II. Macroeconomic Risks and Financial Market Risks

1. External Conditions Determining Financial Stability

Fiscal and monetary measures taken by the governments to control the crisis consequences have resulted in certain revival of their economies in the second half of 2009. According to the analysts from international organizations, up to date the crisis has already hit the bottom; however, there is a high level of uncertainty surrounding further development of the world economy: forecasts vary from expectations for growth recovery in the nearest future to continuation of recession.



Note: * - forecasts as of April 2009, **-forecasts as of October 2009 Source: IMF, World Economic Outlook



Notee: From 2009 – IMF forecast as of October 2009 Source: IMF

The second wave of crisis provoked by bankruptcy of Lehman Brothers, the US largest investment bank, in autumn 2008 has resulted in collapse of stock indexes in the global financial markets and surge in the risk premiums.

Worsening of economic situation in most of the countries around the world has negative triggered expectations of the economic agents, which have shown themselves in downward reassessment of the majority of the forecasts (Figure 1.1). However, due to positive effect of anti-crisis measures in the largest economies of the world in the second half of the year the forecasts have taken turn for the better.

According to the IMF latest assessments¹, in 2009 the world economy is expected to decline up to -1.1% (the developed countries - 3.4% and developing countries - 1.7%) (Figure 1.2). In turn, the assessment of the independent analysts predicts the deeper recession in the current year. Thus, Fitch rating $agency^2$ measures decline in the world economy in 2009 as equal to -2.8%, mainly due to such factors as significant contraction in business conditions during 2007-2009, credit crunch, considerable reduction of investments in the real sector and worldwide cost cutting.

In the midterm it is expected that the economic growth in the countries worldwide will be gradually recovering and in most economies it will not exceed their pre-crisis

values. Thus, according to the IMF forecasts, growth of world economy in 2010 will amount to 3.1% (1.3% - for the developed countries and 5.08% - for the developing ones).

Figure 1.2

¹ World Economic Outlook, October 2009.

² Fitch, Global Economic Outlook, October 2009

Forecasts of independent analysts for 2010 also predict that the highest growth rate among the developed countries will be observed in the USA, due to effect of large-scale anti-crisis programs and planned reforms (Table 1.1).

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| | | 2010 | | 2009 | | |
|--------------------|---------|-------|--------|---------|-------|---------|
| Country/ region | Average | Max | Min | Average | Max | Min |
| USA | 2.49 | 3.60 | 1.60 | -2.50 | 0.10 | -3.00 |
| Eurozone | 1.13 | 2.20 | 0.50 | -3.85 | -3.50 | -4.50 |
| Great Britain | 1.14 | 2.00 | - 0.50 | -4.30 | -2.70 | -4.70 |
| Japan | 1.14 | 3.10 | 0.00 | -5.23 | -3.40 | -6.80 |
| China | 9.35 | 11.90 | 7.00 | 8.57 | 9.40 | 6.50 |
| Russia | 3.36 | 4.50 | 0.00 | -7.60 | -4.90 | - 10.00 |

Real GDP Forecast, %

Source: Data of Bloomberg consensus forecast; www.rbc.ru, EIU, Morgan Stanley; "Development Center"; Great Britain's Treasury for September-November 2009 During the crisis period the role of developing countries has increased as growth of their economies has become a very important factor to support the level of activity in the global markets. It refers, first and foremost, to the economy of China that started pursuing a policy of domestic demand stimulation to substitute the demand on the part of its main consumers – the USA - in order to prevent decline in the economic growth. Moderate recovery of the capital flows is becoming another determinant of the economic growth revival in the developing countries.

With relation to the economy of Russia, the Ministry of Economic

Development of Russian Federation, in accordance with the forecasts revised upwards, expects that the GDP growth rate in 2010 will amount to 1.6% and to 3% - in 2011; and these expectations are based on the signs of revival in the world economy and oil price rise.

Rise of prices in commodity markets, especially prices on energy resources, is of primary importance for recovery of economic growth in the developing countries.

Low prices in the commodity markets till the end of 2008 after their collapse in the mid-year were retained because of uncertainty concerning the depth of global growth deceleration, contraction of business activity throughout the world and cut down of a number of projects of raw material production due to lack of financing. The first signs of revival in the commodity markets appeared as early as the beginning of 2009. As of 1 October 2009, Reuters/Jefferies CRB Index recovered by 28%, and an average monthly price of Brent oil increased by 86% - from 36.24 USD/bbl to 67.23 USD/bbl (Figures 1.3 and 1.4).





Note: From the 4th quarter 2009 – data of Bloomberg consensus forecasts; P<u>www.rbc.ru</u> as of October-November 2009 Source:Thomson Reuters (Datastream)

Price rise in the commodity markets was essentially supported by the market participants' expectations of positive effect of the governments' anti-crisis programs; increase in demand on commodities on the part of the developing countries and overflow to the market of a portion of liquid resources provided as a part of anti-crisis measures.

Table 1.2

| Forecast of OII Prices (USD/DDI) | | | | | | | | | | |
|----------------------------------|-------|-------|--|--|--|--|--|--|--|--|
| Oil type | 2009 | 2010 | | | | | | | | |
| WTI | | | | | | | | | | |
| Average price | 62.20 | 73.01 | | | | | | | | |
| Maximum price | 67.43 | 90.00 | | | | | | | | |
| Minimum price | 48.00 | 40.00 | | | | | | | | |
| BRENT | | | | | | | | | | |
| Average price | 62.27 | 70.44 | | | | | | | | |
| Maximum price | 70.00 | 84.00 | | | | | | | | |
| Minimum price | 50.00 | 39.00 | | | | | | | | |
| URALS | | | | | | | | | | |
| Average price | 57.91 | 65.90 | | | | | | | | |
| Maximum price | 61.70 | 83.50 | | | | | | | | |
| Minimum price | 33.90 | 37.40 | | | | | | | | |

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Source: Bloomberg consensus forecasts; <u>www.rbc.ru</u>, September-November 2009.

Market participants also expect the oil price rise in the medium term (Table 1.2).



Note: From 2009–IMF forecast as of October 2009 Source: IMF

In addition, of vital importance was the OPEC policy of crude oil supply regulation and policy of China and a number of the developing countries to replenish their reserves, as well as wider participation of China in a large number of projects on raw materials extraction in different countries around the world.

These factors, combined with forecasted reduction in oil reserves and production worldwide in the medium term, will support the growth of commodity prices in future.

According to the IMF forecasting data, the average price of three types of crude oil in 2010 will be as high as 76.50 USD/bbl.

The global economy entry into recession had direct impact on significant disinflation all over the world.

Price rise in the commodity markets resumed from the beginning of 2009 has had no pressure on increase of the inflation rate, as it had in previous period. Starting 2009 disinflation has been observed in many countries around the world. According to IMF the worldwide inflation rate in 2010 will be by 3.44 p.p. lower on year-on-year basis, while the inflation rate in 2010 is expected to be equal to 2.89% (1.15% - for the developed countries and 4.87% - for the developing countries).

Moreover, onset of deflation has been noted in a number of countries in the current

year. According to the IMF estimates, at 2009 year-end deflation in the USA and Japan will be recorded at the level of -0.39% and -1.13%, respectively. However, as against the IMF forecasts, the market players expect deflation in 2009 in China as well, where it will average to $-0.6\%^3$.

Such factors as slow revitalization of the global economy, preservation of limited domestic demand and reasonable cost management of the economic agents will also contribute to preservation of low inflation rates in the near future. However, the large-scale liquidity inflows as a part of anti-crisis programs of the governments and low interest rates in case of the economic growth recovery are fraught with a danger of development of a new round of inflation. These concerns require from the governments to work over a strategy of anti-crisis policy completion simultaneously with toughening of terms and conditions for liquidity injection.

The mid-term projections of the inflation rates assume the price rise both in the developed and developing countries. Thus, the analysts expect that the inflation rate in the USA will be 1.88%

³ Average forecast according to Morgan Stanley (as of 23 October 2009); Bloomberg consensus forecast (August 2009); www.rbc.ru (November 2009)

in 2010 and 2.34% in 2011. Consensus forecasts for 2010 and 2011 are as follows: Eurozone -1.10% and 1.50% and Great Britain -1.98% and 1.56%, respectively⁴.

China's policy to stimulate the domestic demand and high rates of economic growth will influence the escalation of the inflation rate in China. Thus, in 2010 the inflation rate in China is expected to increase up to 2.73% and up to 3.03% in 2011^4 .

In the developing countries the impact of global financial crisis has shown itself primarily through materialization of risks associated with excessive debt burden of the economic agents and volatility of funding due to a high share of a short-term debt. Moreover, the level of risks associated with state finances and quality of the financial institutions assets is gradually going up.

Notwithstanding the fact that by the end of 2009 the investors have become less averse in their perception of the country risks associated with investments in the developing countries, the key indicators of the financial system soundness in said countries give evidence of the high level of its vulnerability to external shocks. Thus, GED/GDP ratio in the countries of Central and Eastern Europe and CIS member states remains rather high; moreover, a share of short-term liabilities in the gross external debt structure averages to 25%, while the level of its cover with international reserves is relatively low (Table 1.3).

This year, due to shortage of international reserves and the need to maintain the acceptable level of internal and external liquidity, a number of countries of Eastern Europe and CIS have had to request assistance from the international organizations, IMF in the first instance.

Large-scale government anti-crisis measures alongside with decrease in state revenues have resulted in increase of the state budget deficit. The current level of external debt and low sovereign credit ratings in the medium term may lead to the problems of the state budget deficit financing.

The government assistance to the banks has failed to mitigate their foreign exchange and credit risks up the acceptable level because of low quality of the banks' assets and significant share of loans granted in foreign currency.

It should be noted that many countries from this group have succeeded in improvement of their balances of payment at the expense of the national currency devaluation. Another factor that has contributed to improvement of the current accounts is a decline in aggregate domestic demand. Reduction in revenues of the economic agents and in aggregate demand thereof also limits the inflation rate escalation in the short term.

⁴ Bloomberg average-weighted consensus forecast: the USA – as of 21 October 2009; Eurozone – as of 21 October 2009 and 23 September 2009; Great Britain – as of 22 October 2009 and China – as of 28 August 2009.

