

LIQUIDITY MEASUREMENT AND MONITORING for 03.2016

The list and free-float coefficients of the MICEX Index stocks as of 16.12.2015, total stocks outstanding as of the corresponding business day of 03.2016. 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 | 0,057 | 0,0836 | 17 | ALRS | 0,122 | 0,0864 | 33 | PHOR | 0,241 | 6,8636 |
| 2 | MGNT | 0,061 | 6,6364 | 18 | SNGS | 0,126 | 0,0500 | 34 | CHMF | 0,252 | 1,6682 |
| 3 | SBER | 0,062 | 0,0673 | 19 | IRAO | 0,129 | 0,002136 | 35 | AGRO | 0,294 | 3,5909 |
| 4 | URKA | 0,072 | 0,1182 | 20 | FEES | 0,130 | 0,000095 | 36 | POLY | 0,309 | 2,1364 |
| 5 | LKOH | 0,086 | 2,3182 | 21 | MAGN | 0,144 | 0,0300 | 37 | PHST | 0,310 | 3,1818 |
| 6 | GMKN | 0,087 | 7,9545 | 22 | VTBR | 0,145 | 0,000109 | 38 | LNTA | 0,321 | 1,4091 |
| 7 | NVTK | 0,087 | 0,5409 | 23 | HYDR | 0,148 | 0,0010 | 39 | TRNFP | 0,326 | 600,0000 |
| 8 | MTSS | 0,088 | 0,2068 | 24 | RTKM | 0,172 | 0,1636 | 40 | MVID | 0,352 | 0,9045 |
| 9 | ROSN | 0,088 | 0,2682 | 25 | LSRG | 0,176 | 1,1591 | 41 | VSMO | 0,385 | 48,6364 |
| 10 | MOEX | 0,095 | 0,0986 | 26 | YNDX | 0,183 | 1,8636 | 42 | PIKK | 0,388 | 0,9773 |
| 11 | RSTI | 0,095 | 0,000545 | 27 | TATN | 0,186 | 0,6500 | 43 | AKRN | 0,437 | 16,3636 |
| 12 | MTLR | 0,105 | 0,0659 | 28 | MFON | 0,209 | 1,7273 | 44 | RUAL | 0,440 | 0,1091 |
| 13 | EONR | 0,108 | 0,0028 | 29 | GCHE | 0,218 | 2,0909 | 45 | NKNC | 0,854 | 0,4318 |
| 14 | AFLT | 0,117 | 0,0809 | 30 | TRMK | 0,219 | 0,1159 | Total stocks | | 0,203 | - |
| 15 | AFKS | 0,119 | 0,0214 | 31 | BANE | 0,229 | 6,0227 | | | | |
| 16 | NLMK | 0,122 | 0,0959 | 32 | DIXY | 0,229 | 0,6591 | | | | |

