

September 2017

Investor presentation

History of MOEX

1992 Moscow Interbank Currency Exchange (MICEX) established 1997
National Settlement
Depository (NSD)
established

2006
National Clearing
Centre (NCC)
established

2012
Launch of Central
Securities Depository
(CSD)

2013 **The Central Bank of Russia**becomes mega-regulator of
financial markets

 $Currency \to Government \ securities \to REPO \to Corporate \ securities \to Derivatives$



 \rightarrow Commodities \rightarrow ...

1995
Russian Trading
System (RTS)
established

1997 MICEX Index launched 2011
Merger of MICEX and RTS
- Moscow Exchange
(MOEX) established

2013 **IPO** of Moscow Exchange (MOEX) 2013 & onwards
Persistent
development of
financial infrastructure



Operates in one of the worlds' largest economies and covers all major asset classes



Commitment to transparency and high standards of corporate governance



Uniquely diversified and vertically-integrated business model



Established track record of solid financial performance and attractive dividend policy



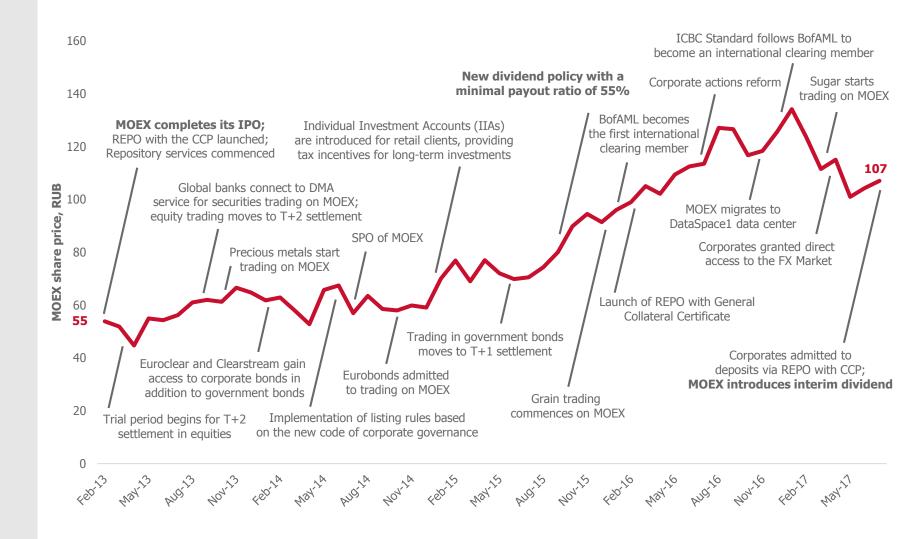
Resilient in alternating macro conditions, features lowcost product scalability



Successfully implemented infrastructure and regulatory reforms put MOEX on par with global peers



MOEX share price performance and financial market reforms

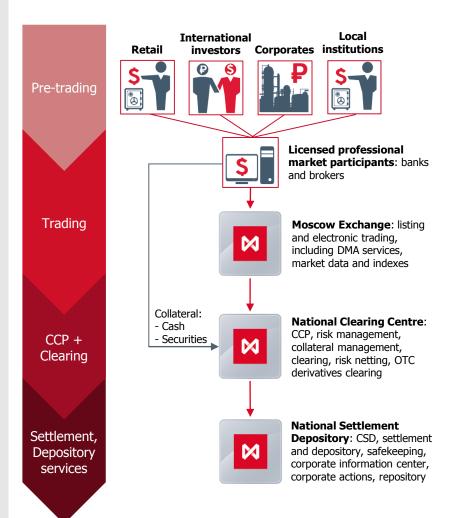




- Business overview
- Corporate governance and dividends
- Market position and competitive strategy
- Financial track record
- 2Q 2017 update



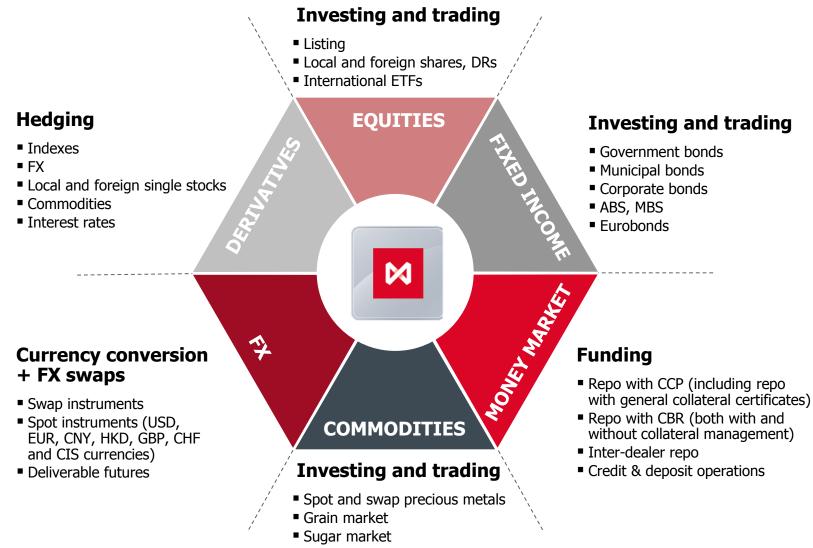
On-exchange market: capturing the entire value chain



- MOEX captures the entire value chain for end-customers, offering a one-stop shop for listing, risk management, market data, multi-asset trading, clearing, settlement and custody.
- ✓ MOEX is **strategically positioned** to benefit from the development of Russia's capital markets in the coming years.
- ✓ Fully **vertically integrated infrastructure** with regulation and oversight by the Bank of Russia (CBR).
- ✓ Single-tier clearing system requires all participants to provide **eligible collateral** to trade any asset class, while pre-trade risk checks forestall any "fat fingers"/"flash crash" problems.
- The market has always been open for competition (except the CSD), but entry barriers are very high due to MOEX's post-trade infrastructure and on-exchange market efficiency. OTC is the key source of competition.
- ✓ Investors trade through brokers and banks, which are **licensed** locally and have access to MOEX markets. Foreign investors have **DMA and ICM services** at their disposal.

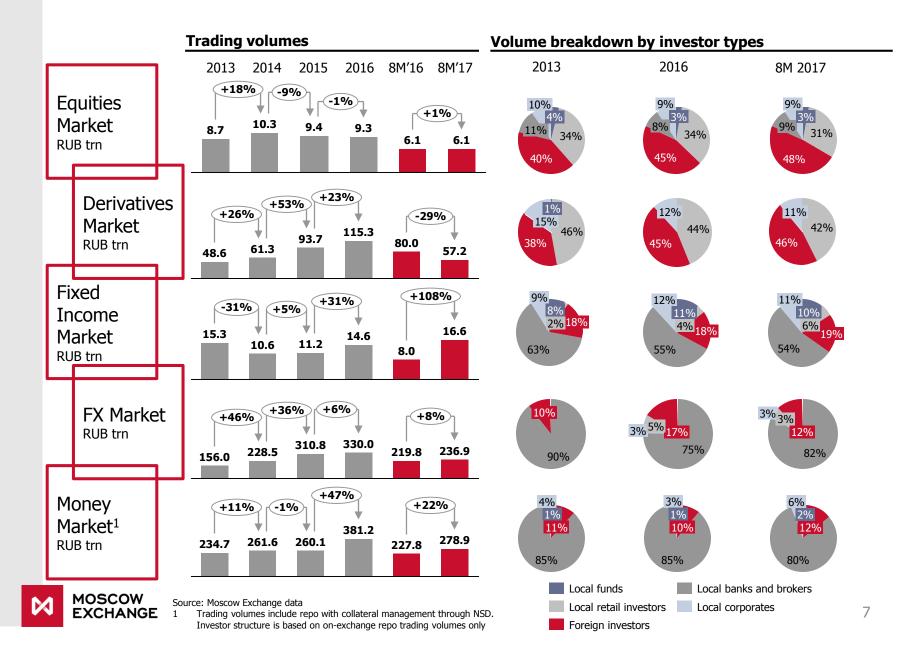


Highly diversified product offering



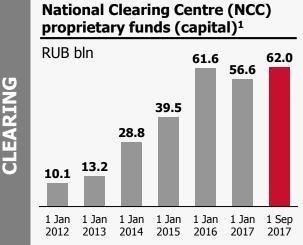


Diversified investor base across different markets



Robust post-trade infrastructure

Central Counterparty (CCP) and Central Securities Depository (CSD)



National Settlement Depository (NSD) proprietary capital²

9.4

7.3

2014

6.0

2012 2013

11.3

8.8

8.5

2017

ADTV (8M 2017) RUB bln FX 1,418 Repo with CCP 887 Derivatives 342 Fixed income 99 Equities 37 Commodities 0.5

CCP cleared value based on

Comments

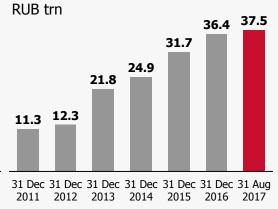
- Well-capitalized NCC acts as a CCP for all asset classes
- Solid risk management has ensured smooth operations amid high volatility
- The only qualified CCP in Russia. The status was granted by the CBR in 2013
- BBB local currency rating from Fitch one notch higher than Russia's sovereign rating



RUB bln

5.4

Assets on deposit³



Comments

- NSD is the Central Securities Depository in Russia
- Safekeeping and settlement services
- Collateral management services for repo transactions
- Repository for OTC trades
- Links to Euroclear and Clearstream for Russian bonds and equities
- **AA-** rating from Thomas Murray⁴



Source: Moscow Exchange

1 Jan 1 Jan 1 Jan 1 Jan 1 Jan 1 Sep

2015 2016

- Figures in accordance with Russian Accounting Standards as reported to and disclosed by the CBR on a monthly basis. Figures from the end of 2015 onwards include skin in the game and other deductions in accordance with the regulation of CCPs by the CBR
- Figures in accordance with Russian Accounting Standards as reported to and disclosed by the CBR on a monthly basis
- 3 Assets in deposit based on Company's operational data

2017

4 Thomas Murray is the leading global agency for depository services

- Business overview
- Corporate governance and dividends
- Market position and competitive strategy
- Financial track record
- 2Q 2017 update

