

LIQUIDITY MEASUREMENT AND MONITORING for 06.2020

\*\*The list and free-float coefficients of the MICEX Index stocks as of 19.06.2020, total stocks outstanding as of the corresponding business day of 06.2020. Free-float coefficients are estimated by the Moscow Exchange.\*\*

**1. Trading costs**

		Percentage spread, %	Absolute spread, rubles			Percentage spread, %	Absolute spread, rubles			Percentage spread, %	Absolute spread, rubles
1	GAZP	<b>0,026</b>	0,0520	17	ALRS	<b>0,058</b>	0,0375	33	TCSG	<b>0,096</b>	1,2700
2	SBER	<b>0,030</b>	0,0635	18	PLZL	<b>0,059</b>	6,4000	34	TRNFP	<b>0,097</b>	132,5000
3	SBERP	<b>0,031</b>	0,0595	19	POLY	<b>0,061</b>	0,8100	35	FIVE	<b>0,104</b>	2,3500
4	ROSN	<b>0,032</b>	0,1225	20	NVTK	<b>0,063</b>	0,6700	36	PHOR	<b>0,110</b>	3,0000
5	MOEX	<b>0,035</b>	0,0405	21	MAGN	<b>0,064</b>	0,0260	37	PIKK	<b>0,158</b>	0,6400
6	CHMF	<b>0,037</b>	0,3300	22	HYDR	<b>0,065</b>	0,0005	38	CBOM	<b>0,159</b>	0,0088
7	TATN	<b>0,043</b>	0,2450	23	TATNP	<b>0,067</b>	0,3700				
8	LKOH	<b>0,043</b>	2,3250	24	MGNT	<b>0,068</b>	2,7000				
9	VTBR	<b>0,043</b>	0,000016	25	AFKS	<b>0,070</b>	0,0118				
10	GMKN	<b>0,044</b>	8,9000	26	UPRO	<b>0,071</b>	0,0019				
11	MTSS	<b>0,046</b>	0,1500	27	NLMK	<b>0,073</b>	0,1000				
12	SNGS	<b>0,046</b>	0,0183	28	IRAO	<b>0,076</b>	0,0038				
13	SNGSP	<b>0,047</b>	0,0165	29	DSKY	<b>0,077</b>	0,0770				
14	YNDX	<b>0,048</b>	1,4800	30	LSRG	<b>0,084</b>	0,5700	<b>Total stocks</b>		<b>0,066</b>	-
15	RTKM	<b>0,052</b>	0,0445	31	RUAL	<b>0,088</b>	0,0238				
16	AFLT	<b>0,057</b>	0,0490	32	FEES	<b>0,089</b>	0,000165				

