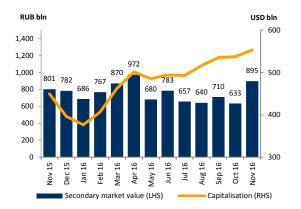


MONTHLY MARKET REPORT

SECURITIES MARKET (STOCKS, RDRs, AND INVESTMENT FUND UNITS)

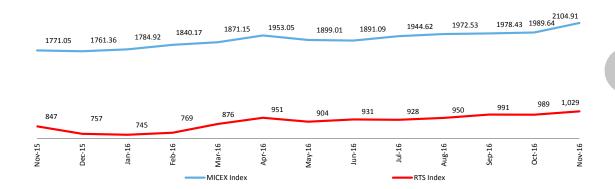
VALUE TRADED IN STOCKS,

RDRs AND INV. FUNDS UNITS

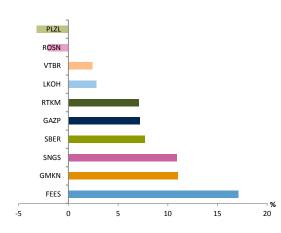


The trading volume of stocks totalled RUB 895 bln in November. The average daily trading volume was RUB 42.6 bln, up 42% MoM. The T+2 sector made up 97% of the total secondary market trading volume and the T0 sector accounted for 3%.

MICEX INDEX AND RTS INDEX PERFORMANCE



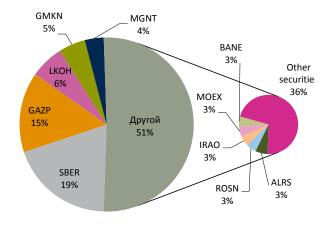
The MICEX Index was up 5.8% MoM to 2,104.91 at the end of November from 1,989.64 at the end of October. The dollar-denominated RTS Index was up 4% to 1,029.05 from 988.74. The cash equity market's capitalisation appreciated by 3% to USD 552.7 bln from USD 536.9 ln.



MONTHLY CHANGES IN BLUE CHIPS' CLOSING PRICES

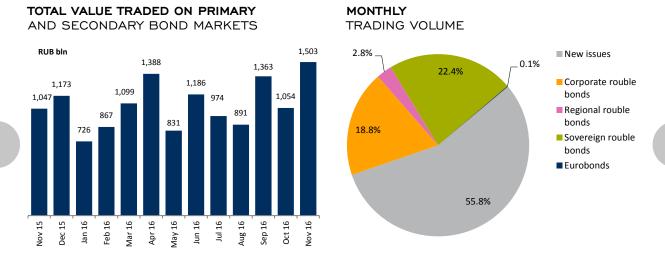
> The following blue chips were down in November: Polyus Gold ords, by 3.2% (to RUB 4,260 per share), Rosneft ords, by 2.1% (to RUB 340.2 per share). The following blue chip shares were up in November: VTB Bank ords, by 2.4% (to RUB 0.0694 per share), Lukoil ords, by 2.8% (to RUB 3,188 per share), Rostelecom ords, by 7.1% (to RUB 84.6 per share), Gazprom ords, by 7.2% (to RUB 148.8 per share), Sberbank ords, by 7.7% (to RUB 158.7 per share), Surgutneftegas ords, by 10.9% (to RUB 29.97 per share), Norilsk Nickel ords, by 11% (to RUB 10,371 per share), and Federal Grid Company ords, by 17.1% (to RUB 0.2 per share).

MONTHLY BEST SELLERS

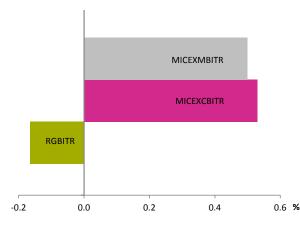


This month's most traded stocks were Sberbank ords (SBER) with a turnover of RUB 173.3 bln (19% of the total), followed by Gazprom (GAZP) with RUB 133.3 bln (15%), Lukoil (LKOH) with RUB 55.9 bln (6%), Norilsk Nickel (GMKN) with RUB 44.5 bln (5%) and Magnit (MGNT) with RUB 31.3 bln (4%). Other securities' turnover totalled RUB 457.3 bln (51% of the total trading volume).