Table 1.3

Comparative Parameters of Developing Countries Vulnerability, % (for 9 months of 2008 and 9 months of 2009)⁵

| | | Creek | | | | | | | | | Mean value for | |
|----------------------------------------------------------------------|-----------------------------------------|-----------------|---------------|-------------|---------------|--------------|---------|-----------|---------|--------|-------------------|------------|
| Indicators | Poland | Rep. | Romania | Hungary | Bulgaria | Jkraine | Latvia | Lithuania | Estonia | Russia | countries | Kazakhstan |
| | | | | | I | External sec | tor | | | | | |
| Gross Extern | nal Debt/O | G DP (1) | | | | | | | | | | |
| 2008 | 50.1 | 41.0 | 41.0 | 133.1 | 110.4 | 54.8 | 122.6 | 73.2 | 144.9 | 32.6 | 80.4 | 81.7 |
| 2009 | 50.5 | 41.1 | 44.5 | 163.2 | 107.1 | 64.1 | 134.1 | 77.8 | 170.5 | 32.0 | 88.5 | 90.9 |
| Short-Term External Debt /International Reserves (without gold) (2) | | | | | | | | | | | | |
| 2008 | 111.8 | 80.0 | 69.7 | 108.3 | 94.1 | 74.4 | 251.2 | 144.4 | 261.4 | 21.2 | 121.7 | 139.9 |
| 2009 | 103.4 | 60.6 | 44.5 | 83.4 | 107.7 | 74.4 | 269.6 | 104.5 | 236.0 | 16.2 | 110.0 | 146.6 |
| Current Acc | ount Bala | nce/GDP | (1) | | | - | | | | | | |
| 2008 | -5.1 | -2.6 | -17.1 | -6.5 | -25.1 | -6.7 | -18.1 | -14.3 | -12.1 | 7.0 | -10.1 | 3.4 |
| 2009 | -2.8 | -2.6 | -6.2 | -4.5 | -19.7 | -3.8 | -2.8 | -4.0 | -2.2 | 3.7 | -4.5 | -3.1 |
| | Factors of Monetary and Fiscal Policies | | | | | | | | | | | |
| State Budget | Deficit/G | GDP (1) | • | | | | | • | 1 | • | | |
| 2008 | -2.4 | -1.1 | -4.6 | -3.5 | 0.6 | -0.4 | -1.8 | -2.3 | 0.2 | 6.7 | -0.9 | -2.1 |
| 2009 | -5.4 | -3.8 | -7.8 | -4.4 | -3.2 | -6.1 | -8.3 | -7.1 | -3.7 | -1.0 | -5.1 | -1.6 |
| Inflation Rate (change to the corresponding period of previous year) | | | | | | | | | | | | |
| 2008 | 4.6 | 6.6 | 8.1 | 5.7 | 11 | 26.2 | 14.7 | 11.7 | 10.9 | 15 | 11.45 | 18.2 |
| 2009 | 4 | 1.2 | 6 | 4.9 | 0.2 | 16.8 | 0.1 | 2.8 | -0.3 | 11.9 | 4.76 | 6.0 |
| REER (3) (change to the corresponding period of previous year) | | | | | | | | | | | | |
| 2008 | 16.4 | 18.9 | -5.3 | 10.2 | 7.6 | 14.6 | 12.8 | 3.6 | 4.4 | 6.6 | 9.0 | 5.3 |
| 2009 | -20.3 | -5.8 | -7.8 | -10.8 | 4.3 | -14.3 | -7.0 | 9.8 | 1.1 | -6.6 | -5.7 | -2.9 |
| | | | | | Fore | ign Exchan | ge Risk | | | | | |
| Share of FX | loans to | Total Cre | edits to Ecor | nomy | 1 | | | T | | 1 | | |
| 2008 | 27.9 | 13.1 | 56.1 | 65.3 | 55.0 | 51.4 | 88.4 | 63.0 | 84.7 | 22.1 | 52.7 | 43.9 |
| 2009 | 33.4 | 12.5 | 59.7 | 70.7 | 57.7 | 52.8 | 91.3 | 71.4 | 87.1 | 25.1 | 56.2 | 53.5 |
| | | | | | | Credit Ris | k | | | | | |
| Non-perform | ning Loan | s to Loar | Portfolio (| (4) | 1 | 1 | 1 | 1 | 1 | 1 | | |
| 2008 | 4.4 | 3.3 | 13.8 | 3.0 | 2.4 | 17.4 | 3.6 | 4.6 | 1.9 | 3.8 | 5.8 | 4.3 |
| 2009 | 5.7 | 4.4 | n/a | 4.8 | 3.2 | 29.9 | 10.7 | 11.3 | 3.2 | 7.6 | 9.0 | 17.5 |
| Provisions to | Non-per | forming 1 | Loans | Т | · · · | 1 | 1 | , | , | T | | |
| 2008 | n/a | 67.5 | 28.7 | 59.6 | n/a | 29.6 | 61.3 | n/a | n/a | 118.4 | 60.9 | 59.4 |
| 2009 | n/a | 61.3 | n/a | 52.6 | n/a | 29.8 | 40.7 | n/a | n/a | 90.8 | 55.0 | 78.6 |
| | | | | | В | usiness Acti | ivity | | | | | |
| Real GDP (c | hange to t | the corre | sponding pe | riod of pre | evious year) | 1 | 1 | r | 1 | r | | |
| 2008 | 5 | 3.9 | 9.2 | 1.3 | 4.9 | 6.3 | -5.2 | 2.1 | -3.5 | 6 | 3.0 | 4.0 |
| 2009 | 1.1 | -5.8 | -8.7 | -7.5 | 7.1 | -17.8 | -18.7 | -14.3 | -16.1 | -10.9 | -9.16 | -2.2 |
| Credits to ec | onomy (c | change to | the corresp | onding per | riod of previ | ous year) | 1 | T | 1 | 1 | | |
| 2008 | 30.0 | 21.8 | 50.6 | 20.4 | 47.8 | 54.1 | 16.5 | 28.1 | 13.7 | 49.2 | 33.2 | 2.4 |
| 2009 | 18.5 | 7.9 | 3.2 | 12.0 | 5.0 | 28.9 | -3.7 | -4.4 | -4.0 | -4.0 | 5.9 | 10.1 |

Notes to the Table: (1)-Indicators have been calculated in annual terms including three previous quarters; (2)-Indicator for Kazakhstan has been calculated as the ratio of the sum of short-term debt remaining to maturity and interest payments on the servicing of external debt due within the next 12 months, to international reserves including gold; (3)-The increase in indices reflects appreciation of the domestic currency and their decrease - its depreciation; (4) Indicator for Kazakhstan- loans with delinquency over 90 days;

Source: Central Banks, National Statistics Agencies, Ministries of Finance; IMF statistics (IFS), Eurostat, Thomson Reuters (Datastream), IMF "Global Financial Stability Report".

⁵ Data for 9 months of 2009 are presented as of 30 June 2009 or 20 September 2009 depending on the data availability. Credit risk data for 2008 are presented on the annual basis, while 2009 data are represented as of the last actual date.



Source: Bloomberg

Table 1.3

| Range of actual values | EUR/USD | GBP/USD | USD/JPY |
|----------------------------------|-------------|-------------|----------------|
| 1st quarter of 2009 | (1.26-1.39) | (1.37-1.52) | (87.63-99.40) |
| Mean | 1.304 | 1.434 | 93.68 |
| 2 nd quarter of 2009 | (1.29-1.43) | (1.44-1.66) | (94.57-100.81) |
| Mean | 1.36 | 1.55 | 97.41 |
| 3rd quarter of 2009 | (1.39-1.48) | (1.59-1.69) | (89.47-97.435) |
| Mean | 1.43 | 1.64 | 93.57 |
| Range of forecasted values | | | |
| 4th quarter of 2009 | (1.35-1.55) | (1.52-1.85) | (85-102) |
| Mean | 1.48 | 1.64 | 91 |
| 1st quarter of 2010 | (1.32-1.58) | (1.45-1.85) | (80-108) |
| Mean | 1.47 | 1.64 | 93 |
| 2 nd quarter of 2010 | (1.23-1.65) | (1.42-1.83) | (84-112) |
| Mean | 1.45 | 1.65 | 96 |
| 3 rd quarter of .2010 | (1.23-1.6) | (1.4-1.88) | (84-115) |
| Mean | 1.43 | 1.65 | 98 |

Range of Movement and Forecasts for Foreign Exchange Rates

Source: actual data - Thomson Reuters (Datastream); forecast data - <u>www.rbc.ru</u>, Bloomberg as of October-November 2009. Figure 1.7



Interbank Interest Rates, (%)

Source: Thomson Reuters (Datastream), Bloomberg

This year the global financial markets are characterized by sufficiently high volatility, which will be preserved in future until the time when stable signs of recovery of growth of the world economy appear.

At the same time, due to implementation of the anti-crisis measures, the liquidity has been restored in the financial markets and credit risks of the counterparties have notably reduced.

From the beginning of 2009 the trend of USD decline against other key currencies in FOREX market, observed starting the last midyear, has been going on (Figure 1.6).

The following aspects have contributed to the USD weakening: persistence of the factors; fundamental risk increase in financing as a part of anti-crisis programs; preservation of policy of the economy and certain stabilization stimulation of financial markets. which allowed the investors to move their positions from USD to more risky assets. The forecasts concerning further movements of USD, in its turn, imply that its downward change will also continue in future (Table 1.3).

From the beginning of 2009 a steady decline of the borrowing costs has been observed in the inter-bank market. Thus, for 9 months of this year the 3-month LIBOR has dropped by 1.14 p.p., from 1.43% to 0.29%; 3-month EURIBOR – by 2.14 p.p., from 2.89% to 0.75%, and MIBOR has dropped by 11.77 p.p., from 22.3% to 10.73% (Figure 1.7).

In addition to the inflation rate reduction, the key factor having affected mentioned trend is the impact on the market of such regulatory measures as reduction of major interest rates and increase of the amount of incentives.

⁶ The USD Index measures the performance of the US Dollar against a basket of six main world currencies.



Notee: spreads are calculated as the difference between 3-month LIBOR and 3-month overnight interest rate swaps for three currencies.

Source: Thomson Reuters (Datastream), NBRK calculations



Source: Bloomberg

Figure 1.10 **MSCI Index and its Regional Sub-Indexes** 1800 1600 1400 1200 1000 800 600 400 200 0 01.09.2009 01.01.2007 01.01.2008 01.03.2008 01.05.2008 01.07.2008 01.09.2008 01.11.2008 01.01.2009 01.03.2009 01.07.2009 01.03.2007 01.05.2007 01.07.2007 01.09.2007 01.11.2007 01.05.2009 MSCI World MSCI G7 MSCLEM BRIC MSCI EM (right axis) MSCI EFM Central and Eastern Europe + CIS MSCI Kazakhstan

Source: Thomson Reuters (Datastream)

The fact that in 2008 the governments announced that they would guarantee the banks' liabilities also resulted in mitigation of the counterparties' credit risks and encouraged stabilization of the short-term unsecured borrowings costs. Thus, spread between LIBOR and OIS⁷ in September 2009

spread value as of July 2007 (Figure 1.8). Reduction of the borrowing costs against the background of stabilization of counterparties' risks has resulted in stabilization of expectations of volatility in risk predictability. Nevertheless, the value of VIX⁸ at the level, which is much higher than the pre-crisis one, is a sign of the market participants' caution in spite of the positive trends (Figure 1.9).

narrowed to 0.13 p.p. and became equal to the

This year the corporate stock markets in different countries have been subject to significant fluctuations caused by permanent fear of the market players that recession of the world economy would keep deepening. Thus, in March 2009 the MSCI World index reached its historic minimum of 688.7 points, having dropped by 24% as compared to the beginning of the year (Figure 1.10). Its subindexes, in their turn, also have reached their minimum values: compared to the beginning of the year MSCI G7 has dropped by 25%; MSCI EM BRIC – by 11% and MSCI EM – by 15%.

