

LIQUIDITY MEASUREMENT AND MONITORING for 12.2017

The list and free-float coefficients of the MICEX Index stocks as of 22.09.2017, total stocks outstanding as of the corresponding business day of 12.2017. 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	0,030	0,0395	17	MAGN	0,092	0,0398	33	MSNG	0,184	0,0051
2	SBER	0,030	0,0681	18	TATN	0,095	0,4667	34	AGRO	0,188	1,1667
3	ROSN	0,043	0,1262	19	HYDR	0,099	0,000771	35	LSRG	0,217	1,6905
4	ALRS	0,046	0,0348	20	NLMK	0,104	0,1471	36	POLY	0,220	1,5048
5	GMKN	0,050	5,2857	21	MTLR	0,104	0,1405	37	TRMK	0,226	0,1738
6	VTBR	0,052	0,000026	22	UPRO	0,110	0,0029	38	AKRN	0,226	8,7143
7	LKOH	0,054	1,8095	23	RSTI	0,111	0,000933	39	DIXY	0,264	0,8524
8	MGNT	0,055	3,5238	24	MTSS	0,115	0,3071	40	PIKK	0,269	0,8381
9	MOEX	0,058	0,0667	25	TRNFP	0,122	216,6667	41	NMTP	0,271	0,0214
10	RTKM	0,059	0,0376	26	IRAO	0,130	0,0045	42	UWGN	0,280	2,1905
11	AFLT	0,062	0,0881	27	RUAL	0,146	0,0552	43	MVID	0,287	1,1524
12	MFON	0,080	0,4190	28	NVTK	0,156	1,0571	44	LNTA	0,297	1,0000
13	CHMF	0,080	0,7095	29	PLZL	0,165	7,5238	45	RNFT	0,607	3,2571
14	FEES	0,084	0,000136	30	CBOM	0,172	0,0074	Total stocks		0,146	-
15	SNGS	0,085	0,0238	31	PHOR	0,182	4,5714				
16	AFKS	0,091	0,0100	32	YNDX	0,183	3,4762				

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	AFKS	0,673	1,870	0,36	710 553 382	24	MFON	0,053	0,351	0,15	171 144 581
2	AFLT	0,552	1,347	0,41	875 899 462	25	IRAO	0,052	0,178	0,29	189 134 712
3	MOEX	0,309	0,543	0,57	821 199 927	26	LKOH	0,050	0,109	0,46	1 442 240 934
4	MTLR	0,215	0,478	0,45	121 396 427	27	NLMK	0,049	0,308	0,16	415 312 146
5	MGNT	0,193	0,306	0,63	1 165 632 092	28	MSNG	0,038	0,252	0,15	41 472 720
6	VTBR	0,154	0,396	0,39	967 893 565	29	PLZL	0,031	0,193	0,16	192 793 882
7	SBER	0,151	0,314	0,48	7 311 284 358	30	ROSN	0,029	0,264	0,11	906 112 545
8	HYDR	0,141	0,614	0,23	418 889 426	31	LSRG	0,029	0,087	0,33	23 323 847
9	RTKM	0,137	0,428	0,32	226 380 434	32	SNGS	0,027	0,107	0,25	269 489 913
10	PIKK	0,135	0,423	0,32	276 213 032	33	UPRO	0,027	0,148	0,18	43 780 809
11	MAGN	0,133	1,019	0,13	649 272 901	34	DIXY	0,024	0,052	0,46	9 690 930
12	NMTP	0,125	0,831	0,15	195 615 236	35	POLY	0,024	0,064	0,37	69 156 894
13	ALRS	0,125	0,366	0,34	687 628 450	36	AGRO	0,022	0,104	0,21	18 380 895
14	MTSS	0,123	0,257	0,48	646 709 626	37	TRMK	0,021	0,071	0,30	16 914 101
15	FEES	0,097	0,464	0,21	201 821 935	38	NVTK	0,020	0,072	0,27	400 869 182
16	TRNFP	0,095	0,298	0,32	264 641 093	39	PHOR	0,019	0,075	0,25	61 043 922
17	RSTI	0,094	0,859	0,11	157 018 463	40	UWGN	0,017	0,086	0,20	15 681 263
18	CBOM	0,089	0,385	0,23	91 585 996	41	YNDX	0,017	0,018	0,95	93 641 087
19	GAZP	0,084	0,183	0,46	2 659 835 344	42	RNFT	0,014	0,069	0,20	22 998 100
20	MVID	0,078	0,290	0,27	56 876 792	43	RUAL	0,011	0,083	0,13	63 736 156
21	GMKN	0,076	0,229	0,33	1 247 575 071	44	LNTA	0,009	0,015	0,58	14 187 222
22	TATN	0,075	0,235	0,32	808 172 802	45	AKRN	0,006	0,052	0,12	9 820 301
23	CHMF	0,067	0,372	0,18	498 953 079	Total stocks		0,100	0,339	-	-