CORPORATE, REGIONAL, AND SOVEREIGN ROUBLE BONDS, AND EUROBONDS



The bond market's trading volume totalled RUB 1,503 bln in November. The average daily trading volume was RUB 71.6 bln, up 43% MoM. Secondary market turnover in corporate ruble bonds was RUB 282.8 bln (55.8% of the total trading volume). Regional ruble bonds' turnover was RUB 41.7 bln (2.8%), Sovereign ruble bonds saw RUB 336.8 bln (22.4%), while Eurobonds had RUB 1.9 bln (0.1%) and bonds of MFI had RUB 1.9 bln (0.1%). The total volume of new issues placed was RUB 838.2 bln (55.8%). The growth was due to overnight bonds having been offered to the market.



MONTHLY CHANGES IN BOND INDICES

The Russian Government Bond Index (RGBITR) decreased by 0.2% in November to 402.28 (from 402.94 at the end of October). The MICEX Municipal Bond Index (MICEXMBITR) was up 0.5% to 219.71 (from 218.62). The MICEX Corporate Bond Index (MICEXCBITR) was up 0.5% to 312.93 (from 311.28).

DERIVATIVES MARKET

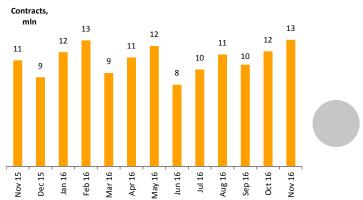
DERIVATIVES MARKET TRADING VOLUME



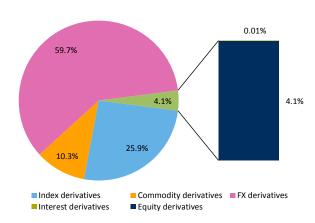
Contracts, mln 208 189 182 173 174 180 160 163 167 160 140 120 Nov 15 Dec 15 Mar 16 Jan 16 Feb 16 Apr 16 May 16 Jun 16 Jul 16 Aug 16 Sep 16 Oct 16 16 Nov Nov

DERIVATIVES MARKET OPEN INTEREST





TRADING VOLUME BY UNDERLYING ASSET



The total value traded on the Moscow Exchange's derivatives market in November was RUB 9.9 trln, or 181 mln contracts. The average daily value was RUB 470.9 bln, up 38% MoM. The total open interest at the end of the month was RUB 842 bln, or 13 mln contracts. Index derivatives made up 24% of the total trading volume (RUB 2.4 trln), securities derivatives constituted 2.9% (RUB 285 bln), FX derivatives made up 52.1% (RUB 5.2 trln), interest derivatives came to 0.03% (RUB 2.8 bln), and commodity derivatives were 21% (RUB 2 trln).

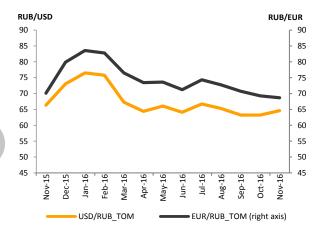
Jul 1 Aug 16 Sep 16 Sep 16 Nov 15 Dec 15 Jun 16 Ang 16 Sep 16 Sep 16 Nov 16

At the end of the month, open interest totalled RUB 842 bln, of which: RUB 402 bln (47.8%) were FX instruments, RUB 352 bln (41.8%) — index instruments, RUB 49.5 bln (5.9%) — commodities, RUB 1.2 bln (0.1%) — nterest rates, and RUB 36.6 bln (4.4%) — equities and bonds.