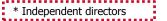


Best-in-class corporate governance standards

- ✓ Independent directors represent 50% of the 2017-2018 Supervisory Board vs. a minimum threshold of 20%¹. Five of the six Supervisory Board committees are chaired by independent directors
- ✓ MOEX was a pioneer to adopt the new criteria of Director Independence aligned with the new Corporate Governance Code
- ✓ Alexei Kudrin, a well-known and respected financial expert who was acknowledged as the best Minister of Finance in 2004 ("The Banker") and 2010 ("Euromoney"), serves as Board Chairman
- ✓ 11 out of 12 Board members are non-executive, with CEO Alexander Afanasiev the only executive Director

	Supervisory Board members	Strategy Planning	Audit	Nomination and Remuneration	Budget	Technical Policy ²	Risk Management
3	Alexey Kudrin - <i>Chairman</i> Chairman of the Board at the Centre for Strategic Research						
Q	Andrey Golikov - Deputy Chairman Deputy Chairman of the Supervisory Board at Moscow Exchange	✓			Chair	\checkmark	
	Alexander Afanasiev CEO, Chairman of the Executive Board at Moscow Exchange						
	Anatoly Braverman First Deputy CEO at Russian Direct Investment Fund	\checkmark			\checkmark		\checkmark
	Valery Goreglyad Chief Auditor at Bank of Russia				\checkmark		\checkmark
	Bella Zlatkis Deputy Chairman of the Executive Board at Sberbank of Russia						
9	Oleg Vyugin Professor at Higher School of Economics	✓		\checkmark			
	Maria Gordon Independent Director at Alrosa		\checkmark				
	Yuriy Denisov Chairman of the Supervisory Board at NCC Clearing Bank	\checkmark		\checkmark			Chair
	Anatoly Karachinsky President at IBS LLC					Chair	
	Duncan Paterson Chairman at G. H. Financials Limited	\checkmark	Chair				
	Rainer Riess Director General at Federation of European Securities Exchanges (FESE)	Chair	✓	Chair			





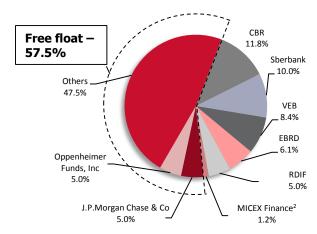
According to the Listing Rules of Moscow Exchange for stocks listed in the First level of the Quotation list

Technical Policy committee includes key industry IT professionals

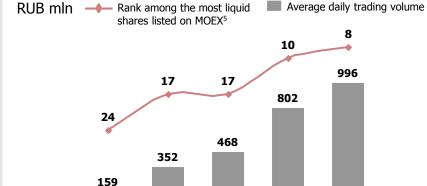
Dispersed ownership with one of the **highest free-floats** in Russia

Dispersed ownership with no controlling shareholder...

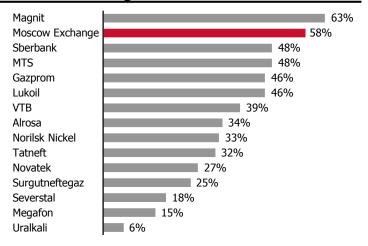
as of 7 July 20171



Growing liquidity of MOEX shares⁴



...and one of the highest free-floats in Russia³



Striving for transparency

- Voluntary disclosures and regular updates of investor materials, including monthly trading results
- Annual MOEX Forums in Moscow, New York, London and Shanghai have become well-know venues to maintain dialogue with international market participants
- Robust investor relations program:
 - √ 349 investor meetings in 2016
 - ✓ IR activities in Russia, the UK, Europe and the US to maintain dialogue with overseas investors
 - ✓ IR awards in Russia in 2014, 2015 and 2016



2013

2014

- MICEX Finance ownership as of 12 July 2017, J. P. Morgan's indirect stake based on data disclosed on 1 June 2017, OppenheimerFunds' stake based on data disclosed on 16 May 2017
- 2 100% owned subsidiary of the Moscow Exchange
- 3 Largest companies by market capitalization from MICEX Index

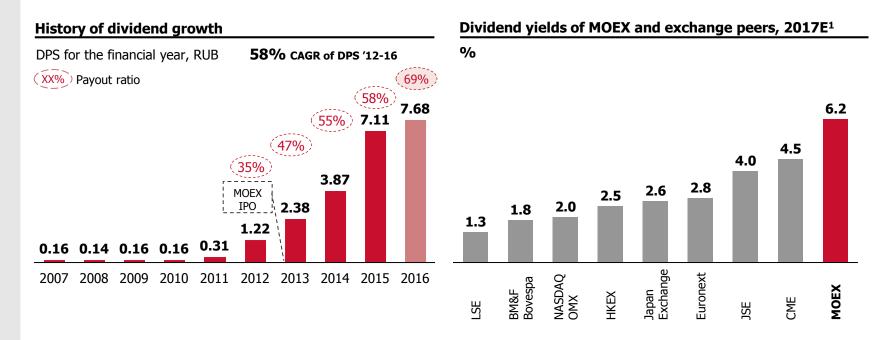
2016

1H 2017

- Trading volumes in the main trading mode (T0, T+2)
- 5 Ordinary and preferred shares

2015

2016 payout: 69.4% of net profit



Comments

- Dividend policy approved in September 2015 sets 55% of net profit as the minimum payout
- In April 2017 MOEX's AGM voted to pay out a dividend of RUB 7.68 per share, or 69.4% of 2016 net profit
- In 2017 Moscow Exchange switched to more frequent dividend payments paying out its first ever interim dividend

- Business overview
- Corporate governance and dividends
- Market position and competitive strategy
- Financial track record
- 2Q 2017 update



Leading positions in a global context

3rd largest exchange in fixed income1

Rank	Exchange	Country	Trading vol. (USD bln)	Incl. REPOs
1	LSE Group	UK	5 035	×
2	BME	Spain	2 294	\checkmark
3	Moscow Exchange	Russia	2 239	√
4	Korea Exchange	Korea	1 191	×
5	Johannesburg SE	South Africa	1 009	\checkmark
6	Nasdaq OMX	USA	828	\checkmark
7	Oslo Borse	Norway	544	\checkmark
8	Bolsa de Valores de Colombia	Colombia	170	×
9	Shanghai SE	China	167	×
10	Taipei Exchange	Taiwan	139	×

3rd largest exchange in derivatives²

	geet entenange m aenna		
Rank	Exchange	Country	Contracts traded (mln)
1	CME Group	USA	2 096
2	NSE India	India	1 134
3	Moscow Exchange	Russia	786
4	BM&FBOVESPA	Brazil	778
5	Deutsche Boerse	Germany	591
6	Nasdaq OMX	USA	550
7	Dalian Commodity Exchange	China	534
8	Korea Exchange	Korea	444
9	BSE India	India	281
10	International Securities Exchange	USA	270

Among top 25 exchanges by equity trading volumes globally³

Rank	Exchange	Country	Mkt Cap (USD bln)	Securities listed	Trading vol. (USD bln)
1	ICE&NYSE	USA	20 659	2 303	8 032
2	Nasdaq OMX	USA	10 218	3 832	6 051
3	Shenzhen SE	China	3 348	1 995	4 162
4	Shanghai SE	China	4 537	1 302	3 439
5	Japan Exchange	Japan	5 502	3 562	2 768
6	LSE Group	UK	4 005	2 485	1 178
7	Euronext	EU	4 034	1 278	953
8	Korea Exchange	Korea	1 549	2 081	856
9	HKEx	Hong Kong	3 674	2 034	814
10	Deutsche Boerse	Germany	1 994	451	698
24	Moscow Exchange	Russia	554	234	72

12th largest publically listed exchange by Mkt Cap4

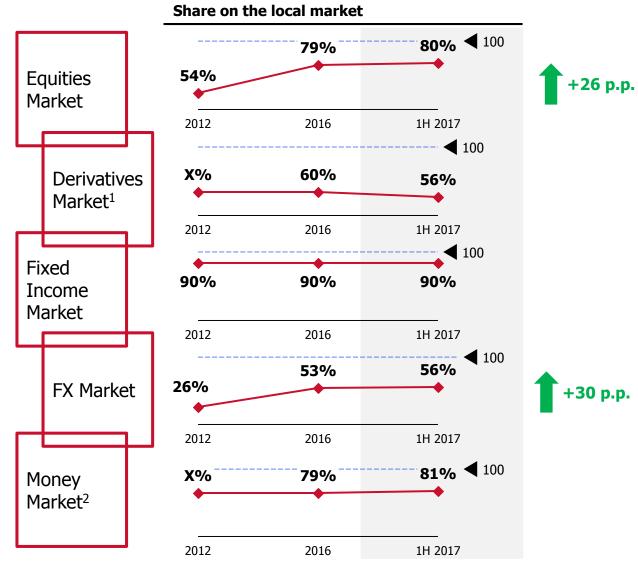
12" lč	LZ ⁴⁴ largest publically listed exchange by MKt Cap+					
Rank	Exchange	Country	Mkt Cap (USD bln)			
1	CME	USA	44.6			
2	ICE&NYSE	USA	38.5			
3	HKEx	Hong Kong	33.0			
4	Deutsche Boerse	Germany	21.5			
5	LSE Group	UK	18.0			
6	BM&FBovespa	Brazil	15.6			
7	Nasdaq OMX	USA	12.5			
8	CBOE	USA	11.8			
9	Japan Exchange	Japan	9.2			
10	ASX	Australia	8.1			
11	SGX	Singapore	5.9			
12	Moscow Exchange	Russia	4.5			

Source: Moscow Exchange, WFE, Bloomberg, LSE Group (for LSE Group data)

- 1 Due to different methodologies applied, data on fixed income trading may not be directly comparable among exchanges. Ranking without Amman SE and Buenos Aires SE (excluded due to single large volume). Data for 1H 2017
 - 2 Data for 1H 2017
- 3 Top equity trading exchanges are ranked by trading volume. Ranking without BATS (excluded due to absence of data for market capitalization and number of listed companies). Data for 1H 2017
- 4 Market capitalization of public exchanges based on Bloomberg data as of 18 September 2017



High and increasing market share versus OTC trading





Source: Moscow Exchange data

Data before launch of obligatory reporting to repository is unavailable

Repo trading volumes only. Data before launch of obligatory reporting to repository is unavailable

