

## IV. Appendices

### Appendix 1

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

(as percentage)

	2009 <sup>2</sup>	2010 <sup>2</sup>	2011 <sup>2</sup>	2012 <sup>3</sup>	2013 <sup>3</sup>	2014 <sup>3</sup>
<b>Banking Sector</b>						
<i>Capital adequacy ratios</i>						
Regulatory capital to risk-weighted assets	-8,1 (18,4)	17,6 (17,5)	17,3 (17,5)	18,0 (17,5)	18,5 (17,8)	17,3 (17,9)
Tier-1 capital to risk-weighted assets	-9,3 (14,1)	13,8 (13,2)	13,2 (13,0)	13,5 (12,7)	13,3 (12,5)	13,5 (13,8)
Capital to total assets	-8,5 (11,5)	10,9 (18,8)	10,2 (13,8)	14,4 (14,5)	13,4 (13,2)	13,0 (13,7)
Past due loans over 90 days net of specific provisions to capital	-52,2 (39,3)	60,2 (27,1)	78,2 (37,9)	40,5 (44,6)	33,1 (39,4)	27,7 (31,4)
Capital to total liabilities	-7,8 (13,0)	12,3 (16,4)	11,3 (16,0)	16,9 (17,0)	15,5 (15,2)	14,9 (15,8)
<i>Asset Quality</i>						
Past due loans over 90 days to total loans	21,2 (14,4)	23,8 (16,4)	30,8 (20,7)	29,8 (19,4)	31,2 (19,5)	23,5 (12,4)
Provisions to total loans	31,5 (20,7)	30,9 (21,8)	32,1 (24,6)	31,9 (20,0)	34,8 (22,4)	25,2 (12,9)
Provisions on past due loans over 90 days to past due loans over 90 days	74,9 (55,9)	63,2 (56,3)	68,4 (66,2)	76,6 (57,0)	83,4 (66,0)	80,4 (51,6)
Foreign currency loans to total loans	57,2 (54,2)	50,2 (46,8)	44,2 (38,5)	37,6 (31,2)	38,4 (31,5)	37,4 (30,7)
<i>Profitability Ratios</i>						
Return on assets (ROA) <sup>4</sup>	-24,1 (0,2)	12,0 (5,9)	-0,1 (1,3)	1,88 (1,93)	1,71 (1,72)	2,0 (2,9)
Return on Equity (ROE) <sup>4</sup>	-1192,5 (1,9)	843,9 (51,2)	-1,0 (10,3)	15,2 (13,6)	13,1 (13,4)	16,0 (23,0)
Interest margin to total income*	92,9 (10,0)	16,4 (72,8)	71,1 (69,7)	27,0 (63,8)	59,6 (59,1)	56,75 (56,67)
Non-interest expenses to total income*	145,4 (99,6)	21,1 (47,1)	67,6 (50,9)	67,8 (45,2)	38,1 (37,2)	38,9 (36,5)
Personnel expense to non-interest expense*	1,0 (1,4)	26,3 (34,1)	31,3 (35,2)	11,7 (37,3)	36,9 (38,2)	36,7 (39,4)
Spread between reference rates on deposits and loans* <sup>5</sup>	509,2 (745,9)	393,6 (635,4)	453,8 (581,5)	430,5 (548,3)	483,9 (593,3)	518,5 (652,6)
<i>Liquidity Ratios</i>						
Highly-liquid assets to total assets	19,2 (20,3)	21,2 (22,8)	21,0 (22,0)	17,5 (18,6)	17,3 (17,9)	18,4 (19,2)
Highly-liquid assets to short-term liabilities <sup>6</sup>	53,1 (64,9)	63,3 (64,8)	57,3 (59,4)	46,9 (50,3)	48,2 (51,1)	53,1 (57,6)
Customer deposits to total loans (excl. interbank loans)	67,2 (82,1)	76,7 (88,8)	76,0 (85,8)	74,1 (84,1)	74,4 (85,6)	80,6 (91,0)
<i>Market Risk Sensitivity</i>						
Net FX exposure to capital	177,3 (1,3)	-3,2 (-3,7)	-1,3 (-0,1)	-4,0 (-4,5)	-1,6 (-4,6)	-1,4 (-2,0)
<b>Other Financial Corporations<sup>7</sup></b>						
Assets to total assets of the financial system	19,9	23,4	25,5	27,0	26,8	26,5
Assets to GDP	16,9	16,8	15,9	16,9	16,9	17,0

	2009	2010	2011	2012	2013	2014 <sup>8</sup>
<b>Corporate Sector</b>						
<b>(large and medium-size enterprises)</b>						
Return on Assets (ROA)	11,3	14,7	17,1	14,2	10,6	10,4
Return on Equity (ROE)	29,8	39,6	44,7	35,7	26,7	26,6
Total liabilities to capital (leverage)	1,7	1,6	1,6	1,5	1,6	1,6
Net FX exposure to capital	-55,1	-61,1	-56,4	-44,5	-58,9	-51,8
Current liquidity ratio	1,3	1,4	1,4	1,3	1,3	1,3
<b>Households Sector</b>						
Debt of households to GDP	11,6	8,7	7,7	8,9	9,9	10,4
Debt of households to disposable income <sup>8</sup>	27,1	20,0	17,2	19,4	22,5	24,6

Source: NBRK, CS MNE RK

\* - data differ from the data of the Financial Stability Report for 2009 due to changes in methodology for generating data.

