the world commodity markets, the inflation pressure in the world started to decrease which should be expressly seen already in 2009. According to the IMF forecasts, an inflation rate in 2009 will be by 1.5-2% lower comparing to the current year for both the developed countries (1.4% in 2009 versus 3.6% in 2008) and the developing countries (7.1% versus 9.2% respectively), and it should be on the average 4.6% (6.2% in 2008) (Figure 1.1.6).





³ Consensus forecast of the Ministry of Finance of the United Kingdom on the basis of polls of 27 international financial institutions. The forecast dates are October 1-9, 2008.

⁴ Average consensus forecast of RBK Consulting on the basis of polls of the international financial institutions (October 16, 2008), rating agency Fitch (November 2008), JP Morgan, Financial Market (www.finmarket.ru)

⁵ FitchRatings, "Global Economic Outlook", November 2008

⁶ Average consensus forecast of RBK Consulting (October 16, 2008), rating agency Fitch (November 2008), JP Morgan, Ministry of Economy of RF

At the same time, according to the estimate of IMF⁷, the decrease of business activity may result in an inflation rate in the developed countries lower than the target parameters established by the countries. According to the forecasts, the greatest decrease is expected in the USA as result of a sharp reduction of the domestic demand and consumption where according to the consensus forecast of international organizations⁸, an inflation rate should go down from 4.1% in 2008 to 2.5% in 2009.

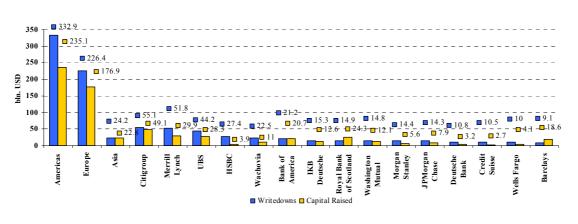
In turn, in the developing countries inflation will decrease slower as the increase of the prices for the fuel and consumer goods during the price surge in 2007 greatly affected the level of consumer prices.

In spite of the forecasts on inflation rate decrease, a threat of its growth remains high in the long-term perspective as result of the macroeconomic policy pursued by the state on weakening the monetary policy in the form of interest rates reduction, injections of substantial funds for the purpose of resisting the financial crisis consequences and probability of currency devaluation in the developing countries.

A substantial losses and write-offs, bankruptcy of the world largest companies, tightening of credit terms and unavailability of free liquidity on the market have forced to take joint large-scale anti-crisis measures by different countries of the world.

All the seriousness of mortgage crisis revealed itself from the first announcements of losses by the largest investment banks upon the results of 2007 fiscal year and later in this year (Box 1). It resulted in the need of formation of additional capital for the purpose of covering losses writing off the balance. One of the first financial organizations that declared losses and soon were nationalized by the state were IKB and Sachen LB (Germany), Country wide (USA), Northern Rock (United Kingdom). Thus, as estimated by IMF, for period from the second half of 2007 to September 2008, banking institutions have made write-offs for the total amount of USD580 bln. About 95% of write-offs were made mainly by the institutions of America and Europe and at the less degree by Asian institutions. For the same period, capital injections were approximately USD430 bln. and also were focused on a few large financial institutions of America and Europe (Figure 1.1.7). If at the initial stage of the crisis private investors and various wealth funds acted as main investors in the capital (88%), since this year the situation has changed in favor of state regulators. The capital was increased in different forms such as purchasing additional issues of common and preference shares, both convertible and common, subordinated bonds, assets purchase and other.





⁷ World Economic Outlook, October 2008

Source: Bloomberg

Figure 1.1.7

⁸ Consensus forecast according to the data of 30 international institutions as of October 2008. Source: RBK Consulting

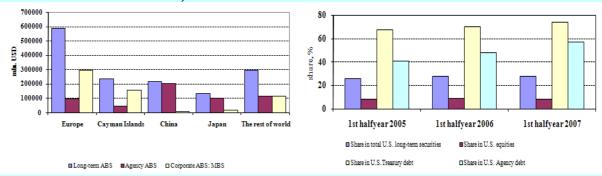
⁹ Global Financial Stability Report, October 2008

Credit Risk and Its Materialization

Spreading of financial risks all over the world through securitization instruments and their inadequate assessment by financial institutions served as one of the main reasons of considerable losses and bankruptcies of many financial institutions. The credit risk on these complex instruments have a wide institutional distribution with vigorous activity on the world financial market of not only hedge funds, but different financial institutions, including institutions with state participation such as wealth funds. Thus, according to the US Treasury data, the share of investments of foreign official institutions (include monetary authorities and national investment funds) in agency debt securities for period from 2004 to 2007 increased from 34% to 58%. These institutions were responsible for all of the increase in total foreign holdings of long-term U.S. Treasury securities during the June 2006 -to-June 2007 period (about ¾ of the growth fits only agency debt liabilities) (Figure 1.2).



Figure 2 Share of Foreign Official Institutions in Total Foreign Holdings of U.S. Long-Term Securities



Source: US Treasury. "Report on Foreign Portfolio holdings of U.S. Securities", April 2008.

Although this year the largest financial institutions made large-scale write-offs, a high credit risk on investments in the US financial assets, including in government securities, remains high. An active support of the financial market in the form of huge volumes of the financial resources provided by the US Government expands further the imbalance of the US state budget, which in addition to the risk of ownership of secured debt liabilities increase a sovereign credit risk and volatility of the treasury liabilities.

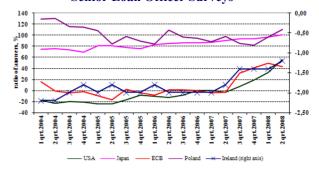
The high level of uncertainty with regard to the financial conditions of borrowers and growth of credit risk forced the commercial banks to raise the requirements for loans granted for both corporate sector and households.

Thus, according to the questionnaires of commercial banks conducted by central banks of different countries of the world, among the main reasons that entailed tightening of the credit standards were mainly indicated such factors as weak forecasts of economic growth, decrease of the activity on the real estate reduction of market, risk 'tolerance', deterioration of the intrasectoral conditions inside the industries and concern about the level of debt burden on capital (Figure 1.1.8). Tightening of credit requirements in turn resulted in reduction of the lending volumes of domestic economies, and this has an additional negative effect on the level of business activity in different countries (Figure 1.1.9).

Figure 1.1.8

Balance of Answers of Commercial Banks on a

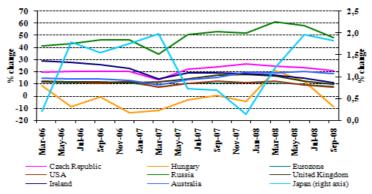
Question of Credit Standards Tightening according to
Senior Loan Officer Surveys



Note: Positive value indicates a prevalence of respondents' answers to question of credit standards tightening Source: web-sites of central banks, Thomson Financial Ltd. (DataStream)

Figure 1.1.9

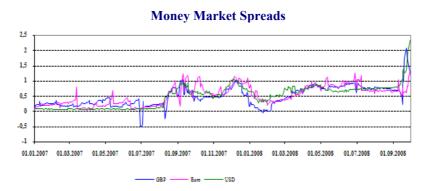




Uncertainty in the financial sustainability of counter partners and the collateral value, refusal from risky operations has resulted in overall reduction of market liquidity.

The market of unsecured borrowings with the term of less than 3 months has become very expensive and practically closed. The measures taken by the states, for example, announcement of the guarantees on banks liabilities on the interbank market had only partially solved the problems with improvement of the conditions on the interbank market. Thus, spread of LIBOR-OIS reflecting the risk and liquidity premium to be paid by the banks for granting unsecured and short-term loans essentially expanded in September 2008 (Figure 1.1.10).

Figure 1.1.10



Source: Thomson Financial Ltd. (DataStream), Bloomberg

Note: the spreads have been calculated as a difference between 3-month LIBOR and 3-month Overnight interest rate swaps

General risk aversion became a main trend of the situation development on the stock markets worldwide during 2008. High sensitivity of stock markets to an essential flow of negative news in the background of development of a new stage of the crisis directed the market with an increasing trend to downward, and as a result this run out into the stock markets collapse throughout the world.

Constant signals about deepening of the crisis and its spreading from the US markets to Europe and other regions of the world, panics at stock markets due to declaring considerable losses and their write-offs, bankruptcy of Bear Stearns in March, nationalization of British bank Northern Rock, record prices for crude oil, nationalization of Fannie May and Freddie Mac agencies in July served as a reason for sharp decline in stock indices. In turn, declaring itself bankrupt by the largest financial institution Lehman Brothers and nationalization of AIG insurance company in October 2008 provoked a mass escape almost from all markets and assets regardless of its level of development and capitalization. This was reflected in record historical decline of indices of the world stock markets (Figure 1.1.11). In comparison with other markets, the Russian stock market has fallen down at the highest extent – by -47% (Table 1.1.2).

Figure 1.1.11 Table 1.1.2

World Stock Indices

Dynamics of World Stock Indices for 9 months of 2008

350,00
300,00
250,00
200,00
150,00
100,00
50,00
50,00 0,00 02.01.2006 02.07.2006 02.01.2007 02.07.2007 02.01.2008 02.07.2008
50,00
50,00 0,00 02.01.2006 02.07.2006 02.01.2007 02.07.2007 02.01.2008 02.07.2008

Index	Country	Index value as of the end of 2007	Index value as of the end of Q3 2008	Change, %
RTSI	Russia	2,290.51	1,211.84	-47.09
ATX	Austria	4,512.98	2,767.76	-38.67
AEX General	Netherlands	515.77	331.45	-35.74
India BSE 30	India	20,286.99	12,860.43	-36.61
Greece General share	Greece	5,178.83	2,856.47	-44.84
Hang Seng	Hong Kong	27,812.65	18,016.21	-35.22
S&P500	United Kingdom	1,468.35	1,166.36	-20.56
DowJones	USA	13,264.82	10,850.66	-18.19
Nikkei	Japan	15,307.78	11,259.86	-26.44

Source: Thomson Financial Ltd. (DataStream), www.rbc.ru

Over 9 months of 2008, the FOREX market was most sensitive to the all trends that occurred in the background of financial crisis development and unfavorable future forecasts, as well as anti-crises measures of states.

The tendency of the US dollar depreciation in relation to the main currencies of the world has remained in the first half of 2008. The main factors that contributed to this tendency were as follows:

- Reduction of the basic interest rate for the purpose of supporting the financial market in the conditions of the expanding crisis;
 - Assessments of further reduction of economic activity in the USA; and
 - Gradual disclosure of the problems of the largest financial institutions.

Further deterioration of the tendency of the US dollar depreciation has caused gradual decrease by many states of a dollar component in their reserves and refusal from using a US dollar in their settlements.

In the second half of 2008 the US dollar was noted to appreciate in the background of undertaken anti-crisis measures from the side of the US Government with respect of the country's exit from the crisis, reduction of oil prices and growth of the cost of dollar resources on the interbank market. The main participants of the FOREX forecast that this trend will remain in the short-term perspective (Table 1.1.3).