FX AND MONEY MARKET

4.4%

EXCHANGE RATES

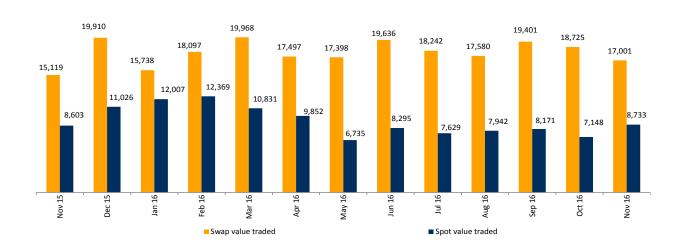


The USD appreciated, while the EUR weakened against the RUB in November. The USD with next day settlement added RUB 1.35 (2.1%) to RUB 64.6. The EUR with next day settlement lowered RUB 0.62 (0.9%) to RUB 68.64 at the end of November.

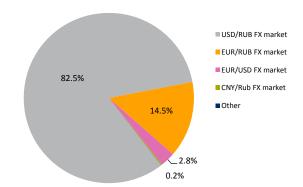
FX MARKET

RUB billion

TRADING VOLUME



TRADING VOLUME



MONEY MARKET TRADING VOLUME

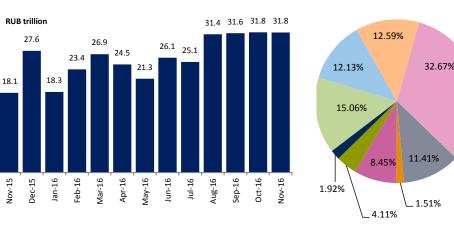
The FX market's trading volume totalled RUB 25.7 trln in November. The average daily trading volume was RUB 1.22 trln, down 0.5% MoM. Spot trading reached RUB 8.7 trln, or 33.9% of the total trading volume. Swap operations accounted for 66.1% of the total trading volume (RUB 17 trln).

USD/RUB transactions made up 82.5% of the total trading volume, with a total value of RUB 21.2 trln; EUR/RUB came to RUB 3.7 trln (14.5%); EUR/USD totalled

RUB 0.7 trln (2.8%), and CNY/RUB were RUB 51 bln (0.2%). Other instruments were traded for RUB 4.6 bln.

0.15%

TRADING VOLUME BREAKDOWN

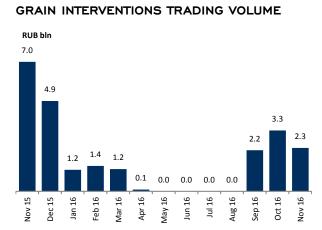


Repo with the Bank of Russia stocks and RDRs Repo with the Bank of Russia -OFZ/OBR

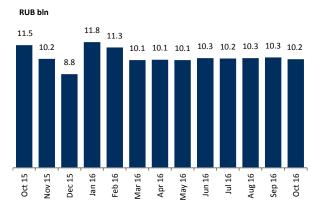
- Repo with the Bank of Russia other bonds
- Interdealer repo stocks and RDRs
- Interdealer repo OFZ/OBR
- Interdealer repo other bonds
- Repo with the CCP stocks and RDRs
- Repo with the CCP OFZ/OBR
- Repo with the CCP other bonds
- Repo with the CCP General collateral certificate
- Deposit and credit operations

The Money Market's trading volume was RUB 31.8 trln in November. The average daily trading volume was down 0.1% MoM to RUB 1,514 bln. Direct repo with the CBR came to RUB 480.7 bln (1.5%) for OFZs and OBRs, and RUB 2.7 trln (8.56%) for other bonds. Interdealer repo transactions totalled RUB 1.3 trln (4.1% of the total trading volume) for stocks and RDRs, RUB 611.6 bln (1.9%) for OFZs and OBRs, and RUB 4.8 trln (15.1%) for other bonds. Repo transactions with the CCP came to RUB 3.9 trln (12.1% of the total) for stocks and RDRs, RUB 4 trln (12.6%) for OFZs and OBRs, RUB 10.4 trln (32.7%) for other bonds, and RUB 47.4 bln (0.1%) for general collateral certificates (GCC). Deposit and credit transactions totalled RUB 3.7 trln (11.4%).

