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The review provides a detailed analysis of main trends in Russia's economy in 2012. The paper contains 6 big sections that highlight single aspects of Russia's economic development: the socio-political context; the monetary and credit spheres; financial sphere; the real sector; social sphere; institutional challenges. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts.

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Russia's Financial Markets and Financial Institutions in 2012

The Post-Crisis Recovery of Russia's Financial Market

In 2012, Russia's stock market failed to recover its pre-crisis indices. After their decline in the previous year, in 2012 the RTS Index rose by 10.5%, the MICEX Index – by 5.2%. After that, there was no hope for a V-shaped recovery of the Russian stock market: the movement of its indicators rather strictly followed a W-shaped trajectory.

The crisis of 2008–2009 was milder than its predecessor in 1997–1998, both in terms of depth and longevity of the downfall of the market indexes (*Table 1*). In the late 1990s, the RTS Index dropped by 91.3%, the MICEX Index - by 73.0%; in 2008–2009, the two indexes dwindled by 78.2% and 68.2% respectively. In 1997–1998, the RTS Index was on the decline for 14 months, and the MICEX Index – for 13 months in a row; the length of decline of these two indexes in 2008–2009 was 8 and 7 months respectively.

Table 1

The Financial Crises of 1997/98 and 2008/09 in Russia and the Market's Subsequent Recovery (as of 31 January 2013)

	1997/98 crisis	2008/09 crisis
. Decline, from peak		
1.1. Depth, %		
RTS Index	-91.3	-78.2
MICEX Index	-73.0	-68.2
1.2. Length, months		
RTS Index	14	8
MICEX Index	13	7
2. Recovery, months		
RTS Index	58	48
MICEX Index	8	49

Source: data released by the Moscow Exchange.

However, the recovery of stock prices after the last financial crisis is becoming a lengthy process. During the 1997–98 crisis, due to the 5-fold depreciation of the ruble, the ruble-denominated MICEX index returned to its pre-crisis record high within a period of only 8 months, while the recovery of the RTS Index denominated in foreign currencies lasted for 58 months. In 2008–2009, the value of the ruble dropped approximately by 50%, and in the course of its subsequent strengthening against major foreign currencies approximately one-half of its lost value was recovered. That is why both these indexes are now recovering at nearly the same rate – the RTS Index for 48, and the MICEX Index – for 49 successive months.

Against the backdrop of last century's biggest long-term financial crises (*Fig. 1*), the current financial crisis in Russia appears to be a short-term one. Its W-shaped trajectory resembles the development pattern of the Korean financial crisis of 1989, which lasted for 183 months – while Russia's current drop-recovery cycle has lasted for only 56-months. In the situation of the current lengthy recession of the global economy it would be useful to remember that, over the course of modernity, the stock indexes sometimes failed to return to their former historic highs. After its drop in 1989, the recovery of Japanese Nikkei-225 Index has

been continuing for 278 months, and by January 2013 it has gained only 28.6% of its former peak value. If things remain the way they are, in twenty-five months the Nikkei-225's 'recovery' will be the slowest in history, surpassing the current record of 303 months set by the Dow Jones Industrial Average (DJIA) in the aftermath of the Great Depression of 1929–1933. The NASDAQ Composite Index (USA) in January in 2013, after a 156-month recovery period, had increased to only 66.9% of its 2000 record high. By its recovery schedule and its W-shaped trajectory, that index also resembles the recovery parameters of the Korean stock market after its collapse in 1989.

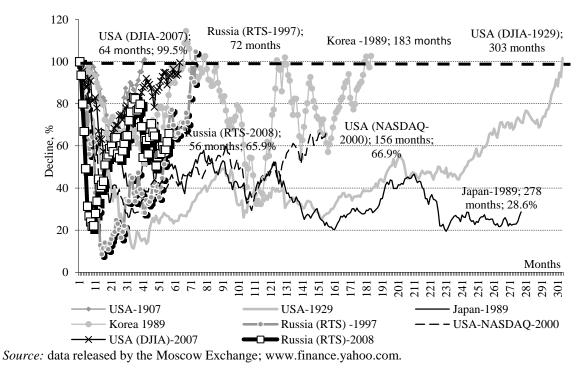
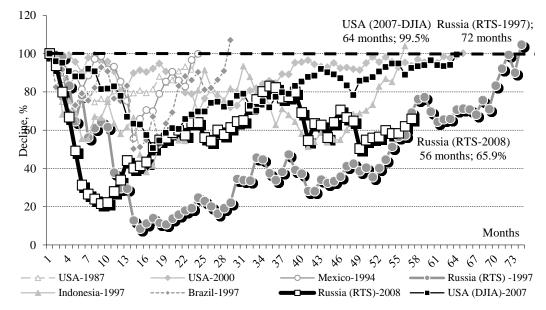


Fig. 1. Depth and Length of Long-term Financial Crisis across the World, As of 31 January 2013 (Peak = 100%)

When set against the most famous short-term financial crises in the USA in 1987, 2000 and 2007; in Mexico in 1994; in Indonesia in 1997; and in Brazil in 1997, the Russian crisis of 2008/2009 appears to be remarkable by its depth and longer period of recovery (*Fig. 2*). These specific features can be explained not only by the protracted recession experienced by the world's leading economies, but also by the weakness of Russia's stock market caused by the declining rate of economic growth, continuing capital outflow and unresolved institutional problems. In January 2013, the DJIA in the US – in contrast to the indicators of Russia's stock market – managed to return exactly to its 2007 historic high. By that moment, Russia's RTS Index had amounted to only 65.9% of its pre-crisis historic high of 2008. It is noteworthy that, as seen by the past 56 months, its current pattern and recovery level began to follow precisely the timeline and recovery level of the RTS Index after the 1997 crisis.



Source: data released by the Moscow Exchange; www.finance.yahoo.com.