In this case, revaluation of risks associated with assets of the companies in the developed countries has been more material as compared to revaluation in the developing countries. Thus, decrease in value of shares of the companies in the developed countries in February-March 2009 was by 8% higher in average than the respective indicator decrease for the group of the developing countries. As soon as the markets started demonstrating recovery, the investors began directing the capital flows to the developing countries' markets, thus expanding the volume of speculative operations therein.

⁷ OIS (overnight interest rate swap) is 3-month overnight interest rate swap.

⁸ VIX is Chicago Board Options Exchange (CBOE) Volatility Index. It is calculated based on implied volatility of call and put options of S&P500 index and represents a measure of expectation of the market volatility within next 30 days. MOVE index is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options. It is calculated by Merrill Lynch.



Source: Thomson Reuters (Datastream)



Source: Bloomberg

Figure 1.13 Spreads on 5-year Credit- Default Swaps of Banks in Developed and Developing Countries



Note: CDS spread are calculated as a mean value of CDS of banks from different countries.

Source: Thomson Reuters (Datastream), NBRK calculations;

As a result, in 2009 the highest degree of recovery has been demonstrated by the stock market indexes of the developing countries (Figure 1.11). Thus, for 9 months of 2009, Hang Seng has increased by 47% and RTS by 101% as compared with stock indexes of the developed markets, which have grown by less than 20% for the same period.

Growth of interest to the markets of the developing countries has been also confirmed by narrowing of the EMBI+ spread indexes from the beginning of 2009 (Figure 1.12). However, while the investors assess positively the developing countries' markets, they do not always take into account their weak fundamental parameters.

In addition to assessment of high probability of default of the financial institution itself, evaluation of the country's sovereign risk and effectiveness of its anticrisis measures have also contributed to significant expansion of spreads on creditdefault swaps during the period of higher volatility in 2009.

Implementation of anti-crisis measures has reduced the risks of default and resulted in CDS spreads narrowing against the background of increase in the levels of capitalization of the financial institutions and writing-off of losses (Figure 1.13). However, their level will remain relatively high in conditions when bad assets are still preserved in the balance sheets and financial performance is weak.

It should be noted that investors reassess risks of the developing countries against the risks of the developed countries, mainly due to the fact that the increased amount of anti-crisis measures has resulted in surge of debt liabilities on the part of the developed countries. This reassessment, accordingly, has shown itself in higher premiums on sovereign debts of the developed countries.

Financial Stability Report of Kazakhstan, December 2009



Note: Index represents the first principal component calculated on the basis of the following indicators: VIX, MOVE, JPM EMBI+ COMPOSITE, Risk Appetite Investable Index, trade-weighted Swiss franc, 3 month FX implied volatility (USD/JPY, EUR/USD), US swap, gold price in USD.

Source: Thomson Reuters (Datastream), Bloomberg, NBRK calculations

In general, one should note that the "risk appetite" starts recovering (Figure 1.14). Forecasts of revival in the world economies stimulate the investors' expectations of possibility of future market growth.

Favorable conditions existing for the market. such as prolongation of the stimulating measures; governments' low interest rates; large-scale liquidity injections and price rise in the commodity markets increase the market players' aptitude to accept the risks. This situation taken in the short term creates preconditions for a new "bubble" in the financial and trade markets. In the long run, however, probability that the investors' risky behavior will lead to the market overheat depends on the adequacy of implementation of measures aimed at

limitation of speculative operations in the financial markets and strengthening control of such operations on the part of the governments. Some developing countries, in conditions of speculative inflows, also introduce regulatory restrictions against trans-border capital flows.

Up to date the anti-crisis measures have succeeded in stabilization of the world financial system and created conditions for resumption of economic growth. However, the short-term prospects for further development still remain indefinite and hide possible risks for the global financial system.

- Anti-crisis measures taken by the governments have been able to stimulate certain revival in the economies and stabilize financial positions of financial institutions. However, there is a risk that without the government resources the financial institutions will face difficulties in attraction funds from the markets, if the policy for the financial market support ends before full recovery of confidence in said markets.

- Conservatism in lending on the part of financial institutions restricts revival of business activity, preventing financial resources received as a part of the state support from overflow to a direct recipient thereof.

- More sustainable growth of the developing countries has increased their investment appeal, thus creating preconditions for overflow of "hot money".

- Public funds transferred to the financial institutions to support the real sector are invested in the financial markets, thus creating a danger of their overheating and promoting growth of the speculative operations scope. In view of danger to create the new "bubbles", it is necessary to take measures aimed at limitation of the speculative capital movements.

- Drop in the purchasing power minimizes a danger of escalation of inflation in the short run; however, large-scale injections of government funds in the economy and retention of interest rates at the low levels invite a danger of inflation pressure in the medium term.

- Large-scale government aid has resulted in growth of the state budget deficit, which creates preconditions for increase in the sovereign debt burden and risks associated therewith.

- Increase in the "risk appetite" after the first quarter of 2009 gives evidence of the market growth in expectation of the near recovery of economic growth. Taking into account that the market recovery is an achievement of the government, in case the government anti-crisis policy is terminated before a complete recovery of the market stability, the repeated revaluation of assets may be provoked, which may lead to more serious assessment of risks with relation to other market participants.

2. Macroeconomic Environment and Economic Conditions in Kazakhstan

Figure 2.1.2

2.1 Factors of Economic Growth



Note: * in % on YoY basis, accrued from the beginning of the year; ** MEBP forecast Source: SARK



Note: in % on YoY basis, accrued from the beginning of the year; **Changes in stocks have been calculated as the ratio to the respective period of the previous year based on the data in current prices. Source: SARK



Figure 2.1.3

Source: NAC

Certain recovery of the economic growth observed starting from the 3^{rd} quarter of 2009, which has compensated, in part, a significant drop in real GDP in the first half of 2009. For a while however, the basis for growth is limited by certain industries. In general, despite economic recession, investments in capital assets have become the main factor supporting the growth.

Negative economic growth (-2.2) prevailing in Kazakhstan based upon the results for 9 months 2009, as against the economic growth (4%) for the same period of last year, has demonstrated high degree of the economy dependence on external factors.

Substantial drop in the capital inflow and fall in world market prices on energy resources has shown itself in slowdown of economic growth almost in all branches of economy: negative growth based upon results for 9 months of 2009 has been observed in transport (-10.7%), construction (-8.9%), trade (-8.4%), financial activity (-5.7%) and industry (-0.6%) (Figure 2.1.1). The GDP within-year dynamics shows that the bottom of crisis has fallen on the first half of this year.

Reduction of gross fixed capital formation in the non-industry sector, export and import of goods and services and considerable reduction in inventories have been somewhat compensated by growth of expenses on final consumption of households and public authorities (Figure 2.1.2).

Certain slowdown in the contraction rates has been noted based upon the results for 9 months 2009 due to revival in some branches of industries in the 3^{rd} quarter (Box 1).

Moreover, a composite leading indicator⁹, which forecasts trends in development for the next 9 months, shows during a few months preservation of positive trends (Figure 2.1.3). It gives evidence that the economic revival trends that have begun to show in the 3^{rd} quarter of 2009 are not just a short-term outburst but the beginning of economic growth recovery, although still based on the growth of world export prices.

In general, for 2009 MEBP estimates the real growth of economy in the amount not exceeding 1%. The National Bank assesses the real economic growth within the range of 0.1% - 0.3%. Alternative scenarios of Kazakhstani economy development in 2009 offered by the international financial organizations and rating agencies fall within a range from (-2%) to (-3.5%).

Further recovery of the economic growth rates is expected in 2010.



Box 1

Despite decline of investments in the economy in general, the slight growth of investment in the industry has preserved and supported increase in the overall production in the industrial sector of economy.

Beginning of positive dynamics in the 2nd and 3rd quarters of 2009 has been determined by the rise of world market oil prices and recovery of investment activity in certain branches of mining industry, in particular, production of crude oil and natural gas, coal, lignite and peat and extraction of metallic ores

Source: SARK, NBRK calculations

(Figure 1). For this purpose more than 60% of investments in the industry have been channeled to production of crude oil and natural gas and provision of services in said spheres.

Certain revitalization in the manufacturing industry (which accounts for 35% in the industrial production) is mostly due to production of oil products, food products, ferrous industry, production and distribution of electric power, gas and water (Table 1). However, from the beginning of 2007 a share of investments in the manufacturing industry has reduced from 22% to 15%. Negative growth of industrial output is still preserved in many branches of the manufacturing industry, including textile industry, pulp and papermaking industry, non-ferrous metallurgy, industries related to transport vehicles and equipment.

With the existing pattern of financing of the industrial production branches, in future the high dependence on the external factors and exposure to unpredictable downturns and wide spread in growth rates of different branches of industries would be preserved.

⁹ Composite leading indicator is based on 5 indices: Oil price index, US Leading Index, IFO World Economic Survey, M2 growth and real stock price.

Composite coincident indicator characterizing the current dynamics of economy development is based on 4 indices: Activity index of total production, Economically active population, Real wages and Retail trade volume (Source: National Analytical Center).

| | | 2007 | | | 2008 | | | Q1 2009 | | | Q2 2009 | | | Q3 2009 | |
|--------------------------------------------------------------------|----------------|-----------------|-------|----------------|-----------------|-------|----------------|-----------------|-------|----------------|-----------------|-------|----------------|-----------------|-------|
| | Produ ction | Invest ments | Loans |
| Industry | 5% | 17% | 14% | 2% | 15% | -49% | -13% | -51% | -36% | 7% | 119% | -9% | 2% | 21% | -27% |
| Mining industry | 3% | 13% | 3% | 5% | 7% | -47% | -6% | -46% | -38% | 8% | 142% | -43% | -3% | 23% | 17% |
| including oil and gas production | 3% | 11% | na | 5% | 1% | na | -3% | -39% | na | 3% | 69% | na | -2% | -9% | na |
| Manufacturing industry | 8% | 12% | 20% | -3% | 17% | -55% | -21% | -55% | -27% | 12% | 75% | 22% | 6% | -28% | -30% |
| Production of food products | 7% | 31% | 33% | -1% | -4% | -24% | -17% | 2% | -29% | 11% | -4% | 63% | 0% | -36% | -32% |
| Production of coke, oil products and nuclear materials | 9% | 4% | 33% | 4% | -13% | -40% | -7% | -77% | -84% | 4% | 71% | 50% | 19% | -22% | -24% |
| Metallurgy and production of fabricated metal products | 4% | 2% | 17% | -4% | 25% | -82% | -5% | -57% | -34% | 36% | 58% | -9% | -14% | -13% | -42% |
| Machine-building | 15% | 54% | 35% | -7% | 17% | -24% | -42% | -69% | 10% | 13% | 40% | -22% | 10% | 75% | -8% |
| Generation and distribution of electric power, gas and water | 9% | 72% | -3% | 5% | 62% | 96% | -21% | -65% | -52% | -31% | 74% | -54% | -2% | 96% | -71% |

Industrial Production, Investments and Bank Loans by Sectors of Economy * (%)

Significant fall in the lending activity, earnings and liquidity of the enterprises as a result of the global financial crisis has been compensated by increase of the state budget expenditures and influx of foreign capital, which supported the volumes of investments in absolute terms.



