## MONTHLY NOVEMBER MARKET REPORT

## SECURITIES MARKET (STOCKS, RDRS, AND INVESTMENT FUND UNITS)

### VALUE TRADED IN STOCKS, RDRS AND INV. FUNDS UNITS



MOSCOW

EXCHANGE

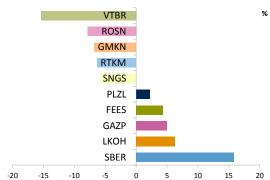
The trading volume of stocks totalled RUB 977 bln in November. The average daily trading volume was RUB 47 bln, up 50% MoM. The T+ sector made up 98.8% of the total secondary market trading volume and the TO sector accounted for 1.2%.»

2017

### MICEX INDEX AND RTS INDEX PERFORMANCE

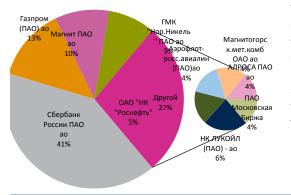
	2232.7	2 2217.3	9 2035.	77 1995.	9 2016.	71	1900.38	10	79.5	1919.	53 202	2.14 2077.1	.9 2100.	62
2104.91							1900.30	10	9.5				20	064.31
1,029	1,152	1,164	1,099	1,114	1,114		1,053	1,00	01	1,007	1,09	5 1,137	1,113	1,132
9	9	~	7	2	7	7		~	~		~	7	7	7
Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17		Jun-17	11-17		Aug-17	Sep-17	Oct-17	Nov-17
			M	DEX Russia I	ndex					R	۲S Index			

The MOEX Russia Index was up 1.8% MoM to 2,100.62 at the end of November from 2,064.31 at the end of October. The dollar-denominated RTS Index increased by 1.6% to 1,131.56 from 1,113.41. The cash equity market's capitalisation decreased by 0.1% to USD 619.97 bln from USD 620.7 bln.



### MONTHLY CHANGES IN BLUE CHIPS' CLOSING PRICES

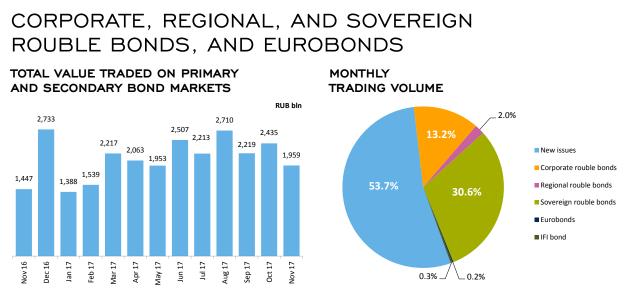




The following blue chips were down in November: VTB Bank ords, by 15.4% (to RUB 0.051 per share). Rosneft ords, by 7.9% (to RUB 293.6 per share), Norilsk Nickel ords, by 6.8% (to RUB 9,876 per share), Rostelecom ords, by 6.3% (to RUB 64 per share), Surgutneftegas ords, by 5.7% (to RUB 27.5 per share), The following blue chip shares were up in November: Polyus Gold ords, by 2.2% (to RUB 4,912 per share) FGC UES ords, by 4.3% (RUB 0.165 per share), Gazprom ords, by 5% (to RUB 132.15 per share), Lukoil ords, by 6.3% (to RUB 3,292.5 per share), Sberbank of Russia, by 15.8% (to RUB 224.35 per share).

This month's most traded stocks were Sberbank ords (SBER) with a turnover of RUB 276.6 bln (28% of the total), followed by Gazprom (GAZP) with RUB 92.2 bln (10%), Magnit (MGNT) with RUB 72.5 bln (8%), Norilsk Nickel (GMKN) with RUB 58.2 bln (6%), and Lukoil (LKOH) with RUB 43 bln (4%). Other securities' turnover totalled RUB 434.5 bln (45% of the total trading volume).

The information provided herein is intended for informational purposes only. This annotation does not provide any recommendations and guidance to take actions on financial markets. For further information, please contact salesteam@moex.com — moex.com.



The bond market's trading volume totalled RUB 1,959 bln in November. The average daily trading volume was RUB 93 bln, down 16% MoM. Secondary market turnover in corporate ruble bonds was RUB 258.5 bln (13.2% of the total trading volume). Regional ruble bonds' turnover was RUB 38.6 bln (2%), Sovereign ruble bonds saw RUB 598.8 bln (30.6%), while Eurobonds had RUB 4.6 bln (0.2%) and IFI bond had RUB 6.1 bln (0.3%). The total volume of new issues placed was RUB 1,051.9 bln (53.7%).