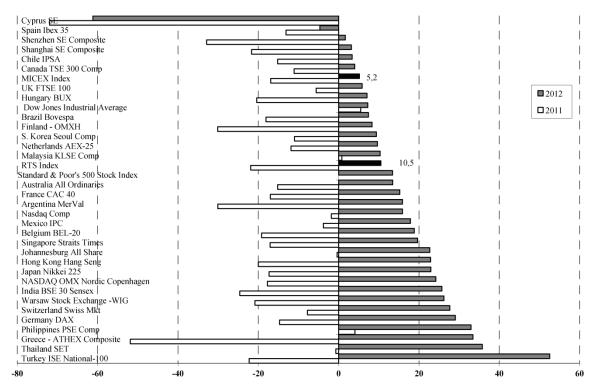
Fig. 2. Depth and Length of Short-term Financial Crisis across the World, As of 31 January 2013 (Peak = 100%)

When the movement of the RTS and MICEX indexes is compared with that of similar indicators of the stock markets in other countries, an interesting trend reveals itself that has already been visible for a second year in a row. The behavior of the Russian indexes can no longer be regarded as fitting an extreme pattern. This means that, in terms of yield, they used to be either leaders or outsiders among the indexes of all the other markets. However, now the Russian indexes, by their annual yield, fit somewhere in the middle of the list of other countries' indexes (*Fig. 3*). In 2011, this specificity could be seen against the backdrop of an across-the board decline in stock indexes; in 2012 - in conditions of the moderate growth demonstrated by the world stock prices. This phenomenon has to do with the multi-vectored influence exerted on the Russian stock market by the increasingly complex variety of factors, and first of all the movement patterns of oil prices, portfolio assets of foreign investors, domestic liquidity, and some other factors.

One of the most important trends in the development of stock markets across the globe in 2012 was the continuing shrinkage of trade volumes on stock exchanges (*Table 2*). Over that period, the volume of trade in shares on US stock exchanges amounted to only 54.5% of its 2007 level; the value of that index for the London Stock Exchange, *Euronext* (Europe), and *Deutsche Börse* was 21.3%, 27.9%, and 37.9% respectively. This situation largely emerged due to investors' avoidance, on a mass scale, of risky investments during the period of protracted recession.

At the same time, one cannot rule out the effect of institutional investors' mistrust of the modern exchange trade mechanisms, caused by the accelerated growth rate of the number of participants resorting to high-frequency trading and other types of speculative strategies. This fact is confirmed, in particular, by the published correspondence between the Investment Company Institute and the US Securities and Exchange Commission (SEC), which states the necessity of regulating the activity of market participants engaged in high-frequency trading.

In the opinion of the organization uniting biggest US investment management companies, high-frequency trading – whose share in the US securities market is estimated to be 50-70%, is fraught with some significant risks for the industry of open-ended funds¹, because it uses confidential information on big bids, resorts to market manipulation through front-running, and induces unjustified liquidity turmoils on the securities market. The ICI fears that such activities may result in market disorganization and provide high-frequency traders with advantages over long-term investors². One of the manifestations of the risks associated with high-frequency trading was the collapse, in 2012, of Knight Capital Group Inc. - a broker company notorious for promoting such trading strategies and taken over by *Getco* LLC – a Chicago-based company³. On 1 August 2012, as a result of the incorrectly installed new software applied by *Knight Capital* in its transactions, the NYSE's trading system was flooded by erroneous bids, which caused the broker company's losses in the amount of \$ 440m.



Source: data released by the Moscow Exchange; www.finance.yahoo.com; World Federation of Exchanges (WFE).

Fig. 3. Yields on World Stock Indexes in 2011–2012, %

¹ The letter addressed by the Investment Company Institute (ICI) to SEC, as of 10 April 2010, concerning proposals relating to the securities market's structure. See its full text on the ICI's official website: http://www.ici.org/pdf/24266.pdf

² Patterson S. *Probe Sparks Split on Trades*. WSJ, 17 December 2012. Russian translation: *Neuiutno na birzhe*. *Vedomosti*, 19 December 2012.

³ Strasburg J., Patterson S. High-Speed Traders Race to Fend Off Regulators. WSJ, December 27, 2012.

As estimated by Tabb Group, the share of off-floor trading systems functioning by the principle of dark pools on the US stock market increased from 3% in 2007 to 15% in 2012^1 . A substantial part of such trading involves shares withdrawn from the exchange.

The situation with share market liquidity on the Moscow Exchange was rather controversial. The volume of (anonymous) market exchange transactions with shares in 2012 dropped to only 44.7% of its 2007 level, while only a year ago, when the RTS and the MICEX merged, it was a high as 151.9% - with the same base. On the contrary, the volume of transactions in shares carried on in all trade modes in 2012 rose by 25.7% on 2007. This happened because the main mode of trade in shares on the Moscow Exchange included the repo market, which is indirectly supported by the Bank of Russia².

Table 2

Behavior of Market Transactions with Shares on Major Global Stock Exchanges in 2007–2012, in Terms of Value (2007 = 100%)

	2007	2008	2009	2010	2011	2012
USA (NYSE и NASDAQ)	100	150.2	109.7	71.5	72.2	54.5
China (two exchanges)	100	70.2	114.9	103.1	98.5	63.8
Japan (Tokyo and Osaka exchanges)	100	90.5	64.5	65.9	64.0	55.5
UK	100	62.8	33.0	29.1	28.8	21.3
Euronext	100	78.2	35.1	35.8	37.8	27.9
Germany	100	92.3	38.3	41.8	52.3	37.9
Hong Kong	100	177.4	162.5	174.2	169.2	120.6
Canada	100	107.6	75.3	83.0	92.4	82.5
Australia	100	76.9	57.6	92.4	94.2	70.8
Russia (MICEX – market transactions)	100	74.5	90.5	106.0	151.9	44.7
Russia (MICEX – all trade modes)	100	117.2	71.4	84.1	134.6	125.7
NASDAQ OMX Nordic Exchange	100	73.6	40.3	41.3	45.6	32.3

Source: calculations based on data published by the World Federation of Exchanges (WFE).