Flow Range and Forecasts of Exchange Rate of the Leading World Banks

Range of actual values	Euro/ US dollar	Pound sterling/ US dollar	US dollar/ Japanese yen
1st quarter of 2008	(1.449-1.580)	(1.945-2.032)	(97.155-111.345)
2 nd quarter of 2008	(1.536-1.595)	(1.943-1.998)	(100.526-108.262)
3 rd quarter of 2008	(1.395-1.595)	(1.751-2.003)	(104.436-110.491)
Range of forecast values			
As of the beginning of 2009	(1.17-1.45)	(1.50-1.82)	(90-110)
Average value	1.3364	1.6896	101.04
As of the end of the 3 rd quarter 2009	(1.18-1.45)	(1.51-1.89)	(95-116)
Average value	1.3136	1.6679	107.04

Source: banks forecasts according to the materials of web-sites www.forexpf.ru (as of October 27, 2008), www.quote.ru (as of November 1, 2008)

Table 1.1.3

For the purpose of reducing the crisis, the Governments and Central Banks of different countries took various anti-crisis measures. If during the first period of crisis primary the developed countries of the world were the most active states, then the events occurred in this autumn provoked a collapse of stock markets, suspension of trade sessions and resulted in an unprecedented taking of coordinated and urgent anti-crisis measures and stabilizing programs by most countries of the world.

The package of anti-crisis measures was mainly implemented in such directions as: 1) markets saturation with liquidity; 2) direct funding of financial institutions; 3) capital increase; 4) declaring explicit and implicit guarantees on the liabilities of financial institutions for the purpose of maintenance confidence in the financial systems. The majority of measures are temporary as many states have determined the time horizon (on the average 2-3 years ahead) of their actions until the end of market turbulence (Table 1.1.4).

At the same time, at the initial stage in most cases adoption of a substantial number of anticrisis measures was perceived by markets negatively, thereby signaling that the countries by taking these measures acknowledge the possible implicit scopes of exposure to the risk of crisis development.

Table 1.1.4 Measures on Ensuring Financial System Stability

Ways of solution	Form
Problem: Squeezing of the financial markets liquid	lity
Increase of operations volume and terms as to	Short-term REPO operations (less than 1 month)
classic instruments of refinancing	Long-term REPO operations (over 1 month)
New forms (instruments, programs) of refinancing	Refinancing operations on special terms
	Auctions on granting/placement of credits/deposits in USD, including unsecured
	Agreements about SWAP currency operations in USD and foreign currency between central banks
	SWAP operation with USD and other currency
	Unsecured credits (including subordinated) through state banks, deposits of the Central Bank and Government
	Schemes of exchange (buyout) of non-liquid assets of the banks to liquid assets
Change of the conditions on the refinancing	Expansion of the list of collateral
operations of the central bank	Expansion of the list of counteragent organizations at the expense of brokers, dealers, credit organizations and investment banks, insurance companies and other organizations
	Decrease of the norms for reserves requirements
Reduction in the cost of the resources of central bank and credits to the economy	Decrease of the key interest rates
Other form of providing liquidity to the banks	Increase of interest rates on deposits in the central banks, payment of interest rates on deposits or deposit certificates
Problem: Reduction in confidence to the financial	
Increase of guarantees on deposits of commercial banks	Increase of a maximum amount of compensation on guaranteed deposits
Announcement of guarantees on liabilities of the	Guarantee of the Government or Central Bank on different types of financial liabilities
banks and other financial institutions	(interbank, external loans, deposits) both existing and new attractions
Problem: Capital adequacy to risks	
Capitalization increase to the level adequate to potential risks	Recapitalization (buyout and subscription to the new or available volumes of shares and subordinated debt)
	Forced nationalization of financial institutions
Address support	Granting credits as a lender of the last resort to financial institutions by the government or central banks
Improvement of the assets quality	Problem assets buyout
Comprehensive solution of the problems with funding, liability guaranteeing, assets buyout and temporary management	Creation of specialized institutions/funds on support of financial institutions
Problems: Increase of financial markets volatility	
Restriction of speculative operations on the domestic markets	Prohibition on conducting short sales throughout the market or according to a restricted list of securities, requirements for information disclosure
Increase of the Central Bank resource base on	IMF credits
meeting the demand for foreign currency	INTE CICCIES
Stabilization of the price parameters of the market	Interventions on domestic currency markets
or the price parameters of the market	The state of the s

Interventions on organized securities markets

Source: NBRK on the basis of publications, press releases of central banks, mass media

1.2. Developing Countries – Risks Transformation

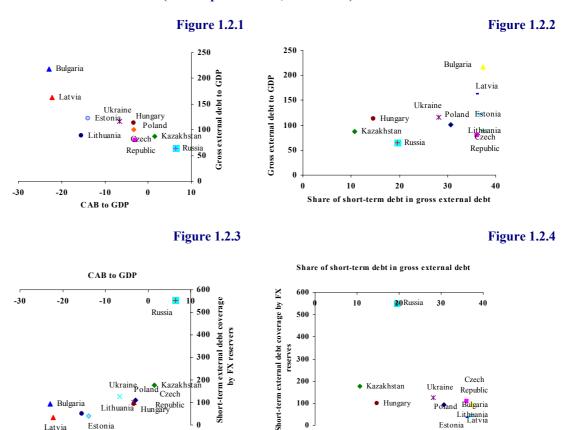
Although direct costs (losses and bankruptcies of the largest financial institutions) of the US sub-prime crisis have until now been borne by the developed countries, the tendency of risks reassessment with regard to the developing countries has intensified in the direction of deterioration in response to the worsening of borrowing conditions, decline in the world prices in the background of credit boom adjustment.

The main risks of the developing countries are in the first place related to restriction of access to external financial resources in the form of tightening of requirements for borrowers, increase of the cost of attracting new resources and servicing the current liabilities.

A negative effect was at the highest degree experienced by those developing countries where a high economic growth was based on the favorable conditions for attracting the resources from external markets and high prices for raw commodities. Thus, the level of external debt in some developing countries have reached the value more than 100% to GDP, where the most part of the external debt primarily is the short-term debt.

In the light of emerged negative consequences of the financial crisis for the developing countries, an observed capital outlow, high share of short-term external liabilities, active support of domestic financial markets creates certain risks to the foreign exchange reserves adequacy of the developing countries (Figures 1.2.1-1.2.4).

Comparative Parameters of Developing Countries Vulnerability (as of 2 quarter 2008, annualized)



Note: Displacement to extreme top and to lower corners of diagrams reflects higher risk Source: Thomson Financial Ltd. (DataStream), web-sites of central banks and national statistic agencies In turn, a high deficit of the current account, restricted capabilities of financing external positions, deterioration of the assets quality due to reduction of borrowers' creditworthiness, and on the whole negative forecasts on economic growth were reflected in lowering by international rating agencies (S&P, Moody's and Fitch) of credit ratings and forecasts of future ratings on sovereign liabilities of the countries (Table 1.2.1).

Ratings of Countries on Long-term Liabilities in Foreign Currency

Country	As of October 31, 2008							
Rating agencies	Moody's	Moody's S&P						
Poland	A2/Stable	A-/Stable	A-/Stable					
Czech Republic	A1/Positive	A/Stable	A+/Stable					
Hungary	A2/Stable	BBB+/Negative	BBB+/Negative					
Bulgaria	Baa3/Stable	BBB/Negative	BBB/Negative					
Russia	Baa1/Positive	BBB+/Negative	BBB+					
Ukraine	B1/Stable	B/Negative	B+/Negative					
Kazakhstan	Baa2/Stable	BBB-/Negative	BBB/Negative					

Source::Bloomberg

Decoding:

Rating increased	Rating increased/forecast improved	No changes
Rating decreased	Rating decreased/forecast worsened	Rating decreased/forecast Stable
Rating unchanged	Rating unchanged /forecast worsened	Rating unchanged/forecast improved
Rating unchanged /forecast Stable		

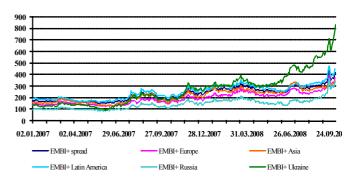
The position of international rating agencies toward any country or its issuer continues to unreasonably serve as a main benchmark for international investors. Revision of credit ratings together with the factors of worsening of the conditions for the developing countries rise a risk of default of an issuer for investors (Figure 1.2.5.). Thus, from the beginning of the year, the rise in index EMBI+spread continued to indicate a negative assessment by international investors of a relative level of risk of the developing countries.

At the same time, it is necessary to note that the risk assessment on the developing countries is relatively distributed, and this may be observed by spreads of credit protection on sovereign debts of the developing countries. Thus, the difference in perceiving the risk by a group of Central and East European countries and CIS countries is assessed on the average at 600 basis points (Figure 1.2.6)

Figure 1.2.5 EMBI+spread by Countries and Regions

900 800 700 600 500 400 300 02.01.2007 02.04.2007 29.06.2007 27.09.2007 28.12.2007 31.03.2008 26.06.2008 24.09.20 — EMEH-Stread — EMEH-Bircpe — EMEH-Asia — EMEH-Latin Amnica — EMEH-Russia — EMEH-Usaine

Figure 1.2.6 Spreads on Sovereign 5-year Credit and Default Swaps of Developing Countries



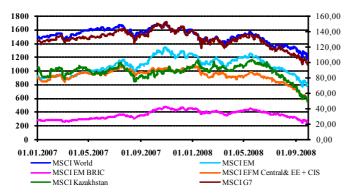
Source: Thomson Financial Ltd. (DataStream)

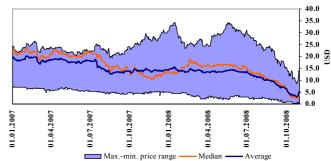
 $Source: \ Thomson\ Financial\ Ltd.\ (DataStream)$

Table 1.2.1

Although at the world stock markets it is observed depreciation of the value of securities of both developed and developing countries due to the fact that the developing countries are viewed as the most risky area of investments, the amplitude of price falls of the markets is almost always more significant in relation to the latter (Figure 1.2.7). As far as securities of Kazakhstani issuers are concerned, re-balancing of portfolios, negative expectations as to financial sector stability and uncertainty of companies' revenues in relation to reduction of the world prices resulted in the fact that the prices for shares fell to almost minimum historical values. Over the period from the yearstart through late October 2008, drop in prices for the shares of Kazakhstani issuers at the London Stock Exchange was for JSC Kazkommertsbank by -43%, JSC Halyk Savings Bank of Kazakhstan by -78.1%, Kazakhgold – 85% (Figure 1.2.8).