#### MONTHLY CHANGES IN BOND INDICES



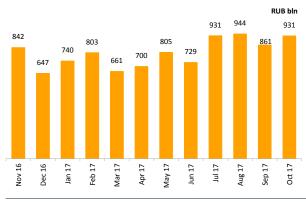
The Russian Government Bond Index (RGBITR) grew 0.8% in November to 460.31 (from 456.85 at the end of October). The MICEX Municipal Bond Index (MICEXMBITR) was up 0.44% to 349.9 (from 348.35). The MICEX Corporate Bond Index (MICEXCBITR) was up 0.4% to 241.42 (from 240.57).

## DERIVATIVES MARKET

### DERIVATIVES MARKET TRADING VOLUME



#### DERIVATIVES MARKET OPEN INTEREST



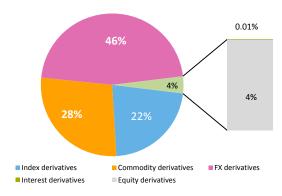


#### Contracts, mln 15 15 15 14 13 13 13 12 Jun 17 Aug 17 Dec 16 Sep 17 16 17 Feb 17 17 5 Oct 17 May 17 Jul 17 N٥ Jan Mar Apr

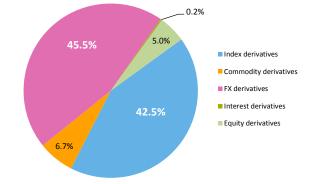
2

The information provided herein is intended for informational purposes only. This annotation does not provide any recommendations and guidance to take actions on financial markets. For further information, please contact salesteam@moex.com — moex.com.

### TRADING VOLUME BY UNDERLYING ASSET



### OPEN INTEREST THE END OF THE MONTH



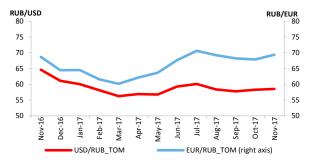
The total value traded on the Moscow Exchange's Derivatives Market in November was RUB 7.5 trln, or 138 mln contracts. The average daily value was RUB 356 bln, up 20% MoM. The total open interest at the end of the month was RUB 931 bln, or 15 mln contracts. Index derivatives made up 26% of the total trading volume (RUB 1.9 trln), securities derivatives constituted 5.7% (RUB 423 bln), FX derivatives made up 44.8% (RUB 3.3 trln), interest derivatives came to 0.01% (RUB 0.8 bln), and commodity derivatives were 23.5% (RUB 1.8 trln).

Open interest was RUB 931 bln at the end of November, of which:

RUB 423.6 bln (45.5%) were for FX contracts; RUB 395.7 bln (42.5%) were for index contracts; RUB 62 bln (6.7%) were for commodities contracts; RUB 2.2 bln (0.2%) were for interest contracts; and RUB 43.9 bln (5.0%) were for equity contracts.»

## FX AND MONEY MARKET

### EXCHANGE RATES

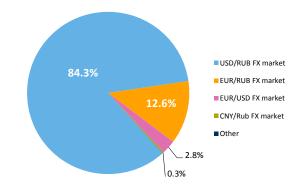


The USD and EUR appreciated against the RUB in November. The USD with next day settlement added by RUB 0.24 (0.4%) to RUB 58.53. The EUR with next day settlement added by RUB 1.53 (2.3%) to RUB 69.39 at the end of November.





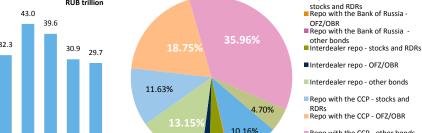
#### TRADING VOLUME



The FX market's trading volume totalled RUB 27.3 trln in October. The average daily trading volume was RUB 1.3 trln, up 4% MoM. Spot trading reached RUB 6.6 trln, or 24% of the total trading volume. Swap operations accounted for 76% of the total trading volume (RUB 20.7 trln). USD/RUB transactions made up 84.3% of the total trading volume, with a total value of RUB 23 trln; EUR/RUB came to RUB 3.4 trln (12.6%); EUR/USD totalled RUB 0.8 trln (2.8%), and CNY/RUB were RUB 70.4 bln (0.3%). Other instruments were traded for RUB 8.8 bln.