Table 3

Movement of Domestic Market Capitalization in 2007–2012 (2007 = 100%)

	2007	2008	2009	2010	2011	2012
USA (NYSE and NASDAQ)	100	58.3	76.7	87.9	79.5	94.9
China (Shanghai SE)	100	38.6	73.2	73.5	63.8	68.9
Japan (Tokyo Exchange)	100	71.9	76.3	88.4	76.8	80.3
UK	100	48.0	72.5	80.5	75.2	88.0
Euronext	100	49.8	68.0	69.4	57.9	67.1
Germany	100	52.8	61.4	67.9	56.3	70.6
Hong Kong	100	50.1	86.8	102.1	85.1	106.7
Canada (TMX Group)	100	47.3	76.7	99.3	87.4	94.2
Australia (Australian SE)	100	52.7	97.2	112.0	92.3	106.8
Russia*	100	26.4	57.3	91.7	72.9	71.8
NASDAQ OMX Nordic Exchange	100	45.3	65.8	83.9	67.8	80.1

* Based on data released by S&P for the period of 2007–2012.

Source: calculations based on data published by the World Federation of Exchanges (WFE).

The movement of market capitalization indices on the world exchanges appears to be more optimism inducing than the situation with liquidity. In 2012, the capitalization of companies on US exchanges rose to 94.9% of its pre-crisis 2007 level. The same index for Japanese

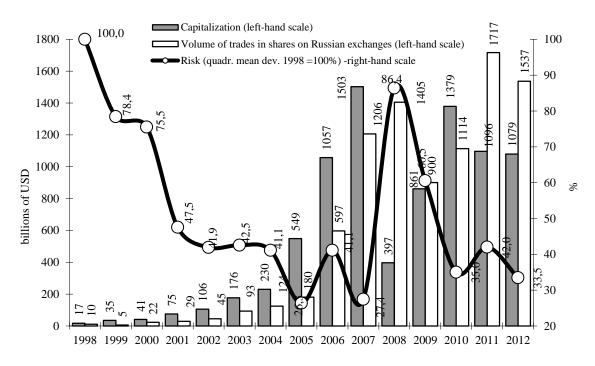
¹ See Patterson S. Finra CEO Says It Is Expanding Oversight of Dark Pools. WSJ, January 8, 2013.

 $^{^{2}}$ As a rule, the Bank of Russia conducts a limited number of repo operations on the stock exchange market. However, the high liquidity volume that it supplies to biggest banks via the bond repo market enables these banks to use part of their excessive liquidity for the issuance if loans to brokers and their clients on the share repo market.

stock exchanges amounted to 80.3%, for UK – 88.0%, for Germany – 70.6%, for Hong Kong – 106.7%, for Canada – 94.2%, for Australia – 106.8%, and for *Euronext* – 67.1%. In 2012, even in face of the declining liquidity on the exchanges, capitalization indices began gradually to return to their pre-crisis level due to the rising prices of stocks traded on the world's biggest stock exchanges.

The capitalization of Russian joint-stock companies in 2012 amounted to \$ 1.1 trillion, or 71.8% of its 2007 level, which generally corresponds to the rates of recovery displayed by that index on the world's major trading floors. However, the specific feature of capitalization in Russia in 2012 is that, in contrast to the other countries included in our overview, and in spite of the rising values of the RTS and MICEX indexes, its rate, instead of increasing, dropped on its 2011 value (*Fig. 4*). This is the result of withdrawal of some Russian issuers into foreign jurisdictions, as well as the modest annual results reported by a number of big companies. Thus, for example, in 2012 the price of share in the state-owned OJSC *Gazprom* dropped from Rb 183.8 to Rb 143.7, or by 28.1%, while its profits shrank by 11% which, according to expert analysts, reflects the competitive capacity and dividend policy problems faced by this emitter. Thus, analysts from UBS believe that *Gazprom* is the most underestimated oil and natural gas producer in the world¹. This is a good illustration of how the insufficient effectiveness and low corporate governance level in a state-owned company may become a serious obstacle to its capitalization growth.

The aggregate volume of transactions in shares carried on in all trade modes on the Moscow Exchange decreased from \$ 1.7 trillion in 2011 to \$ 1.5 trillion in 2012, or by 10.8%. In 2012, the share market's volatility (measured in terms of standard deviation of the RTS Index's daily fluctuations) dropped on the previous year and amounted to 33.5% of its 1998 level.

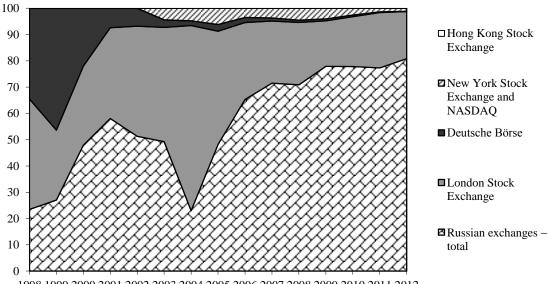


¹ Khodiakova E. Novyi antirekord Gazproma. [Gazprom's New Record]. Vedomosti, 13 February 2013.

Source: estimates based on market capitalization data released by the Moscow Exchange and S&P.

Fig. 4. Capitalization, Liquidity and Volatility of the Russian Share Market

In terms of its aggregate volume of transactions in shares carried on in all trade modes, the Moscow Exchange in 2012 managed to maintain its status of major organizer of trade in this type of financial instruments (shares and depository notes) issued by Russian emitters (*Fig. 5* and *Table 4*). The participation of the Moscow Exchange in trade in shares and depository notes increased from 77.3% in 2011 to 80.8% in 2012. Meanwhile, the relative volumes of trade carried on by the London Stock Exchange, *Deutsche Börse* and the two major US exchanges shrank by a noticeable degree. However, this happened by no means because Russia's major exchange became more attractive for global investors, the simple reason being that the foreign exchanges – in contrast to Moscow's trading floor – could not rely on the central bank's liquidity support mechanism.



1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 *Source:* estimates based on data released by Russian and foreign exchanges.