Lending activity with relation to loans extended to non-bank legal entities keeps weakening. Thus, a number of loans granted in the 3^{rd} quarter of 2009 decreased by 14% as compared to the previous quarter and by 45.5% against the pre-crisis period (3^{rd} quarter of 2007).

At the same time, the state budget expenditures, first of all on development of transport infrastructure, and foreign investments in mining industry have become the main sources of capital investments (Figure 2.1.4).

Note: * for the period on the annualized basis with account of three preceding quarters Source: SARK, NBRK

To mitigate consequences of the financial crisis in the current year the government continues pursuing the policy of maintaining the level of expenditures, stimulation of economic activity at the account of reduction of tax burden and use of the National Fund assets.

This year the policy of public expenditures is aimed at cutting the non-priority expenses, deferral in financing of some programs that were of priority before and simultaneous maintenance of the social expenditures at the previous level.

The amount of public expenditures in absolute terms has been preserved at the level of last year (Figure 2.1.5). Based upon the results of 9 months of 2009, a share of public expenditures in GDP increased from 23% to 25% on year on year basis. In the structure of expenses a share of current expenditures has increased from 61% to 71% and is maintained at the level of 24%.

Table 1



Note: * Public expenditures for a period; GDP in % on YoY basis with accrual from the beginning of the year Source: MoF, SARK

Traditionally social security and education account for the major part of expenditures the current in sectoral breakdown of public expenditures, while the largest share of capital expenditures falls on transport and communications, housing and utilities infrastructure and education (Figure 2.1.6). In this case, based upon the results of 9 months of 2009 there has been observed the significant reduction in current expenditures on the fuel and energy complex, cutting of capital expenditures on public services and public order and increase of capital expenditures on defense.



Source: MoF

To mitigate negative consequences of the global financial crisis and ensure macroeconomic stability, beginning in 2007 the National Fund assets have been used in the form of guaranteed transfers to the state budget to cover expenses of the development budget and transfers for special purposes determined by the President of the Republic of Kazakhstan.

In the 4th quarter of 2008, KZT 607.5 billion (18.4% of the National Fund's assets) were transferred from the National Fund in the form of a special-purpose transfer for increase of the authorized capital of the "National Welfare Fund "Samruk-Kazyna" JSC to implement measures aimed at ensuring competitiveness and sustainable development of Kazakhstan's national economy (Figure 2.1.7).

Moreover, to implement the anti-crisis program for stabilization of economy and financial system for $2009-2010^{10}$ KZT 146.5 billion (3.5% of the Fund's assets) have been withdrawn from the National Fund in the 2nd and 3rd quarters of 2009 with a view to stabilize situation in the financial market, address problems in the real estate market, support small and medium-size business and develop the agro-industrial complex.

¹⁰ Joint Operating Plan of the Government, National Bank and Agency for Regulation and Supervision of Financial Market and Financial Organizations for Stabilization of Economy and Financial System for 2009-2010.







Total assets withdrawn from the National Fund for this period in the form of guaranteed transfers, which ensure growth of the aggregate expenditures of the state budget at the level not exceeding the rates of GDP nominal growth, amounted to 7% of the Fund's assets.

The revenue side of the state budget in absolute terms has been preserved at the level of 2008 (Figure 2.1.8). The expected increase in budget revenues as a result of enforcement of the new Tax Code starting 1 January 2009, which provides for a substantial reduction of tax burden in order to stimulate business activity in the economy, has not occurred. In this case, revenues from the value added taxes and corporate income tax account for 60% of receipts in the budget revenues structure.

According to the results of 9 months of 2009 non-oil revenues have decreased by 19% on year on year basis, which is explained by decrease in the tax revenues from the import VAT as a result of drop in import by 25.7%. It contributed to expansion of the budget deficit up to 2.1% of GDP. In this case, a share of non-oil receipts accounts for 65% in the state budget revenues.

Government debt and government guaranteed debt have increased slightly in order to finance the budget deficit. In particular, the rate of growth of the government debt has increased by 16% based upon the results in the 3rd quarter of 2009 as compared to the same period of last year.

From the viewpoint of the government debt and government guaranteed debt sustainability it is necessary to mention certain increase of risks associated with the public sector solvency and liquidity. Debt growth against the background of decrease of non-oil revenues exerts main pressure on the solvency, while the liquidity level is mostly under the pressure of increase in the expenses on the Government's debt repayment and servicing and decrease of the non-oil revenues in the state budget (Table 2.1.1).

Table 2.1.1

Government and Government Guaranteed Debt Sustainability Indicators

| | 2006 | 2007 | 2008 | 9 months of 2008 | 9 months of 2009 |
|---------------------------------------------------------------------------------------------------------------------------------|------|------|------|--------------------------|----------------------------------|
| Solvency Indicators | | | | | |
| Debt of the Government, local bodies of executive power and government guaranteed debt / Non-oil state budget revenues, % | 33,0 | 28,6 | 36,6 | 47,4 | 87,5 |
| Net external liabilities of public authorities ¹¹ / Non-oil state budget revenues, % | 7,6 | 4,8 | 4,5 | <i>9,6</i> ¹² | 14,3 ¹² |
| Liquidity indicators | | | | | |
| The Government's short-term debt / Non-oil state budget revenues, % | 0,04 | 2,1 | 6,0 | 6,2 | 5,3 |
| The Government's debt repayment and service / State budget revenues, % | na | 4,5 | 5,7 | 7,7 | 9,3 |
| External position of public authorities and monetary authorities (external assets – external liabilities), USD bln | 30,9 | 37,5 | 46,1 | 21,5 12 | <i>40,9</i> ^{<i>12</i>} |

Source: MoF, NBRK calculations

Fall in oil prices, devaluation of currencies in the countries - main trade partners, worsening of terms of trade and appreciation of tenge in real terms have become the main factors that required adjustment of the national currency exchange rate at the beginning of 2009 in order to restore the competitiveness.

As a result of adverse market trends in oil prices and prices of other commodities, decrease of export volume in terms of value and quantity, as well as export revenues, deterioration of indicators of the economy external sustainability has been observed during 9 months of 2009 (Table 2.1.2). At the same time, stably high inflow of foreign investments ensures stable cover of the current account deficit, which is an important automatic stabilizer of the balance of payments under conditions of development of adverse external shocks.

Table 2.1.2

External Sector Sustainability Indicators

| | 2006 | 2007 | 2008 | 1 кв. 2009 | 2 кв. 2009 | 3 кв. 2009 |
|--------------------------------------------------|-------|-------|------|---------------|---------------|---------------|
| Current account, % to GDP | -3% | -8% | 5% | 2% | -1% | -3% |
| Trade balance, % to GDP | 18% | 14% | 25% | 21% | 16% | 13% |
| Cover of current account with FDI, % to GDP | 6% | -0.2% | 13% | 11% | 8% | 6% |
| Capital flight ¹³ , % to GDP | -4% | -9% | -8% | -10% | -9% | -5% |
| Short-term capital, % to GDP | -0.4% | -6% | -2% | -2% | -0.3% | 2% |
| Change in the terms of trade, % on an annualized | | | | | | |
| basis | -12% | 16% | -19% | -36% | 5% | 8% |

Note: Ouarterly indicators are calculated on an annualized basis with the account of three preceding guarters; 3 guarter preliminary estimation.

Source: NBRK

¹¹ Calculated as the difference between the debt instrument liabilities and debt instrument assets ¹² Data are calculated as of the first half of 2008 and 2009 respectively.

¹³ Capital flight = errors and omissions + short-term capital.



Source: NBRK

Devaluation that took place at the end of 2008 in the countries – trade partners of Kazakhstan further weakened its competitive positions (Figure 2.1.9). As a result, the real effective exchange rates of tenge to currencies of the CIS member countries and non-CIS countries in the 4th quarter of 2008 strengthened by 12.2% on year on year basis, including by 8.9% to the currencies of CIS member countries and by 13.6% - to the currencies of non-CIS countries.

Adverse trend in the 4th quarter of 2008 also affected a slowdown in rates of growth of Kazakhstan's external assets and

liabilities (Table 2.1.3). In this case the major reduction of the external assets has resulted from decrease in the National Bank's reserve assets and use of the National Fund's assets to stabilize the economy and financial system. Slowdown in the rates of growth of external liabilities was also explained by decrease in the external liabilities of the banking sector. At the same time growth of external liabilities preserved, first of all, due to the corporate sector.

Table 2.1.3

| | | | | Other | |
|---------------------------------|-------------|-------|---------------------|-----------------------|-----------------------------|
| | | Total | Banks ¹⁴ | sectors ¹⁴ | Public sector ¹⁴ |
| | Assets | 30% | 10% | 10% | 9% |
| 2007 | Liabilities | 38% | 18% | 21% | -1% |
| | Assets | 21% | 3% | 7% | 11% |
| 2008 | Liabilities | 10% | -8% | 18% | 0.1% |
| | Assets | 5% | 4% | 3% | -1% |
| 1 st quarter of 2009 | Liabilities | 2% | -14% | 16% | -0.05% |
| | Assets | -1% | 2% | 2% | -5% |
| 2 nd quarter of 2009 | Liabilities | 1% | -14% | 15% | 0.2% |

Contribution of Banks and Other Sectors to Growth of External Assets and Liabilities (% change on YoY basis)

Source: NBRK

Thus, by the end of 2009 a number of adverse factors prevailed in Kazakhstan's economy, which required adjustment of the national currency exchange rate and recovery of competitiveness of the national economy. Therefore, in order to ensure economic and financial stability the National Bank devalued the national currency on 4 February 2009.

Improvement of certain indicators of economic stability, based upon the results of 9 months of 2009, testifies to the devaluation positive effect. One-step devaluation in Kazakhstan, as compared to other countries that made adjustment of the national currencies at the same period, was carried out with lesser costs and losses of the international reserves.

Comparative analysis of the devaluation results with other countries shows a relative success of devaluation in Kazakhstan. It is assessed from the viewpoint of preservation of the country's international reserves, scale of decline in the economic growth, increase of competitiveness and retention of deposits in the banking system.

¹⁴ Contribution of the sectors to total change of assets and liabilities is calculated as a ratio of the difference of assets (liabilities) of a sector for the current and previous periods to total assets (liabilities) for the previous period.

For the period from the 3rd guarter of 2008 till 1st guarter of 2009¹⁵ the nominal rate of the Russian Ruble has dropped by 43.6%, Ukrainian Hryvnia – by 62.1%, Latvian Lat – by 15.5% and Hungarian Forint - by 45.9%, while Kazakhstani Tenge devalued by 26.4%. Devaluation in said countries was gradual and controlled, while devaluation in Kazakhstan was on-step. High devaluation expectations and substantial capital outflow were the key preconditions for decrease of the exchange rates in said countries.