Figure 1.2.7 Figure 1.2.8 MSCI Subindices by Regions Equity Prices of Kazakhstan's Issuers at the London





Issuers' list formed by Alliance Bank, Halyk Savings Bank

Stock Exchange

of Kazakhstan, Kazkommertsbank, Kazakhstan Kagazy Plc, Kazmunaigaz, ShalkiaZinc

Source: Thomson Financial Ltd. (Datastream), Bloomberg Bloomberg

Source: Thomson Financial Ltd. (Datastream),

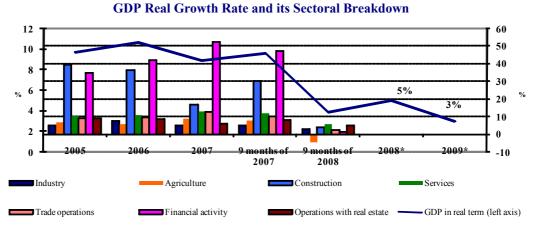
2. Macroeconomic Environment and Economic Conditions in Kazakhstan

2.1. Factors of Economic Growth

Slowdown of credit activity and reduction of the domestic demand directly affected an essential deceleration of the economic growth of Kazakhstan. High dependence of economy sectors supporting the domestic demand upon the resources of commercial banks made the real sector vulnerable to the risks of financial system which reflects a systemic character of threats to financial stability.

The economic growth of Kazakhstan is determined by sustainable development of main sectors of the economy. If earlier the growth of economy historically was largely supported by the oil and gas sector, then in 2005-2007 the growth focus changed to the construction industry which provided about 10% of the country's GDP growth, and also to the financial activity. As a consequence of credit activity deceleration this year, the most pronounced deceleration of real economic growth have occurred in the sectors which in the past years demonstrated a rapid growth and took advantage of the best terms of resource attraction. By the results of 9 months of 2008 the real growth of economy was by 2.5 times lower comparing to the similar period of the last year and amount to 3.9% (9.6% for 9 months of 2007). Slowdown of the economic growth touched upon not only construction and financial activity but agriculture and manufacturing industry as well (Figure 2.1.1). Maintaining of positive growth has been provided mainly by mining industry (5%), its weight in GDP comparing to the same period of the last year increased from 14.9% to 20.6%. At the same time the disproportions marked in the past remain in the industry (Box 2).

Figure 2.1.1



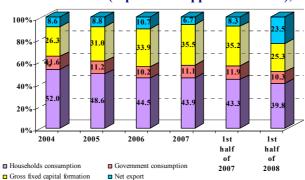
Source: SARK
* forecast of MEB

In turn, the GDP growth in recent years has mostly been provided by high growth rate of expenditures on final consumption of households and gross capital formation. In turn this increase was provided among other things due to a high level of credit activity. The influence of lending of the economy on the real GDP growth is assessed on a rather high level.

In the conditions of gradual deceleration of business activity, the gross capital formation has been considerably decreased. Thus, as of the first half of 2008, the gross capital formation in the nominal terms decreased by 13.6% with a relevant reduction of its share in GDP by 9.9% percentage points (Figure 2.1.2).

Box 2

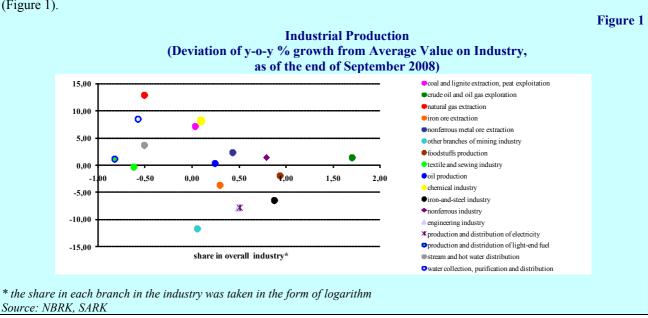
Demand side (expenditure approach to GDP),%



Source: SARK

Maintaining Disproportions in the Industry of Kazakhstan

Today in the main branch of economy – industry – it is observed a considerable spread of growth rates of the branches. It indicates a presence of disproportions between the branches' contributions and their overall efficiency. Thus, the greatest contribution traditionally remains with petroleum which has the largest share, while its growth rates in comparison with other branches are on an average level. Despite of a low share of some branches, the efficiency of their activity is considerably higher than of the 'leading' branches. It creates certain opportunities for increasing their contribution to the overall economic growth and diversification of the economy. On the other hand, a risk of deceleration of the sectors with a low share should not have an essential negative effect on the overall result of industry (Figure 1).



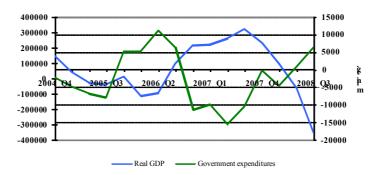
One of the threats of the economic growth decrease in the medium-term perspective seems to be an inequality of slowdown in all sectors of Kazakhstan. Simultaneous economic decline both of the traditional sectors of economy as a result of a negative impact of the low level of the world raw material prices and the sectors with a low share in the gross product as a result of the domestic demand decrease may lead to essential deceleration of the economy.

Taking into account all risk factors, the economic growth can be slowed down by 3% in 2009.

This year the policy of state finances management was directly aimed for mitigating the consequences of the financial crisis. An increased role of the state in stimulating and supporting of the domestic production is an essential step toward solving imbalances of funding. Along with that, the scale of adjustment and social liabilities of the state may essentially increase a burden and reduce sustainability of state finances.

From the beginning of this year, the problems of economic activity deceleration have required from the state a more active use of the budget receipts that have increased due to favorable export price conditions. This active use of the budget receipts is necessary in order to maintain and stimulate the growth of domestic economy (Figure 2.1.3). Thus, by the results of 9 months of current year, the budget receipts increased by 23% comparing to the similar period of the previous year due to corporate income tax and customs duties and amounted to 16.6% of GDP in annual term. At the same time, rapid growth rates of state expenditures that amounted to 27.3% have expanded imbalance of the state budget in the conditions of the need in pursuing an active counter-cyclical policy.

Figure 2.1.3 Government Expenditures and Real GDP (deviation from long term trend*)



Source: NBRK, SARK, MF

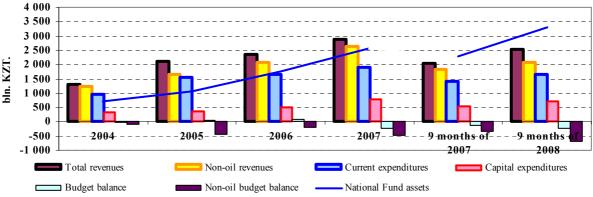
Note: the trend is calculated by means of the Hodrik-Prescott filter

At the same time, in the structure of expenditures the budget credits have increased significantly by 9 times comparing to the same period of the previous year. Consequently, upon the results of 9 months, the balance of state budget has formed with a deficit at 2% of GDP versus 1.3% for 9 months of 2007 (Figure 2.1.4).

There has been indicated a growth rate of expenditures for agriculture and power engineering in the sectoral structure of state expenditures by the current expenses. By capital expenditures, the expenditures for education, social security and agriculture have increased considerably, that displayed increased activity carried out by the state with regard to food security and protection of socially vulnerable population (Figure 2.1.5 - 2.1.6).

The Republic of Kazakhstan State Budget Execution



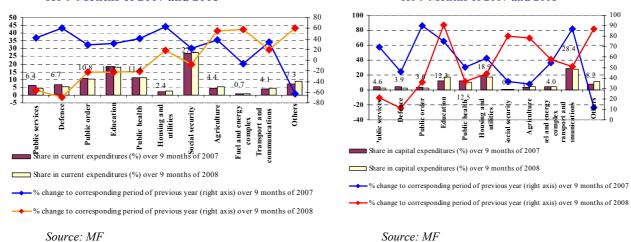


Kazakhstan Financial Stability Report, December 2008

Source: MF

Figure 2.1.5 Sectoral Breakdown of Current Expenditure for 9 Months of 2007 and 2008

Figure 2.1.6 Sectoral Breakdown of Capital Expenditure for 9 Months of 2007 and 2008



Being adequate to threats for the sustainable economic development, at the same time providing of the countercyclic policy by the Government may require from the state taking the higher risks of budget imbalance in the conditions of possible reduction of tax proceeds to the budget.

A gradual decrease of inflation pressure is observed in the country in the background of deceleration of the economic growth rates, reduction of money supply and consumer demand constraints.

Due to both internal and external factors, inflation in economy by the end of the third quarter of current year has started to decrease gradually. Different price indices specify the deceleration of the price growth. Thus, upon the results of the third quarter, the inflation level on the basis of the CPI has decreased to 18.2% in annual term from the maximum value of 20% observed in June and July of the current year (Figure 2.1.7). It has been occurred due to decrease in the prices for foodstuff. In particular, reduction of the prices for commodity exchange goods on the world markets, especially for food (wheat, rice, vegetable oil), deceleration of credit activity of STB (second-tier banks), domestic consumer demand and business activity of the real sector have influenced to stabilization on the internal prices.

The price reduction for imported foodstuff by 6.4% comparing to the same period of the previous year also affected the reduction of the pressure on inflation.

Reduction of the prices of enterprises manufacturing industrial products almost by 15% in September-October 2008 may also affect the consumer price dynamics at the end of 2008 – beginning of 2009.

According to the NBRK forecasts it is expected decline of an inflation rate to 10% in annual term by the end of the first quarter of 2009 under the assumption that the former main factors of influence will remain relatively unchanged.

Figure 2.1.7



Source: NBRK, SARK

2.2. Macroeconomic Factors of Vulnerability

For the purpose of comprehensive monitoring of the economy and identifying main factors of risk, a system of macroeconomic vulnerability indicators was built (Table 2.2.1). This system covers selected (key) indicators of the public finance sector, financial and external sectors, and indicators of reserves adequacy that signal about vulnerability of sectors of the economy¹⁰.

System of Macroeconomic Vulnerability Indicators¹¹

Table 2.2.1

Risk	1	Viacroeconom		Value for the			Value for the	
behavior12			Threshold	3 rd quarter		Threshold	3rd quarter	
	Indicators	Format	level ¹³	2007	Signal	level 14	2008	Signal
	Public Finance Sector							
1	Balance of the state budget/GDP	absolute value	-1.7%	-0.5%	no	-1.5%	-2.9%	yes
1	Public debt/GDP	absolute value	20.7%	9.3%	no	20.1%	9.5%	no
1	Public expenditures/GDP	absolute value	24.6%	22.6%	no	25.4%	24.4%	no
	Financial Sector							
1	Inflation	% year-on-year	11.0%	11.2%	yes	10.8%	18.2%	yes
1	Monetary multiplier	% year-on-year	22.3%	2.4%	no	20.8%	28.3%	yes
1	Money supply	% year-on-year	70.4%	46.7%	no	70.4%	31.4%	no
↑ or < 0	Credits to the economy/GDP	% year-on-year	5.42%	18.21%	yes	7.20%	-10.91%	yes
↓	Deposits of STB (in real terms)	% year-on-year	20.9%	33.3%	no	21.8%	15.9%	yes
	External Sector							
1	Balance of current account/GDP	absolute value	-4.1%	-7.6%	yes	-4.1%	6.4%	no
<u> </u>	(FDI + balance of current account)/GDP	absolute value	4.6%	-2.0%	yes	4.4%	12.2%	no
1	Capital outflow ¹⁵ /External trade turnover ¹⁶	absolute value	7.2%	11.2%	yes	7.3%	6.6%	no
1		deviation from						
	Real effective exchange rate	the trend	2.17	0.32	no	3.36	1.19	no
↓	Terms of trade	% year-on-year	-8.5%	5.3%	no	-9.1%	-7.3%	no
1	Gross external debt/GDP	absolute value	74.9%	97.1%	yes	79.3%	81.6%	yes
1	Gross external debt/ Export of goods and services	absolute value	156.7%	198.2%		159.7%	137.0%	no
	1 5	absolute value	130.770	198.270	yes	139.770	137.070	по
	Reserves Adequacy	1 1 1	2.0	4.1		2.1	4.2	
<u> </u>	International reserves / Import International reserves / Short-term	absolute value	2.0	4.1	no	2.1	4.2	no
<u> </u>	external debt ¹⁷	absolute value	0.44	0.61	no	0.45	0.54	no
Ţ	National fund / Government expenditures	absolute value	26.5%	82.9%	no	27.1%	89.1%	no
1	Forthcoming payments and households' deposits ¹⁸ / Gross international reserves ¹⁹	absolute value	153.3%	88.7%	no	148.2%	87.9%	no

Source: NBRK, ASRK, MF

The macroeconomic vulnerability indicators show rise in factors of risk in the public finance sector against the background of adjustment on the credit market and deceleration of deposits growth.