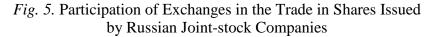


Table 4

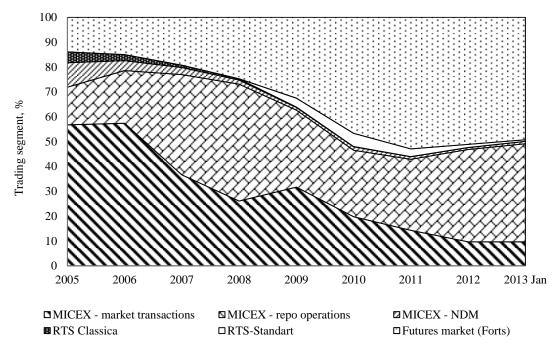
Participation of Exchanges in the Trade in Shares Issued by Russian Joint-stock Companies

	•							
	2000	2005	2010	2011	2012			
MICEX	36.0	38.1	69.9	72.1	78.7			
RTS Classica	11.9	2.0	0.2	0.1	0.03			
RTS T+0 Market		0.8	0.02	0.01				
Saint-Petersburg Exchange	0.003	7.3	0.001	0.001	0.0002			
RTS Standard			7.7	5.1	2.1			
Russian exchanges – total	47.9	48.2	77.8	77.3	80.8			
London Stock Exchange	30.1	43.1	19.0	21.1	17.9			
Deutsche Börse	22.0	2.6	0.6	0.3	0.05			
NYSE and NASDAQ		6.2	2.6	1.4	1.2			
Hong Kong Stock Exchange			0.031	0.009	0.005			
Shares and depository notes - total	100.0	100.0	100.0	100.0	100.0			

Source: calculations based on data released by Russian and foreign exchanges.

A serious defeat suffered by the Russian stock market in the fierce competition between exchanges – and one that may be fraught with far-reaching consequences, as it has created a precedent for the national companies – is the switchover of such companies as *Polyus Gold*, *Polymetal*, and the holding company *Mail.ru* to offshore jurisdictions and onto the London Stock Exchange's main market.

Fig. 6 and *Table 5* demonstrate changes in the structure of different trade modes on Russian exchanges, including operations carried on in the FORTS futures and options market. After the merger, in December 2011, of the two largest Moscow-based exchanges, this structure significantly altered. The share of market transactions dropped from 14.3% in 2011 to 9.7% in 2012, which became a strong negative factor because it is the volume of market (anonymous) transactions that truly reflects the effectiveness of a stock exchange as a pricing center and provides a base for all stock indexes. The futures market's share over the same period shrank only slightly - from 53.0% go 51.1%. Market transactions on the spot and futures markets gave way to repo operations, whose relative volume over the year rose from 28/6% to 37.1%.



Source: calculations based on data released by Russian exchanges.

Fig. 6. The Market Structure of the Moscow Exchange, January 2005 through January 2013

Another important development after the merger of the two exchanges was the gradual disappearance of Standard - the market segment where the more sophisticated mechanisms of guarantees and settlements of exchange operations with shares were tested. This segment shrank from 3.1% in 2011 to 1.3% in 2012. In 2012, the Moscow Exchange significantly reduced its reward programs for market makers in the Standard segment which, as estimated by its own specialists, resulted in a sharp drop of the trade volume¹. However, there is some ground for believing that, in 2013, the Moscow Exchange will fully switch over to applying T+2, thus introducing an adequate replacement for Standard.

Table 5

The Structure of the Moscow Exchange's Share Market from January 2005 through January 2013

			0	•					
	2005	2006	2007	2008	2009	2010	2011	2012	Jan 2013
MICEX – market transactions	56.7	57.4	36.6	26.1	31.7	19.8	14.3	9.7	9.6
MICEX – repo operations	15.1	21.1	40.3	47.0	31.0	26.7	28.6	37.1	39.4
MICEX - Negotiated Transac-	9.8	4.0	2.8	1.7	1.1	1.5	1.1	0.8	1.0
tions Mode									
RTS Classica	4.4	2.5	1.0	0.5	0.2	0.1	0.0	0.0	0.0
RTS Standard					3.5	5.3	3.1	1.3	0.6
Futures market (Forts)	13.9	15.0	19.3	24.8	32.6	46.7	53.0	51.1	49.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: calculations based on data released by Russian exchanges.

The market IPO-SPO represents a week component of the Russian exchange system, as the participation of the Moscow Exchange in the total volume of public placements of shares issued by Russian companies remains close to zero. According to *Dealogic*, in 2011 Russian companies undertook IPO-SPO to the total value of \$ 11.3bn but, as stated by NAUFOR (Russian National Association of Securities Market Participants), the Moscow Exchange launched only IPO in the amount of \$ $0.75bn^2$. In 2012, out of the total of \$ 9.5bn of public placements, the value of shares placed by the Moscow Exchange amounted to \$ 0.15bn. Within the framework of the two biggest public placements by Russian companies, the volume of shares purchased through offering on the Moscow Exchange amounted to 2.9% (*Sberbank* [The Savings Bank of Russia]) and 2.3% (*MegaFon*)³.

The events of early 2013 have given rise to some hopes that the problem posed by the reluctance of Russian issuers to place their shares via the Moscow Exchange may – at least in part – be resolved. At the general government meeting held on 25 January 2013, President Vladimir Putin said that privatization deals in the form of IPO should be carried out in such a way that would ensure the circulation of issued shares on Russian exchanges. This requirement will probably be reflected in some normative legal acts.

Besides, on 15 February 2013 the Moscow Stock Exchange successfully launched an IPO in the amount of Rb 15.0bn. Its specificity was that all the additionally issued shares were to be placed exclusively on Russian trading floors. This relatively successful IPO has proved that large-scale placements of securities may indeed be made on the domestic market and attract biggest international investors.

In addition to providing a solution to the problem of ensuring the participation of Russian companies in the public placement market, the Moscow Exchange will also have to reverse the negative trend towards de-listing the shares of big emitters which emerged in 2011–2012.

¹ Trifonov A. Birzha nedoschitalas' 9 trlsn rub. [The Exchange Lost Rb 9 Trillion] Vedomosti, 18 January 2013.