Building on the success of Strategy 2012-2015

Key initiatives of Strategy 2012-2015 successfully implemented

- ☑ DMA across all markets

- ✓ USD/RUB futures emergence as a flagship derivative contract
- Crucial regulatory reforms (corporate governance, individual investment accounts, "non-loss" rule elimination for NPFs, revival of pension savings)

- Total trading volume CAGR of ~23% in 2012-2015
- Operating income CAGR of ~29% in 2012-2015
- EPS for 2015 up 4.0 times versus 2011 to RUB 12.5
- Dividend per share up 22.9 times versus 2011 to RUB 7.11 with a payout ratio of 58% for 2015



Competitive strategy 2015-2020: key pillars (1)

Market Diversification penetration Strategy Aggressive growth: **Equities** development of the equity market Aggressive growth: **Fixed income** bonds to substitute bank loans as a funding tool Agaressive growth through **Derivatives** reform

Optimization

Sophistication

Standardization

Drivers and initiatives

- ✓ Benefits from infrastructure put in place, tax and regulatory reforms (T+2, CSD and access of ICSDs, IIA)
- ✓ Growth of the retail investor base
- ✓ New listings and IPOs, repatriation of capital
- ✓ Further simplification of access for international investors
- ✓ Development of short-term and ultra short-term bonds, securitization
- Easier access to the bond market for corporates
- ✓ Growth of the retail investor base
- ✓ Benefits from completed reforms (shift to T+1 for OFZs, large block auctions, ICSDs)

new asset classes and tariff

- ✓ Tariff reform to increase effective fees
- ✓ Development of commodity derivatives
- ✓ Approval of CFTC registration application in order to permit access for US market participants
- ✓ Options market development
- Synergies with spot markets via a unified collateral pool
- ✓ OTC derivatives clearing

Market data

Aggressive growth through enhancement of the product offering

- ✓ Growth of market data sales.
- ✓ Improvement of data dissemination: development of a real-time and nonreal time data platform
- ✓ Development of the corporate information center
- Development of the pricing center
- ✓ Expansion of the repository offering



Competitive strategy 2015-2020: key pillars (2)

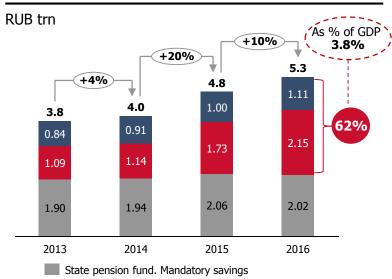
Market Diversification Optimization Sophistication Standardization penetration **Drivers and initiatives** Strategy ✓ Development of international clearing membership Protecting market share **FX Market** ✓ Direct access of corporates to the market through further expansion ✓ Development of SMA services Protecting market share ✓ Further enhancement of the existing product portfolio – collateral **Money Market** through further product management services, repo with the General collateral pool ✓ Direct access of corporates to repo with CCP in the "net creditor" mode development Steady growth via ✓ Corporate actions reform **Depository services** development of new ✓ Launch of the corporate information center ✓ Expansion of the repository offering services ✓ Reduction of NII's contribution to revenue through implementation of the Gradual replacement of NII **Treasury business** single collateral pool as a fee-based service, including risk netting, crosswith F&C income margining and portfolio margining ✓ Focus on reliability of hardware Ongoing enhancement of Improved processes of software development and installation IT IT systems ✓ Corporate accelerator to foster fintech startups that develop technologies

complementary to MOEX's product offering

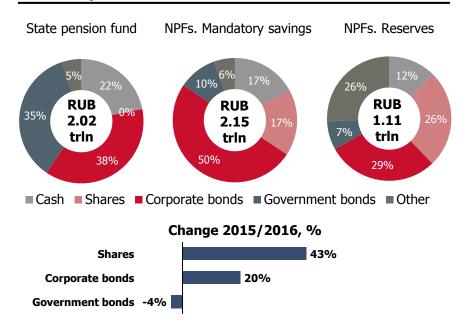


Local institutional investors: the potential of **pension funds**





Pension system asset allocation 2016



Key highlights of the pension reform

Non-state pension funds. Reserves

- Bank of Russia became a regulator of the pension system in 2013
- Adopted changes in non-state pension fund regulation:

Non-state pension funds. Mandatory savings

- "One year non-loss" rule was abolished
- Investment horizon of NPFs was extended to 5 years
- Customers are now incentivized to stay with the fund for not less than 5 years
- Guarantee fund mechanism (similar to the Deposit Insurance Agency in the banking system)
- New allocations to NPFs remained under moratorium until 2019, which reduced growth potential and left room for organic growth only



Source: Bank of Russia

Retail money: aiming to grow the culture of investing

Retail investor savings

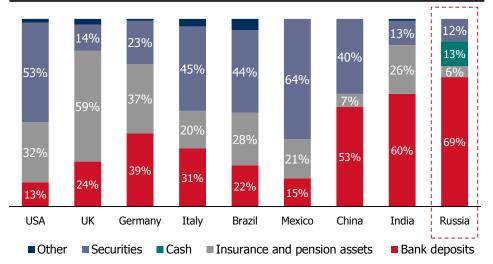
RUB 23 trn

with banks...

RUB 4 trn

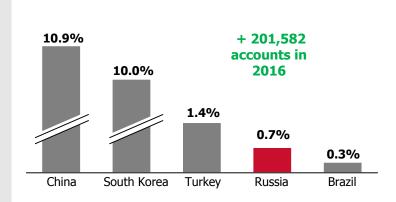
in cash ...vs RUB **33.8** trn of the Russian equity market's market cap

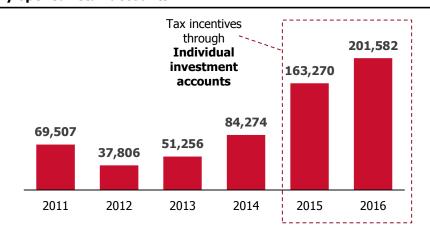
Russians hold majority of savings in banks and cash¹



Population's participation in the securities market²

Newly opened retail accounts





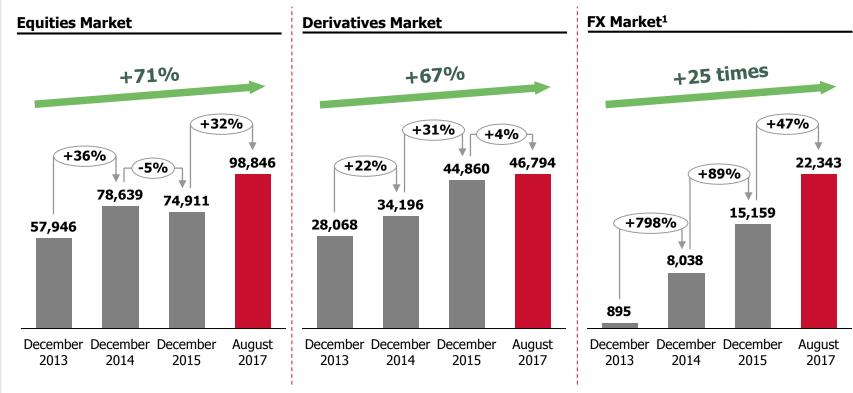


Sources: EIU, World Bank, IMF, central banks of South Korea, Turkey, Mexico, National Bureau of Statistics of China, Allianz, SZSE Factbook, CBR, Moscow Exchange

- 1 As of the end of 2015, Russia as of the end of 2016
- 2 Number of retail accounts as % of population. South Korea, Turkey, Brazil 2014, Russia and China 2015

Retail clients: a growing segment of the Russian financial market

Number of active retail client accounts



Recent regulatory changes:

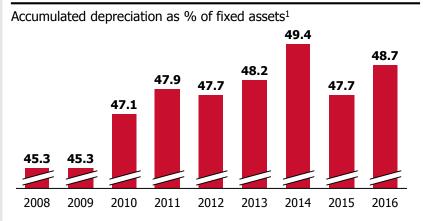
- Introduction of individual investment accounts for private investors since 2015: more than 245,000 accounts opened as of August 2017
- **Tax breaks** on capital gains on securities held for more than 3 years (up to RUB 9 mln for securities purchased after 1 Jan 2014)
- Retail investors allowed to remotely open a brokerage account. This simplifies the process for retail investors in Russia's farflung regions

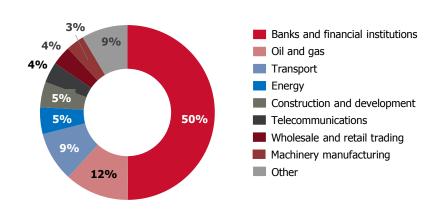


Bond market – why we are strong believers

Ageing fixed assets require long-term investments

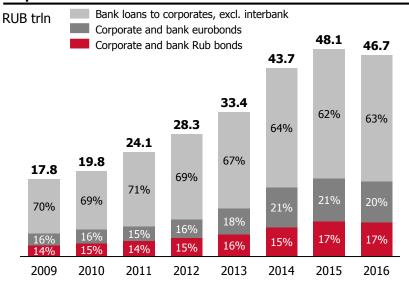
Breakdown of bond issuers² by industry

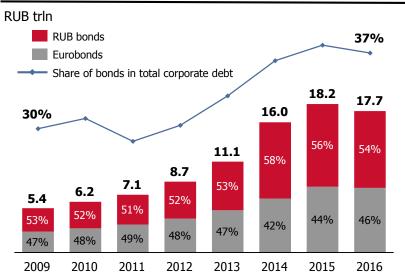




Corporate bonds substitute bank loans

Local bonds vs Eurobonds of Russian corporates³







Source: Bank of Russia, Cbonds, Rosstat, Moscow Exchange

- Preliminary data for 2016 as of 29 May 2017
- Data as of 31 August 2017. Bonds issued in 2015-2017YTD traded on MOEX's Bond Market excluding one-day bonds
- 3 Including banks and financial institutions

Direct access of Russian corporates to FX and Money Markets: update on activity

Corporates on FX Market Direct access to FX Market Launched on 5 April 2017 corporate participants to date 12 **PHOSAGRO®** ROSNEFT C ALFA STRAKHOVANIE АЛЬФА СТРАХОВАНИЕ ингосстрах Ingosstrakh trading volumes since **RUB** 129 bln launch **RUB 15** average trade size mln