#### TRADING VOLUME BREAKDOWN



0.09%

Repo with the CCP - other bonds

Repo with the CCP - General collateral certificate Deposit and credit operations

Repo with the Bank of Russia -

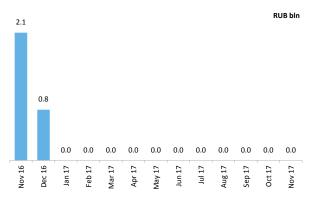
The Money Market's trading volume was RUB 29.7 trln in November. The average daily trading volume increased 0.5% MoM to RUB 1.4 trln.Direct repo with the CBR came to RUB 48.4 bln (0.2%) for OFZs and OBRs, and RUB 25.5 bln (0.1%) for other bonds. Interdealer repo transactions totalled RUB 1,1 trln (3.8% of the total trading volume) for stocks and RDRs, RUB 475.6 bln (1.6%) for OFZs and OBRs, and RUB 3.9 trln (13.1%) for other bonds. Repo transactions with the CCP came to RUB 3.5 trln (11.6% of the total) for stocks and RDRs, RUB 5.6 trln (18.7%) for OFZs and OBRs, RUB 10.7 trln (36%) for other bonds, and RUB 1.4 trln (4.7%) for general collateral certificates (GCC). Deposit and credit transactions totalled RUB 4.4 trln (10.2%).

1.60%

3.80% -

## COMMODITIES MARKET

### **GRAIN INTERVENTIONS TRADING VOLUME**



PRECIOUS METALS TRADING VOLUME

0.16%



#### **GRAIN MARKET VOLUMES**



### SUGAR MARKET VOLUMES



The Commodities Market's trading volume was RUB 10.6 bln in November. Value of precious metals trades was RUB 9.6 bln (91% of the total trading volume); sugar trading totalled RUB 102.5 bln (1%) and grain turnover reached RUB 870.3 mln (9%). No grain interventions were held.

5

## MOSCOW EXCHANGE GROUP MONTHLY MARKET REPORT: NOVEMBER 2017

	Nover	nber	Octob	Change in	
Market				Change in trading	
market	Trading volume, bln RUB	Number of trades	Trading volume, bln RUB	Number of trades	volume, %
Secondary securities market (stocks, RDRs and fu		liddes	ынков	liddes	
T+2	965.7	10,027.5	656.6	8,295.0	47.1
TO	11.4	0.9	1.8	0,295.0	530.7
Primary market	0.1	0.1	14.7	0.0	-99.5
Total	977.2	10,028.4	673.2	8,296.5	45.2
Bond market	717.2	10,020.4	075.2	0,270.5	75.2
Corporate bonds	258.5	61.9	304.9	76.8	-15.2
Regional bonds	38.6	9.0	33.9	9.6	14.0
Government bonds	598.8	96.4	696.1	82.9	-14.0
Eurobonds	4.6	3.0	10.4	3.3	-55.5
IFI bond	6.1	0.0	5.8	0.1	-33.3
Bond placements	1,051.9	8.3	1,383.6	12.3	-24.0
Total	1,051.9	178.6	<b>2,434.6</b>	185.0	-24.0 - <b>19.6</b>
Derivatives market	1,750.0	170.0	2,737.0	185.0	-19.0
Index derivatives	1,944.7	4,771.4	1,438.4	3,717.5	35.2
Cash Equity derivatives	423.0	4,771.4	251.6	3,717.5	68.2
FX derivatives	3,349.1	4,373.7	3,021.5	9,033.7 9,017.2	10.8
Interest rate derivatives	3,349.1	0.5	3,021.5	9,017.2	-18.3
Commodity derivatives	1,760.1	2,842.7	1,793.9	0.5 3,042.4	-18.3 -1.9
Total	7,477.6		6.506.4	18,813.3	-1.9 14.9
FX market	/,4//.0	22,305.0	0,300.4	10,013.3	14.9
	5.656.2	902.0	5,342.3	853.3	5.9
USD/RUB (spot) EUR/RUB (spot)	5,656.2 816.3	902.0	693.3	853.5 159.1	5.9 17.7
	91.5	13.5	118.1	12.8	-22.5
EUR/USD (spot)	91.5 10.4	3.1		3.0	
CNY/RUB (spot)	6.2	2.0	8.9 2.6	2.0	17.8 144.1
Other (spot)	17,331.6	159.4	17,153.5	2.0 161.4	144.1
USD/RUB (swap)	2,624.9	29.6	3,095.7	33.5	-15.2
EUR/RUB (swap)	667.5	29.0	869.4	33.5	-13.2
EUR/USD (swap)				1.2	
CNY/RUB (swap)	60.0 2.5	1.6 0.9	42.4		41.6
Other (swap)			2.8	1.1	-9.2
Swaps trades	20,686.4	194.3 1.103.7	21,163.7	200.2	-2.3
Spot trades Total	6,580.7		6,165.1	1,030.2	6.7
	27,267.1	1,298.0	27,328.8	1,230.5	-0.2
Money market	0.0	0.0	0.0	0.0	
Repo with the Bank of Russia - stocks and RDRs	0.0	0.0	0.0	0.0	-
Repo with the Bank of Russia - OFZ/OBR	48.4	0.8	109.8	1.2	-55.9
Repo with the Bank of Russia - other bonds	25.5	0.3	155.2	1.5	-83.6
Interdealer repo - stocks and RDRs	1,126.4	39.3	1,333.5	42.6	-15.5
Interdealer repo - OFZ/OBR	475.6	0.7	231.7	0.7	105.3
Interdealer repo - other bonds	3,902.8	13.2	4,544.8	16.0	-14.1
Repo with the CCP - stocks and RDRs	3,450.3	66.3	3,567.0	72.7	-3.3
Repo with the CCP - OFZ/OBR	5,563.8	16.8	6,254.3	17.7	-11.0
Repo with the CCP - other bonds	10,673.5	29.9	9,545.9	25.6	11.8
Repo with the CCP - General collateral certificate	1,396.3	8.2	1,013.0	5.4	37.8
Deposit and credit operations	3,016.5	4.9	4,155.5	5.4	-27.4
Total	29,679.1	180.6	30,910.6	188.8	-4.0
Commodities market	0.0	0.00		0.00	
Interventions	0.0	0.00	0.0	0.00	-
Grain market	0.9	0.07	0.8	0.06	12.2
Sugar market	0.1	0.08	0.1	0.17	-2.1
Precious metals market	9.6	0.00	8.4	0.00	15.2
Srandartised OTC derivatives market	8.6	0.0	6.2	0.0	39.4
Total	67,378.7	33,990.7	67,869.0	28,714.3	-0.7