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 | 0,705 | 2,204 | 0,32 | 524 336 277 | 24 | IRAO | 0,065 | 0,363 | 0,18 | 113 888 179 |
| 2 | MOEX | 0,467 | 0,917 | 0,51 | 1 096 499 750 | 25 | SNGS | 0,065 | 0,260 | 0,25 | 919 084 194 |
| 3 | SBER | 0,413 | 0,860 | 0,48 | 9 703 316 796 | 26 | NLMK | 0,060 | 0,430 | 0,14 | 286 167 664 |
| 4 | MTLR | 0,257 | 0,733 | 0,35 | 67 826 456 | 27 | LSRG | 0,054 | 0,163 | 0,33 | 36 115 269 |
| 5 | MAGN | 0,214 | 1,525 | 0,14 | 499 394 005 | 28 | ROSN | 0,053 | 0,441 | 0,12 | 1 701 147 682 |
| 6 | FEES | 0,170 | 0,808 | 0,21 | 164 704 927 | 29 | MFON | 0,042 | 0,282 | 0,15 | 208 968 053 |
| 7 | TRNFP | 0,169 | 0,169 | 1,00 | 484 641 323 | 30 | NVTK | 0,041 | 0,150 | 0,27 | 763 916 965 |
| 8 | RSTI | 0,164 | 1,168 | 0,14 | 148 737 409 | 31 | TRMK | 0,031 | 0,126 | 0,25 | 16 774 431 |
| 9 | MGNT | 0,153 | 0,283 | 0,54 | 1 566 400 099 | 32 | YNDX | 0,028 | 0,093 | 0,30 | 79 569 477 |
| 10 | GMKN | 0,147 | 0,489 | 0,30 | 2 126 787 519 | 33 | BANE | 0,024 | 0,198 | 0,12 | 92 218 822 |
| 11 | ALRS | 0,140 | 0,611 | 0,23 | 732 299 382 | 34 | MVID | 0,021 | 0,049 | 0,42 | 9 535 151 |
| 12 | GAZP | 0,140 | 0,305 | 0,46 | 4 850 522 572 | 35 | GCHE | 0,013 | 0,035 | 0,36 | 5 322 939 |
| 13 | LKOH | 0,140 | 0,305 | 0,46 | 3 214 269 500 | 36 | AKRN | 0,012 | 0,073 | 0,16 | 17 734 094 |
| 14 | HYDR | 0,128 | 0,377 | 0,34 | 340 222 342 | 37 | POLY | 0,007 | 0,030 | 0,25 | 21 761 639 |
| 15 | CHMF | 0,128 | 0,610 | 0,21 | 716 473 501 | 38 | PHOR | 0,007 | 0,036 | 0,19 | 25 040 766 |
| 16 | EONR | 0,121 | 0,673 | 0,18 | 197 675 684 | 39 | RUAL | 0,004 | 0,044 | 0,10 | 16 591 278 |
| 17 | MTSS | 0,118 | 0,261 | 0,45 | 572 684 334 | 40 | PIKK | 0,004 | 0,013 | 0,32 | 6 933 665 |
| 18 | VTBR | 0,107 | 0,273 | 0,39 | 1 034 500 756 | 41 | PHST | 0,003 | 0,008 | 0,34 | 1 026 910 |
| 19 | AFKS | 0,102 | 0,284 | 0,36 | 176 796 740 | 42 | NKNC | 0,002 | 0,011 | 0,19 | 1 667 625 |
| 20 | TATN | 0,096 | 0,300 | 0,32 | 731 012 091 | 43 | VSMO | 0,001 | 0,009 | 0,10 | 1 274 720 |
| 21 | RTKM | 0,095 | 0,297 | 0,32 | 231 900 103 | 44 | AGRO* | - | - | 0,17 | 13 660 468 |
| 22 | DIXY | 0,080 | 0,173 | 0,46 | 28 219 791 | 45 | LNTA* | - | - | 0,10 | 17 542 670 |
| 23 | URKA | 0,067 | 0,475 | 0,14 | 323 109 515 | Total stocks | | 0,113 | 0,393 | - | - |

* MOEX does not provide data on daily market capitalization for «LENTA Ltd» and «ROS AGRO PLC» on the basis of RDR in March 2016.