² Sovershenstvovanie protsedury emissii tsennykh bumag [Improvement of the Procedure for the Issuance of Securities] (Report by NAUFOR). 13 December 2011. See NAUFOR's official website http://naufor. ru/tree.asp?n=9411&hk=20111216

³ Kuznetsov I., Ladygin D. *Pervichnoe razmeshchenie pensii. Rynok IPO poluchil prezidentskoe poslanie.* [Primary pension placement. The IPO Market Received the President's Messsage.]. *Kommersant*, 28 January 2013.

As stated in the reports released by CJSC MICEX, the number of emitters of shares operating on the exchange had shrunk from 320 in 2011 to 275 in 2012, or by 14.1%; and the number of issues of shares – from 418 to 368, or by 12.0% respectively.

In 2012, more than 30 big joint-stock companies left the Moscow Exchange, including *Pe*tersburg Energy Sales Company, Kurganenergo, SUEK-Krasnoyarsk (Siberian Coal Energy Company), Far-Eastern Bank, Vyksa Steel Works, Baskirenergo, Podolsk Machine-building Factory, Kemerovo OJSC Azot, JSC Moscow Heat Distribution Network, OGK-1, OGK-2, OGK-3, Taganrog Metallurgical Works, Seversk Pipe Plant, Sinar Pipe Works, Tulagorvodokanal, TGK-13, *Kola Energy Sales Company*, Kazan Helicopters (Russian Helicopters), Ulan-Ude Aviation Plant (UUAZ), SIBUR Holding, Kuibyshevnefteorgsintez, RTM Group, Hutrinvestholding, Polymetal, JSC The Seventh Continent, Baltika Breweries, LO-MO, Phosagro, and Bashinformsviaz. They did so for a variety of reasons: reorganization, low sales of their shares on the exchange, or reluctance to disclose their information in accordance with the International Financial Reporting Standards.

One manifestation of the worsening position of the Moscow Exchange in the global competition between exchanges is Russia's low global competitive capacity rating by the World Economic Forum (WEF), which estimates the ability of domestic markets to attract financial resources for the development of national companies. By that criterion, Russia was rated 125th among 139 countries in 2010, 127th among 142 in 2011, and 130th among 144 in 2012. In that year, India, Brazil and China were rated 19th, 40th and 46th respectively.

The Market for Shares Issued by Russian Companies

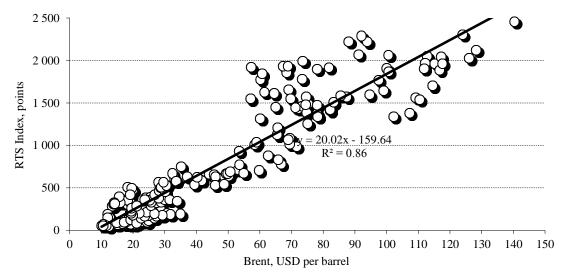
As in previous years, the main factors determining the movement of Russian stock prices were the global conjuncture of prices for raw materials, and primarily oil and gas prices; the behavior of foreign portfolio investors; the ruble's exchange rate against major foreign currencies; and instability of the world economy and financial system. The majority of these factors exist independently of the economic policy pursued by Russian authorities.

Dependence on the Global Conjuncture of Prices

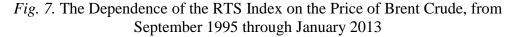
The dependence of the market for the shares of Russian emitters on oil prices is a wellknown fact. The coefficient of determination (\mathbb{R}^2) between the absolute monthly values of the RTS Index and the price of Brent crude over the period from September 1995 through January 2013 is equal to 0.86 (see *Fig. 7*), which points to a very close interdependence of these two indicators.

According to the forecasts released by international financial organizations and the RF Ministry of Economic Development, no dramatic growth of oil prices can be expected in the next few years. The subdued outlook for oil prices stems from both by the moderate demand for oil in a situation of a slowdown in the global economy's growth rate coupled with the implementation of energy-saving technologies, and the emergence of technologies for the extraction of mineral resources, in particular shale oil and natural gas. As estimated by the RF Ministry of Economic Development, the availability of hydrocarbons from domestic sources in the USA will increase from 50% in 2010 to 66% in 2030; in terms of liquid fuel extraction,

the USA remains the world's leader¹. Under such conditions, Russian energy carriers in the European and Asian markets will have to deal with growing competition from the countries of the Middle East and Central Asia, and probably from the USA as well.

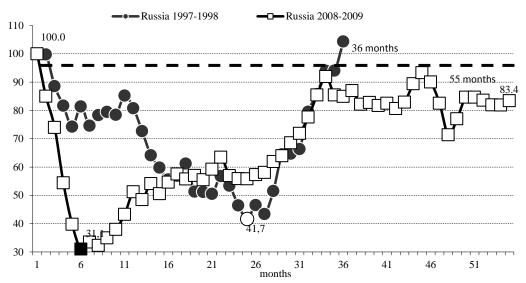


Source: calculations based on data released by IMF International Financial Statistics (IFS) and the Moscow Exchange.



As a result, in accordance with the basic scenario for the development of Russia's economy and the RF Ministry of Economic Development's *Forecast-2030*, the price of Urals will rise to the level of \$ 127 per barrel (its pre-crisis record high of June 2008) only in the next decade, by 2023. As shown in *Fig.* 8, so far the correctness of such predictions has been confirmed by facts. In contrast to the 1997–1998 crisis period when oil prices returned to their previous level within 36 months, over the past 55 months they have climbed to a level of only 83.4% of their pre-crisis peak. Another feature of the present situation is that for 22 months in a row oil prices have remained relatively stable.

¹ Scenario Conditions of the Long-Term Forecast for the Socio-Economic Development of the Russian Federation until 2030 (Forecast-2030). January 2013, p. 32. See the RF Ministry of Economic Development's official website.



Source: data released by IMF IFS.