## 2. Trading activity

		Trading volume, %	Trading volume (adjusted for free-float), %	FF	Trading volume, units of securities			Trading volume, %	Trading volume (adjusted for free-float), %	FF	Trading volume, units of securities
1	AFLT	3,204	7,814	0,41	3 073 140 922	24	GAZP	0,198	0,396	0,50	9 293 673 221
2	DSKY	0,820	1,490	0,55	599 439 219	25	LKOH	0,196	0,355	0,55	7 291 488 147
3	SBERP	0,819	0,819	1,00	1 580 231 146	26	CBOM	0,174	0,872	0,20	286 183 938
4	TATNP	0,635	0,635	1,00	518 087 896	27	CHMF	0,155	0,777	0,20	1 176 255 392
5	MGNT	0,576	0,812	0,71	2 336 447 934	28	RTKM	0,152	0,475	0,32	332 292 651
6	SNGSP	0,483	0,662	0,73	1 295 720 151	29	FIVE	0,139	0,339	0,41	851 767 782
7	MOEX	0,473	0,751	0,63	1 247 119 257	30	MAGN	0,131	0,819	0,16	586 554 933
8	AFKS	0,461	1,396	0,33	745 206 864	31	SNGS	0,125	0,502	0,25	1 779 238 914
9	HYDR	0,369	1,944	0,19	1 217 811 835	32	UPRO	0,125	0,780	0,16	217 833 699
10	SBER	0,349	0,727	0,48	15 854 706 534	33	NLMK	0,103	0,542	0,19	850 361 014
11	TRNFP	0,329	1,029	0,32	696 388 573	34	ROSN	0,082	0,744	0,11	3 319 158 096
12	ALRS	0,317	0,933	0,34	1 521 562 075	35	RUAL	0,063	0,396	0,16	262 116 153
13	GMKN	0,312	0,820	0,38	9 868 394 661	36	PHOR	0,062	0,249	0,25	219 250 198
14	LSRG	0,273	0,650	0,42	186 274 227	37	NVTK	0,048	0,228	0,21	1 548 149 755
15	MTSS	0,268	0,596	0,45	1 747 072 797	38	PIKK	0,017	0,094	0,18	44 573 469
16	TCSG	0,254	0,286	0,89	396 422 428						
17	TATN	0,251	0,783	0,32	3 133 671 625						
18	FEES	0,247	1,373	0,18	587 386 545						
19	VTBR	0,245	0,907	0,27	1 161 564 041						
20	YNDX	0,226	0,236	0,96	2 065 999 148						
21	POLY	0,220	0,490	0,45	1 360 902 372						
22	IRAO	0,220	0,665	0,33	1 136 085 680						
23	PLZL	0,198	0,945	0,21	2 886 825 602		<b>Total stocks</b>	<b>0,351</b>	<b>0,904</b>		

### 3. Elasticity\*

		HH			HH
1	AFLT	0,002	24	LSRG	0,015
2	SBERP	0,003	25	UPRO	0,017
3	SNGSP	0,004	26	POLY	0,018
4	MOEX	0,004	27	RTKM	0,019
5	TATNP	0,005	28	PLZL	0,019
6	MGNT	0,005	29	TCSG	0,020
7	DSKY	0,005	30	NLMK	0,022
8	MTSS	0,006	31	MAGN	0,022
9	TRNFP	0,007	32	SNGS	0,024
10	SBER	0,008	33	ROSN	0,027
11	VTBR	0,008	34	FIVE	0,030
12	ALRS	0,009	35	PHOR	0,036
13	CBOM	0,009	36	RUAL	0,053
14	AFKS	0,009	37	NVTK	0,056
15	CHMF	0,011	38	PIKK	0,138
16	GAZP	0,011			
17	LKOH	0,011			
18	HYDR	0,012			
19	FEES	0,012			
20	IRAO	0,012			
21	GMKN	0,012			
22	YNDX	0,013			
23	TATN	0,014	<b>Total stocks</b>		<b>0,019</b>

\* From 10.2015 performance in the elasticity dimension is assessed through the HUI-HEUBEL Liquidity Ratio (hereinafter HH).