3. Elasticity*

| | | HH | | | HH |
|----|-------|-------|----|---------------------|--------------|
| 1 | SBER | 0,005 | 24 | LSRG | 0,039 |
| 2 | AFLT | 0,006 | 25 | SNGS | 0,044 |
| 3 | MOEX | 0,006 | 26 | ROSN | 0,049 |
| 4 | MTLR | 0,011 | 27 | IRAO | 0,053 |
| 5 | GMKN | 0,015 | 28 | NLMK | 0,059 |
| 6 | GAZP | 0,015 | 29 | NVTK | 0,063 |
| 7 | MGNT | 0,016 | 30 | TRMK | 0,099 |
| 8 | MAGN | 0,017 | 31 | MFON | 0,125 |
| 9 | MTSS | 0,018 | 32 | YNDX | 0,136 |
| 10 | ALRS | 0,018 | 33 | MVID | 0,146 |
| 11 | LKOH | 0,020 | 34 | BANE | 0,209 |
| 12 | AFKS | 0,022 | 35 | GCHE | 0,278 |
| 13 | TRNFP | 0,022 | 36 | AKRN | 0,408 |
| 14 | HYDR | 0,022 | 37 | PHOR | 0,526 |
| 15 | FEES | 0,022 | 38 | POLY | 0,724 |
| 16 | RSTI | 0,023 | 39 | RUAL | 0,951 |
| 17 | CHMF | 0,025 | 40 | PHST | 1,165 |
| 18 | VTBR | 0,026 | 41 | PIKK | 1,499 |
| 19 | RTKM | 0,030 | 42 | VSMO | 2,468 |
| 20 | TATN | 0,032 | 43 | NKNC | 4,139 |
| 21 | URKA | 0,034 | 44 | AGRO | - |
| 22 | EONR | 0,037 | 45 | LNTA | - |
| 23 | DIXY | 0,039 | | Total stocks | 0,318 |

* 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 |
|---------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|
| 10/2015 | 1 | GAZP | AFLT | SBER | 1 | GCHE | POLY | AKRN |
| | 2 | SBER | SBER | AFLT | 2 | RUAL | RUAL | PHOR |
| | 3 | LKOH | MOEX | MOEX | 3 | PGIL | VSMO | LSRG |
| | 4 | AFLT | MTLR | GAZP | 4 | TRNFP | PHST | PIKK |
| | 5 | MTSS | MAGN | GMKN | 5 | PHST | PGIL | POLY |
| 11/2015 | 1 | URKA | AFLT | SBER | 1 | PIKK | PIKK | GCHE |
| | 2 | SBER | SBER | AFLT | 2 | LSRG | RUAL | VSMO |
| | 3 | NLMK | MOEX | MOEX | 3 | EONR | PHST | PIKK |
| | 4 | NVTK | MTSS | MTSS | 4 | LNTA | VSMO | PHST |
| | 5 | LKOH | MAGN | GMKN | 5 | PGIL | PGIL | PGIL |
| 12/2015 | 1 | SBER | AFLT | SBER | 1 | PIKK | GCHE | POLY |
| | 2 | NLMK | SBER | AFLT | 2 | GCHE | RUAL | GCHE |
| | 3 | MGNT | MOEX | MOEX | 3 | LNTA | PHST | PHST |
| | 4 | GAZP | MTLR | GMKN | 4 | AGRO | VSMO | VSMO |
| | 5 | NVTK | TRNFP | GAZP | 5 | NKNC | NKNC | NKNC |
| 01/2016 | 1 | GAZP | SBER | SBER | 1 | MVID | POLY | POLY |
| | 2 | SBER | MOEX | MOEX | 2 | GCHE | RUAL | GCHE |
| | 3 | NVTK | AFLT | AFLT | 3 | LNTA | PHST | PHST |
| | 4 | ROSN | TRNFP | GMKN | 4 | VSMO | VSMO | VSMO |
| | 5 | URKA | GMKN | GAZP | 5 | NKNC | NKNC | NKNC |
| 02/2016 | 1 | SBER | SBER | SBER | 1 | PHST | GCHE | PIKK |
| | 2 | GAZP | MOEX | MOEX | 2 | GCHE | RUAL | GCHE |
| | 3 | MOEX | AFLT | AFLT | 3 | VSMO | PHST | PHST |
| | 4 | URKA | MTLR | GAZP | 4 | PIKK | NKNC | VSMO |
| | 5 | EONR | MGNT | MTLR | 5 | NKNC | VSMO | NKNC |
| 03/2016 | 1 | GAZP | AFLT | SBER | 1 | VSMO | RUAL | RUAL |
| | 2 | MGNT | MOEX | AFLT | 2 | PIKK | PIKK | PHST |
| | 3 | SBER | SBER | MOEX | 3 | AKRN | PHST | PIKK |
| | 4 | URKA | MTLR | MTLR | 4 | RUAL | NKNC | VSMO |
| | 5 | LKOH | MAGN | GMKN | 5 | NKNC | VSMO | NKNC |