Worsening of the budget balance/GDP ratio is affected by the growth of government expenditures in the framework of anti-recessionary measures on ensuring stability of the social and economic development of the country. The advanced growth of government expenditures and budget deficit expansion has already been noted upon the results of 9 months of 2007. At the same time, currently the budget deficit is not considerable and is generated in the conditions of low level of the public debt. Further rise in government expenditures without an appropriate growth of government revenues may result in increase of vulnerability of the public sector. Moreover, in the issue of public finances it is important to take into consideration deceleration of the economic growth rates, possible reduction of tax revenues, and uncertainty in budget revenues from oil sector and risk of ineffective use of state resources.

¹⁰ Comparison of the actual value of the indicator with the threshold shows the presence or absence of vulnerability signal.

¹¹ The indicators which contain data over a period of time, for example, the state budget balance, current account, etc. are calculated year-on-year and may differ from the official data.

¹² Behavior of the risk shows the direction of indicator deterioration in comparison with the threshold level: « \uparrow » - exceeding of the indicator value over the threshold level gives a signal of vulnerability; « \downarrow » - the indicator value which is lower than the threshold level gives a signal of vulnerability; « \uparrow or < 0 » - the indicator value which is higher than the threshold level or less than « 0 », gives a signal of vulnerability.

a signal of vulnerability.

The threshold level is calculated as an average value for 2000-2005 adjusted to one standard deviation. According to the early warning indicators system, a time lag for determining the indicator signal should be from 12 to 24 months.

¹⁴ The threshold level is calculated as an average value for 2000-2006 adjusted to one standard deviation.

¹⁵ Errors and omissions plus short-term capital.

¹⁶ Export plus import of goods and services.

¹⁷ Calculated as a sum of short-term external debt and long-term external debt service.

¹⁸ Calculated as a sum of forthcoming payments on the gross external debt and households' deposits in foreign currency.

¹⁹ Calculated as a sum of gross international reserves (without gold) and the assets of the National Fund.

An adverse impact of external factors which reveals itself mostly in the financial sector creates a risk of implicit capital flight.

By the end of the third quarter of 2008, four macroeconomic indicators out of five give signals that risk factors increase in the financial sector. From the fourth quarter 2007, the monetary multiplier substantially increases. Worsening of this indicator was largely due to money supply growth as a result of increase in external assets of the banking sector and increase in repayments of external liabilities. The money supply growth in the third quarter 2008 comparing to the corresponding period of the previous year was 31%, out of which contribution of STB was 27%. In addition, a certain contribution to the monetary multiplier increase was made by reduction of growth rates of money base as a result of reducing reserve requirements by NBRK in order to maintain liquidity.

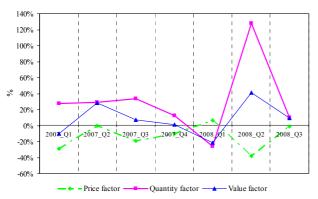
On the other hand, the fundamental factors of inflation such as low productivity of industrial sectors, low competition in some markets of goods and services continue to determine prices in the economy. Accordingly, in spite of some stabilization of the world markets and reduction of inflation pressure in the third quarter of 2008, there remains a risk of high prices.

A share of credits in GDP and change in deposits in real terms characterizing a level of development of the country's financial system also indicates vulnerability of the economy. If formerly the risk factors increased due to excessively high rates of economy crediting, then, from the second quarter 2008, the risks are materialized through reduction of credits to economy caused by scarcity of the domestic resources in the conditions of decreasing external funding.

Favorable trends on the world commodity markets have reduced a degree of vulnerability of the external sector of the economy, however, considerable amount of the accumulated external debt and necessity of its servicing are long-run structural factors of risk of unbalanced capital flows under price fluctuations.

Mitigation of risk factors in the external sector is explained by the improvement of the current account of the balance of payments due to high world prices for raw commodities and

Figure 2.2.1 Factors of Import Dynamics (% change to previous period)



Source: NBRK

decreasing of goods import growth rates. Slowing down of import growth rates has been noted since third quarter of 2007. It is obvious that during this period quantitative factor was prevailing (Figure 2.2.1), i.e. the reduction of domestic demand.²⁰

At the same time, the drop in the world oil prices has already affected worsening of terms of trade in the third quarter 2008. In future, this may reduce a capital inflow to the country. At present the risk of capital flight is not essential. Moreover, whereas increase in overdue payments, advance payments and conversion of assets into a cash foreign currency are consequences of financial markets turbulence, these parameter greatly depends on

re-estimation by agents of the country's economic risks. Moreover, a persistent factor of risk is a high share of the accumulated external borrowings. Repayment and service of external liabilities require considerable financial resources.

The experience of financial crises that have occurred over the past decades shows that the main sources of countries' vulnerability are also maturity, currency and interest rates structures of foreign loans. In this connection, the factor of structural risk of a debt burden is a high share of bank loans denominated in foreign currency (over 90%), and considerable increase in average interest rate of foreign loans in 2008 comparing to 2007 (Figure 2.2.2). At the same time, along

 $^{^{20}}$ A sharp growth of import in the second quarter can be explained by realization of the deferred demand in the background of stabilization of economic expectations

with stabilization of the LIBOR dynamics, a growth of average interest rates of foreign loans is determined not by the capital cost increase as by a high level of risks and uncertainty on the capital markets. The high interest rates of foreign loans also affected the growth of share of the loans at fixed rates in the first and second quarters of 2008 comparing to the corresponding periods of 2007 (Figure 2.2.3). This trend probably can be explained by some stabilization of risk expectations by creditors who preferred to fix high interest rates and ensure high earnings yield on the lent money.

Figure 2.2.2

Maturity Structure of Foreign Borrowing by
Banks and Interest Rate

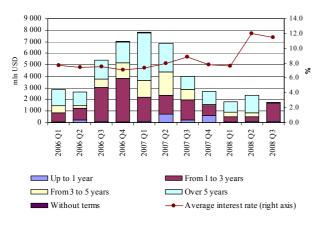
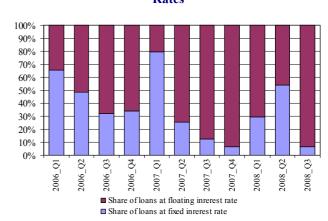


Figure 2.2.3
Breakdown of Banks' Foreign Borrowing by Interest
Rates



Source: NBRK Source: NBRK

The indicators of reserve adequacy are within the acceptable limits relative to their historical levels; however, they are inadequate according to benchmarks recommended by the world practice.

By the end of the third quarter of 2008, gross international reserves of NBRK covered 4.2 months of import, although for the countries with limited access to capital markets IMF recommends to maintain reserves in 6 months of import. This indicator reflects the country's ability to support its current level of import if all other inflows cease. The most useful indicator of reserve adequacy which characterizes the country's ability to meet its external obligations within a year if there is no new financing is the ratio of reserves to short-term external debt which is recommended to maintain not less than 1. By the end of the third quarter of 2008, this indicator was 0.5. It should be noted that the gross international reserves do not comprise the assets of the National Fund which can be considered as 'safety pillows' and if necessary can be partially used to stabilize the economy. In spite of the recommended benchmarks, it is complicated to determine an adequate level of international reserves that would guarantee sustainability of the economy of Kazakhstan because the adequate level of international reserves was not assessed in the real conditions under the influence of external factors (Box 3).

Balance of Payment Forecast

Box 3

Upon the results of 2008 it is expected that surplus of the current account of the balance of payment will slightly reduce. Deterioration of the current account in the fourth quarter will occur due to fall in oil prices and other main export goods, decrease of external demand and slowdown of ferrous and non-ferrous metals production and their export. In 2009 this trend will continue if oil price is about USD 50 per barrel, rise in crude oil and gas condensate supply mainly due to increase in production at the Tengiz field will partially compensate losses of oil export value. However, in consideration of the predicted decrease of ferrous and non-ferrous metals supply and with slight increase in goods import pro rata the expected real GDP growth by 3%, surplus of the trade balance will decrease by more than 3 times. As a result, a deficit of the current account may reach 6% of GDP in 2009. This deficit will be funded partially by increased net direct investments (basically due to rise in financing of the North-Caspian project) and capital inflow to new infrastructure projects with participation of investors of the countries that are less exposed to the liquidity crisis.

At the same time, taking into consideration the expected needs of residents in servicing of external debt about USD 17 bln., the total balance of payment may be formed with a deficit.

In 2010, with an expected oil price increase up to USD 60 per barrel and recovery of ferrous and non-ferrous metals supply at the level of 2008, a deficit of the current account may remain 2-3% of GDP. Also, the total deficit of the balance of payment will be less that can be also financed by international reserves of NBRK.

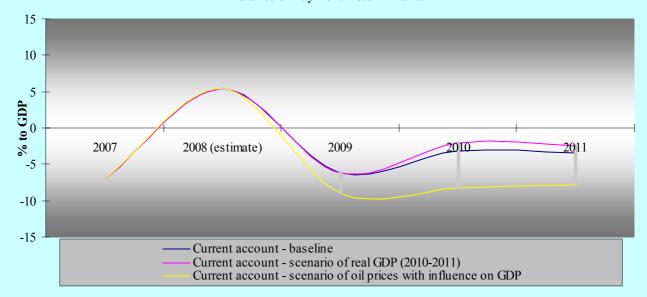
Moreover, in the assessment of the factors determining capital flows it should be taken into consideration a number of uncertainties of the present situation:

- 1) uncertainty of the depth of domestic economic growth deceleration, including an impact on it of the economic situation of main trading partners;
- 2) uncertainty of the maximum amplitude of oil price adjustment and its reverse effect on increasing deceleration of the real growth.

If in the first case decrease in demand influence mostly on import, then decrease in oil prices to USD 40 per barrel and decrease in ferrous and non-ferrous metals export will increase the current account deficit to 8-9% of GDP in 2009 in spite of a possible drop in goods import. Under unchanged expectations regarding direct investments (which is necessary to maintain production at the Kashagan field in 2013), some decrease in capital inflow for some projects and increased deficit requires additional funding through the reduction of the accumulated assets of the National Fund. It will help to maintain adequate level of international reserves of the NBRK. If the oil price remains at this level, the similar situation with the balance of payment is possible in 2010.