Deposits with the CCP for corporates Launched on 24 July 2017 corporate participants to date GAZPROM ROLF ингосстрах Ingosstrakh PHOSAGRO[®] ALFA STRAKHOVANIE АЛЬФА КЕЙСИСТЕМС СТРАХОВАНИЕ trading volumes since **RUB**

launch

average trade size

201

bln

RUB

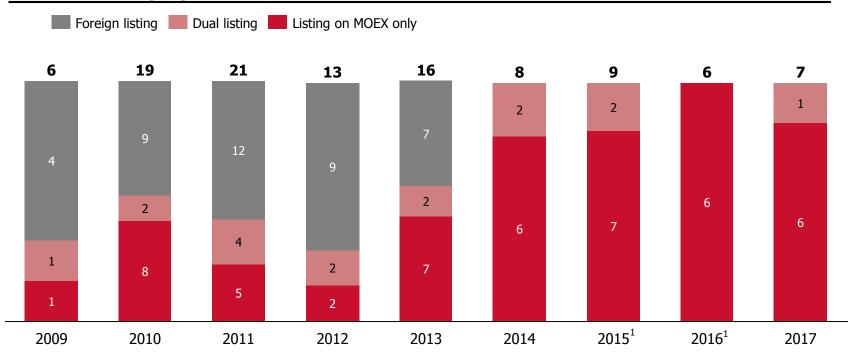
mln

Corporates on Money Market



Shift towards local capital raisings

IPOs/SPOs/listings by Russian issuers



Despite a challenging macro environment that impacted Russian equity capital markets

- In 2016, 6 Russian issuers held IPOs/SPOs that raised a total of ~RUB 121 bln, including Alrosa's privatisation transaction in July 2016
- Nearly all ECM transactions in 2015-2016 were held exclusively on MOEX
- During January-September 2017 the IPO of Detsky Mir and the SPOs of TMK, Phosagro, UWC, Polyus, MMK and Aeroflot were held on MOEX, raising more than RUB 118 bln



Trend of local placements continued

All public capital raisings by Russian companies in 2016 were held exclusively on MOEX

Company	Sector	Date	Transaction type	Transaction value, RUB bln
europl <u>*</u> n	Leasing	December 2016	SPO	15.0
Russ Nett	Oil & gas	November 2016	IPO	32.4
FINANCIAL GROUP FUTURE	Financials	October 2016	IPO	11.7
ALROSA	Metals & mining	July 2016	SPO	54.4
UNITED WAGON COMPANY	Manufacturing & transportation	May 2016	SPO	5.0
Promsvyazbank	Financials	April 2016	SPO	2.6

Capital raisings in 2017



SPO

(oil & gas services)

Date: 3 Feb 2017 Deal size: RUB 10 bln

(\$174 mln)

Free float: up from

16% to 30%



Date: 8 Feb 2017 Deal size: RUB 21.1 bln

(\$356 mln)

Free float: 30.55%



SPO (fertilizers)

Date: 8 Feb 2017

Deal size: RUB 15 bln

(\$255 mln)

Free float: up from 20%

to 25%



SPO

(manufacturing)

Date: 5 May 2017 Deal size: RUB 1.9 bln

(\$32 mln)

Free float: up from 19.83% to 21.05%



(metals & mining)

Date: 30 Jun 2017 Deal size: RUB 47.3 bln

(\$800 mln)

Free float: up from

6.8% to 16%



IPO

(retail)

SPO (metals & mining)

Date: 5 Sept 2017 Deal size: RUB 13 bln

(\$230 mln)

Free float: up from 12.7% to 15.7%



Date: 19 September 2017 **Deal size**: RUB 10.4 bln

(\$180 mln)

Free float: up from 41%

to 45.8%



DR holders pay substantial **EXTRA FEES** to depositary banks

Fees to be paid to depositary banks for some of the DR programs of the Russian companies

DR program	Depositary bank	Depositary Service Fee ¹ (DSF), USD per DR	Dividend Fee ² , USD per DR	DSF + Dividend Fee as % of dividend amount ³	DRs cancellatio n fees, USD per DR
VTB Bank	BoNY Mellon	0.03	0.005	84%	0.05
RusHydro	BoNY Mellon	0.02	0.009	38%	0.05
TMK	BoNY Mellon	0.01	0.016	20%	0.05
Sberbank	JP Morgan	0.01	0.015	16%	0.05
MMK	BoNY Mellon	0.00	0.020	7%	0.05
Phosagro	Citi	0.02	-	7%	0.05
Megafon	BoNY Mellon	0.03	-	7%	0.05
Rostelecom	JP Morgan	0.01	0.030	7%	0.05
Gazprom	BoNY Mellon	-	0.020	7%	0.05
Norilsk Nickel	BoNY Mellon	0.01	0.020	4%	0.05
Magnit	JP Morgan	0.01	-	4%	0.05
NLMK	DB	0.02	-	4%	0.05
Rosneft	JP Morgan	0.003	-	2%	0.05
Severstal	DB	-	0.020	2%	0.05
Novatek	BoNY Mellon	-	0.020	2%	0.05
Lukoil	Citi	-	0.020	2%	0.05
Surgutneftgaz	BoNY Mellon	-	-	0%	0.05
AFK Sistema	Citi	0.02	-	NA ⁵	0.05
Lenta	DB	0.03	-	NA ⁵	0.05
Average		0.012	0,011	12%	0.05

Gross DSF and dividend fees calculated for Top-3 international funds holding DRs of Russian companies⁴

Fund A	3,115,856 USD
Fund B	4,431,129 USD
Fund C	3,331,150 USD

Cost of cancellations of all DRs in portfolios to local shares for Top-3 funds

Fund A	8,051,581 USD
Fund B	9,886,719 USD
Fund C	3,050,742 USD

- · A depositary service fee and a dividend fee are to be paid by the DR holders to the depositary bank while there are no such fees for holders of local shares
- · Majority of DRs cancellations are also charged 0.05 USD per DR



- Service fees are charged annually, on an arbitrary date. Calculated based on number of DR in a client's account on the record date
- Dividend fees are charged when dividends are paid
- As % of dividend amount after tax
- Calculations based on Thomson Reuters data as of June 2017
- Data for dividend amount is unavailable

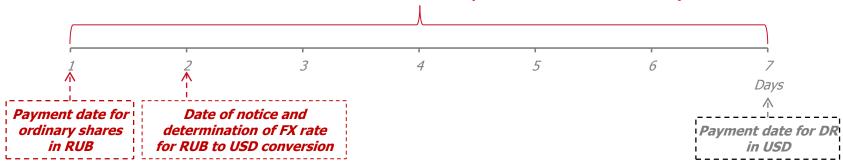
Dividend payments for DR holders

FX rate determination for dividends

- FX rates for conversion of dividends are determined in a non-transparent manner
- According to information from notices for DR holders³:
- Custodian DR issuer has no obligation to obtain the "best price" for any FX Trade
- The conversion rate reflects a foreign currency transaction ("FX Trade") executed by the Custodian - DR issuer as principal counterparty and not as agent, fiduciary or broker

Issuer	Record	Local Shares		D		
	date	Payment date	FX rate ¹	Payment date	FX rate ²	Diff.
PhosAgro	26 Jan 16	15 Feb 16	76.7	22 Feb 16	78.0	1.7%
MMK	11 Jun 17	21 Jun 17	59.6	28 Jun 17	60.2	1.0%
Akron	11 Jul 17	18 Jul 17	59.1	25 Jul 17	59.7	1.0%
MTS	10 Jul 17	25 Jul 17	59.5	1 Aug 17	60.0	1.0%
NCSP	30 May 17	22 Jun 17	59.6	29 Jun 17	60.0	0.7%
Novatek	2 May 17	23 May 17	56.3	30 May 17	56.7	0.7%
Norilsk Nickel	23 Jun 17	10 Jul 17	60.3	17 Jul 17	60.7	0.7%
Tatneft	7 Jul 17	26 Jul 17	59.5	2 Aug 17	59.8	0.5%

DR holders received their dividends one week later compared to holders of the ordinary shares





Source: Moscow Exchange

Average weighted USD/RUB FX rate at Moscow Exchange

FX rate for dividends conversion

Public available information on the Custodian - DR issuer web site

Corporate actions reform in Russia: From paper to market-leading digital technology

From 1 July 2016

New approach to corporate actions processing

LOWER COSTS

- ✓ Power of attorney no longer necessary for corporate actions
- ✓ No mailing costs and hard copies needed for investors to participate in corporate actions
- ✓ CSD's service pricing based on principles of covering costs, simplicity and fairness

LOWER RISKS

- Creation of a single source of reliable and comprehensive information on corporate actions at the Russian CSD
- ✓ Unified electronic ISO-based standards for corporate actions
- ✓ Control over assets and settlement oversight by the Russian CSD

BETTER CORPORATE GOVERNANCE

- ✓ Direct electronic access to AGMs for investors
- Standardized electronic meeting convocations, nomination of directors, participation in corporate actions through custodians
- ✓ No more special requirements set for holders' incorporation



Improved corporate governance as a result of higher listing standards

Completion of the 1st stage of the listing reform

Following adoption of Russia's new Corporate Governance Code in 2014, MOEX initiated a program to bring listing requirements into line with global standards and the Code:

- ✓ **Listing structure simplified:** 3 quotation lists (Premium, Standard, Off-the-list) replaced the previous six
- ✓ **Stricter criteria for inclusion in the Premium (Highest) list:** at least 3 Independent Directors, 3-year history of IFRS accounts (vs. 1-year previously), free float of at least 10%, requirement to have internal audit department and Boardapproved policy on internal audit, etc
- ✓ **Issuers are eligible to list in any section at IPO**. This allows pension funds and insurance companies (that are authorised to buy only the highest-level stocks) to invest at the IPO stage
- ✓ Stricter requirements for Directors to be considered independent
- ✓ Creation of Listing committee at MOEX of more than 30 market experts to monitor special listing situations

Results of the 1st stage: higher listing quality, approved dividend policies, increased number of INEDs

	June 2014		Januar	y 2017
	Highest list	Standard list	Highest list	Standard list
# of Independent Directors	150	69	222	73
Issuers complying with criteria for Audit Committee	2 issuers (3.57%)	0 issuers	52 issuers (100%)	33 issuers (100%)
Issuers complying with criteria for HR and Remuneration Committee	1 issuer (1.79%)	n/a	52 issuers (100%)	n/a
Issuers with approved dividend policies	45 issuers (80.3%)	n/a	52 issuers (100%)	33 issuers (100%)

What's next?