Devaluation effect can be accessed through changes in the main macroeconomic indicators during the period before and after devaluation (Table 2.1.4). Thus, for example, losses of reserves in Kazakhstan were less significant compared to those funds that Russia, Ukraine and Latvia have spent to maintain the exchange rates of its currencies. For instance, for the period from the beginning of 2008 and till 1st quarter of 2009 Russia has lost 31% of its international reserves; Latvia – 33% and Ukraine – 24% with due account of the IMF loan, while Kazakhstan has lost 14%. A number of counties also applied to IMF to have assistance for recovery of their reserves.

Table 2.1.4

| (% chang | e as compa | (% change as compared to Q3 2008) | | | | | | | | | | |
|-------------------------------------------------------------|---------------------|-----------------------------------|---------------------|---------------------|--------------------|--|--|--|--|--|--|--|
| | Russia | Ukraine | Latvia | Hungary | Kazakhstan | | | | | | | |
| | | | Q3 200 | 9 | | | | | | | | |
| International reserves ¹⁶ (<i>change in %</i>) | -25.7 | -25.1 | -36.8 ²³ | 57.7 | -5.9 | | | | | | | |
| Real effective exchange rate ¹⁷ (% change to the | | | | | | | | | | | | |
| previous year) | -6.5 | -17.5 ²³ | 4.7 | -14.1 ²³ | -9.5 | | | | | | | |
| Real GDP growth 18 (as %) | -10.9 ²³ | -17.8 ²³ | -18.7 ²³ | -7.5 ²³ | -2.2 | | | | | | | |
| Industrial production (the change for the | | | | | | | | | | | | |
| reviewed period, as %) | -11.0 | -18.4 | -10.2 | -18.0 | 2.8 | | | | | | | |
| Exports ¹⁹ (<i>change as %</i>) | -36.7 | -12.9 ²³ | -17.5 ²³ | -23.6 ²³ | -34.3 | | | | | | | |
| Imports ¹⁹ (<i>change as %</i>) | -31.2 | -18.2 ²³ | -27.4 ²³ | -26.2 ²³ | -17.8 | | | | | | | |
| Inflation (as % to the respective period of the | | | | | | | | | | | | |
| previous year) | 10.7 | 16.8 | 0.1 | 4.9 | 6.0 | | | | | | | |
| Exchange rate volatility ²⁰ | 0.56 | 0.12 | 0.45 | 0.92 | 0.05 | | | | | | | |
| Individuals deposits (change in %) | 13.3 ²¹ | 3.3 | -13.9 | 14.3 | 20.8 | | | | | | | |
| Reference (as of the end-period): | | | | | | | | | | | | |
| International reserves / Short-term debt ²² | | | | | | | | | | | | |
| (ratio) | 6.4 ²³ | 1.4 23 | 0.4 23 | 1.2 23 | 0.68 23 | | | | | | | |
| International reserves / Imports of goods | | | | | | | | | | | | |
| and services (by months of imports) | 19.9 | 4.0 ²³ | 3.3 ²³ | 4.4 ²³ | 6.1 | | | | | | | |
| Current account / GDP ¹⁹ (ratio, as %) | 3.7 23 | -3.8 ²³ | -2.8 ²³ | -4.5 ²³ | -3.1 | | | | | | | |
| Gross External Debt / GDP ¹⁹ (ratio, as %) | 32 ²³ | 64.1 ²³ | 134.1 ²³ | 163.2 ²³ | 90.9 ²³ | | | | | | | |

Change in Key Macroeconomic Indicators of Countries after Devaluation

Source: central banks, national statistics agencies, IMF statistics (IFS), Thomson Reuters (Datastream), NBRK calculations

As dynamics of Kazakhstan's export depends, in a greater degree, on the world commodity prices, devaluation has not had significant impact on the volume of export but at the same time

¹⁵ Russia, Ukraine, Latvia and Hungary have been selected for comparative analysis of the devaluation effect as the countries where considerable change of the national currency exchange rates were observed within the period from Q3 2008 till O1 2009.

¹⁶ Gross international reserves including gold.

¹⁷ Changes for the period, based on the average-quarterly values

¹⁸ Changes for 6 months of 2009 (for Kazakhstan - for 9 months of 2009) as compared to the respective period of the ¹⁹ Calculated in annual terms including the three previous quarters.

²⁰ Exchange rate volatility is calculated as the standard deviation of the changes in nominal daily exchange rates taken from the module, for Q2 and Q3 2009.

²¹ Changes are calculated at 01.09.2009 as compared to 01.10.2008.

²² A short-term debt for Kazakhstan is calculated as the sum of short-term debt by remaining maturity and external debt interest payments due within the next 12 months.

 $^{^{23}}$ The data is calculated at the end of Q2 2009.

allowed minimizing the reduction in profit of the exporting enterprises in the national currency in amid the drop in commodity process and limiting the growth of import. The task of devaluation – to weaken de facto the national currency in the real terms – has been achieved and selected regime of the exchange rate made possible to stabilize the currency risks to the maximum, in conditions of uncertainty surrounding the economic system development.

Box 2

Forecasts of Balance of Payments for 2009-2010*

The main and most probable scenario of dynamics in the balance of payments for 2009 has been developed assuming that this year the oil price of 60USD/bbl is preserved and that in 2010 the annual average world market oil price will be 70 USD/bbl and GDP real growth will amount to 4%. This level of oil prices is a reflection of trends in the world market of energy resources and intents of the oil exporters to maintain "fair" level of the world market oil price within the range of 65-75 USD/bbl.

According to the preliminary estimate it is expected that the current account in 2009 will be formed with deficit of GDP not more than 3% and with surplus of 1% of GDP in 2010. Trade balance in 2009-2010 will be about 13-15% of GDP. In this case the key changes in export and import in 2010 will take place due to a price factor rather than due to quantitative factor.

Financial account in 2009 will be formed with surplus of more than USD 5 billion, which allows financing the current deficit and cover the banks' need in foreign currency, while in 2010 it will be formed with deficit of USD 0.4 billion. In such a case the key factors of the financial account deficit in 2010 may include:

- significant reduction of the foreign direct investments primarily due to cutting of financing of the North Caspian Project, the peak of which falls on 2009;

- increase in net outflow of portfolio investments in 2010 as a result of increase of proceeds to the National Fund of Kazakhstan and no withdrawals, except for the planned guaranteed transfers;

- possible entrance of certain banks to the Eurobond markets and attraction of other longterm investments that will ensure capital inflow to the banking sector and enable to cover the payments on previously issued securities.

Eventually, it is assumed that the overall balance of payments in 2009 will be formed with surplus of about 2.1% of GDP and with surplus of 0.7-1% of GDP in 2010.

In 2010 the National Bank's gold and foreign exchange reserves will grow moderately and by the end of 2010 their amount will be sufficient to cover at least 6.2 months of import of goods and services.

Forecasts of development of the world demand against the background of the global economy recovery make realistic the assessment that the current level of oil prices will be preserved in 2010. Accordingly, **risk of the balance of payment deterioration under the influence of world prices is assessed as remote**, however it cannot be excluded completely and should not be underestimated. High dependence of the real economy on the external sector determines sensitivity of the balance of payments to changes in the world market prices on energy resources. In particular, should a scenario where the oil price is 50 USD/bbl is realized in 2010, the current account will be (-)3% of GDP due to decrease of trade balance up to 10% of GDP. The accumulated international reserves make possible to preserve the cover level required for at least 5 months of import of goods and services. In this case the forecasts do not take into account a positive effect of restructuring of the bank's external liabilities on the capital outflow.

Table 1

| Forecasts of K | azakhstan's I (as of N | Balance of Paylor lovember, 2009 | ments for 2009 – 2)) | 2010 | |
|-----------------------------------|---------------------------|-------------------------------------|--------------------------|---------------|---------------|
| | 2008 | 2009 (9 months) | 2009 estimate | 2010 (fo | recast) |
| | | | | 1 alternative | 2 alternative |
| A. Current account | 6.6 | -3.4 | -3.1 | 1.2 | -3.6 |
| as % to GDP | 5.0 | | -2.9 | 1.0 | -3.1 |
| Trade balance | 33.5 | 9.0 | 14.5 | 19.2 | 11.8 |
| Export (fob) | 72.0 | 29.9 | 44.0 | 54.1 | 43.5 |
| Import (fob) | -38.5 | -20.9 | -29.6 | -35.0 | -31.7 |
| Balance of services | -6.6 | -4.3 | -6.2 | -4.5 | -3.6 |
| Balance of income and transfers | -20.3 | -8.2 | -11.3 | -13.5 | -11.7 |
| B. Capital and financial account | -4.4 | 3.7 | 5.4 | -0.4 | 1.4 |
| Direct investments (net) | 10.9 | 7.2 | 8.2 | 5.5 | 4.9 |
| Portfolio investments | -9.3 | 1.0 | -0.4 | -6.1 | -2.3 |
| Other long-term investments (net) | 4.3 | -1.7 | -0.4 | 3.3 | 1.3 |
| B-2. Short-term capital | -10.3 | -3.0 | -2.0 | -3.0 | -2.6 |
| C. Overall balance | 2.2 | 0.3 | 2.3 | 0.9 | -2.2 |
| NBRK reserve assets | -2.2 | -0.3 | -2.3 | -0.9 | 2.2 |
| Reference: | | | | | |
| Annual average exchange rate | | | | 150 | 150 |
| GDP (real growth, %) | | | 100.1% | 104.0% ** | 102.4% |
| GDP (USD bln) | | | 108 | 122.2 | 116.1 |
| Oil price forecast (USD/bbl) | | | | 70 | 50 |

Note: *including errors and omissions

** The forecast of the GDP growth for 2010 is different from the Forecast of socio-economic development of the Republic of Kazakhstan for 2010 - 2014 as approved at the session of the Government of the Republic of Kazakhstan, by minutes No32 of 27.08.2009, since a more favorable environment in the global commodity markets is anticipated. Source: NBRK

2.2. Corporate Sector

Tension in the financial market and credit crunch that commenced from the mid 2007 started impairing the indicators of financial stability and business activity of the enterprises only from the end of 2008, against the background of slowdown in economic growth and worsening of the price parameters of commodity markets. Despite the low levels preserved in the second quarter, as the external market trends in prices improve, the tendency to stabilization of financial situation has manifested itself and its sustainability depends on improvement of parameters of the domestic consumer demand. Further recovery of the foreign currency liquidity, which compensates partially the negative effect of expansion of negative foreign exchange position as a result of tenge devaluation, will also depend on the scale of recovery and stability of trends in the foreign commodity markets.



Source: SARK, NBRK calculations



Source: SARK, NBRK calculations

Decline in prices in the global commodity markets, devaluation of national currency, toughening of lending conditions for small and medium size enterprises by the banks and decrease of the domestic demand by the end of 2008 have impaired the key financial indicators 24 of the corporate sector (Figure 2.2.1).