3. Elasticity*

		HH			HH
1	AFLT	0,005	24	MFON	0,049
2	MOEX	0,010	25	TATN	0,049
3	MGNT	0,011	26	NLMK	0,056
4	SBER	0,014	27	IRAO	0,060
5	AFKS	0,014	28	ROSN	0,069
6	RTKM	0,015	29	MVID	0,075
7	ALRS	0,016	30	MSNG	0,078
8	GAZP	0,019	31	UPRO	0,086
9	FEES	0,019	32	SNGS	0,089
10	VTBR	0,020	33	LSRG	0,106
11	HYDR	0,021	34	NVTK	0,133
12	MTLR	0,022	35	YNDX	0,138
13	TRNFP	0,023	36	POLY	0,139
14	MAGN	0,026	37	DIXY	0,142
15	GMKN	0,032	38	PHOR	0,145
16	MTSS	0,033	39	AGRO	0,168
17	PIKK	0,036	40	PLZL	0,184
18	LKOH	0,036	41	TRMK	0,206
19	CHMF	0,037	42	RUAL	0,344
20	RSTI	0,037	43	RNFT	0,395
21	UWGN	0,043	44	LNTA	0,468
22	CBOM	0,046	45	NMTP	0,488
23	AFLT	0,005	Total stocks		0,077

* 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
06.2017	1	MVID	MOEX	MVID	1	BANEP	YNDX	POLY
06.2017	2	VTBR	AFLT	MOEX	2	RUAL	URKA	YNDX
06.2017	3	RTKM	AFKS	TRNFP	3	CBOM	NMTP	NMTP
06.2017	4	GAZP	SBER	SBER	4	TRMK	PLZL	RUAL
06.2017	5	ROSN	TRNFP	AFLT	5	PIKK	RUAL	PLZL
08.2017	1	SBER	MOEX	MOEX	1	POLY	NMTP	YNDX
08.2017	2	HYDR	AFLT	SBER	2	NMTP	PIKK	URKA
08.2017	3	ALRS	MTLR	AFLT	3	DIXY	AKRN	NMTP
08.2017	4	GAZP	ALRS	ALRS	4	PIKK	RUAL	AKRN
08.2017	5	NVTK	SBER	GAZP	5	RUAL	URKA	RUAL
09.2017	1	GAZP	AFLT	AFLT	1	LNTA	PLZL	PIKK
09.2017	2	ROSN	MOEX	MOEX	2	CBOM	RUAL	NMTP
09.2017	3	SBER	DIXY	SBER	3	PIKK	PHOR	LSRG
09.2017	4	FEES	RNFT	HYDR	4	UWGN	LNTA	RUAL
09.2017	5	MAGN	SBER	ALRS	5	RNFT	LSRG	LNTA
10.2017	1	GAZP	MOEX	AFLT	1	TRMK	LNTA	RUAL
10.2017	2	MAGN	AFLT	MOEX	2	UWGN	LSRG	LSRG
10.2017	3	MFON	MGNT	SBER	3	DIXY	NMTP	AGRO
10.2017	4	SBER	MFON	HYDR	4	NMTP	AGRO	AKRN
10.2017	5	GMKN	MTLR	ALRS	5	RNFT	AKRN	NMTP
11.2017	1	GAZP	AFLT	AFLT	1	LNTA	AGRO	RNFT
11.2017	2	SBER	MVID	MOEX	2	PHOR	LSRG	LSRG
11.2017	3	GMKN	MGNT	MGNT	3	MVID	NMTP	LNTA
11.2017	4	ROSN	MOEX	RTKM	4	DIXY	AKRN	NMTP
11.2017	5	ALRS	RTKM	SBER	5	RNFT	LNTA	AKRN
12.2017	1	GAZP	AFKS	AFLT	1	NMTP	YNDX	TRMK
12.2017	2	SBER	AFLT	MOEX	2	UWGN	RNFT	RUAL
12.2017	3	ROSN	MOEX	MGNT	3	MVID	RUAL	RNFT
12.2017	4	ALRS	MTLR	SBER	4	LNTA	LNTA	LNTA
12.2017	5	GMKN	MGNT	AFKS	5	RNFT	AKRN	NMTP