- ✓ On 1 October 2017 the Corporate Governance Code's requirements for INEDs will fully come into force
- ✓ Starting January 2018, only ratings by approved rating agencies will count towards listing requirements



From 2018 NCC will be regulated as a clearing organization and a CCP

Dec 2015	Dec 2016	Nov 2017	Jan 2018			
Changes to law "On Clearing" that regulate NCC as a CCP instead of a banking institution were approved and will come into force in 2018	Bank of Russia developed a set of new regulatory ratios for the CCP	NCC is to apply for a new license, switching from banking regulation to CCP regulation	NCC operates and is regulated as a CCP, licensed as a non-banking credit organization			
Target capital	Target capital in financial year 2	Target capital in financial year 2017 that suits new regulatory requirements: RUB 55.2 bln				
New regulation requires:						
Capital adequacy		At all times NCC's own capital shall exceed the sum of "skin in the game", the minimum capital to maintain 11% of RWA and a reserve of 75% of annual operating expenses				
Adequacy of total resources	At all times the sum of "skin in the event of default of the two	the game" and the guarantee fund largest counterparties	d shall exceed potential losses in			
Adequacy of initial margin	Price fluctuations of each asset shall not exceed the initial margin amount in at least 99% of cases of price changes					
Liquidity ratio	The amount of liquid assets of the CCP at any time shall exceed the amount of potential losses in the event of default of the two largest counterparties					
Collateral concentration	A certain type of asset is eligible as collateral as long as its addition does not exceed 25% in total assets placed as collateral by market participants					

E-voting via Blockchain successfully tested at NSD

Blockchain: E-voting for bondholders

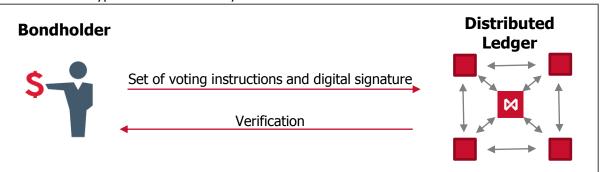
E-voting for bondholders

Prototype version successfully tested in 2016

Open source code

80 transactions per second

Pilot version to be launched in 2017



Changing the environment of the financial market...

- Participation in the development of unified standards for e-voting based on distributed ledger technology in BRICS
- Membership in Hyperledger, a leading consortium aimed at developing and promoting blockchain technology, as well as the working group of the Bank of Russia, and the Post-Trade Distributed Ledger (PTDL) Group, an initiative of 37 member financial institutions aiming to determine the best way for the post-trade industry to benefit from distributed ledger technology.
- Support of hackathons and sponsorship of FinTech
 Pilotbed, a blockchain start-up accelerator

...while studying areas of potential implementation





Supporting fintech initiatives to develop the retail investor base

Platforms:



MOEX is an industry partner of the **Finance & Banking Technologies** track of the largest accelerator for technology start-ups in Russia and Eastern Europe in 2016. The track is organized by the Bank of Russia and combines projects in the area of financial technologies, services and e-commerce. The best projects selected via a multi-stage assessment received intensive development as well as opportunities to attract major new investment



MOEX is the general partner of the **Forum of Innovative Financial Technologies** (Finopolis), the largest fintech forum in Russia organized by the Bank of Russia to disseminate innovation technologies in the financial sector in 2016. Five start-ups presented services in robo-advising, financial marketplaces, access interfaces and crypto-security during a MOEX roundtable

Products and Services:

MOEX launched the first annual **"Innovations in Investing"** contest among professional market participants and independent developers to support and develop products and services complimentary to MOEX technologies:

Selected contest participants:



- ✓ Automated stock and bond trading app
- Robo-advising with online recommendations driven by fundamental analysis
- Personal approach based on the client's risk profile



- Mobile App for buying bonds
- One-click investment without threshold limit
- Blockchain to decrease operating risk and to protect against fraud
- Robo-advising to help create a fixedincome portfolio



SIMPLE INVEST

- An easy way to start investing
- Personalization of the investment process
- Gamification to learn and strengthen investment skills
- Link to the client's bank card

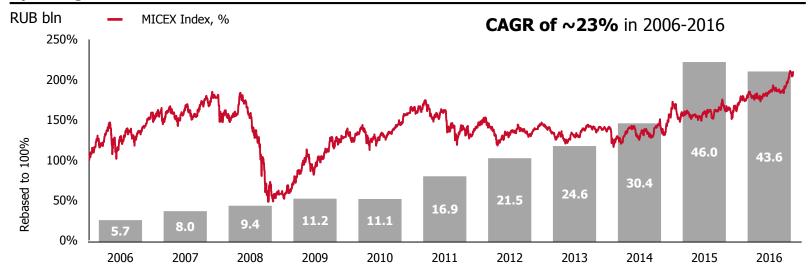


- Business overview
- Corporate governance and dividends
- Market position and competitive strategy
- Financial track record
- 2Q 2017 update



MOEX business model continues to deliver

Operating income¹



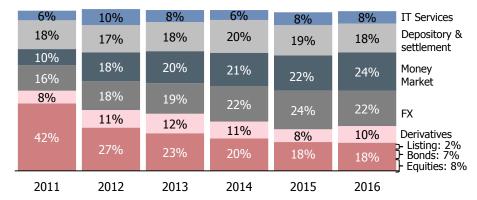
Key highlights

Unique business model allows MOEX to increase operating income regardless of the stage of the economic cycle:

- Business lines are diversified, while markets have limited growth correlation
- Growth drivers differ across markets and products

Fee & commission income evolution¹

■ Equities+ ■ Derivatives ■ FX ■ Money Market ■ Depository & Settlement ■ IT Services ³ Bonds ²



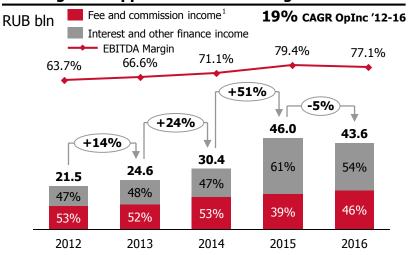


According to Moscow Exchange Consolidated Financial Statements for the relevant period

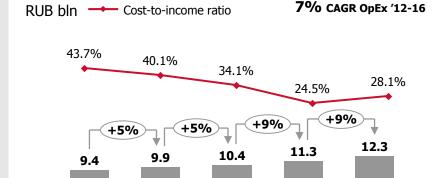
- RTS data is consolidated from 29 June 2011
- Includes Listing and other service fees related to the Securities Market
- IT Services includes Information services, Sale of software and technical services and Other fee income

Strong financial performance

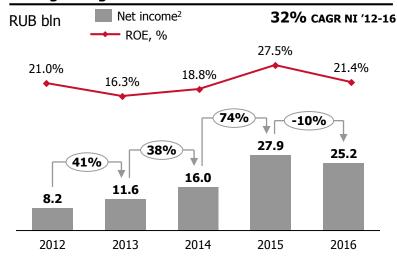
Growing fees support the EBITDA margin



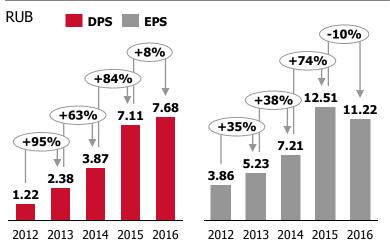
Tight control over expenses



Strong ROE generation



DPS growth outperforming EPS





2013

2012

2015

2014

2016

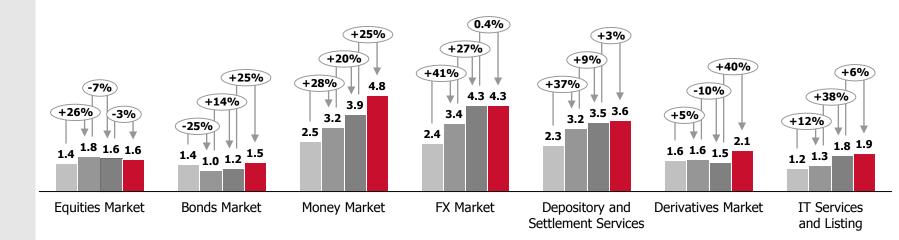
Includes Other operating income

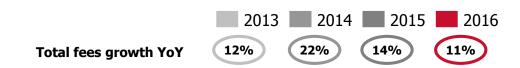
Includes Interest and other finance income, Interest expense, Net loss on financial assets available-for-sale and FX gains less losses

Well-diversified and growing fee income

Fee and commission income

RUB bln

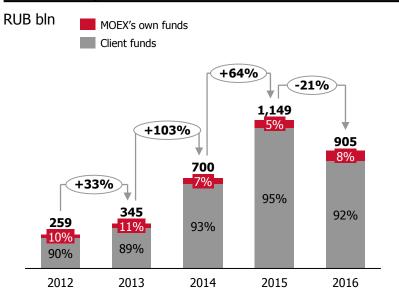




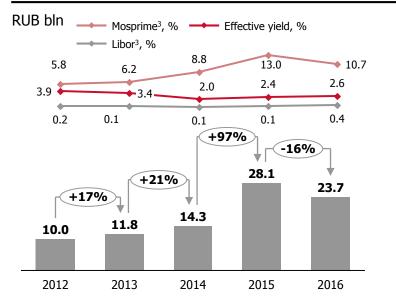


Interest and finance income

Investment portfolio¹



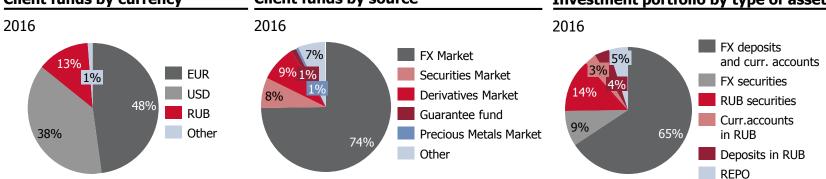
Interest income²



Client funds by currency

Client funds by source

Investment portfolio by type of asset



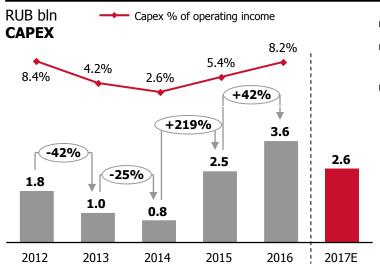


Source: NFEA, Bloomberg, Moscow Exchange operational information and Consolidated Financial Statements