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 10.2015 - 03.2016:

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):

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

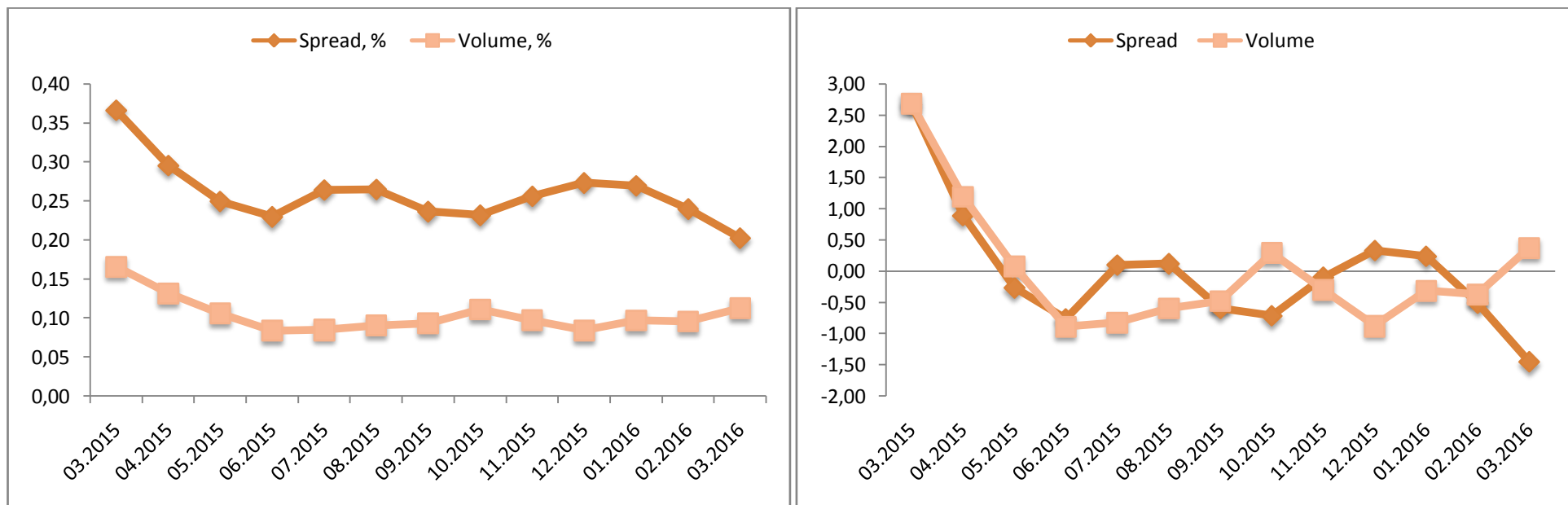
Among the least liquid stocks within a half-year period of 10.2015 - 03.2016:

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):

GCHE, NKNC, PGIL, PIKK, RUAL, VSMO.

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):

PHST, RUAL, VSMO (trading activity), PHST, VSMO (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*. In March 2016 the MICEX Index segment is featured by brisk trading - the average percentage daily trading volume raises to 0.113% while the average percentage daily spread declines to 0.203%.

The right figure displays dynamics of the two liquidity dimensions *in standardized numerical values*. In March 2016 the MICEX Index segment is featured by the largest improvement in liquidity compared to the preceding 10-month period both in the trading activity dimension and the trading costs dimension.