	Most liquid	Spread, %	Volume, %	HH	Least liquid	Spread, %	Volume, %	HH
01.2020	1	<b>SBER</b>	HYDR	<b>AFLT</b>	1	RTKM	POLY	<b>RUAL</b>
01.2020	2	LKOH	<b>AFLT</b>	<b>SBERP</b>	2	<b>CBOM</b>	ROSN	ROSN
01.2020	3	<b>GAZP</b>	<b>MGNT</b>	MGNT	3	IRAO	LNTA	LNTA
01.2020	4	VTBR	<b>SBERP</b>	SNGSP	4	TCSG	<b>NVTK</b>	<b>NVTK</b>
01.2020	5	<b>SBERP</b>	<b>TATNP</b>	HYDR	5	<b>TRNFP</b>	<b>PIKK</b>	<b>PIKK</b>
02.2020	1	<b>GAZP</b>	<b>AFLT</b>	<b>SBERP</b>	1	FEES	<b>NVTK</b>	<b>RUAL</b>
02.2020	2	<b>SBER</b>	<b>SBERP</b>	<b>AFLT</b>	2	<b>FIVE</b>	<b>FIVE</b>	LNTA
02.2020	3	LKOH	<b>MGNT</b>	<b>TATNP</b>	3	AFKS	ROSN	<b>FIVE</b>
02.2020	4	<b>SBERP</b>	HYDR	SNGSP	4	<b>PIKK</b>	LNTA	<b>NVTK</b>
02.2020	5	GMKN	<b>TATNP</b>	MGNT	5	<b>TRNFP</b>	<b>PIKK</b>	<b>PIKK</b>
03.2020	1	<b>MOEX</b>	<b>AFLT</b>	<b>AFLT</b>	1	<b>CBOM</b>	RUAL	<b>FIVE</b>
03.2020	2	MGNT	<b>TATNP</b>	<b>SBERP</b>	2	LSRG	PHOR	<b>NVTK</b>
03.2020	3	<b>GAZP</b>	<b>SBERP</b>	<b>MOEX</b>	3	<b>PIKK</b>	<b>NVTK</b>	<b>RUAL</b>
03.2020	4	<b>SBERP</b>	<b>MOEX</b>	SNGSP	4	FIVE	LNTA	LNTA
03.2020	5	HYDR	<b>MGNT</b>	<b>TATNP</b>	5	<b>TRNFP</b>	<b>PIKK</b>	<b>PIKK</b>
04.2020	1	<b>SBERP</b>	<b>AFLT</b>	<b>AFLT</b>	1	<b>FIVE</b>	<b>FIVE</b>	<b>RUAL</b>
04.2020	2	<b>SBER</b>	<b>TATNP</b>	<b>SBERP</b>	2	<b>CBOM</b>	RUAL	PHOR
04.2020	3	<b>GAZP</b>	<b>SBERP</b>	<b>TATNP</b>	3	TCSG	<b>NVTK</b>	<b>FIVE</b>
04.2020	4	GMKN	<b>MOEX</b>	<b>MOEX</b>	4	<b>TRNFP</b>	PHOR	<b>NVTK</b>
04.2020	5	VTBR	TCSG	VTBR	5	<b>PIKK</b>	<b>PIKK</b>	<b>PIKK</b>
05.2020	1	<b>GAZP</b>	<b>AFLT</b>	<b>SBERP</b>	1	UPRO	RTKM	<b>FIVE</b>
05.2020	2	<b>SBER</b>	<b>SBERP</b>	<b>AFLT</b>	2	<b>PIKK</b>	<b>NVTK</b>	<b>RUAL</b>
05.2020	3	<b>SBERP</b>	<b>MOEX</b>	<b>MOEX</b>	3	<b>TRNFP</b>	RUAL	PHOR
05.2020	4	CHMF	<b>TATNP</b>	<b>TATNP</b>	4	<b>CBOM</b>	PHOR	<b>NVTK</b>
05.2020	5	VTBR	<b>MGNT</b>	MGNT	5	TCSG	<b>PIKK</b>	<b>PIKK</b>
06.2020	1	<b>GAZP</b>	<b>AFLT</b>	<b>AFLT</b>	1	<b>TRNFP</b>	ROSN	<b>FIVE</b>
06.2021	2	<b>SBER</b>	DSKY	<b>SBERP</b>	2	FIVE	RUAL	<b>PHOR</b>
06.2022	3	<b>SBERP</b>	<b>SBERP</b>	SNGSP	3	<b>PHOR</b>	<b>PHOR</b>	<b>RUAL</b>

The table to the left provides statistics on liquidity at a level of an individual stock.