The main decrease of the indicators from the end of 2008 has been caused, in the first place, by deterioration in operations of small enterprises, which account for 30% of the corporate sector total assets. Thus, rates of return of small enterprises have dropped by more than 3 times: with ROE decreased by almost 12% and ROA decreased by 2%. Such decrease has resulted from the losses suffered by the enterprises of the processing industry and construction as well as shrinkage of equity and assets in trade. Lower capitalization of the trade enterprises entailed, in its turn, increase of leverage and decrease of liquidity, despite the lower general liabilities.

In general, with regard to the small enterprises the inventory turnover ratio decrease by almost 2 times has designated decline in the efficiency of operations and affected the income from sales.

Deterioration of financial indicators of small enterprises has also resulted in fall in the business activity ²⁵ of the whole corporate sector: small enterprises account for 90% of all

liquidated and bankrupt enterprises (Figure 2.2.2). Moreover, at the end of the 2nd quarter of 2009, 40% of the liquidated and bankrupt enterprises were those from the trade sector. Substantial growth of the group of temporary non-operating or unknown enterprises, in which 70% are the trade sector companies, construction and service-rendering enterprises may serve as an indicator of possible further increase in the number of bankruptcies and preservation of burden on the quality of loan portfolios of the banks, depending on the scale of economic recovery.

Large and medium-size enterprises. For the period from the 2nd quarter of 2008 till the 2nd quarter of 2009 one could observe the deterioration of almost all financial indicators of large and

²⁵ <u>Business activity indicators</u>:

²⁴ Key Financial Indicators :

ROA – Return on Assets is a ratio of income before tax to the average assets;

ROE-*Return on Equity* is a ratio of income before tax to average equity;

Return on sales is a ratio of income before tax to the income from sales of product and provision of services; *Leverage* is a ratio of total liabilities to equity;

Current liquidity is the current assets to current liabilities ratio;

Asset turnover is a ratio of income from sales of finished goods to average assets;

Inventory turnover ratio is a ratio of cost of goods sold to average inventory reserves;

Receivables turnover is a ratio of income from sales of finished goods to average reserves of receivables.

Temporary non-operating enterprises are those idle for more than one month ;

Unknown enterprises - if no information is available for more than two months and enterprise cannot be found;

Net change is a ratio of new enterprises to the sum of liquidated and bankrupt enterprises.

medium size businesses (Table 2.2.1). Decline has been mostly noted in agriculture, construction and production sector (due to the oil-processing companies and metal manufacture), and among the enterprises that provide consumer services.

| By industries | ROA* | ROE * | Return on sales* | Multip lier | Receivabl es turnover | Asset turnov er | Share of industry asset in total assets | Dues to the banks (in total liabilities) |
|-------------------------------------------------------------------------|--------|--------|------------------------|----------------|-----------------------------|-----------------------|-----------------------------------------------------|---------------------------------------------------|
| Total for Kazakhstan, including | 11.77% | 29.42% | 19.36% | 2.60 | 3.50 | 0.61 | 100% | 0.20 |
| Agriculture | 2.71% | 8.20% | 5.78% | 2.81 | 1.79 | 0.47 | 2% | 0.23 |
| Industry, including: | 19.54% | 34.87% | 29.93% | 1.80 | 3.55 | 0.65 | 48% | 0.19 |
| - Mining industry | 27.52% | 47.82% | 41.07% | 1.77 | 4.31 | 0.67 | 28% | 0.14 |
| - Manufacture industry | 9.96% | 18.82% | 15.78% | 1.92 | 2.52 | 0.63 | 16% | 0.25 |
| Construction | 4.72% | 49.69% | 6.06% | 11.36 | 2.49 | 0.78 | 7% | 0.20 |
| Trade | 13.01% | 61.54% | 9.69% | 4.53 | 4.12 | 1.34 | 7% | 0.29 |
| Transport and communication | 6.92% | 14.05% | 12.30% | 2.15 | 5.64 | 0.56 | 14% | 0.47 |
| Transactions with real estate, lease and provision of consumer services | -0.19% | -2.38% | -1.09% | 15.62 | 3.01 | 0.17 | 17% | 0.04 |

Financial Stability Indicators (Large and Medium-Size Enterprises) – 2nd quarter of 2009

Note: *-*Rates of return have been calculated on the annual basis Source: SARK, NBRK calculations*



ROA (year) ROE (year) ROA (qrt.) ROE (qrt.)

At the same time, despite the declining trend in rates of return of the enterprises starting from the 2^{nd} quarter of 2009, the basis for recovery is formed²⁶, which, however, is still limited to a list of sectors oriented at external market (Figure 2.2.3).

Table 2.2.1

²⁶ As a part of this analysis, compared were ROA and ROE calculations on YoY basis (for previous 4 quarters) and results derived by method of extrapolation of the quarterly values.



Timely assessment of the default risk of the corporate sector enterprises makes possible to evaluate the banking sector vulnerability from the viewpoint of stability of the borrowing enterprises.

In spite of decrease in a number of enterprises with maximum risk (the worst indicators of all three parameters: liquidity, leverage and rate of return), first of all in construction and manufacture industry, increased a share of enterprises included in the group with at least two "worst" indicator values*** (Figure 1). In terms of debt to the banking sector, in the 2nd quarter of 2009 this group accounts for about 16.7% of all loans, including 23% of loans extended to the trading enterprises, 20% of loans to manufacture industry enterprises and 19% - to the mining enterprises.

Thus, the level of debt for which the risk of non-repayment is high (the enterprises with at least two risk factors) is still rather significant and corresponds, approximately, to the non-operating loans in the banking system, less the banks under restructuring. In this case, the determining risk factor is low rates of return and low liquidity level (enterprises with both said risk factors account for 11% of the outstanding bank loans of the corporate sector enterprises).

From the point of view of combination of risks of rates of return, liquidity and leverage the highest risk is present in the following industries: (1) real estate transactions and provision of consumer services, (2) construction, and (3) agriculture (Figure 2).

* More detailed analysis of the methods was presented in 2007 Financial Stability Report, "Special Research" Section.

**Indicators of the enterprise default risk:

Liquidity+*ROE*+*Leverage is an area of maximum default risk, which combines enterprises characterized by low liquidity****, *low return on equity**** *and high debt level;*

Combination of two indicators with worst values, for example, Liquidity+ROE, is an indicator of twofactor risk, i.e. an enterprise combines a low Liquidity indicator and low ROE at the same time;

*** "Worst" values of indicators are low indicators of Liquidity and ROE, included in the group of under 25 percentile, and high indicators of leverage included in the group of above 75 percentile.

Also in the second quarter of 2009 the liquidity of enterprises was supported by net cash flows, primarily from financial activity (Figure 2.2.4). Moreover, an increase in the cash inflows in foreign currency from operating activity was observed in the second quarter at the account of oil-



Source: SARK, NBRK calculations







Figure 2.2.7 Foreign Exchange Risk Assessment by Industries (at the end of period)



Note: the Figure lacks the industry of consumer service provision. FX risk of this industry is -14.33 and liquidity is 0.04.

Source: SARK, NBRK calculations

Source: SARK, NBRK calculations

producing and processing industries, which had direct impact on improvement of indicators of currency liquidity (Figure 2.2.5).

Improvement of situation with currency liquidity has partially compensated the growing negative currency position 27 as a result of revaluation of liabilities after tenge devaluation B (Figure 2.2.6).

As a whole, in the viewpoint of foreign exchange risk²⁸, the most vulnerable still remain the enterprises oriented at the domestic market that do not have significant cash flows in foreign currency (Figure 2.2.7). In particular, increase of foreign exchange risk was noted in agriculture, transport and communication, construction, real estate business and provision on consumer services.

Further expansion of the sectoral basis of economic recovery will have direct impact on future dynamics in quality of the bank loan portfolios, which at current stage is determined by combination of decrease in rates of return and liquidity, which strengthens the effect of high leverage on the paying capacity of the borrowers (Box 3).

График 2.2.5 **Cash Flows in Foreign Currency (on quarterly** basis) 1 2 0 0 1.50 1 0 0 0 1,30 800 1.10 600 400 0.90 KZT bl n 200 0,70 0.50 -200 0.30 -400 0,10 -60(1 gtr 2008 2 gtr 2008 3 gtr 2008 4 gtr 2008 1 gtr 2009 2 gtr 2009 sition on operating activity Net position on investment activity Net position on financial activity Net cash flows Current liquidity (right axis) Ab solute liquidity (right ax is)

²⁷ To calculate net balance FX position there have been used the financial assets, which include cash and cash equivalents, financial investments and receivables.

Adjusted FX position also takes into account the cash proceeds from operating activities denominated in foreign currency in year-on-year basis.

²⁸ FX risk exposure is a net foreign exchange position/equity ratio.

2.3 Household Sector

Certain improvement has been observed in the indicators of the household financial stability primarily due to financial assets revaluation. At the same time, to preserve this trend the sustainable recovery of domestic economic activity and respective employment growth shall be required. Accordingly, the individual lending might become an attractive banking segment again.





Source: SARK

Despite the negative impact of the credit crunch on the domestic demand and business activity, it should be noted that decrease in the individual lending by the banks and continued growth of the disposable income have had certain positive effect on the parameters of households' financial stability²⁹ (Figure 2.3.1). In particular, a downward trend continued and the debt burden dropped from the levels recorded at the peak of a credit boom: debt-to-GDP ratio decreased from 23% to 17.2% and debt-to-disposable income ratio dropped from 47% to 30%. Households' deposits revaluation and decrease in the debt burden have also contributed to growth of the assets side of the household balance sheet, improvement of foreign exchange position and certain recovery of liquidity. All in one makes it possible to assume that in case of economic recovery and employment growth the individual lending might become an attractive sector of banking business again.

Worsening of the domestic economic environment has been compensated by the Employment Support Program, which curbed the unemployment rate that is currently fixed at the level of 6.3%. However, hidden unemployment parameters still testify to the tension existing in the labor market (Figure 2.3.2)

In general, stagnation in the revenue side and current structure of the population's expenses prevent from expecting a significant growth of savings in the short run. Food

products account for the main share of expenses in an average household, while the employment accounts for the main source of income (70%). Burden on the population's expenses associated with the current debt servicing is also preserved (see Box 4).

Foreign Exchange Position/Disposable Income, where foreign exchange position is a difference between foreign currency deposits and bank foreign currency loans, including external foreign exchange position; *Liquidity Coefficient* is a ratio of foreign exchange cash and deposits to loans.

²⁹ Financial Soundness Indicators:

Assets/GDP, where assets are the amount of non-financial (households' real estate) and financial assets, including external assets;

Debt/GDP, where debt is the amount of loans from banks and non-banking organizations as well as external liabilities; *Debt/Disposable Income*, where disposable income is a difference between the income and provided material aid and taxes;

Box 4

Assessment of equitability of the population's income and expenses

The group of population with the above-average income accounts for the main concentration of expenses. At the same time, this group could allow itself to finance expenses partially through obtaining the additional funding from the banks. Due to increase in the debt service expenses in 2008, the debt burden on income also increased. In particular, if in 2006 only about 4% of population had the above-average debt service expenses among all groups of population, in 2008 almost 13% of households are included in this group.