The information provided herein is intended for informational purposes only. This annotation does not provide any recommendations and guidance to take actions on financial markets. For further information, please contact salesteam@moex.com — moex.com.

# Appendix 2

### MOSCOW EXCHANGE GROUP MONTHLY MARKET REPORT: NOVEMBER 2017

	Value in points November October			YTD change, %	
Index			Change, %		
Equity Indices					
Main Equity indices:					
MOEX Russia Index (MICEXINDEXCF)	2,100.62	2,064.31	1.76	-0.20	
RTS Index (RTSI)	1,131.56	1,113.41	1.63	9.96	
Blue Chip Index (RTSSTD)	13,621.36	13,300.91	2.41	-1.24	
Second-Tier Index (MICEXSC)	6,942.50	7,111.71	-2.38	20.05	
Broad Market Index (MICEXBMI)	1,501.98	1,476.73	1.71	0.30	
Sectoral Indices:					
Oil & Gas (MICEXO&G)	5,071.72	5,054.89	0.33	-3.33	
Electric Utilities (MICEXPWR)	1,906.87	1,929.55	-1.18	-1.69	
Consumer goods & Retail (MICEXCGS)	6,637.51	6,846.51	-3.05	-2.21	
Telecommunication (MICEXTLC)	1,781.49	1,795.74	-0.79	9.68	
Industrials (MICEXMNF)	1,781.37	1,808.08	-1.48	9.44	
Financials (MICEXFNL)	7,306.05	7,442.19	-1.83	-6.18	
Chemicals (MICEXCHM)	14,952.41	14,548.11	2.78	2.53	
Metals & Mining (MICEXM&M)	5,697.53	5,703.17	-0.10	3.33	
Transport (MICEXTRN)	2,004.64	2,271.56	-11.75	15.63	
Thematic indices:					
MICEX10 Index (MICEX10INDEX)	4,185.24	4,320.48	-3.13	-10.24	
MICEX Innovation Index (MICEXINNOV)	409.09	401.73	1.83	2.19	
RTS Siberia Index (RTSSIB)	882.13	901.25	-2.12	3.23	
Bond Indices					
Russian Government Bond Index (RGBITR)	460.31	456.85	0.76	14.43	
Micex Corporate Bond Index (MICEXCBITR)	349.90	348.35	0.44	11.81	
Micex Municipal Bond Index (MICEXMBITR)	241.42	240.57	0.35	9.88	
Pension Indices:					
Conservative (RUPCI)	2,265.00	2,255.14	0.44	11.25	
Moderate (RUPMI)	1,983.94	1,978.41	0.28	8.38	
Aggressive (RUPAI)	1,712.96	1,711.81	0.07	4.72	
	Value i 30 November	in points	Change, %	YTD change, %	
Fundamenta anton	2017	31 October 2017			
Exchange rates USD/RUB	58.53	58.29	0.4	-4.3	
EUR/RUB	69.39	67.85	2.3	-4.3	
	07.07	07.00	2.0	7.0	

The information provided herein is intended for informational purposes only. This annotation does not provide any recommendations and guidance to take actions on financial markets. For further information, please contact salesteam@moex.com — moex.com.

8.84

8.78

0.7

-0.3

CHY/RUB