COMMODITIES MARKET



PRECIOUS METALS TRADING VOLUME



The Commodities Market's trading volume was RUB 12.5 bln in November. Grain interventions totalled RUB 2.3 bln (19% of the total), while precious metals saw turnover of RUB 10.1 bln (81%).

Appendix 1

MOSCOW EXCHANGE GROUP MONTHLY MARKET REPORT: NOVEMBER 2016

	Nov	ember	Oct	tober	Change ir
Market	Trading volume, bln RUB	Number of trades	Trading volume, bln RUB	Number of trades	trading volume, %
Secondary securities market (stocks, RDRs and					
T+2	833.4	11,120.4	550.2	7,842.1	51.5
TO	29.7	3.1	70.6	1.7	-57.9
Primary market	32.4	2.2	11.7	1.1	176.4
Total Based en andert	895.5	11,125.7	632.6	7,844.9	41.6
Bond market	202.0	16.2	F 4 6 7	(0)(40.5
Corporate bonds	282.8 41.7	46.2	546.7	60.6	-48.3 83.6
Regional bonds Government bonds	336.8	9.5 48.0	22.7 282.6	7.0 48.3	19.2
Eurobonds	1.9	3.5	4.5	48.3	-58.6
IFI bond	1.9	0.1	10.8	0.1	-38.0
Bond placements	838.2	2.6	186.7	0.1	-82
Total	1,503.2	109.9	1,053.9	119.8	42.0
Derivatives market	1,000.2	107.7	1,000.7	117.0	12.0
Index derivatives	2,374.0	6,039.4	1.826.5	4,743.2	30.0
Cash Equity derivatives	285.3	3,225.6	215.9	2,579.7	32.2
FX derivatives	5,153.3	13,891.0	3,627.2	9,612.5	42.2
Interest rate derivatives	2.8	1.2	2.3	1.2	25.4
Commodity derivatives	2,074.1	4,320.3	1,497.2	3,235.3	38.
Fotal	9,889.6	27,477.5	7,169.0	20,171.9	37.9
FX market					
USD/RUB (spot)	7,674.8	1,413.0	6,203.2	1,020.7	23.7
EUR/RUB (spot)	890.5	216.1	825.4	195.1	7.9
EUR/USD (spot)	151.2	7.3	102.8	6.0	47.2
CNY/RUB (spot)	13.5	4.3	11.2	5.7	21.0
Other (spot)	3.2	1.7	5.1	2.1	-36.0
USD/RUB (swap)	13,560.5	129.6	14,716.9	146.5	-7.9
EUR/RUB (swap)	2,836.2	32.5	3,149.0	34.6	-9.9
EUR/USD (swap)	564.7	1.6	798.7	2.1	-29.3
CNY/RUB (swap)	37.9	1.6	57.9	1.3	-34.5
Other (swap)	1.3	1.0	2.9	1.3	-53.1
Swaps trades	17,000.6	166.3	18,725.4	185.8	-9.2
Spot trades	8,733.3	1,642.5	7,147.6	1,229.6	22.2
lotal .	25,733.9	1,808.8	25,873.0	1,415.5	-0.5
Money market					
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	480.7	1.3	479.2	1.9	0.3
Repo with the Bank of Russia - other bonds	2,686.3	5.1 41.3	2,744.2 1,460.7	5.9 42.6	-2.1
Interdealer repo - stocks and RDRs Interdealer repo - OFZ/OBR	1,304.9 611.6	41.3	526.3	42.6	-10.7 16.2
Interdealer repo - other bonds	4,787.5	1.2	526.3 4,719.7	1.2	10 1.4
Repo with the CCP - stocks and RDRs	4,787.5	47.7	3,934.3	46.3	-2.0
Repo with the CCP - Stocks and KDRs Repo with the CCP - OFZ/OBR	4,002.1	47.7	3,934.3 4,182.2	46.3	-2.0 -4.3
Repo with the CCP - other bonds	10,383.7	18.8	10,499.5	19.2	-1.1
Repo with the CCP - General collateral certificate		0.6	29.4	0.5	61.3
Deposit and credit operations	3,625.6	4.5	3,239.9	4.1	11.9
Fotal	31,786.2	ч.5 147.8	31,815.3	148.7	-0.1
Commodities market	,,		,	,	J.
Interventions	2.3	0.35	3.3	0.35	-28.7
Spot trades	0.0	0.00	0.0	0.00	
Precious metals market	10.1	0.00	10.2	0.00	-0.
Srandartised OTC derivatives market	0.0	0.0	0.0	0.0	-
Total	69,820.8	40,670.1	66,557.1	29,701.1	4.9