Balance of Payment Determinants

Figure 1



	2008 (estimate)	2009	2010	2011
Export (% change) - baseline	48%	-31%	20%	2%
Export (% change) – scenario of real GDP (2010-2011)		-31%	20%	2%
Export (% change) – scenario of oil prices with influence on GDP		-43%	2%	1%
Import (% change) – baseline	18%	2%	11%	7%
Import (% change) – scenario of real GDP (2010-2011)		2%	9%	6%
Import (% change) – scenario of the oil prices with influence on GDP		-4%	3%	1%
Reference data:				
FDI (% to GDP)	4%	8%	4%	3%
Real growth of GDP in % (range of scenarios)		2-3%	2-5%	2,3-5,5%
Oil price, USD/bbl		40-50	40-60	40-60

Source: NBRK

2.3. Corporate Sector

Deceleration of business activity may increase a burden on the liquidity of the corporate sector with further effect on decline in profitability of enterprises. A negative balance position in the foreign exchange makes the corporate sector at a great degree vulnerable from the point of view of the risk of insolvency in case of reduction of currency proceeds from export and negative changes of the national currency exchange rate. This risk is a little bit compensated by a high liquidity of enterprises in the foreign currency.

The financial and economic indicators of the corporate sector due to a great influence on the total results of activity of the export-oriented enterprises in 2008, at the first sight, did not reflect the influence of credit activity and domestic demand slowdown (Table 2.3.1).

Main Indicators of Financial Stability of the Corporate Sector²¹

Table 2.3.1

	A_{ξ}	ggregate ind	licators	Large a	nd medium e	nterprises		Small enterp	prises
	2006	2007	2Q 2008 ²²	2006	2007	2Q 2008 ²²	2006	2007	2Q 2008 ²²
				Total Indicat	ors:				
Assets/GDP, в %	0.21%	0.24%	-	0.15%	0.15%	0.16%	0.06%	0.09%	-
Income from sale									
of products and provision of									
services, %	122.4%	137.3%	133.1%	127.9%	121.7%	175.1%	114.9%	160.7%	89.5%
Cost value of sold	110.00/	1.45.20/	109.20/	121.00/	120.00/	125 70/	107.40/	165.00/	01.50/
products, %	119.8%	145.2%	108.3%	131.0% of Return and	130.0%	125.7%	107.4%	165.9%	91.5%
			Indicators						
ROA	17.7%	16.2%	-	21%	20.4%	24.6%	9.6%	7.9%	-
ROE	49.7%	46.2%	-	49.3%	48%	56.7%	52%	38.7%	-
Profitability	21.6%	19.8%	23.4%	29.6%	30.1%	33.4%	8.8%	7.2%	9.5%
			<u>Inc</u>	licators of De	bt Load				
Ratio of debt burden	0.64	0.66	-	0.58	0.57	0.57	0.79	0.80	-
Leverage	1.77	1.90	-	1.38	1.33	1.31	3.86	3.95	-
			<u>In</u>	dicators of Li	quidity				
Ratio of current liquidity	1.10	1.31	-	1.06	1.45	1.48	1.18	1.18	-
Ratio of quick liquidity	0.89	1.05	-	0.83	1.12	1.15	1.00	0.98	
			<u>In</u>	dicators of Tu	<u>irnover</u>				
Assets turnover	0.82	0.82	-	0.71	0.68	0.74	1.09	1.10	-
Inventory turnover	5.71	5.80	4.60	4.62	4.29	3.40	7.93	8.38	7.15
Receivables turnover	3.44	3.60	-	3.57	3.77	3.39	3.24	3.40	-

Source: NBRK, SARK

In particular, in the first half of 2008, the increase of incomes from the products sales, overwhelming the growth of the cost, allowed increasing the level of return in the economy. Furthermore, an inflation growth stimulated to increasing the profitability of the enterprises involved in trade which was 10% year on year as of the end of the first half of 2008 in comparison to 2.6% in the same period of the last year. A favorable price conditions in the cereal market also

²¹ Due to the changes in the forms of state statistical reporting of the Agency of the Republic of Kazakhstan for Statistics that exclude submitting the balance sheet indicators by small enterprise on a quarterly basis, a calculation of most indicators of the financial sustainability on an aggregate level is impossible.

²² The indicators for the second quarter were calculated year on year except for the change in % of revenue from the products and services sales and the cost value of the sold products calculated for the period from the beginning of the year relative to the same period of the last year.

²³ The indicators are calculated using the revenue before taxation as a numerator, and return on assets (ROA), return on equity (ROE) and return on the products sales (Profitability) as a denominator.

allowed agricultural companies realizing a maximum profit. At the same time, the domestic demand decrease is first of all reflected on small enterprises. Reduction of the inventory turnover and a respective increase of the products' stay at warehouses occur in the background of decrease in the gross revenue from the products sale and services provision. This factor could put an additional load on the enterprises liquidity that is hard to be maintained in the conditions of credit volumes reduction. The large enterprises statistics also show a reduction of the assets and capital profitability in the sector of real estate and manufacturing industry.

In addition to a threat of reduction of the profitability indicators in the medium-term perspective due to lack of liquidity, gross sales reduction and world economic downturn for enterprises focused on export, a system factor of instability is an essential gap in the foreign exchange position which may be assessed on the basis of new statistics²⁴ of the activity of small and medium-size enterprises (Table 2.3.2).

Foreign exchange position of the Corporate Sector

Table 2.3.2.

		incl	uding:
	Total, mln. KZT	USD	Share in assets in the foreign currency
Financial assets* in the foreign currency	1,894,644	1,599,828	84.4%
including short-term assets	1,644,848	1,458,595	88.7%
Financial liabilities in the foreign currency	4,616,629	4,252,348	92.1%
including short-term liabilities	1,088,134	915,319	84.1%
Net balance fx. position (BfxP)	-2,721,985	-2,652,520	
Cash inflow from operating activity year-on-year	6,939,676		
Cash outflow from operating activity year-on-year	3,563,043		
Net proceeds from operating activity in the foreign currency	3,376,633		
FX position adjusted to the cash flows on operating activity in the foreign currency	654,648		

10	wafawawaa.	
As	reference:	

BfxP / own capital	-28%	
BfxP / cash inflow from operating activity in the foreign		
exchange	-39%	
Current FX liquidity**	1.51	

Note: *Financial assets include money and equivalents, financial investments and receivables

Source: NBRK, SARK

In particular, a negative balance currency position of large and medium-size enterprises, according to the SARK data, was equivalent to USD22.6 bln. and was formed when financial assets and liabilities expressed in USD were dominating. A negative currency position was about 28% of enterprises' own capital and about 40% of gross cash inflow in the foreign exchange from operating activity of enterprises²⁵. A negative balance position was compensated by a positive gap between proceeds and payments in the foreign currency which was encouraged by the high world prices for export resources and import decrease. An indirect FX risk for the banking system is the highest in the sectors of operations with real estate, trade, hotel and restaurant business, construction – the main borrowers of the banking sector.

²⁴ Starting from the first quarter 2008, the statistical reporting forms were changed in part of providing by respondents of the information about financial assets and liabilities and cash flow in the foreign currency.

^{**}Ratio of short-term assets and liabilities in the foreign exchange

²⁵ The data of the statement on cash flow in the national and foreign currency were used which the Statistics Agency has started to collect since 2008.

2.4. Household Sector

The inflation growth, rise in the cost of credits and reduction of their availability make the servicing of the liabilities accumulated during the 'boom' period more complicated. In future this may restrict the contribution of consumption to the economic growth and the STB deposit base.

The highest level of the debt burden was fixed at the end of 2007 which was caused by increase of STB credits to the households by 70% comparing to the end of 2006. In 2008, reduction of the population lending in conformity with the possibilities of financing of consumption and refinancing of liabilities has worsened the problem of low liquidity. In particular, in spite of the increase of cash by 9.1% and residents' deposits in deposit organizations by 6.3%, as well as debt reduction on credits of STB and non-banking financial organizations by 4.5% by the results of 9 months of 2008, the liquidity ratio was much lower than one²⁶ (Figure 2.4.1).

The decrease of lending resulted in reduction of the housholds business activity rates. Thus, for 9 months of 2008, the financial assets growth was only 4.4% (36% for the same period of 2007). At the same time, investments in shares considerably reduced because of the problems on the stock market which caused depreciation of a wide range of financial instruments. Although the growth of deposits was maintained, the population managed the risks related to reliability of the financial institutions during the turbulence. The reaction and strategy of own deposit assets management was different in large and small depositors (Box 4).

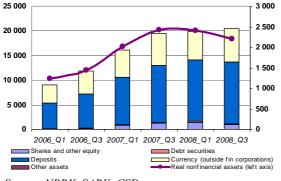
Source: NBRK, SARK

Reduction of attractiveness of another object of investment – the real estate market and,

as a consequence, drop in prices for the real estate also led to reduction of non-financial assets (Figure 2.4.2).

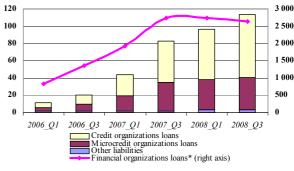
The financial liabilities of households by the results of 9 months of 2008 decreased by more than 4%. With regard to the debt to financial organizations, of which 90% are STB, there is a downward trend of 6.5% per year, but in relation to credit and microcredit organizations, the growth, on the contrary, has remained by the end of the third quarter 2008, and comprised 34% and 9% respectively for the past period of the year (Figure 2.4.3).

Figure 2.4.2 Structure of Households Assets, bln. KZT



Source: NBRK, SARK, CSD

Figure 2.4.3 Structure of Households Liabilities, bln. KZT



* include NBRK, commercial banks, mortgage companies, Development Bank Source NBRK, SARK

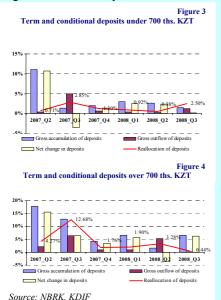
²⁶ Ratio of liquidity = (cash money+deposits)/loans. The indicator is calculated on second-tier banks, credit and microcredit organizations

Box 4

Assets Management – Assessment of the Scope of Deposits Re-Distribution in the Banking System of Kazakhstan

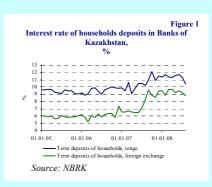
Due to restricted access to external financing since August 2007 the activity of Kazakhstani banks on attraction of the deposits of individuals has activated, and this in the first place was reflected in increasing the interest rates for deposits.

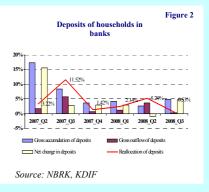
However, the interest rate level on deposits as such is not always a key factor determining preferences in favor of a certain bank. During financial instability, the population's confidence in the national banking system decreases. This inevitably leads to subjective re-estimation by depositors of risks of some financial institutions from the point of view of security guarantee for their savings. For the purpose of determining the migration level of depositors inside the banking system, there was made an



assessment of change in the STB deposit base on the basis of 'gross flows'. This approach allows by the STB individual data assessing the volumes of attraction to and withdrawal from STB of deposits, and the scope of their re-distribution by depositors between financial institutions*.