- Based on average daily investment portfolio for the period according to management accounts
- Interest income includes Interest and other finance income, Interest expense, Net loss on financial assets available-for-sale, Foreign exchange gains less losses
- 3 Average daily rate for the period

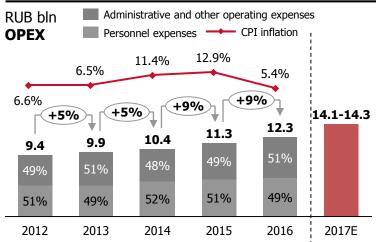
CAPEX and OPEX 2017

Moderate capital intensity in spite of operating a technology-based business



- Capex 2016 peaked, and amounted to RUB 3.6 bln, in line with guidance
- In 2017 and onwards capex is expected to normalize at RUB 2.5-3.0 bln/year
- The scope of key capital expenditures includes:
 - New IT architecture to add functionality of the single collateral pool
 - Hardware upgrade
 - Corporate actions reform

Effective cost management



- In 2017 operating expenses growth is expected to be in the range of 15-17% (updated from 17-19%) driven by:
 - ✓ Double-digit administrative expenses growth as a result of higher D&A and IT maintenance costs following migration to the new data center and increased IT footprint
 - Personnel expenses growth above inflation mostly due to selective salary increases and approval of the new share-based compensation scheme

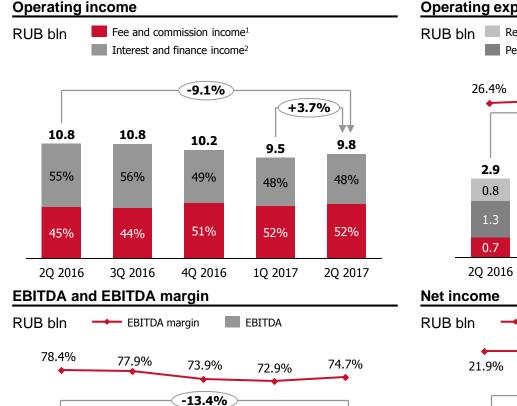


Source: Moscow Exchange, gks.ru

- Business overview
- Corporate governance and dividends
- Market position and competitive strategy
- Financial track record
- 2Q 2017 update



2Q 2017 summary of financials



+6.2%

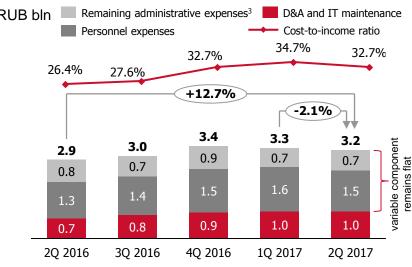
6.9

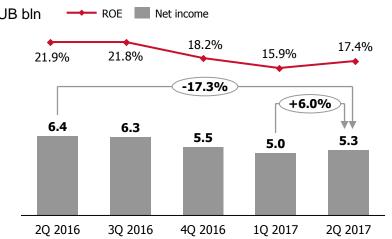
1Q 2017

7.3

2Q 2017

Operating expenses







8.5

2Q 2016

8.4

3Q 2016

Source: Moscow Exchange

4Q 2016

7.6

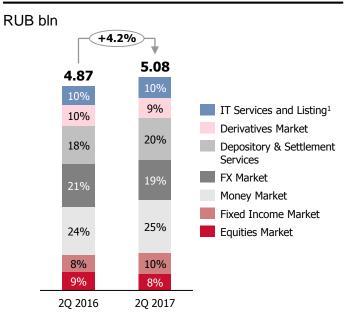
- Includes Other operating income
- Includes Interest and other finance income, Interest expense, Net loss on financial assets available-for-sale and Foreign exchange gains less losses
- Remaining administrative expenses are calculated as Administrative expenses less Depreciation of property and equipment, Amortisation of intangible assets and Equipment and intangible assets maintenance

Diversified fee and commission income

Fee & commission income performance

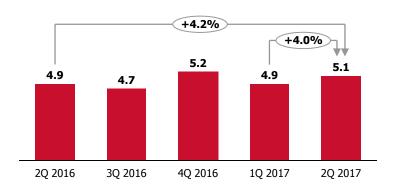
RUB mln	2Q 2016	2Q 2017	Change YoY, mln	Change YoY, %
Depository and Settlement Services	890	1,001	111	12.4%
Money Market	1,151	1,253	102	8.8%
Fixed Income Market	408	502	94	23.1%
IT Services and Listing ¹	467	490	23	4.9%
Derivatives Market	502	481	-21	-4.2%
Equities Market	422	385	-37	-8.8%
FX Market	1,031	965	-67	-6.4%

Fee & commission income breakdown



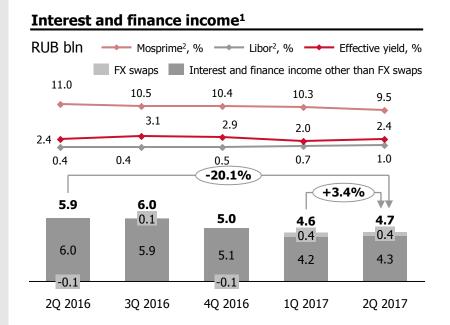
Fee & commission income dynamics

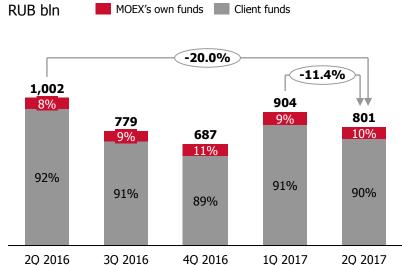
RUB bln





Interest and finance income



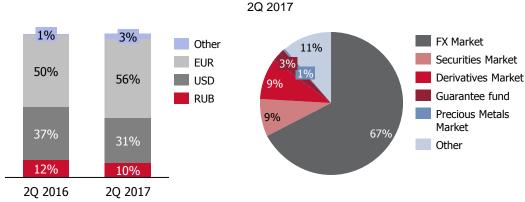


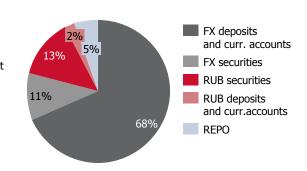
Investment portfolio³

Client funds by currency

Client funds by source

Investment portfolio by type of asset 2Q 2017







Source: NFEA, Bloomberg, Moscow Exchange operational information and Consolidated Financial Statements

¹ Interest and finance income includes Interest and other finance income, Interest expense, Net loss on financial assets available-for-sale, Foreign exchange gains less losses

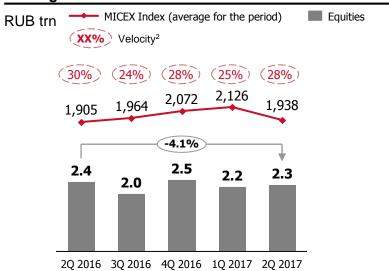
² Average daily rate for the period

Based on average daily investment portfolio for the period according to management accounts



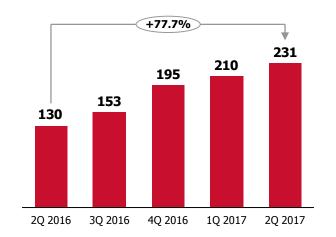
Equities Market: growing retail interest

Trading volumes¹

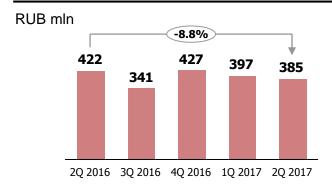


Increasing popularity of Individual Investment Accounts

Individual Investment Accounts, thousands



Fee & commission income



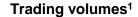
- Volatility of the Equities Market (as measured by RVI) was down by 30% YoY. On the back of lower volatility, trading volumes in the Equities Market declined by 4% YoY. Velocity decreased from 30% in 2Q 2016 to 28% in 2Q 2017. Fee and commission income declined by 9% YoY concurrently with trading volumes.
- As of 30 June 2017 there were 89,000 active retail accounts (+24% YoY) in the Equities Market.
- In the second quarter of 2017 two MOEX-listed companies, United Wagon Co. and Polyus, held SPOs totaling more than RUB 49 bln.

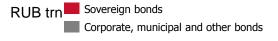


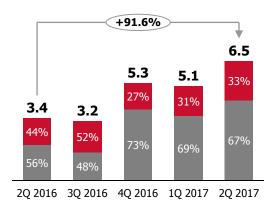
- Volumes of both primary and secondary markets
- 2 Velocity is defined as total annualized trading volumes for the period divided by the average market capitalization of the Equities Market



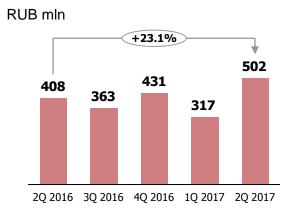
Fixed Income Market: strong primary placements and growth in secondary trading



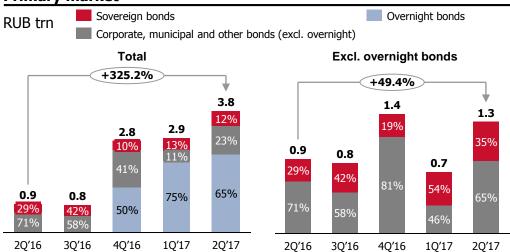




Fee & commission income



Primary market

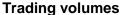


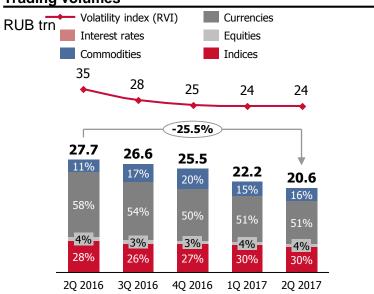
- Volumes of primary placements excluding placements of overnight bonds increased by 49% YoY. Placements of government bonds increased by 78%YoY, and corporate bond placements (excl. placements of overnight bonds) rose by 38% YoY. Overnight bonds comprised 65% of total new placements. Secondary trading increased by 9% YoY thanks to active trading in government bonds.
- Fees and commissions increased by 23% YoY, primarily as a result of strong primary placements.
- A law introducing tax exemption of coupons on corporate bonds for retail investors was adopted. The law effectively removes differences in tax treatment between corporate bonds and deposits for individual investors.