Among the most liquid stocks within a half-year period of 01.2020 – 06.2020:

1. Stocks, appearing at least once in the top-5 list of the most liquid stocks in the three dimensions simultaneously (highlighted in red in the table): **MOEX, SBERP.**

Stocks, appearing no less than 5-6 months in the top-5 list of the most liquid stocks in any of the dimensions (displayed in red bold font in the table):

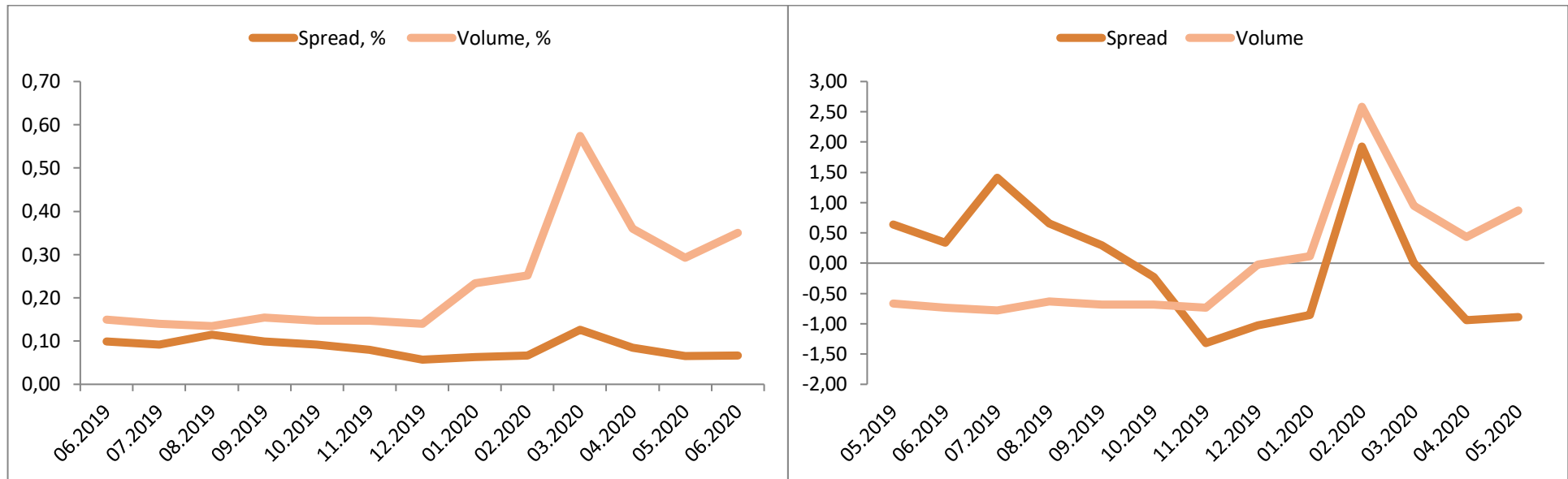
**GAZP, SBER, SBERP (trading costs), AFLT, MGNT, SBERP, TATNP (trading activity), AFLT, SBERP, TATNP (elasticity).**

Among the least liquid stocks within a half-year period of 01.2020 – 06.2020:

1. Stocks, appearing at least once in the list of the 5 least liquid stocks in the three dimensions simultaneously (highlighted in blue in the table): **FIFE, PHOR, PIKK.**

2. Stocks, appearing no less than 5-6 months in the list of the 5 least liquid stocks in any of the dimensions (displayed in blue bold font in the table):

**CBOM, PIKK, TRNFP (trading costs), NVTK, PIKK (trading activity), FIVE, NVTK, PIKK, RUAL (elasticity).**



The figures above provide liquidity dynamics **at an aggregate level**. The left figure displays dynamics of the two liquidity dimensions *in original numerical values*. Trading costs measured by average percentage daily spread in June 2020 stayed at the previous month's level and amounted to 0.066%. Trading activity measured by average percentage daily trading volume in June 2020 increased and amounted to 0.351%. In June 2020 liquidity, following the 6-month trend, was in a disequilibrium state: the trading activity metric and the trading costs metric moved in the same direction.

The right figure displays dynamics of the two liquidity dimensions *in standardized numerical values*. In June 2020 trading costs stayed below and trading activity stayed above the average over a 1-year period.