The fact of unexpected risk increase of banks in the third quarter 2007 was not reflected directly on the net decrease of deposits of the banking system –





a growth per quarter was 2.7%. At the same time, reaction of small depositors falling under the guarantee system and of large depositors was diametrically opposite. Thus, the first reaction of depositors whose deposits are subject to guaranteeing to deterioration of the conditions in the third quarter of 2007 was sharp withdrawal of deposits from bank accounts by 3.5% for the period. The effect of outflow prevailed over the effect of re-distribution which speaks of re-estimation by this category of

depositors of the risks of the entire banking system and higher sensitivity of retail depositors to the change in the news background. In contrast to them, most depositors whose deposits are not subject to guaranteeing, with the aim of retaining their savings preferred not to withdraw but transfer them to other larger banks. In the third quarter 2007 about 12.7% of deposits not subject to guaranteeing migrated between banks seeking for a 'quiet harbor'. Due to the fact that this category of depositors is more concerned about safety of their savings, the level of deposits movement between banks is both higher and more changeable for them, whereby characterizing higher sensitivity to perception of risks of separate financial institutions, on the one hand, and a more weighted approach to monitoring of the banks risks, on the other hand. The level of re-distributions of savings between banks on the part of depositors who have guaranteed deposits is slight. Thereby it demonstrates a low tendency of this category to assess risks of each bank.

In the middle of 2008, gradual accumulation of negative information on the part of the market about an increase of banking sector risks created in depositors certain negative expectations in respect of the banking system, and this caused some volatility of the deposit base in the second and third quarters of 2008. Large depositors, along with more active re-distribution of the deposits between banks, also withdrew about 3.7% of deposits from the banking system. Accordingly, retention of confidence of large depositors (14% of accounts of fixed deposits) who have about 86% of fixed deposits amount should be not less priority direction of the anti-crisis policy in the conditions of risks increase for financial stability. On the average, for the period under analysis, about 4% of deposits were re-distributed by depositors between banks in virtue of re-estimation of the risks or attractiveness of the conditions of some banks of the system. (Table 1)

Descriptive Statistics

Name	Number of periods	Average value	Maximum	Minimum
Gross deposit accumulation	6	6.8%	17.3%	2.6%
Gross deposit outflow	6	2.2%	5.8%	0.3%
Net change	6	4.7%	15.7%	-1.0%
Reallocation	6	4.1%	11.5%	0.5%

Table 1

Methodological Explanations: Positive/negative flows in the period t for bank I are determined as follows:

POS / NEG flows =
$$\sum_{i=1}^{N} |g_{ii}| * \left(\frac{(I_{i,t-1} + I_{i,t}) / 2}{\sum_{i=1}^{N} I_{i,t-1}} \right)$$

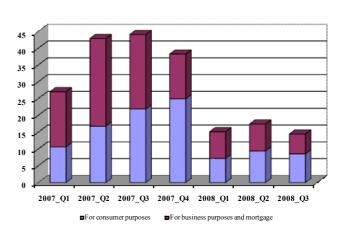
where g – is a rate of deposits change versus the previous period weighted by the bank market share in total volume of deposits. The net flow is determined as a difference between positive and negative flows. The reallocation flows are determined as a sum of positive and negative flows less net flow by modulus.

* - For the analysis the information about placed deposits of individuals in the second-tier banks provided by the bank to KDIF on a quarterly basis for the period from the first quarter 2007 to the third quarter 2008 is used.

The reduction of the population lending by credit organizations by more than 2 times in the background of continuing growth of nominal income of the population caused some decrease in the debt burden on the disposed income (from 45% in 2007 to 36% for September 2008). If earlier the households' debt was formed in the first place at the expense of mortgage credits, then currently loans for consumer purposes are prevailing in the structure of loans issued (Figures 2.4.4 and 2.4.5).

Figure 2.4.4
Structure of Bank lendings to the Household,
bln. KZT, for the Period

Figure 2.4.5 Structure of Non-Bank* Lendings to the Housholds, bln. KZT, for the Period



* Credit partnerships and micro-credit organizations Source: SARK

Source: NBRK

Among the factors of reduction of natural persons lending, according to the results of banks questioning regularly conducted by NBRK, pessimistic economic expectations and high interest rates were indicated as a result of toughening of the STB credit policy in relation to borrowers. In particular, the average credit cost for individuals in the third quarter 2008 versus the second quarter 2007 grew by 19.37% from 16%; on consumer credits – to 21.6% from 17.3%, on construction and

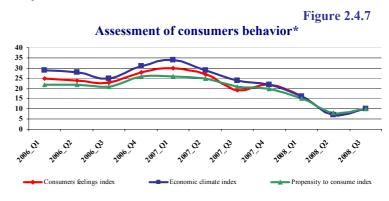
housing credits an interest rate varied in the range of 13% to 14% per annum. The interest rates growth affected the increase of a share of expenses for credit and debt repayment in cash disbursement of the population almost to 6%, or by 1.8 times comparing to the end of 2007 (Figure 2.4.6).

The growth of expenses for payment of interests and toughening by STB of non-price parameters of credit policy in the background of low liquidity and

Source: SARK

high inflation did not allow implementing a positive potential of decrease of the debt burden on the population's income. Also, in spite of a slight reduction of the total unemployment level as of the end of the third quarter 2008, comparing to the same period in 2007 to 6.4%²⁷, there is observed a growth of a number of redundant workers by 26% due to liquidation of enterprises and by 30% of those who left in a voluntary manner²⁸. In addition, in 2008 there is observed some reduction of a number of self-employed population in the economy, and reduction of the real wage in construction - by 2%; retail trade, financial activity and financial intermediation - on the average by 6%; in the sphere of operations with the real estate – by 12%, and in a number of other sectors of services.

These factors determine aggravation of the population's expectations and their careful consumer behavior. In particular. according to the population poll conducted by SARK, there was found a reduction of the desire to buy in the background of overall aggravation of expectations and perception of the economic climate $(Figure 2.4.7)^{29}$



Source: SARK

2.5 Factors Determining the Real Estate Market Situation

The real estate market was characterized by prices reduction for all categories of housing in the background of speculative capital outflow and lack of investment attractiveness. At the same time, price uncertainty of main regional real estate markets, first of all in Almaty, is formed in the background of obvious gap between the factors that determine the demand and supply for real estate, including new housing. Fair pricing on the market will form either owing to further reduction of price parameters of deals as a result of disposable income constraints or renew of banks' credit activity or fall of costs inflation in the construction segment.

After the period of intensive growth of real estate prices, the peak of which was in the second and third quarters of 2007, an extensive reduction of real estate prices could be observed in Kazakhstan. This trend is especially noticeable in Astana and Almaty which are the main 'construction sites' of the country. Thus, at the end of the third quarter of this year, the price drop for housing, according to the SARK, was 27% in Almaty, 17% in Astana, 10% in Kazakhstan in general comparing to a respective period of the last year³⁰ (Figure 2.5.1).

Figure 2.5.1 Housing Price Dynamics 450 120% Housing prices, ths. KZT per sq. m. 400 100% 80% 300 250 60% 40% 20% 150 0% -20% 2006 Q4 2007 Q1 2007 Q2 2007 Q3 2007 Q4 2008 Q1 2008 Q2 2008 Q3 Housing prices, Kazakhstan average Housing prices, Astana Housing prices, Almaty - Housing prices % change y-o-y, Kazakhstan average Housing prices % change y-o-y, Astana Housing prices % change y-o-y, Almaty

Source: NBRK, SARK

²⁷ The indicators of employment and unemployment can underestimate the real situation in the sector of small and medium-size business, especially, in the period of the economic growth deceleration.

Voluntary resignation can also be a latent form of staff reduction.

²⁹ Assessment of consumers is made on the basis of the population poll and is calculated as a ratio of negative responses of the population to positive responses.

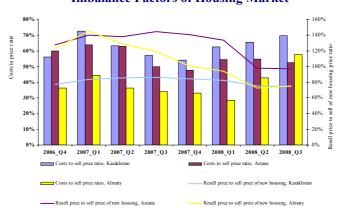
30 Here and further in the text, under an average price is understood an average arithmetic of 4 prices: sale of a new standard housing

and re-sale of uncomfortable, comfortable and elite housing.

The price adjustment was made in the background of drop in the speculative attractiveness of the market. In particular, in Almaty the speculative attractiveness of the market started its decrease from the second quarter of 2007, in Astana – from the fourth quarter of 2007. As of the end of the third quarter 2008, the selling prices at the secondary market to the selling prices of new housing ratio was about 75% in Almaty and it matched the average republican value.

Besides, it should be noted that up to the first quarter of this year, the ratio between the

Figure 2.5.2 Imbalance Factors of Housing Market



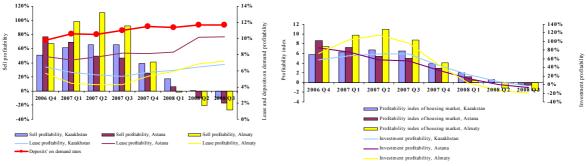
Source: NBRK, SARK

construction cost and prices for the real estate was less than 50% which witnesses to a considerable overpricing in sale of new housing. A considerable gap between the cost value of construction and the selling price for new housing in Almaty that occurred last year is explained, on the one hand, by the high price for land plots in the city, and on the other hand, by overpricing by construction companies themselves in the background of high demand for housing (Figure 2.5.2).

The attractiveness of real estate as an investment instrument was determined by a very high profitability of investments in real estate³¹ which was about 70% per annum on the average in Kazakhstan in the second-third quarters of the last year. In Almaty the peak of profitability of investments in real estate was reached in the second quarter of the last year and was 115%. Starting from the second quarter of this year, profitability of investments in real estate became negative, i.e. the market lost its attractiveness for investors and speculators (unprofitability of investments into housing in Kazakhstan in the third quarter was 10.2%, in Almaty -26.7%). The profitability of housing rent increased slightly and was on the average 6.8% in Kazakhstan as of the end of the third quarter (Figures 2.5.3-2.5.4).

Speculation Factors in the Housing Markets





Source: NBRK, SARK

3

³¹ Profitability of investment in real estate is calculated as a sum of lease profitability within a year of possession and from subsequent re-sale. The profitability indices from sale and lease are determined as a income ratio from re-sale in a year of ownership or from lease throughout a year to the value of real estate.

The main factor determining a supply on the primary real estate market is commissioning

new housing. Up to the fourth quarter 2007, in Kazakhstan there was observed a growth of a number of apartments put into operation, as well as their aggregate useful area. However, in 2008 a substantial decrease housing of commissioning can be seen. However, at one of the main 'construction sites' of the country - in Almaty - this trend started to be observed back to the second quarter 2007 (Figure 2.5.5).