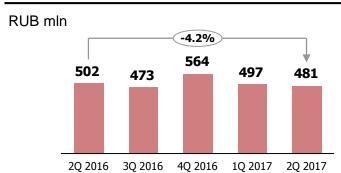


Derivatives Market: continued growth of options and commodity derivatives



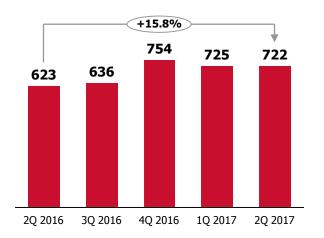


Fee & commission income



Open interest

RUB bn, daily average

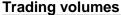


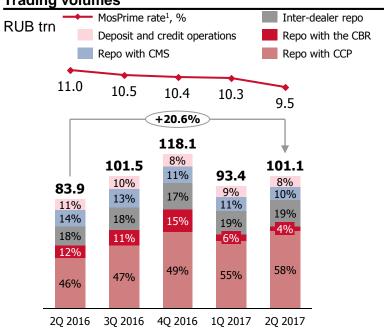
- Fee and commission income from the Derivatives Market declined by 4% YoY, while trading volumes decreased by 25% YoY in RUB terms.
- The decline in derivatives trading volumes was mostly due to lower trading in FX and index futures (down 36% and 29% YoY, respectively), consistent with muted or even subsiding volatility in both USD/RUB and equities.
- Options trading volumes were up by 39% YoY, with growth driven by index options (up 53% YoY).
- Commodity derivatives continued to grow (up 10% YoY).



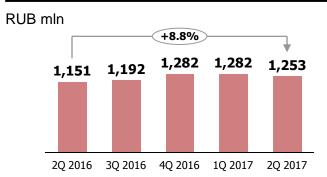


Money Market: growing repo volumes support fees





Fee & commission income

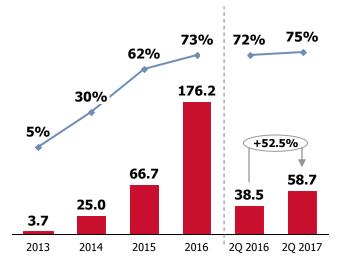


Trading volumes for repo with CCP



Share of repo with CCP in total inter-dealer repo (including repo with CCP)





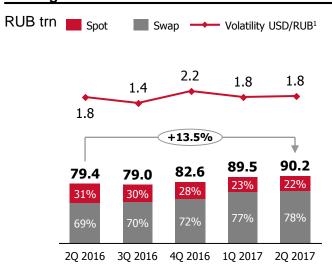
- Fee and commission income grew by 9% YoY, driven by continued strong demand for repo with CCP (trading volumes grew by 52% YoY).
- The share of repo with CCP in total inter-dealer repo volumes reached 75% (vs 72% a year ago), reflecting the economy-wide liquidity surplus. Volumes of repo with the CBR decreased by 57% YoY as a result of the decreased need to provide liquidity.
- On 24 July 2017 Russian corporates were given access to deposits with the CCP. Corporates can deposit money at repo market rates.



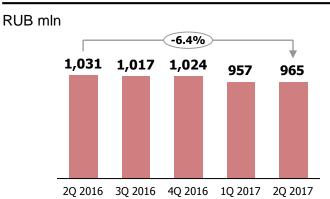


FX Market: higher share of swap trading volumes amid continued demand for liquidity management

Trading volumes

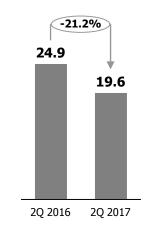


Fee & commission income



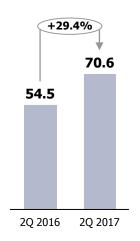
Spot trading volumes

RUB trn



Swap trading volumes

RUB trn



- FX Market's trading volumes increased by 14% YoY. Fee and commission income declined by 6% YoY, driven by a higher share of swaps in the total FX Market's volumes.
- Spot trading volumes declined by 21% YoY as volatility remained relatively muted. Trading volumes in the swap segment grew by 29% YoY due to demand for liquidity management instruments.
- MOEX's market share vs OTC in 2Q 2017 was 54%, roughly at the same level as in 2Q 2016.
- 12 Russian corporates obtained direct access to MOEX FX Market and have executed trades totaling USD 2 bln YTD².

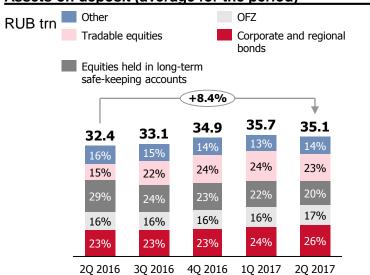


- Calculated as daily standard deviation for the period divided by the average value for the period
- Number of companies last updated on 18 September 2017, trading volumes as of 31 August 2017

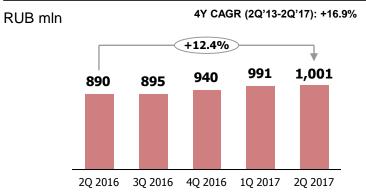


Depository and settlement: growing assets under custody

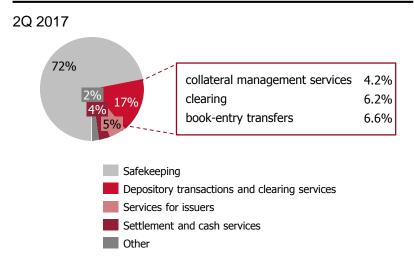
Assets on deposit (average for the period)



Fee & commission income



Fee & commission income breakdown



- Assets under custody grew by 8% YoY. The fastest growing asset classes were government and corporate bonds (growth rates of 15% and 19% YoY, respectively), driven by new bond placements.
- Fees and commissions from depository and settlement services were up by 12% YoY, driven primarily by safekeeping fees.





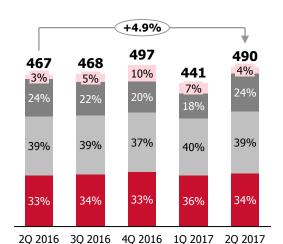
IT Services and Listings: growth across the board

IT Services and Listings¹

RUB mln

4Y CAGR (2Q'13-2Q'17): +15.1%

- Other fee and commission income
- Listing and other fees related to Securities Market
- Information services
- Sale of software and technical services



- Listing and other service fees related to the Securities Market expanded by 1% YoY as a result of increased activity on the bond primary market.
- Sales of software and technical services grew by 5% YoY.
- Fees and commissions contributed by information services increased by 4% YoY.



Operating expenses

48%

3Q 2016

Operating expenses RUB mln Administrative and other operating expenses Personnel expenses +12.7% -2.1% 3,351 3,281 3,214 2,980 2,853 54% 51% 54% 52% 53%

46%

4Q 2016

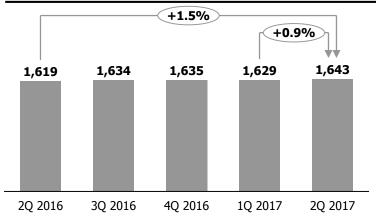
Major expense items

RUB mln	2Q 2016	2Q 2017	Change YoY
Personnel expenses	1,327.7	1,477.9	11.3%
D&A and IT maintenance	732.0	997.8	36.3%
Remaining administrative expenses ¹	793.2	738.4	-6.9%
Total	2,852.9	3,214.1	12.7%
Cost income ratio	26.4%	32.7%	6.3 p.p.

Headcount

47%

2Q 2016



Comments

- In 2Q 2017 operating expenses grew by 12.7% YoY, below previous guidance.
- Administrative expenses increased by 13.8% YoY. D&A and IT maintenance growth was attributable to expenses related with the implementation of CAPEX program in 2016. Depreciation and amortisation increased by 40.7% YoY and IT maintenance expenses were up by 25.9% YoY. The remaining administrative expenses decreased by 6.9% YoY.
- Personnel costs increased by 11.3% YoY due to a lower bonus provision reversal in 2Q 2017 compared with 2Q 2016.
- Revised 2017 operating expenses growth guidance is **15-17%**.



49%

1Q 2017

46%

2Q 2017

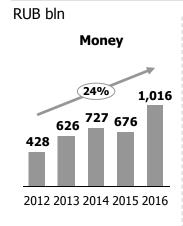
Appendix

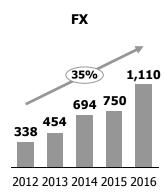


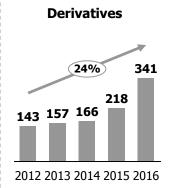
Trading volumes demonstrate growth both in highly liquid and less liquid periods

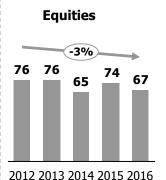


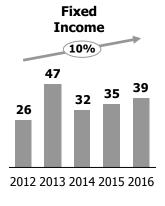




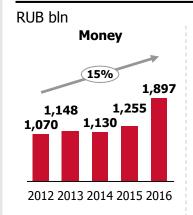


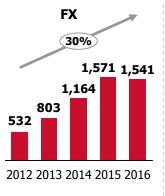


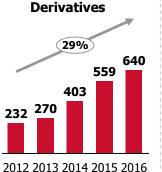


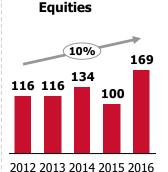


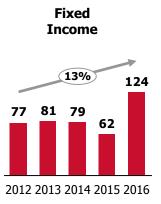
ADTV in the month of the year with the highest volumes



