

# Centre for Financial Research & Data Analytics (CFR&DA)

## NRU HSE

### LIQUIDITY MEASUREMENT AND MONITORING FOR 12.2020\*

\* The list and free-float coefficients of the MOEX Index stocks as of 18.09.2020, total stocks outstanding as of the corresponding business day of 12.2020. 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	SBER	0,019	0,0518	17	GMKN	0,044	10,1818	33	FEES	0,072	0,000152
2	LKOH	0,024	1,2273	18	TATNP	0,045	0,2136	34	TCSG	0,076	1,8000
3	GAZP	0,027	0,0541	19	SNGS	0,047	0,0166	35	RSTI	0,084	0,0014
4	POLY	0,029	0,4818	20	ALRS	0,048	0,0445	36	LSRG	0,084	0,7364
5	CHMF	0,029	0,3636	21	PLZL	0,050	7,4545	37	RUAL	0,084	0,0320
6	SBERP	0,033	0,0805	22	NVTK	0,051	0,6182	38	TRNFP	0,104	147,7273
7	YNDX	0,033	1,7000	23	FIVE	0,053	1,4773	39	PIKK	0,108	0,6364
8	MOEX	0,034	0,0545	24	CBOM	0,053	0,0032				
9	MTSS	0,034	0,1114	25	MGNT	0,057	3,0227				
10	SNGSP	0,038	0,0155	26	AFLT	0,058	0,0409				
11	ROSN	0,040	0,1727	27	IRAO	0,059	0,0031				
12	TATN	0,040	0,2000	28	PHOR	0,061	1,9091				
13	NLMK	0,041	0,0836	29	UPRO	0,065	0,0018				
14	HYDR	0,041	0,0003	30	DSKY	0,068	0,0964	<b>Total stocks</b>		<b>0,053</b>	-
15	VTBR	0,042	0,000016	31	AFKS	0,070	0,0201				
16	MAGN	0,043	0,0223	32	RTKM	0,072	0,0686				

## 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	1,869	4,560	0,41	1 481 892 261	24	GMKN	0,162	0,425	0,38	5 948 798 311
2	DSKY	1,369	1,850	0,74	1 432 922 268	25	HYDR	0,160	0,842	0,19	532 350 916
3	SBERP	0,700	0,700	1,00	1 702 230 079	26	PLZL	0,146	0,694	0,21	2 908 759 645
4	AFKS	0,646	1,957	0,33	1 797 080 220	27	UPRO	0,137	0,856	0,16	240 068 755
5	TATNP	0,555	0,555	1,00	387 947 017	28	FEES	0,125	0,693	0,18	333 811 045
6	MOEX	0,440	0,698	0,63	1 613 118 180	29	FIVE	0,119	0,290	0,41	904 743 902
7	MAGN	0,428	2,673	0,16	2 410 396 408	30	TRNFP	0,114	0,308	0,37	251 661 232
8	SNGSP	0,390	0,534	0,73	1 203 797 774	31	RUAL	0,110	0,689	0,16	625 650 959
9	MGNT	0,370	0,521	0,71	2 014 340 726	32	RSTI	0,099	0,897	0,11	337 407 813
10	SBER	0,323	0,673	0,48	18 908 385 632	33	SNGS	0,086	0,342	0,25	1 079 067 982
11	GAZP	0,284	0,568	0,50	13 580 419 103	34	LSRG	0,078	0,186	0,42	70 622 168
12	ALRS	0,249	0,733	0,34	1 717 293 522	35	PHOR	0,078	0,310	0,25	313 350 553
13	POLY	0,242	0,538	0,45	1 905 230 718	36	RTKM	0,064	0,220	0,29	201 011 921
14	VTBR	0,239	0,884	0,27	1 171 615 068	37	ROSN	0,063	0,568	0,11	2 912 916 043
15	IRAO	0,238	0,722	0,33	1 310 162 103	38	NVTK	0,047	0,225	0,21	1 748 356 446
16	TATN	0,214	0,668	0,32	2 353 064 600	39	PIKK	0,009	0,051	0,18	35 353 025
17	LKOH	0,201	0,365	0,55	7 184 550 840						
18	CHMF	0,199	0,997	0,20	2 065 765 231						
19	CBOM	0,185	0,925	0,20	335 408 690						
20	NLMK	0,180	0,946	0,19	2 215 753 220						
21	TCSG	0,177	0,198	0,89	498 708 250						
22	MTSS	0,170	0,377	0,45	1 094 934 133						
23	YNDX	0,168	0,173	0,97	2 734 616 783		<b>Total stocks</b>	<b>0,293</b>	0,780		