The investments structure³² in housing construction is not uniform in different regions. If in general in Kazakhstan the share of borrowed financing was 44.4% as of the end of the third quarter, then in Almaty where traditionally a specific weight investments in construction at the expense of borrowed funds is traditionally high (80.45% in the third guarter 2007), it was 76.23%. In Astana up to the second quarter 2007, the share of borrowed funds was less than 10%. Afterwards there was observed a sharp growth that reached a peak (90.9%) in the first quarter 2008 (Figure 2.5.6). The growth of the share of loan financing in Astana is largely explained by allocation of money from the budget

In the recent 'construction boom' observed in Kazakhstan, the banks was played an important role crediting both construction sector and individuals for purchasing housing. However, the process of granting loans did not only stimulate the construction industry but was one of the main sources of price growth on the housing market. Starting from approximately September 2005, the trends in price change for real estate largely coincide with crediting of individuals for construction and housing purchase, But during the period of price reduction that started in the second

Kazakhstani banks.

New Housing Construction Volumes



Source: SARK

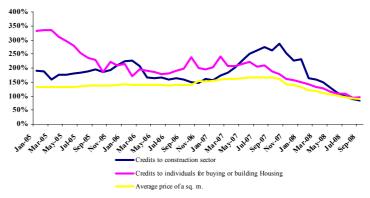
Figure 2.5.6 Investments into Housing Construction



Source: SARK

as part of stabilization measures, and this money was provided by government fund Kazyna through

Figure 2.5.7 Connection Between Credits and Housing Prices, growth speed **y-o-y**



Source: NBK, SARK

³² Under the investments in housing construction, according to the SARK methodology, are implied the costs for construction of residential houses, dormitories; residential houses of apartment and hotel type; non-residential buildings where there are residential apartments; hotels, including boarding schools under general secondary schools.

half of the last year these trends became actually identical. The prices for real estate and credits of the construction industry demonstrate a little bit less close interrelation (Figure 2.5.7).

The important source of financing the construction industry is buyers' financial participation in construction. According to the SARK data, as of the end of 2008 in Kazakhstan in general, 939 apartment residential houses were erected with attraction of share-holders. More than a half of all the projects with buyers' financial participation in construction were raised in Almaty and Astana, out of them 447 facilities were constructed in Almaty and 107 – in Astana. The role of projects with a buyers' co-investment is especially important in Astana where almost all the apartments commissioned for 3 quarters of this year were constructed with certain degree of buyers' participation. In Almaty their portion is also higher than on the average in Kazakhstan and is close to 50% (Table 2.5.1).

Table 2.5.1
Role of Buyers' Co-investment in the Construction Industry Financing

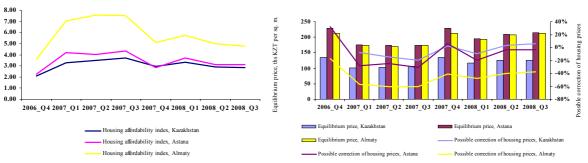
	1Q 2008.	2Q 2008.	3Q 2008.			
Number of apartments in the houses constructed with buyers' financial participation in construction						
Republic of Kazakhstan	5,562	6,523	9,695			
Astana	3,901	4,021	5,558			
Almaty	587	1,061	2,029			
Share of apartments in the houses constructed with buyers' financial participation in construction, in aggregate number of commissioned apartments						
Republic of Kazakhstan	45.56%	28.79%	26.86%			
Astana	98.19%	96.89%	87.50%			
Almaty	44.64%	46.19%	50.92%			

Source: SARK

Starting from the second half of the last year, there appeared a trend of increase of housing affordability³³ in general in Kazakhstan. Thus, as of the end of the third quarter 2008, there is observed a reduction of this ratio to 4.78 in Almaty (as of the end of the third quarter, this ratio was 7.5). The same dynamics is observed in Astana.

At the same time, at the end of the third quarter 2008, the prices in Astana and in Kazakhstan in general were close to an equilibrium price³⁴. In Almaty the potential correction could be about 35% of the average housing price if there are no restrictions on the part of the cost value and in the environment of greater flexibility of the market, and also in the event if the population has no other sources of raising money to buy housing besides their own income (Figures 2.5.8 - 2.2.9).

Figure 2.5.8- 2.5.9 Housing Affordability and Equilibrium Price



Source: NBRK, SARK

by 18 (the norm of housing) and divided by the wage value per 1 year (average monthly wage multiplied by 12 (number of months)). The ranges of this ratio characterize affordable housing (up to 3), moderate unaffordable housing (3.1-4), seriously unaffordable housing (4.1-5), considerably unaffordable housing (more than 5.1).

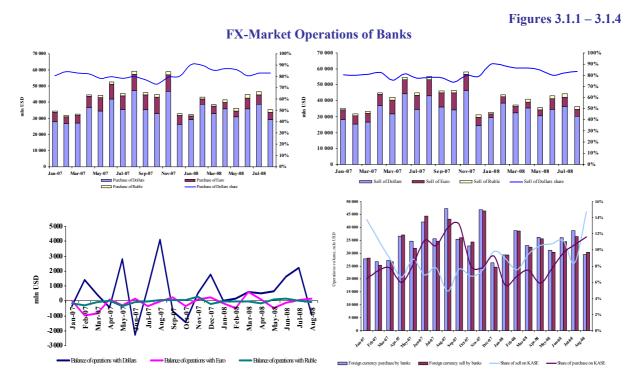
³⁴ It is calculated as an annual salary times 3 (an upper value of the ratio for affordable housing) and divided by 18 (the norm of housing).

3. Financial Market Situation

3.1 Currency and Money Markets

One of the potential threats to financial stability is possible shocks of demand for US dollars on the part of the banks. As a consequence of the decrease of demand for import and restricted access to foreign funding, the aggregate volume of operations on the foreign currency purchase and sale, in particular, of a dollar, has considerably reduced this year.

The Kazakhstani economy is dollarized to a considerable extent and in this connection a vast majority of bank operations on the foreign currency purchase and sale are operations with dollars. Thus, the share of operations on dollars purchase and sale in the aggregate volume of operations of the banks with the foreign currency from January to September of this year was about 85%. The demand and supply for dollars on the part of banks are not in an equilibrium state, and a balance of operations of banks on purchase and sale of the American currency testifies to it³⁵. Thus, in August-December of the last year, a net balance of dollars purchase and sale by banks was more than USD4 bln., net balance of banks operations with clients on dollars purchase and sale was about USD7.9 bln., on banks operation at KASE - USD6.3 bln. In January-August 2008, a net balance was about USD4.8 bln., net balance of operations on purchase and sale from clients – USD15.9 bln., net balance of the operations at KASE – minus USD4.7 bln. (purchase and sale of dollars for tenge and other currencies). If from August to December of the last year there was a sharp increase of the demand for dollar in Kazakhstan, then this year on the contrary the clients of banks sold dollars the surplus of which were, in turn, sold by the banks at the stock exchange (Figures 3.1.1 – 3.1.4).



Sourcek: NBRK

During the period of turbulence at the currency market in August-September 2007, there was a growth of a share of US dollars purchase by the banks at KASE. The growth took place in the background of total increase of purchase from clients that showed that it was the banks and not

³⁵ The difference between the volumes of purchase and sale (purchase-sale) according to the NBK data includes the operations at the stock exchange and purchase-sale from customers.

customers' demand that became a main source of additional pressure on the exchange rate which went up from KZT119-120 per dollar to KZT126.25 per dollar on August 29, 2007. Considerable fluctuations in exchange last August-September are related to the increase of banks' demand for

2.00

dollars to pay out external borrowings. Later

on, the dollar deficiency decreased.

The liquidity index³⁶ of the market shows that in 2008 it noticeably grew comparing to the last year level, and afterwards slightly decreased from the peak in July of the current year. During the turbulence period last August-September, the market decreased due to speculative pressure and an increased need in the American currency. All the components of the liquidity index essentially changed (the spread and amounts of an average transaction considerably increased with the reduction of a number of transactions), and this caused reduction of its value, and an influence of spread change was maximum (Figure 3.1.5).

Tightness³⁷ of the stock market of dollars increases this year versus the last year due to decrease of the spread value and its volatility.

Depth³⁸ of the market greatly changed during the last and current years. The market depth was maximum this July due to a great number of transactions relative to a small volume (less than USD500,000). By September, aggregate volume of transactions considerably increased (to more than USD17 bln.), however, their number sharply decreased. In October the indicator of the market depth reduced both at the expense of decrease of an



FX-market Operations on KASE, Volumes and

Operations

KASE FX-market liquidity

Figure 3.1.5

128.00

126.00

124 00

118.00

116.00

Figure 3.1.6

Source: NBRK, KASE

Source: NBK, KASE

aggregate volume of transactions, and their number (Figure 3.1.6).

Resilience³⁹ of the market is fairly hard to be assessed due to the activity of the National Bank on the market aimed at maintaining the tenge exchange rate. The resilience level is indirectly shown by the ratio of the daily change in exchange rate to volume of an average transaction per day⁴⁰. This market parameter last year was notable for serious volatility related to fluctuations in exchange rate as a result of external shocks. Thus, the currency market resilience and its ability to absorb the shocks of demand and supply were considerably lower in the second half of the last year

³⁶ The liquidity index is calculated as a sum of normalized values of spread between the best prices of demand and supply taken with 'minus', amount of an average transaction at KASE on main session taken with 'minus', and number of transactions. It is considered that maximum liquidity is reached when the spread is minimum (i.e. the costs for covering the position are minimum), amount of an average transaction is minimum, and number of transactions is maximum.

³⁷ The market characteristic that shows how far the real transaction price deviates from the average market price. The main indicator of tightness is a spread between the best and average weighted prices of purchase and supply.

³⁸ The market characteristic that shows activity of its participants; its main indicators are an aggregate volume, average transaction volume and number of transactions.

³⁹ The market characteristic that shows dependence of change in the price parameters of the market upon volumes of transactions.

⁴⁰ The closer is the parameter value to zero, the higher is the resistance, and vice versa.

than in this year. In other words, the dollar exchange rate became less sensitive to the influence of transactions of a large volume.

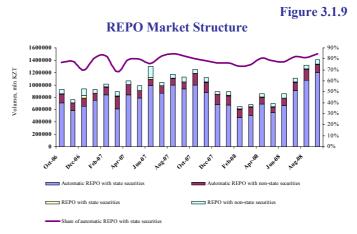
High ability of the dollar stock market for resistance is determined by participation in the bidding of the National Bank which, having considerable gold and foreign currency assets, can undertake a role of a main market-maker during the period when stability of the tenge exchange rate is threatened by shocks of demand or the dollar supply. Thus, this year a degree of participation of the National Bank⁴¹ in the transactions at KASE was on the average 15.6% (for comparison: 22.4% in August-December 2007) (Figure 3.1.7 – 3.1.8).