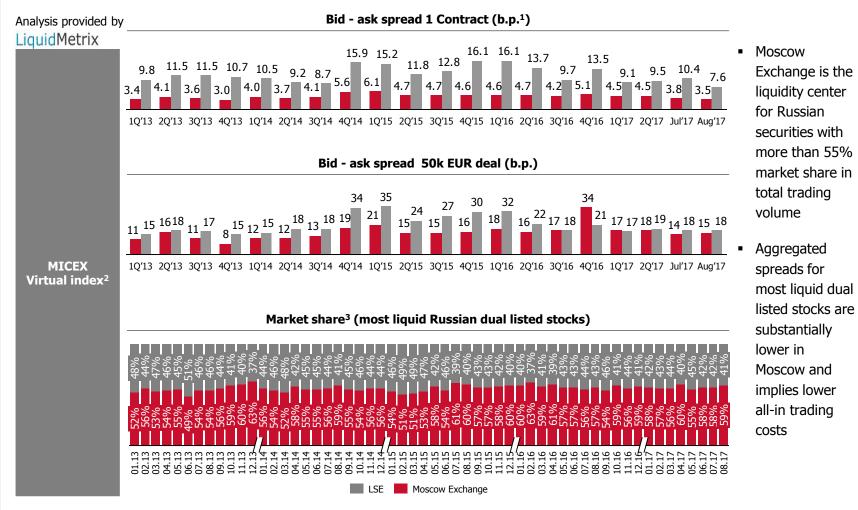








Dual listed stocks virtual index spread dynamics



Notes:

Spreads measure the bid to offer spread of the best visible orders in the book, the result based on measurements of the order books every 30 seconds



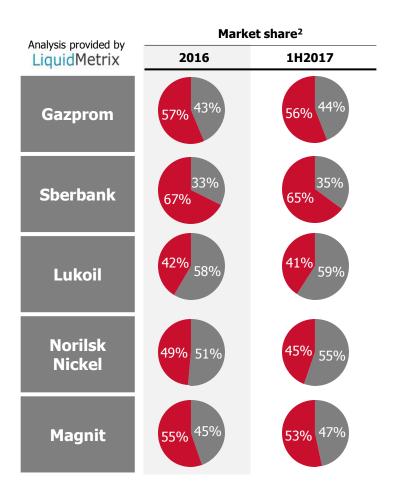
The value for the spread is quoted in basis points (0.01%)

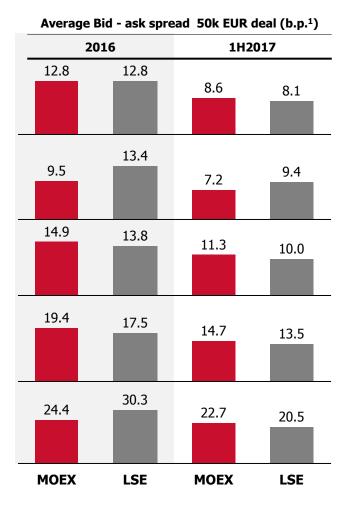
Source: LiquidMetrix

² MICEX Virtual Index – index calculated based on prices and EOB data of the most liquid Russian dual listed stocks

Data since December 2015 includes trading auctions on MOEX

Blue Chips bid - ask spread dynamics for 50k EUR deal (1)





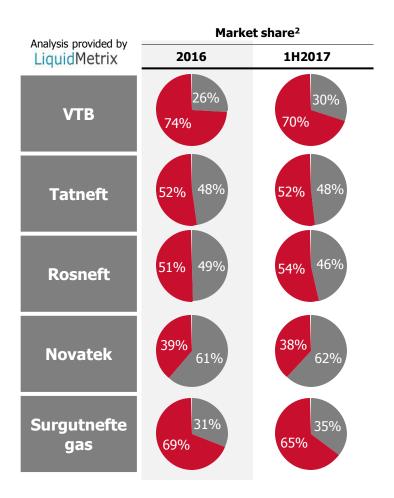
Bid-ask spreads for the Russian "Blue Chips" are fully competitive with those on other trading venues



The value for the spread is quoted in basis points (0.01%)

² Data since December 2015 includes trading auctions on MOEX Source: LiquidMetrix

Blue Chips bid - ask spread dynamics for 50k EUR deal (2)





Bid-ask spreads for the Russian "Blue Chips" are fully competitive with those on other trading venues



The value for the spread is quoted in basis points (0.01%)

² Data since December 2015 includes trading auctions on MOEX Source: LiquidMetrix

Consolidated Statement of Comprehensive Income

RUB min	1H 2017	1H 2016	% chg. 1H 2017/ 1H 2016
Fee and commission income	9,958.3	9,883.1	1%
Interest and finance income ¹	9,314.8	12,643.2	-26%
Other operating income	17.2	20.3	-15%
Operating Income	19,290.3	22,546.6	-14%
Administrative and other operating expenses	-3,415.4	-2,963.4	15%
Personnel expenses	-3,080.1	-2,965.0	4%
Operating Expense	-6,495.5	-5,928.4	10%
Operating Profit Before Tax	12,794.8	16,618,2	-23%
Income tax expense	-2,497.2	-3,231.0	-23%
Net Profit	10,297.6	13,387.20	-23%
Earnings per share			
Basic earnings per share, rubles	4.58	5.98	-23%
Diluted earnings per share, rubles	4.56	5.94	-23%



Consolidated Statement of Financial Position

RUB min	30 June 2017	31 December 2016	% chg. 30 June 2017/ 31 December 2016
Assets:			
Cash and cash equivalents	460,489.1	380,516.6	21%
Central counterparty financial assets	1,898,305.0	1,733,263.8	10%
Financial assets ¹	247,199.2	282,339.3	-12%
Property and equipment and intangible assets	25,437.2	26,064.3	-2%
Goodwill	15,971.4	15,971.4	0%
Other assets ²	6,070.2	3,782.5	60%
Total Assets	2,653,472.1	2,441,937.9	9%

RUB mln	30 June 2017	31 December 2016	% chg. 30 June 2017/ 31 December 2016
Liabilities:			
Balances of market participants	630,272.1	574,590.1	10%
Central counterparty financial liabilities	1,898,305.0	1,733,263.8	10%
Distributions payable to holders of securities	1,608.9	2,952.3	-46%
Other liabilities ³	7,161.0	7,748.1	-8%
Total Liabilities	2,537,347.0	2,318,554.3	9%
Total Equity	115,933.5	123,192.4	-6%
Total Liabilities and Equity	2,653,472.1	2,441,937.9	9%



Source: Moscow Exchange, Consolidated Financial Statements

¹ Financial assets at fair value though profit or loss, Due from financial institutions, Investments available-for-sale

Current tax prepayments, Deferred tax asset, Other assets

B Derivative financial liabilities, Deferred tax liability, Current tax payables, Other liabilities

Disclaimer

NOT FOR RELEASE OR DISTRIBUTION OR PUBLICATION IN WHOLE OR IN PART IN OR INTO THE UNITED STATES, AUSTRALIA, CANADA OR JAPAN.

- •This presentation has been prepared and issued by Public Joint Stock Company "Moscow Exchange MICEX-RTS" (the "Company"). Unless otherwise stated, the Company is the source for all data and assumptions contained in this document. Such data and assumptions are provided as at the date of this document and is subject to change without notice. Certain industry, market and competitive position data contained in this document come from official or third party sources believed to be reliable but the Company does not guarantee its accuracy or completeness. The Company does not intend to have any duty or obligation to update or to keep current any information contained in this presentation.
- •Neither the presentation nor any copy of it may be taken or transmitted into the United States of America, its territories or possessions, or distributed, directly or indirectly, in the United States of America, its territories or possessions as defined in Regulation S under the US Securities Act 1933, as amended (the "Securities Act), except to "qualified institutional buyers" as defined in Rule 144A under the Securities Act. Any failure to comply with this restriction may constitute a violation of United States securities laws. The presentation is not an offer or sale of securities in the United States. Moscow Exchange Group has not registered and does not intend to register any securities in the United States or to conduct a public offering of any securities in the United States.
- •This presentation does not constitute an advertisement or a public offer of securities in any jurisdiction. It is not intended to be publicly distributed in any jurisdiction. This document is only being made available to interested parties on the basis that: (A) if they are UK persons, they are persons falling within Articles 19 or 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005; or (B) they are outside the United Kingdom and are eligible under local law to receive this document. Recipients of this document in jurisdictions outside the UK should inform themselves about and observe any applicable legal requirements.

This presentation is not a prospectus for purposes of Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU, to the extent implemented in any relevant Member State and any relevant implementing measure in the relevant Member State) (the "Prospectus Directive"). In any EEA Member State that has implemented the Prospectus Directive, this presentation is only addressed to and is only directed at qualified investors in that Member State within the meaning of the Prospectus Directive.

This presentation is not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would require any registration or licensing within such jurisdiction.

- •This document does not constitute or form part of, and should not be construed as, an offer or invitation for the sale or subscription of, or a solicitation of any offer to buy or subscribe for, any securities, nor shall it or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any offer, contract, commitment or investment decision, nor does it constitute a recommendation regarding the securities of the Company.
- •The information in this document has not been independently verified. No representation or warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy or completeness of the information, assumptions or opinions contained herein. None of the Company, or any of its subsidiaries or affiliates or any of such person's directors, officers or employees, advisers or other representatives, accepts any liability whatsoever (whether in negligence or otherwise) arising, directly or indirectly, from the use of this document or otherwise arising in connection therewith.
- •This presentation includes forward-looking statements. All statements other than statements of historical fact included in this presentation, including, without limitation, those regarding MOEX financial position, business strategy, management plans and objectives for future operations are forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results, performance, achievements or industry results to be materially different from those expressed or implied by these forward-looking statements. These forward-looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we expect to operate in the future. Important factors that could cause our actual results, performance, achievements or industry results to differ materially from those in the forward-looking statements include, among other factors:
- -perception of market services offered by the Company and its subsidiaries;
- -volatility (a) of the Russian economy and the securities market and (b) sectors with a high level of competition that the Company and its subsidiaries operate;
- -changes in (a) domestic and international legislation and tax regulation and (b) state policies related to financial markets and securities markets;
- -competition increase from new players on the Russian market;
- -the ability to keep pace with rapid changes in science and technology environment, including the ability to use advanced features that are popular with the Company's and its subsidiaries' customers;
- -the ability to maintain continuity of the process of introduction of new competitive products and services, while keeping the competitiveness;
- -the ability to attract new customers on the domestic market and in foreign jurisdictions;
- -the ability to increase the offer of products in foreign jurisdictions.
- •Forward-looking statements speak only as of the date of this presentation and we expressly disclaim any obligation or undertaking to release any update of, or revisions to, any forward-looking statements in this presentation as a result of any change in our expectations or any change in events, conditions or circumstances on which these forward-looking statements are based. Past performance should not be taken as an indication or quarantee of future results, and no representation or warranty, express or implied, is made regarding such future performance.