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 06.2017 - 12.2017:

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):

ALRS, SBER.

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 (trading costs) AFLT, MOEX (trading activity), AFLT, MOEX, SBER (elasticity).

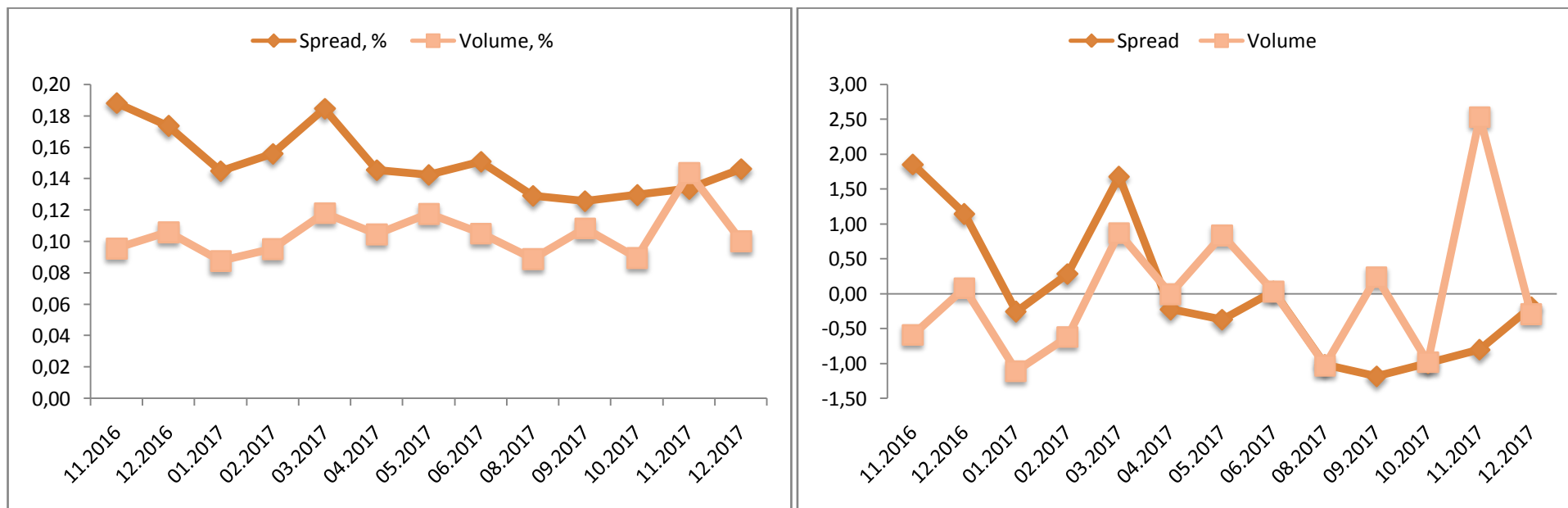
Among the least liquid stocks within a half-year period of 06.2017 - 12.2017:

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):

LNTA, NMTP, 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):

- (trading costs), - (trading activity), NMTP, 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 2017 followed the upward trend of the preceding three months reaching 0.146%. Trading activity measured by average percentage daily trading volume in December 2017 exhibited correction relative to November 2017 from 0.144% to 0.100% staying close to the October level.

The right figure displays dynamics of the two liquidity dimensions *in standardized numerical values*. In December 2017 trading costs and trading activity were at about the average yearly level. Trading activity exhibited correction after an abnormally high level in November 2017.