Fig. 8. Drops and Recoveries of the Price of Brent Crude During Financial Crises in Russia (Record High =100%), as of January 2013

A more accurate description of the interdependence between stock indexes and oil prices is based on the analysis of the relative changes in their values. *Fig. 9* demonstrates the results of changes in the coefficient of correlation between the monthly relative movements of the RTS Index and the price of Brent over a 12-month period. A specific feature of the sliding correlation curve is that it reflects the strengthening or weakening of the interrelation between the two indicators with a lag of one year.

The correlation curve describing the changing values of the RTS Index and the oil price has a cyclical nature. As the value of the Index approaches the pre-crisis peak, the coefficient of correlation declines and becomes negative. It means that the price of oil and the Index unexpectedly begin to change in two different directions. While the share market is plummeting, the positive correlation between the changes in the Index's value and the price of oil is reestablished. When the acute phase of the crisis is over, the correlation once again begins to move towards (-1).



Source: calculations based on data released by IFS IMF and MICEX-RTS.

Fig. 9. The Correlation between the Movements of the RTS Index and the Price of Brent Crude, from September 1995 through January 2013.

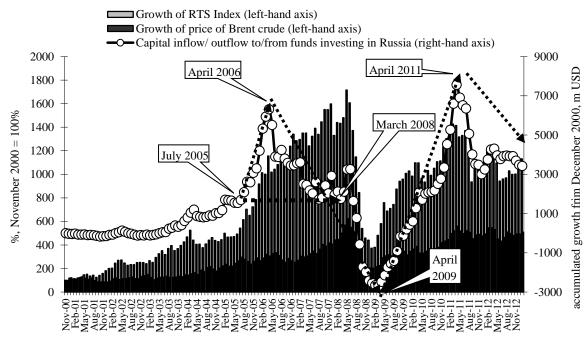
The correlation curve clearly displays five periods over the last decade:

- from the early 2000s through July 2005 the coefficient of determination increased from 0.2 to 0.5; oil prices and the RTS Index were moving upwards in one and the same direction;
- July 2005 April 2008: the coefficient of determination declined from 0.5 to -0.5, oil prices and the RTS Index generally displayed an upward movement over that period, but in the second half of 2006 and the first half of 2007 there was a decline in oil quotations;
- April 2008 April 2009: the coefficient of determination increased from -0.5 to 0.8, this was a period of plummeting oil prices and the prices of shares issued by joint-stock companies;
- April 2009–April 2011: the coefficient of determination declined from 0.8 to -0.2, the price of oil demonstrated a moderate growth, while the RTS Index displayed intensive recovery-related growth;
- in the period from May 2011 through January 2012, the coefficient of determination increased to 0.8 in April 2012, then slightly declined towards January 2013 to 0.6; over that period, prices of oil and the prices of shares issued by Russian joint-stock companies were generally on the decline.

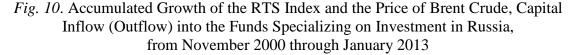
Inflow/Outflow of Foreign Portfolio Investment

In terms of their influence on the prices of Russian shares, the outflow and inflow of funds provided by foreign portfolio investors and recorded by Emerging Portfolio Fund Research $(EPFR)^1$ represent a factor equal to the movement of oil prices, as shown in *Fig. 10*.

¹ The data released by EPFR on capital inflow and outflow via the foreign funds specializing on investing in Russia may be treated as in indicator of the investment behavior of foreign big portfolio investors, including global and regional funds. According to our estimates, the portfolio held by specialized funds amount to approx-



Source: calculations based on data released by IFS IMF, the Moscow Exchange and EPFR.



As for the five periods during which the correlation of changes in the RTS Index and the movement of oil price was becoming distinctly different, an analysis of accumulated resources of foreign investment funds specializing on Russia has provided an explanation of the nature of that phenomenon.

The growth of the coefficient of correlation between the RTS Index and the prices of oil from the early 2000s through July 2005 occurred because, during that period, both factors influencing the movement of the share market – oil prices and the money inflow into the foreign funds specializing on investing in Russia – were moving in the same direction. Oil prices were rising, the flow of portfolio investment was directed into Russia, and the RTS Index was displaying a stable growth. As shown in *Table 6*, over the period from November 2000 through June 2005 the investment funds received \$ 1.5bn in investment.

The decline in the coefficient of correlation in July 2005 - April 2008 to -0.5 was caused by the differently directed movement of oil prices against the inflow of foreign portfolio in-

imately 50% of all investment in Russia made by regional and global investment funds. If, for example, investors withdraw their monies from a specialized fund, this should by no means be regarded as capital outflow from Russia. True capital outflow will occur only when a fund, in order to fulfill its obligations to investors, will begin to sell its shares in Russian joint-stock companies. If capital is withdrawn from global or regional funds, it is practically impossible to make a quantitative estimation of the influence of that operation on the actual shrinkage of amount of investment made by that fund in Russian shares which, as a rule, constitute only a negligible portion of their portfolios. Nevertheless, if there indeed occurs capital outflow from the foreign funds specializing on investing in Russia, it is likely that global and regional portfolio investors have also begun to withdraw their assets from Russia.

vestment. In the period from July 2005 through April 2006, in spite of the increasing volatility of oil prices, the foreign funds specializing in investing in Russia received a total of \$ 4.8bn of new investment (*Table 6 \mu Fig. 10*). The surge in the short-term investment activity can be explained by Russia being assigned an investment rating by international rating agencies (*Fitch*'s - on 17 November 2004; S&P's – on 31 January 2005). Besides, on 31 May 2005, the verdict in the first court case of Mikhail Khodorkovsky was announced, and many portfolio investors then believed the declarations of Russian authorities that this case was going to be exceptional. However, in the period between April 2006 and April 2008 there occurred a reversal in the preferences of foreign investors, and so, in spite of the stable growth of oil prices, the funds investing in Russia began to actively withdraw their capital (*Fig. 10*). As a result of portfolio investment outflow, the growth rate of the RTS Index demonstrated a significant slowdown against the rapidly rising oil prices.