At the same time the gap in the population's inequality of incomes decreased insignificantly. Thus, at the end of 2008 Gini coefficient was 0.288, while in 2006 and 2007 it exceeded 0.309.

Table 1

| | | 5001 | 10001 | 15001 | 20001 | 25001 | 30001 | 35001 | 40001 | 40001 | above |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| tenge | below | - | - | - | - | - | - | - | - | - | 50000 |
| | 5000 | 10000 | 15000 | 20000 | 25000 | 30000 | 35000 | 40000 | 45000 | 45000 | |
| Share of target | | | | | | | | | | | |
| households, % of total | | | | | | | | | | | |
| target population | 0,60 | 12,50 | 30,29 | 22,05 | 13,83 | 7,87 | 4,87 | 2,66 | 1,70 | 1,06 | 2,57 |
| Debt service/disposable | | | | | | | | | | | |
| income, %** | 0,32 | 0,90 | 1,55 | 2,82 | 3,90 | 4,66 | 5,54 | 5,68 | 6,55 | 6,03 | 10,08 |
| Consumer | | | | | | | | | | | |
| expenses/disposable | | | | | | | | | | | |
| income, % | 58,6 | 69,8 | 75,7 | 79,8 | 84,2 | 88,0 | 93,1 | 96,9 | 97,2 | 100,3 | 121,9 |

Debt Burden on a Per Capital Monthly Income Used for Consumption in 2008

Source: SARK, NBRK calculations

* Gini coefficient is a measure of inequality of income. Gini coefficient may vary from 0 to 1, and the higher is the coefficient, the less equal is distribution of income in the society (it is calculated by the Statistics Agency of the Republic of Kazakhstan).

2.4 Factors Determining the Condition of the Real Estate Market

The price adjustment in the real estate market that has started in end-2007 has considerably reduced its rates in the first-third quarters of 2009. Based on the number of features (in the first instance, price stabilization in July-October this year) one may suggest that the real estate market is close to its bottom. In the near-term (up to 1 to 2 years) the dynamics of house prices will primarily depend on the bank policy for the funding of the construction sector and mortgage lending. In a longer term an insufficient offer of new houses in large cities may become an important factor for the rise in prices.

During 2009 a further fall in the real estate prices was observed, however, its rates were not so high as compared to 2008. Thus, if in Kazakhstan on average³⁰ prices had dropped by 9.6% over



Source: SARK, NBRK calculations

Figure 2.4.2 Place-to-place Comparison of Price Dynamics of the Real Estate Markets



Note: Dynamics in growth rate on YoY basis

Source: SARK, Office of Federal Housing Enterprise (US), Nationwide Anglia Building Society (UK), Ministero de Vivienda (Spain), Federal State Statistics Service (RF),NBRK calculations the 9 months of 2008, the drop accounted for 6.6% over the three quarters of this year. In Almaty and Astana where the "overheating" of the market till the mid-2007 was much more obvious than in other regions, the price adjustment was also more intensive. If in Almaty and in Astana from January to September 2008 the average prices dropped by 20% and 17.4%. in the same period of 2009 the rates of decline were 15.1% and 12.5% respectively. During the three quarters of 2009 there was an increase in the rental prices, one of the reasons being the decline in the availability of housing due to the decreased volumes of mortgage lending (Figure 2.4.1).

The reduced growth rates for housing in Kazakhstan occurred virtually in parallel with the fall in the house price index in other countries (Figure 2.4.2).

The beginning of the falling price period for real estate coincides with a dramatic decline in the activity of banks associated with the mortgage lending. Alongside with that, the lending deficit appeared to be one of the key factors determining the price fall in the housing market (Figure 2.4.3).

³⁰ The mean of 4 prices: sale of new standard houses and re-sale of tenements, houses with all modern conveniences and elite houses.



Note: * *Data for period*

Source: SARK, NBRK calculations



Source: SARK, NBRK calculations

Figure 2.4.5 Number of Permissions Issued for Construction of Apartment Buildings



Source: SARK, NBRK calculations

The fall in the volumes of new houses offered in 2008 - 2009 together with the declined effective demand on behalf of the population was closely connected with the reduced volumes of lending provided to the construction sector by banks. Thus, based on three quarters of 2009 the decline in the total usable floor area commissioned as compared to the same period in 2007 amounted in Kazakhstan as a whole to 27.96%, in Astana -11%, in Almaty -7.2%(Figure 2.4.4). It should be mentioned that the JSC NWF "Samruk-Kazyna" and Akimats of the cities played the essential role in the replenishment in the volumes of funding of the construction sector in Almaty and Astana.

The existing problems with the financing of the construction sector may result in insufficient supply in the primary housing market in a few years. Thus, the number of permits granted for the construction of apartment buildings reduced in 2008 as compared to 2007 in on average in Kazakhstan by 16%, and in Astana by 78.6%. The number of permits granted for the construction in Almaty in the first half of this year have slightly exceeded the level of 2007. However, the opposite tendency is observed in Astana: the granting of permits for construction has virtually stopped in 2008 – 2009 (Figure 2.4.5).

Reduction in the real estate market attractiveness as an object of investment and drop in consumer demand contributed to decrease in the amount of investments³¹ in housing construction in the 1st quarter of 2008 $- 1^{st}$ quarter 2009. Beginning the 2nd quarter of the current year the investment in housing construction have started growing again; however,

Figure 2.4.4

³¹ 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.

it is still too early to conclude that the growth is sustainable, as this indication in the 2^{nd} and 3^{rd} quarters of this year have not reached the levels of the last year. Decrease in lending of construction industry and mortgage lending has a major contribution to the negative dynamics of housing

Figure 2.4.7

Figure 2.4.8



Source: SARK, NBRK calculations











Source: SARK, NBRK calculations

decrease in prices despite the drop of average monthly wage. Housing Affordability Index³² in Kazakhstan and Astana testifies to high affordability of housing for the population (the Index value

construction. Thus, a share of investments in construction carried out at the expense of borrowings decreased from its peak value of 66% in the 1^{st} quarter of 2008 till 24.2% in the 3^{rd} quarter of 2009 in average throughout Kazakhstan (Figure 2.4.6).

As compared to the years of booming, construction has become less attractive business, as it does not provide an opportunity to earn high profit per unit of invested funds any more, as was the case during the year of construction boom. This fact is confirmed by reduction of difference between the cost of construction and sales price of new housing. Thus, for 2 years (from the 4th quarter of 2006 till 3^{rd} quarter of 2009), a share of construction costs in the price of a new house has increased from 65% till 88% average throughout Kazakhstan, in including from 60% to 70% - in Astana and from 36% to 73% - in Almaty. Increase of this indicator is explained by factors: drop in speculative two attractiveness of the real estate market and decrease in the consumer demand on new real estate facilities in 2008-Decrease in the level of the 2009. market "overheat" in Astana and Almaty is evidenced by dynamics of such indictor as ratio of prices of new houses standard and resale of comfortable houses. Thus, in Astana this ratio changed 79% to 109%, and from 81% to 115% - in Almaty for the period from 4th quarter of 2006 till 3rd quarter of 2009 (Figure 2.4.7).

In general, during 2009 one can observe slight increase in the housing affordability, which takes place due to

³² Housing affordability is assessed using a special index, which is calculated as an average price of 1 sq m multiplied by 18 (a housing norm) and divided by the value of annual wage (average monthly wage multiplied by 12 (a number of months)). Margins of fluctuations of this coefficient characterize the affordance housing (under 3); moderately unaffordable housing (3.1 - 4), seriously unaffordable housing (4.1-5), and considerably unaffordable housing (above 5.1).

is less than 3); at the same time in Almaty the value of the Index has moved from the a zone of serious unaffordability to a zone of moderate unaffordability (Figure 2.4.8). Therefore, this indicator makes possible to assume the near stabilization of housing prices, while further dynamics of the market will be determined by a whole set of factors. Thus, in the short run (1-2 years) it will depend upon mainly on normalization of the process of lending by the banks of the real estate cluster. Intensification of lending by the banks, in its turn, will depend on the time required for sanation of the Bank's balance sheets (write-off of bad loans) and amounts of banks' funding in future. In the longer term its is probable that deficit of new housing in the market will arise, in which case the growth of housing prices may become intensive.

3. Condition of the Financial Market

3.1 Main Indicators of Key Segments of the Financial Market

In 2009 the dynamics of the exchange rate of Tenge was primarily characterized by the pricing environment in the global raw commodities markets. The effect of external shocks and speculative pressure was to a great extent offset by the NBRK's interventions that didn't allow significant fluctuations in the exchange rate of Tenge. The reduced prices for oil and other export raw commodities in the end of 2008 – beginning of 2009 forced the devaluation of Tenge effected in February. This year also faced a significant decline in the overall foreign exchange market turnover caused by the drop in the foreign economic activity of the Kazakhstan's corporate sector.

From January to April there was a steady downward trend in the Kazakhstan's foreign exchange market in respect of the total volume of FX purchases and sales by banks in the interbank market, from clients and in the currency exchange market. So, by April 2009 volumes of FX purchases by banks dropped by more than three times as compared to December 2008, and volumes

Figure 3.1.3







Source: NBRK



Source: NBRK

of sales – approximately by 3.6 times. The drop in the total volumes of FX purchase and sale was primarily related to the falling volumes of foreign trade operations of the Kazakhstani companies. In May-June 2009 total volumes of operations stabilized at about 50% of the average monthly volumes in 2008 (Figures 3.1.1 and 3.1.2). It's worth mentioning that from December 2008 to February 2009 there was a soaring of net FX purchases by banks, with considerable amount of the demand being satisfied by hedging (Figure 3.1.3). In both cases the growth in the demand was caused by devaluation expectations of banks. In the fall of 2008 these expectations were provoked by the decline in prices for the main export items of Kazakhstan, and in February 2009 market players had concerns that the KZT/USD exchange rate band of 150±5 announced by the NBRK would not be maintained. Alongside with that. significant excess of the demand for foreign exchange over its offer in the market was compensated by the NBRK. Thus, in February 2009 the offer by the NBRK was over 17% of the aggregate offer of foreign exchange in the FX market, however, this number went down to 4.5% by the end of 2009.

Devaluation of the Tenge and problems in two of the strategic banks - Alliance Bank and BTA Bank – as well as uncertainty in assessing the prospect of the economy at the beginning of the year appeared to be the cause of reduced certainty among the money market participants about stability of individual banks in Kazakhstan thus resulting in the growth of price for borrowed funds and in the reduced volumes of money market operations. From May 2009, the rates came back to the January level and the amount of transactions in the market stabilized at the level of the first half of the previous year.

In February – March 2009 the KazPrime index reached 15%; KIBOR3M was in the range between 15 and 25%, where the spread between the KIBOR3M index (supply) and KIBID3M (demand) in a number of instances exceeded 10 percentage points (Figure 3.1.4). The stabilization of the bank liquidity situation that followed as a result of fund placements as part of the anti-crisis program and actions by the NBRK gradually facilitated the restoration of acceptable levels of the value of money in the second half of this year.







the main money market players – the banks – in Q1-3 2009 that is evidenced by a significant growth of the NBRK's liabilities to banks. At the same time the NBRK pursued the policy related to providing an adequate offer in the money market through reverse REPO operations and aimed at encouraging investments in the economy (Figure 3.1.7).