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

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

<sup>3</sup> – numbers provided in brackets represent the banking system of Kazakhstan excluding BTA Bank.

<sup>4</sup> – net income before tax to average assets (capital). Intra-annual numbers for income before tax were annualized by multiplying a current number for the indicator by a numeric value inverse to the respective period of the year. Average assets value was calculated as the average of positions at the beginning and end of the period. Average capital was calculated as the average of positions at the beginning and end of the period.

<sup>5</sup> – reference rate on loans is calculated as the ratio of the sum of interest income on loans (interest income on bank loans to customers) to the average position on loans. The reference rate on deposits represents the ratio of interest expense on deposits (interest expense on attracted deposits) to the average position on deposits. The average position on loans and deposits represents the average of positions at the beginning and end of the period on loans and deposits, respectively. The numbers are given as percentage points.

<sup>6</sup> – short-term liabilities are calculated based on the net position on transactions with financial derivatives.

<sup>7</sup> – when calculating the indicators, only data on the sector of non-banking financial institutions were used.

<sup>8</sup> – according to updated information.

## Appendix 2

### List of key indicators signaling the beginning of periods of the countercyclical buffer build-up and its release

Key indicators	Average, 2000-2014	Average, 2000-2004	Average, 2005-2006	Minimum, beginning from 2000	Maximum, beginning from 2000	Previous value (a year ago)	Most recent value (as of the 4 <sup>th</sup> quarter of 2014)	Threshold	Signaling by indicators with (*)
<b>Macroeconomic indicators</b>									
Deviation of the ratio of credits to the economy to GDP from the long-term trend (1)	-0.17	4.91	9.33	-17.01	21.86	-14.04	-12.94	6.00	
Capital inflows to GDP	-0.004	n/a	-0.05	-0.15	0.07	-0.001	-0.03	-0.07	
Deviation of the ratio of capital inflow to GDP from the long-term trend (*)	-0.0001	n/a	0.00	-0.07	0.09	-0.05	-0.07	0.02	If the value is above the threshold
Deviation of the ratio of money supply to GDP from the long-term trend (1)	-0.01	0.02	0.03	-0.13	0.07	-0.11	-0.10	0.03	
Deviation of the ratio of bank total liabilities to GDP from the long-term trend (2)	-0.08	0.00	0.07	-0.35	0.19	-0.27	-0.19	0.03	
External debt to GDP	0.77	0.72	0.79	0.65	1.00	0.67	0.70**	0.76	
<b>Efficiency Ratios of the Banking Sector</b>									
Capital adequacy ratio k2 (for the banking system) (*)	0.15	0.19	0.15	-0.08	0.26	0.19	0.17	0.10 <sup>1</sup>	If the value is below the threshold

<sup>1</sup> The threshold will be recalculated every year based on a gradual transition to Basel III.

(Table Continued):

Key indicators	Average, 2000-2014	Average, 2000-2004	Average, 2005-2006	Minimum, since 2000	Maximum, since 2000	Previous value (a year ago)	Last value (as of the 4 <sup>th</sup> quarter of 2014)	Threshold	Signaling by indicators with (*)
Loans to deposit ratio	1.21	1.10	1.42	0.83	1.92	1.12	1.04	1.30	
The share of banks' liabilities of gross external debt	0.23	0.10	0.34	0.02	0.50	0.08	0.07**	0.23	
Deviation of the share of NPLs in the LP from the long-term trend (*)	1.64	-0.02	-0.26	-15.50	23.12	-7.78	-15.50	5.30	If the value is above the threshold
Total liabilities to equity	8.07	6.46	9.13	3.82	23.91	6.58	6.23	8.45	
Return on assets (ROA(*))	0.004	0.02	0.02	-0.23	0.12	0.02	0.02	A negative value	A negative value
Leverage ( <i>Equity (regulatory capital) to assets</i> ) (*)	14.12	14.74	13.21	7.38	18.46	15.13	15.41	3.00	
<b>Other Indicators</b>									
Property prices to gross disposable income of household sector ratio	1.30	1.19	1.52	0.90	2.18	1.01	1.05	1.59	
Return on assets of the corporate sector (ROA)	0.17	0.17	0.20	0.09	0.26	0.12	0.10	A negative value	
Deviation of the ratio of households debt to gross disposable income of household from the long-term trend	-5.64	-0.02	1.86	-16.03	5.68	-1.52	-2.11	1.48	
Deviation of the ratio of the securities market capitalizations to GDP from the long-term trend	-0.26	1.40	6.95	-42.11	76.63	-6.93	-3.85	3.91	

Source: NBRK, CS MNE RK

Note:

(\*) Indicators signaling the release of the buffer

Capital inflow means the financial account (except the NBRK's reserve assets)

The trend was determined by using the Hodrick-Prescott filter with a smoothing parameter equal to 400 000.

\*\* The data was provided as of the 3<sup>rd</sup> quarter of 2014.

n/a - data is non-available.

(1) 1995

(2) 1999

(3) 2003