During the period from April 2008 through April 2009, the coefficient of correlation increased to 0.8, while the share market sharply declined. At that time, plummeting oil prices resulted in rapid withdrawal of capital from the foreign funds investing in Russia. The RTS Index also displayed a rapid decline.

The downward movement of the coefficient of correlation between the RTS Index and the level of oil prices in the period from April 2009 through Aprile 2011 (to -0.2) was once again caused by the fact that the accelerated growth of the RTS Index was mostly sustained by the capital inflow into the foreign funds, while the price of oil was increasing at a moderate rate. Over that period, the foreign funds received new investment in the amount of \$ 10.2bn.

The recovery of the former values of the coefficient of correlation between the RTS Index and the price of oil in the period from May 2011 through January 2013 occurred because the latter once again was moving in the same direction as the volume of foreign investment. In the second half of the year, oil prices were on the decline, and private investors were withdrawing their monies from the funds investing in Russian shares. Between May 2011 and January 2013, a total of \$ 4.1bn was withdrawn, and the RTS Index declined accordingly.

Table 6

	Investment inflow (+)/ outflow (–), million USD
November 00 – June 05	1,538
July 05 – April 06	4,769
May 06 – March 09	-9,005
April 09 – April 11	10,255
May 11 – January 13	-4,140

Inflow/ Outflow of Foreign Funds Invested in Russian Shares, According to EPFR

Source: calculations based on data released by EPFR.

From the changes in the cumulative capital flows via the foreign funds specializing on investing in Russia shown in *Fig. 10* it become obvious that the key shifts in the behavior of foreign investors took place in May 2006 and May 2011. According to the data displayed in *Table 6*, capital outflow from foreign investment funds in the period from May 2006 through March 2009 amounted to \$ 9.0bn, and in the period from May 2011 through January 2013 – to \$ 4.1bn. Even if these figures are doubled by way of adjusting them to the potentially similar behavior of regional and global asset managers whose investment in Russia were likewise shrinking, it will still appear that the shock-generated fluctuations in the prices of shares on the Russian market may only result in a gradual withdrawal of capital in amounts equal to 1-to-2-day volume of trading in shares on the Moscow Exchange.

The explanation of the factors behind the negative changes in the behavior of global portfolio investors in the developing markets was offered by the IMF's experts in its Global Financial Stability Report published in September 2011¹. They based their calculations on data collected by EPFR Global for the period from January 2005 through May 2011 on the capital flows via the investment funds managing investment in shares across the world, in Asia, Latin America, Europe, the Middle East and the economically developed countries. Their conclusion was that the most important factors with statistical significance at the 1% level of confidence were as follows:

- the forecast real GDP growth rate² (+);
- volatility of the forecast GDP growth rate (-);
- volatility of the exchange rates of major world currencies (-);
- the volatility index of the share market (VIX) (-).

The level of interest rates and the toughness of currency regulation were the least significant factors.

These factors can be regarded as indicators of forthcoming financial crises, which are applied by the portfolio investment funds specializing on certain types of markets. According to the IMF Report, the strongest shock in the form of peak capital outflow in the amount of 4.4 bn from the funds specializing in investment into Europe, the Middle East and Africa occurred in June 2006. As seen from *Fig. 10*, it was in that month that the investors in shares issued by Russian joint-stock companies reversed their behavior. In such a situation, the downward trend in the rate of GDP growth in the leading developed and developing economies registered in the IMF's World Economic Outlook in April 2006³, as well as the disturbances in the movement of VIX that began from Q2 2005 onwards⁴, could serve as signals triggering the withdrawal of funds by portfolio investors. The volatility surges predicted in the forecasts of GDP growth and the prices of shares were a reflection of the concerns of the experts and the market about the disproportions in the national balances of trade, the aggravating crisis on the housing mortgage market in the USA, and some other factor that finally resulted in the 2008 recession.

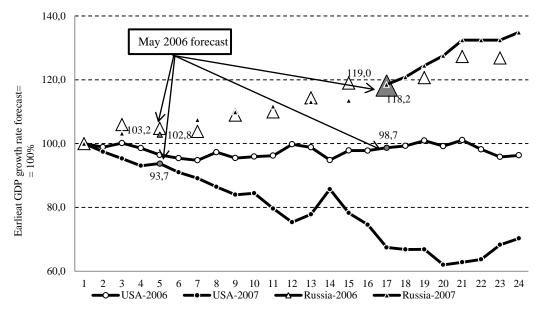
Fig. 11 displays changes in the predicted values of GDP growth in Russia and the USA in 2006 and 2007, plotted on the basis of the international surveys of economic forecasts conducted by *Consensus Economics*. The GDP growth data for 2006 were collected from January 2005 through December 2006, the forecasts for 2007 -from January 2006 through December 2007. The cumulative estimations of the forecasts for Russia over these periods were done, as a rule, once every two months.

¹ IMF. Financial Stability Report. September 2011, pp. 11-18. See www.imf.org.

² The forecasts of GDP growth and its volatility are based on data released by Consensus Economics.

³ World Economic Outlook (WEO), April 2006, Fig. 1.8. See www.imf.org.

⁴ In his book *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, (Russian translation: Delo Publishers, Moscow, 2011. P. 272) R.Rajan noted that in the period from Q2 2005 through Q2 2007, the two-year implied volatility of S&P500 option price (an indicator that reflects markets expectations of stock price vol-atility) was by 30–40% above the short-term one-month volatility.



Source: calculations based on data released by Consensus Economics.