Figures 3.1.7 – 3.1.8



Source: NBRK, KASE Source: NBRK, KASE

In 2008 the importance of REPO market as a source of obtaining short-term liquidity by the financial market participants has increased. After abrupt decrease of the volumes of transactions committed in November 2007 – February 2008 there was observed a growth of the REPO market depth expressed in the increase of aggregate volumes of transactions. Thus, in September 2008, an aggregate volume of transactions was KZT1.407 trln which was an absolute maximum for two years (Figure 3.1.9). At the same



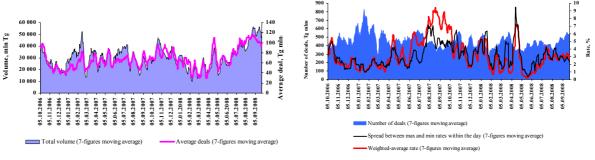
Source: KASE

time, a dominating REPO segment (84.8% this September) is automatic REPO with state securities.

The greatest number of transactions and the greatest aggregate volumes of transactions are in the sector of automatic REPO with state securities for the term of 1 day. In 2008, there is observed an intensive increase of the market depth in this segment of REPO market at the expense of growth of aggregate volumes and number of transactions. The absolute maximum of interest rates (more than 8%) was observed in August 2007, i.e. during the period when the banks experienced the largest problems with liquidity. By the beginning of 2008, the rates considerably lowered but by April again reached a local maximum (about 7%). In August-September 2008, the situation stabilized, and the average rate in this period was about 3%. As for the average volume of transaction, its value changes slightly since the transactions are standardized (Figures 3.1.10 – 3.1.11). Thus, stabilization of the REPO rate at the level of approximately 3% has in the recent months reflected stabilization of the liquidity level of the banking system.

⁴¹ It is calculated as a ratio of the amount of all NBK operations on both purchase and sale to the aggregate volume of transactions (on a gross basis).

Characteristics of the 1-day Automatic REPO Market



Source: KASE

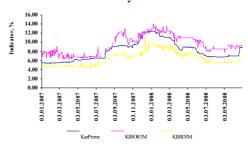
The decrease of main indices of the interbank money market reflecting the cost of attraction of unsecured loans on the interbank market testified to normalization of the situation with liquidity in the banking sector.

On the interbank money market up to the beginning of this year there was observed an increase of the cost of attraction and placement of funds (Index KazPrime approached the level of 14%, and the KIBOR and KIBID indices considerably increased). Afterwards there started a rapid decrease of indices value, and since this July their stabilization was observed (KazPrime dropped to

8% and up to November demonstrates a slight volatility) (Figure 3.1.12).

The market of short-term interbank crediting in Kazakhstan remains comparatively undeveloped in relation to the interbank deposits market. Thus, according to the National Bank data, the loans granted for January-September 2008 were KZT20.7 bln. which is 3.4% of the amount of the deposits placed in the same period (KZT613.5 bln.). The interbank credits in dollars granted for the same

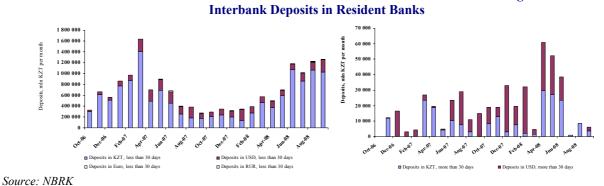
Figure 3.1.12 Interbank Money Market Indices



Source: KASE

period amounted to USD697.6 mln., or 0,19% of the aggregate amount of deposits denominated in dollars (USD365 bln.)⁴². The main part of interbank contributions in resident banks for the period of up to 30 days is denominated in tenge. Their volumes for the period, by reaching a minimum last September (deposits in tenge - KZT174.2 bln.. in dollars - KZT92.1 bln.), have fairly rapidly increased its volume by this August (1073.1 bln. in tenge and 102.7 bln. in dollars). The volumes of deposits for more than 30 days are insignificant comparing to the deposit with the period of less than 30 days. In the third quarter of this year, there was observed a serious reduction of their volumes (Figures 3.1.13 – 3.1.14).

Figures 3.1.13 – 3.1.14

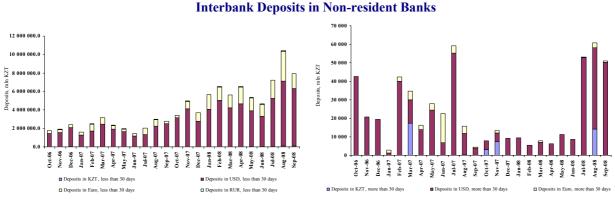


⁴² Here and below the volumes of interbank deposits and loans are considered without NBK credits and banks' deposits in NBK.

Thus, the increase of deposits with the period of less than 30 days testifies to normalization of the situation with liquidity in Kazakhstani second-level banks. But at the same time, reduction of the deposits volumes over 30 days witnesses to the banks desire to retain liquidity in tenge in the next months.

The deposits in non-resident banks from January to September of the current year were at 95.9% of the aggregate number of interbank deposits. Between the internal and external markets of interbank crediting the banks give preference to the latter. The main part of accounts in non-resident banks remains nominated in US dollars. The aggregate volumes of the deposits in US dollars with the period of up to 30 days have been rapidly growing during this year. In the last quarter, in contrast to the tenge market, the deposits for more than 30 days in non-resident banks have also considerably increased (Figures 3.1.15 - 3.1.16).

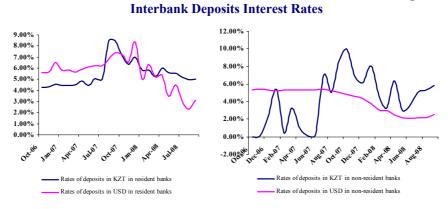
Figures 3.1.15 – 3.1.16



Source: NBRK

During the period till July-August of the last year, the rates on interbank deposits in dollars in relation to both deposits in resident banks and non-resident banks were noticeably higher than the rates for deposits in tenge. This year, the opposite takes place: the rates on tenge deposits are higher than the rates on dollar deposits which may be linked with a larger need in tenge rather than in dollar liquidity of the Kazakhstani banks. Due to the fact that the sale of dollars to the banks by clients had a positive balance, the banks had sufficient volumes of dollars, and this resulted in reduction of the rates on the interbank market (Figures 3.1.17 - 3.1.18).

Figures 3.1.17 - 3.1.18



3.2. Securities Market

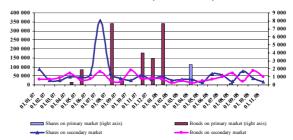
Source: NBRK

The crisis that occurred in summer 2007 slowed down the development of Kazakhstani stock market and reflected mainly on the return on bank shares. The primary market of shares likewise the market of derivatives instruments remained on the former undeveloped level. On the

whole, the market of equity and debt securities could not become an alternative to banking crediting in the conditions of credit activity slowdown.

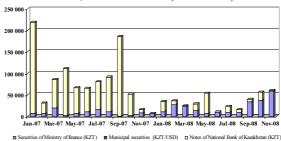
The total turnover of the stock exchange on shares for 10 months 2008 was USD3,076.1 mln., on corporate bonds - USD2,932.3 mln., whereas as of the end of 2007 the stock turnover was 8.9 bln., and on corporate bonds -4.1 bln.The share of REPO market operations remains prevailing as before and is equal to 61.7% of the total turnover of the stock exchange, out of them 64% - automatic REPO and 36% - direct REPO. In 2008 the National Bank stopped to actively withdraw money liquidity which affected the volumes of the government securities market. Also, in the last months of 2007 there was noted a surge on the corporate securities market which is related to additional issues of large banks with the aim of funds attraction as an alternative to foreign financing. It is also necessary to note the investors' interest on the government securities market of the Ministry of Finance. Thus, for 10 months 2008, the share of state securities of the Ministry of Finance was more than 60%. This growth is related to Kazakh investors' preferences to invest in riskless instruments in spite of low rate of return on them due to the drop in stock markets and lack of other riskless instruments (Figures 3.2.1 - 3.2.2).

Figure 3.2.1 Volume of Transactions on Primary and Secondary Markets of Shares and Bonds, for the Period (mln. KZT)



Source: KASE

Figure 3.2.2 Volume of Transactions on State Securities Market, for the Period (mln. KZT)



Source: KASE

The main indicators of the stock market demonstrate an increased interest in debt instruments of high quality which shows a substantial growth of a confidence index⁴³. Within 10 months of 2008 a number of transactions committed with regard to bonds has increased by 2.5 times where the peak was in September and October that entailed a growth of index KASE-BY. The market of shares, in turn, demonstrates further aggravation by 2.68 times since July 2008 which is explained by overall drop of indicators on the world stock markets. Along with that, in spite of the situation on the external market, the domestic market of shares in September-October 2008 demonstrated a growth of activity – a number of the securities on which transactions were executed exceeded the data for January-August 2008 almost by 2 times, and this entailed a sharp growth of liquidity (Figures 3.2.3 and 3.2.4).

Figures 3.2.3 – 3.2.4



⁴³ The confidence index represents a ratio of the average weighted rate of return of bonds with a high rating to the average weighted rate of return of corporate bonds with a lower rating.

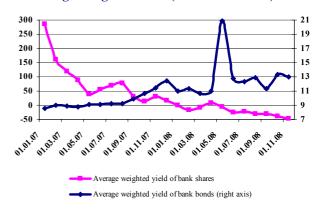
The drop in prices for the shares of Kazakhstani issuers took place under the psychological influence of closure by foreign investors of the positions in securities of the financial institutions of the entire world, and also at the expense of reduction of prices for metals and petroleum. In general, an average weighted profitability of bank shares from the beginning of 2008 through October 2008 lost

47% by reaching the mark of -46.02% per annum, whereas an average weighted profitability of bank bonds for the same period increased by 1.96% (Figures 3.2.5 и 3.2.6).

The drop in shares quotations resulted in decrease of market capitalization by 40% over 10 months of 2008. The greatest rise in May-June is explained by appearance of a few new issuers that also affected the sectoral structure of the securities market. In particular, by volume of the committed transactions on the Kazakhstani stock exchange, there is observed a growth of activity of the energy sector on the market of shares and industrial sector on the market of

Source: NBRK

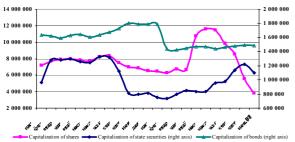
Figure 3.2.6 Average Weighted Yield (domestic market)



Source: NBRK

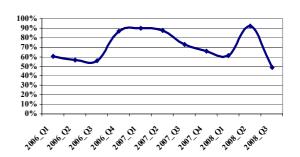
bonds represented by new issuers. This demonstrates the interest in new companies in the industries less exposed to crisis and reflects decrease in investors' confidence in the financial sector (Figures 3.2.7, 3.2.8, 3.2.9).

Figure 3.2.7 Capitalization of the Shares, Bonds, State Securities



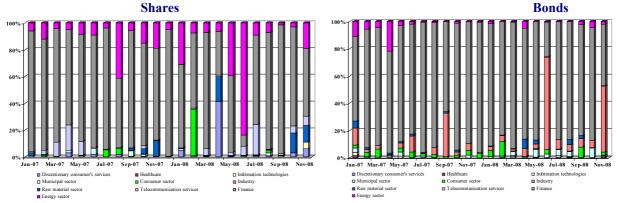
Source: KASE

Figure 3.2.8 Total Capitalization of KASE to GDP



Source: NBRK, KASE

Figure 3.2.9
Branch Structure of Securities Market in Terms of Completed Transactions, mln. KZT



Source: KASE