Appendix 2

7

MOSCOW EXCHANGE GROUP MONTHLY MARKET REPORT: NOVEMBER 2016

	Value in points			
Index	November	October	Change, %	YTD change, %
Equity Indices				
Main Equity indices:				
MICEX Index (MICEXINDEXCF)	2,104.91	1,989.64	5.79	19.37
RTS Index (RTSI)	1,029.05	988.74	4.08	33.71
Blue Chip Index (RTSSTD)	13,791.86	13,012.00	5.99	18.30
Second-Tier Index (MICEXSC)	5,783.19	5,318.84	8.73	65.06
Broad Market Index (MICEXBMI)	1,497.49	1,414.33	5.88	20.26
Sectoral Indices:		,		
Oil & Gas (MICEXO&G)	5,246.28	4,905.32	6.95	13.48
Electric Utilities (MICEXPWR)	1,939.56	1,697.93	14.23	107.44
Consumer goods & Retail (MICEXCGS)	6,787.62	6,704.39	1.24	0.87
Telecommunication (MICEXTLC)	1,624.22	1,588.13	2.27	-4.16
Industrials (MICEXMNF)	1,627.68	1,613.97	0.85	10.90
Financials (MICEXFNL)	7,787.28	7,420.45	4.94	22.29
Chemicals (MICEXCHM)	14,583.16	13,898.80	4.92	6.51
Metals & Mining (MICEXM&M)	5,513.80	5,169.83	6.65	46.53
Transport (MICEXTRN)	1,733.74	1,689.28	2.63	100.73
Thematic indices:				
MICEX10 Index (MICEX10INDEX)	4,662.46	4,465.60	4.41	18.22
MICEX Innovation Index (MICEXINNOV)	400.32	386.14	3.67	30.40
RTS Siberia Index (RTSSIB)	854.57	817.59	4.52	67.55
Bond Indices				
Russian Government Bond Index (RGBITR)	402.28	402.94	-0.16	12.00
Micex Corporate Bond Index (MICEXCBITR)	312.93	311.28	0.53	10.41
Micex Municipal Bond Index (MICEXMBITR)	219.71	218.62	0.50	10.84
Pension Indices:				
Conservative (RUPCI)	2,035.88	2,024.77	0.55	9.77
Moderate (RUPMI)	1,830.54	1,802.24	1.57	11.69
Aggressive (RUPAI)	1,635.83	1,590.50	2.85	14.24
Derivatives Market Indicator:				
Russian Volatility Index (RTSVX)	25.38	22.89	10.88	-25.66
	Value in points			
	30 November	31 October	Change, %	YTD change, %
Exchange rates	2016	2016		
USD/RUB	64.60	63.25	2.1	-11.5

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.

9.41

9.32

1.0

-15.4

CHY/RUB