Increased bank liquidity while reducing the turnovers of the money market and increasing the value of borrowed funds in the market is explained by the change in risk perceptions by banks which do not want to invest their resources in the market and prefer to keep them at the NBRK. Currently they do not seek to place funds either in financial or credit markets due to their reluctance to assume risk and prefer to have an excessive liquidity.

The increased rates of borrowings and placements in the money market were accompanied by the decreased activity of players in the REPO stock exchange market. While in the second half of 2008 the number of transactions at all REPO trading floors restored the turnover and grew (reaching the level of 2007), in the first quarter of 2009 the aggregate volumes of transactions started declining dramatically and had stabilized by the spring at the level approximately two times less than in the second half of 2008 (Figure 3.1.5). In January and February 2009 the shortage of liquidity in the market was sufficiently compensated by the NBRK's offer which reached approximately 15% of the total volume of REPO operations at the KASE (Figure 3.1.6). In March when the percentage of the NBRK's operations went approximately down to 1.8%. the transaction volume in the stock exchange REPO market decreased from KZT 2.6 trln. to KZT 1.8 trln. and was fixed at the level of KZT 1.5 - 2 trln. until the third guarter.

It should be mentioned that the market "contraction" was money accompanied by the increased liquidity of





Source: KASE, NBRK

Source: NBRK

Similarly to the total turnover of the REPO market, the volumes of interbank deposit placements with maturity of less than 30 days demonstrate negative trends in the 1st half a year having decreased over 5 times – from its peak value of KZT 11.65 bln. in August 2008 to KZT 2.29 bln. in March 2009. At the same time there was a parallel increase in the share of deposits with resident banks (with the peak value in July 2009 of 62.8%) and increase in the share of the Tenge deposits. At the end of the first half a year the volume of deposits placements for less than 30 days somewhat grow and stabilize in the 3rd quarter at about KZT 4 bln. a month.

The role of interbank loans and deposits with maturities over 30 days and the share remain insignificant. Thus, over 9 months of 2009 placed deposits with maturity over 30 days accounted for 1,7% of the total interbank deposit placements and the volume of interbank loans made comprised 0.7% to the total deposits placed (Figures 3.1.8 and 3.1.9).



Note: The amount doesn't include deposits of banks in the NBRK





Source: NBRK

The securities market in the fourth quarter of 2008 – first quarter of 2009 demonstrated negative trends that were explicit in the segment of shares and less explicit in the segment of equity securities. However, reduced capitalization of the securities market and its volume of operations didn't significantly affect the overall condition of the economy and the financial sector of Kazakhstan due to underdeveloped stock market as a source of fund-raising for economic entities.

From the fourth quarter of 2008 and until the fall of 2009 there was a trend for overflow of investors funds from the equity securities segment to debt and government securities segment of the

stock market (primarily, government securities of the MoF RK), accompanied by the reduce in the aggregate turnover of the former and the increase in the turnover of the latter. Reallocation of investor resources in the period is explained by their intention to reduce market risks and get a guaranteed return (Figures 3.1.10 and 3.1.11).



Reallocation of the investor resources in favor of the debt securities segments was occurring against the backdrop of reduced yield on shares of the Kazakhstani companies. The "bottom" of the fall in the KASE_Shares index coincides with January-February 2009 when the problems of two large issuers – BTA Bank and Alliance Bank – manifested dramatically. Gradual increase in quotations of shares that started this spring didn't contribute to the fast restoration of confidence among investors: insignificant increase in the trading volumes on shares only started to be observed in August 2009 (Figure 3.1.12). Contrary to the stock market, the bond market demonstrated significant growth in profitability and low growth in capitalization in 2009. The growth in profitability of debt securities was associated with the falling quotations resulting from increased risks of issuers (Figure 3.1.13).



Note: Classification of securities traded at the KASE is subject to change in September 2008 Source: KASE





Note: Classification of securities traded at the KASE is subject to change in September 2008 Source: KASE

3.2 Liquidity of Financial Markets

High magnitude of variation in prices for export items of Kazakhstan that has been observed in the recent two years had a direct impact on liquidity of the foreign exchange market. Active involvement of the NBRK allowed avoiding sharp changes in the exchange rate of the Tenge and shortage of resources offered in the money market, however, macroeconomic and macrofinancial shocks since October 2008 have been significantly affecting liquidity in all segments of the market, the effect being primarily vivid in the reduced total volumes of market operations.

Over the first quarter of 2008 – third quarter of 2009 the USD market has demonstrated maximum liquidity level in December 2008, and minimum – in the beginning of February 2009, which is evidenced by the value of the respective index³³ for the period. A sizable growth in liquidity of the USD market in the end of 2008 was related to the growth of the market depth³⁴ and resilience³⁵, at the same time market tightness³⁶ was lower than average sample level (i.e. a relatively low spread was observed). During the period there was a noticeable growth in the number



of transactions and total volume of operations in the market as well as less explicit increase in the average volume of transactions. The growth in the number of transactions and total volume of operations was caused bv devaluation expectations of the main players in the market banks, as well as an increased offer by exporting enterprises at the end of the year. Market resilience in the period was quite high and its tightness was low owing to NBRK's involvement in the market (Figure 3.2.1).

Devaluation of the domestic currency effected by the NBRK on February 4, 2009

caused steep decline in the market liquidity which was reflected in the increase of the average transaction volume, reduction in the number of transactions while increasing the total transaction volume (February 3 - 4) and dramatic increase of spread (February 4). The outstripping reaction of market players is explained by escalation of devaluation expectations as the result of Government's equity holding in Alliance Bank and BTA Bank a few days before the devaluation. Since March, the liquidity level had been increasing until average sample values and had stabilized, however, in the end of August – beginning of September it showed some reduction due to the falling market depth coinciding with the dramatic increase in the demand.

³³ Liquidity index in respect of USD stock exchange market was calculated by using a number of normalized values of spread between average weighted bid and ask prices, a number of transactions, an amount of an average transaction and the price difference between the first and the last transaction taken based on the module. The following formula was used in the calculation: «Liquidity index = - Spread + (Number of transactions – Average transaction)/2 - The price difference between the first and the last transaction to the average transaction taken based on the module». The market is assumed to be liquid to the maximum, when the spread is minimal a number of transactions is maximal and the price difference between the first and the last transaction to the average transaction is maximal. Within the Report, the data series on the KASE trading (the USD_TOD instrument) for the period from 3.01.2008 to 30.09.2009 are used in the calculation of the index. Series were normalized by dividing the difference between the actual index value and its mean for the period by the standard sample deviation.

It should be noted that the methods for calculation of the index have undergone some changes compared to the methods used in the Financial Stability Report of Kazakhstan for 2008. Thus, for instance, the market resilience determined through the ratio of the price difference between the first and the last transaction to the average transaction included in the structure of liquidity index in this report.

report. ³⁴ Market characteristic showing the activity of its players with a total volume, average transaction volume and a number of transactions being the main indicators of such activity.

³⁵ Market characteristic showing the dependency of the change in the price parameters of the market from transaction volumes.

³⁶ Market characteristic showing how far the real transaction price deviates from the average market price. The main indicator of viscosity is represented by the spread between the best and average weighted purchasing and selling prices.



Source: KASE, NBRK

Figure 3.2.3 Indices of Liquidity and Skewness of the REPO Stock Exchange Market



Source: KASE, NBRK calculations

From November 2008 through February 2009, there was a significant pressure on the market by those players who wanted to buy the USD. The most explicit increase in the demand was demonstrated from October 2008 through February 2009. Thus, the values of the skewness index³⁷ evidence a significant excess of demand over offer during the period from November 2008 to February 2009 (Figure 3.2.2). Afterwards the market enters into a relative equilibrium which is from time to time disturbed by speculative wavelets lying in a steep increase in the demand for the Dollar; this market condition didn't change until the third quarter. It should be noted that in addition to the factor of the global commodity market environment, the behavior of the market players was also affected by the uncertain situation with the USD in the middle of this year.

The role of the NBRK as a stabilizing factor can be clearly seen when comparing the skewness index of the market with the modified skewness index of the market³⁸. So, the value of the modified skewness index may show a several-fold increase versus the skewness index in the times of the highest demand and offer.

The behavior of players in the REPO market is also determined by the occurred shocks or their expectation, with the interrelation between the money and foreign exchange market showing up through reduced liquidity of the REPO market in the periods of increased demand for foreign exchange. So, in December 2008, i.e. in the period of maximum liquidity of the foreign exchange market there reduced liquidity of the REPO market due to the increased volumes of an average transaction and reduced resistance indicator. A similar situation recurred in February-March 2009 when the liquidity index³⁹ of the REPO market reached its maximum values against a somewhat increased demand. Notably that the REPO market liquidity is maximal when there is an excessive offer in the market which can be seen from the comparison of dynamics of the liquidity index and skewness index of the market (Figure 3.2.3). In addition, in the periods of implicit (devaluation expectations in December 2008) and explicit (devaluation in February 2009) shocks a dramatic reduction of the market liquidity occurs. By the end of the third quarter of this year there was reduced volatility of the skewness index and increase in the market liquidity that gives evidence of some degree of normalization of situation in the money market.

Securities market also negatively responds to shocks, however, due to its underdevelopment in Kazakhstan (small volumes and number of transactions) it's rather difficult to trace the trends in the level of its liquidity. Indices of the market depth⁴⁰ of equity and debt securities segments show

 $^{^{37}}$ It is calculated as the difference between total values of bids and asks for USD divided by the total volume of transactions in the market. This index serves to assess the pressure on the price on the part of market players and allows evaluating potential changes in trends. Positive values show the pressure on the price on the part of demand, and negative values – on the part of offer.

³⁸ It is calculated similarly to the skewness index, however, transactions and bids of the NBRK are not taken into account. The use of the two indices allows assessing the role of the NBRK's interventions as a shock absorption factor.

³⁹ Liquidity index on the REPO stock exchange market is calculated as the average-weighted of liquidity indices of REPO markets of all maturities. Liquidity index for REPO transactions of all maturities is calculated alike the liquidity index of the USD stock exchange market, with average-weighted bids for opening of REPO and reverse REPO being used as the bid and ask price. Total volumes of transactions in the market segments were taken as the weights. Within the Report, the data series on the KASE trading for the period from 3.01.2008 to 30.09.2009 are used in the calculation of the index.

⁴⁰ Simplified liquidity index where only depth components are used for calculation: average transaction volume and number of transactions in the entire population of transactions on respective segments of the SM

the increased liquidity of the securities market in the fourth quarter of 2008 and its relative drop in early 2009 associated with the decreased attractiveness of the SM for investors. By the end of the third quarter of this year there was a reduction in the skewness indices of all securities markets which was the most explicit in the stocks segment. In general, volatility of both indices is explained by a small number of transactions and occasional activity of the traders of different types of securities (Figures 3.2.4 and 3.2.5).



Source: KASE, NBRK calculations

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