### 3. Elasticity\*

		<b>HH</b>			<b>HH</b>
1	AFLT	<b>0,001</b>	24	YNDX	<b>0,017</b>
2	DSKY	<b>0,003</b>	25	GMKN	<b>0,017</b>
3	SBERP	<b>0,004</b>	26	FEES	<b>0,018</b>
4	TATNP	<b>0,004</b>	27	CHMF	<b>0,018</b>
5	SNGSP	<b>0,005</b>	28	PLZL	<b>0,020</b>
6	AFKS	<b>0,006</b>	29	FIVE	<b>0,021</b>
7	MGNT	<b>0,006</b>	30	PHOR	<b>0,022</b>
8	MOEX	<b>0,007</b>	31	SNGS	<b>0,024</b>
9	MTSS	<b>0,008</b>	32	RTKM	<b>0,025</b>
10	VTBR	<b>0,008</b>	33	LSRG	<b>0,027</b>
11	SBER	<b>0,008</b>	34	TCSG	<b>0,029</b>
12	CBOM	<b>0,009</b>	35	RSTI	<b>0,030</b>
13	IRAO	<b>0,009</b>	36	RUAL	<b>0,035</b>
14	MAGN	<b>0,010</b>	37	ROSN	<b>0,049</b>
15	UPRO	<b>0,010</b>	38	NVTK	<b>0,073</b>
16	GAZP	<b>0,011</b>			
17	POLY	<b>0,012</b>			
18	TATN	<b>0,012</b>			
19	HYDR	<b>0,013</b>			
20	ALRS	<b>0,013</b>			
21	LKOH	<b>0,014</b>			
22	TRNFP	<b>0,015</b>			
23	NLMK	<b>0,016</b>	<b>Total stocks</b>		<b>0,020</b>

\* The elasticity dimension is measured by the HUI-HEUBEL Liquidity Ratio (HH).

	Most liquid	Spread, %	Volume, %	HH	Least liquid	Spread, %	Volume, %	HH
07.2020	1	<b>GAZP</b>	<b>AFLT</b>	<b>AFLT</b>	1	FIVE	RUAL	ROSN
07.2020	2	<b>LKOH</b>	<b>SBERP</b>	<b>SBERP</b>	2	<b>TRNFP</b>	<b>PHOR</b>	<b>RUAL</b>
07.2020	3	ROSN	MGNT	<b>SNGSP</b>	3	CBOM	ROSN	FIVE
07.2020	4	<b>SBER</b>	<b>MOEX</b>	<b>MOEX</b>	4	<b>PIKK</b>	<b>NVTK</b>	<b>NVTK</b>
07.2020	5	<b>MOEX</b>	DSKY	MGNT	5	<b>TCSG</b>	<b>PIKK</b>	<b>PIKK</b>
08.2020	1	<b>GAZP</b>	<b>AFLT</b>	<b>SBERP</b>	1	IRAO	<b>PHOR</b>	<b>RUAL</b>
08.2020	2	<b>SBER</b>	YNDX	<b>AFLT</b>	2	PHOR	FIVE	<b>ROSN</b>
08.2020	3	<b>LKOH</b>	<b>SBERP</b>	<b>SNGSP</b>	3	<b>TCSG</b>	<b>ROSN</b>	FIVE
08.2020	4	<b>SBERP</b>	AFKS	<b>MOEX</b>	4	AFKS	<b>NVTK</b>	<b>NVTK</b>
08.2020	5	<b>MOEX</b>	<b>MOEX</b>	MGNT	5	<b>TRNFP</b>	<b>PIKK</b>	<b>PIKK</b>
09.2020	1	<b>GAZP</b>	DSKY	<b>SBERP</b>	1	PLZL	<b>RUAL</b>	FIVE
09.2020	2	<b>SBER</b>	<b>SBERP</b>	DSKY	2	IRAO	<b>PHOR</b>	<b>ROSN</b>
09.2020	3	<b>SBERP</b>	TATNP	<b>AFLT</b>	3	<b>RUAL</b>	<b>ROSN</b>	<b>RUAL</b>
09.2020	4	<b>LKOH</b>	YNDX	TATNP	4	<b>TCSG</b>	<b>NVTK</b>	<b>NVTK</b>
09.2020	5	MTSS	<b>AFLT</b>	<b>SNGSP</b>	5	<b>TRNFP</b>	<b>PIKK</b>	<b>PIKK</b>
10.2020	1	<b>SBER</b>	<b>AFLT</b>	<b>AFLT</b>	1	<b>PIKK</b>	<b>ROSN</b>	FIVE
10.2020	2	<b>SBERP</b>	TATNP	<b>SBERP</b>	2	RSTI	RUAL	PHOR
10.2020	3	<b>GAZP</b>	<b>SBERP</b>	TATNP	3	LSRG	<b>PHOR</b>	<b>PIKK</b>
10.2020	4	<b>LKOH</b>	AFKS	MOEX	4	<b>TCSG</b>	<b>NVTK</b>	<b>NVTK</b>
10.2020	5	VTBR	MOEX	<b>SNGSP</b>	5	<b>TRNFP</b>	<b>PIKK</b>	<b>RUAL</b>
11.2020	1	<b>SBER</b>	<b>AFLT</b>	<b>AFLT</b>	1	<b>TCSG</b>	LSRG	PHOR
11.2020	2	ROSN	TATNP	<b>SBERP</b>	2	LSRG	RTKM	<b>ROSN</b>
11.2020	3	<b>SBERP</b>	AFKS	TATNP	3	<b>PIKK</b>	<b>PHOR</b>	<b>RUAL</b>
11.2020	4	<b>LKOH</b>	<b>SBERP</b>	MOEX	4	RSTI	<b>NVTK</b>	<b>NVTK</b>
11.2020	5	MOEX	DSKY	<b>SNGSP</b>	5	<b>TRNFP</b>	<b>PIKK</b>	<b>PIKK</b>
12.2020	1	<b>SBER</b>	<b>AFLT</b>	<b>AFLT</b>	1	RSTI	<b>PHOR</b>	RSTI
12.2020	2	<b>LKOH</b>	DSKY	DSKY	2	LSRG	RTKM	<b>RUAL</b>
12.2020	3	<b>GAZP</b>	<b>SBERP</b>	<b>SBERP</b>	3	RUAL	<b>ROSN</b>	<b>ROSN</b>
12.2020	4	POLY	AFKS	TATNP	4	<b>TRNFP</b>	<b>NVTK</b>	<b>NVTK</b>
12.2020	5	CHMF	TATNP	<b>SNGSP</b>	5	<b>PIKK</b>	<b>PIKK</b>	<b>PIKK</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 07.2020 – 12.2020:

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, LKOH, SBER (trading costs), AFLT, SBERP (trading activity), AFLT, SBERP, SNGSP (elasticity).**

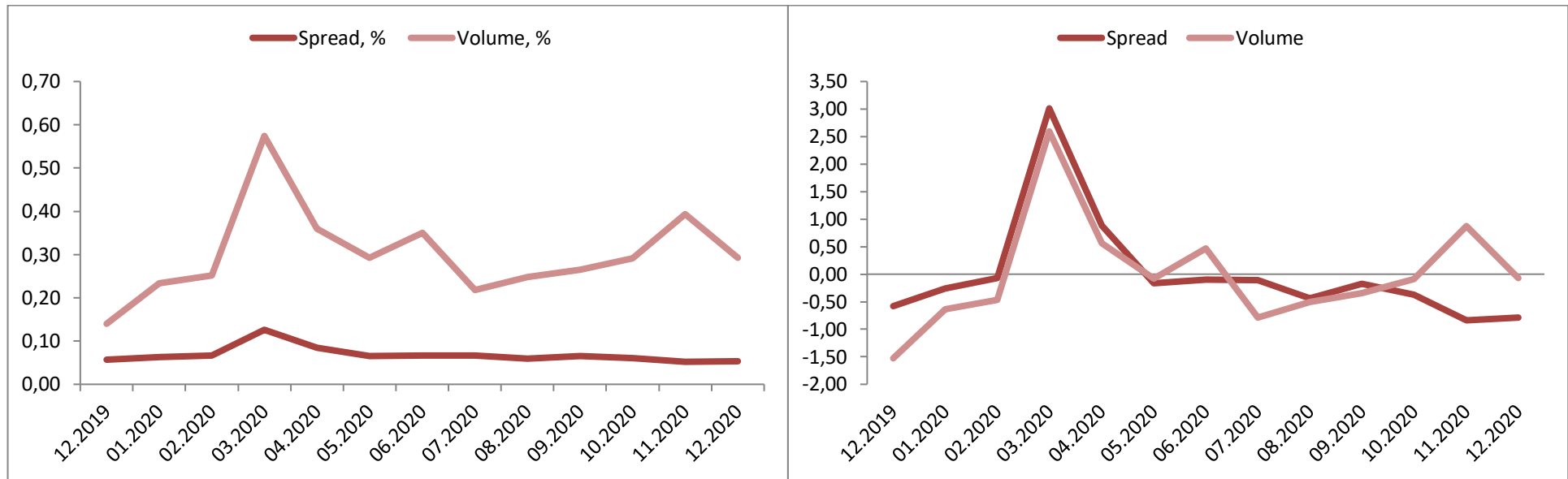
Among the least liquid stocks within a half-year period of 07.2020 – 12.2020:

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):

**PIKK, RUAL.**

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):

**TRNFP, TCSG (trading costs), NVTK, PHOR, PIKK, ROSN (trading activity), NVTK, PIKK, ROSN, 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 December 2020 stayed at approximately the previous month's level and amounted to 0.053%. Trading activity measured by average percentage daily trading volume in December 2020 decreased and amounted to 0.293%. In December 2020 liquidity was in an equilibrium state: the trading activity metric and the trading costs metric moved in the opposite directions. The right figure displays dynamics of the two liquidity dimensions *in standardized numerical values*. In December 2020 trading costs stayed below and trading activity stayed close to the average level over a 1-year period.