Fig. 11. Changes in the Forecasts of GDP Growth for 2006 and 2007 Based on International Surveys

Among the factors shown in *Fig. 11*, in May 2006 the strongest influence on the growing concerns of the portfolio investors operating in Russia could be exerted primarily by pessimistic forecasts for US growth in 2007. Over the period from January through May 2006, economists cut their forecasts for US GDP growth in the USA in 2007 by 6.3% which, in its turn, pointed to the possibility of a decline in the demand for oil and the risk of the ruble's depreciation. Later on, the fears of a slowdown in the US economy were transformed in a reality, as indicated by the behavior of the USA-2007 curve. At the same time, also in May 2006, the forecasts of US GDP growth in 2006 stayed practically at the same level, as well as the forecasts of Russia's GDP growth in 2006 and 2007. In May 2006, the forecast growth in the Russian economy for 2006 amounted to 118.2% of its level forecast as of January 2005, and the forecast growth for 2007 – to 102.8% of its level as of January 2006. In other words, the analysts of the world's biggest financial organizations in May 2006 were expecting a dramatic slowdown in the US economy in 2007, which so far had not transformed itself in a decline in the developing economies, and Russia in particular. This proved to be a sufficient signal for portfolio investors to begin fleeing from developing markets.

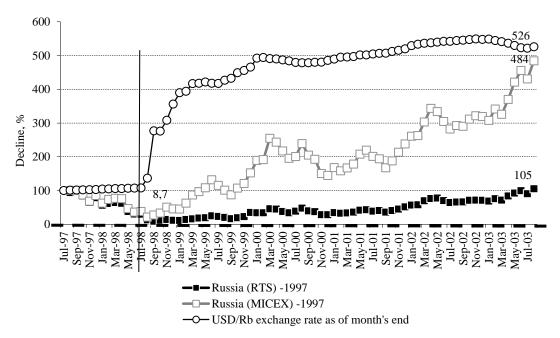
It is an interesting fact that, by withdrawing their assets in June 2006 from the funds investing in the shares issued by European companies, as well as in Russia, the Middle East and Africa, global portfolio investors displayed their amazing insight as they came far ahead of the most outspoken prophets of the future financial crisis. The famous declaration by Professor Nouriel Roubini that a housing mortgage crisis was looming came only as late as September 2006 at an IMF conference. At Davos, in February 2008, RF Minister of Finance Alexei Kudrin insisted that Russia will remain a 'peaceful haven' amidst the world financial crisis. Christine Lagarde, the current managing Director of the IMF, in her interview in the documentary film *Inside Job* (2010) admitted that it was only in February 2008, at a G7 summit,

that she had realized that a crisis was indeed approaching – when she heard US Treasury Secretary Henry Pauson's assurances that everything was 'under control'.

However, as early as May 2006, foreign investors began to flee from Russia's and other developing markets. Now we can better understand why foreign portfolio investors proved to be more shrewd and insightful than the most eminent stock market experts of monetary authorities. The movement of these indicators in 2012 will be discussed later, in the section on the stock market risks.

Currency Exchange Rates

The differences in the depth of the ruble's depreciation observed during the 1997–1998 and 2008–2009 crises are reflected in the discrepancies in the recovery dynamics of the RTS and MICEX Indexes. The MICEX Index describes the value of shares in portfolios denominated in rubles, and the RTS Index – the value of those denominated in US dollars. So, after the more than 5-fold depreciation of the ruble¹ in 1998, the subsequent recovery of the MICEX Index returned to its pre-crisis record high in May 1999 – only 8 months after it had hit 'the bottom'. By contrast, the recovery of the RTS Index lasted for 58 months.



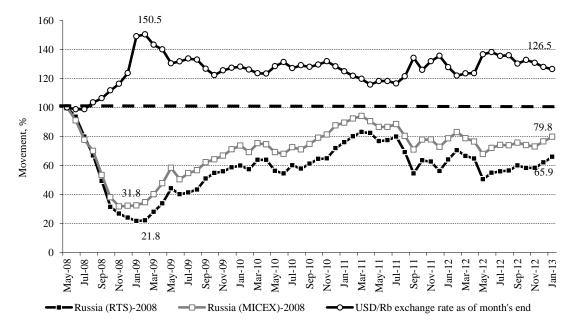
Source: data released by the Moscow Exchange and the Bank of Russia.

Fig. 12. The Dynamics of the US Dollar's Exchange Rate and the RTS and MICEX Indexes during the Crisis Period 1997–98 (July 1997 = 100%)

During the crisis period of 2008–2009, the ruble's depreciation hit the mark of 50% of its initial level (*Fig. 13*), and then its exchange rate against major foreign currencies began gradually to rise. For this reason, the recovery of the RTS and MICEX Indexes proceeded at almost identical rates, the rate displayed by the MICEX Index being only slightly higher. By

¹ The period of 1998–2003.

January 2013, the RTS Index had gained 65/9%, and the MICEX Index – 79.8% of their record highs registered in May 2008.



Source: data released by the RTS, the MICEX, the Moscow Exchange and the Bank of Russia.

Fig. 13. The Dynamics of the US Dollar's Exchange Rate and the RTS and MICEX Indexes during the Crisis Period from May 2008 through January 2013 (May 2008 = 100%)

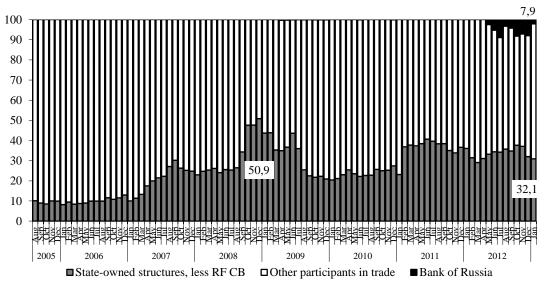
Competition on the Domestic Share Market

The year 2012 saw a considerable rise in the influence exerted by state-owned companies and government departments on the share market. This was manifest in the increasing participation of government financial organizations in the trading in shares on the exchanges, their increasingly prominent role in the management of the Moscow Exchange, and the expansion of power of government departments in the field of regulation, supervision and development of the financial market.

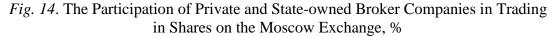
Fig. 14 demonstrates the results of the transactions with shares carried out in the Main Market of the Moscow Exchange by the Bank of Russia, state-owned banks and related structures¹. During the most acute phase of the crisis from September 2008 through July 2009 this segment of the market was characterized by a marked increase in the activity of the players representing the State. By December 2008, the participation of state-owned structures in the trading in shares on the exchange had increased to 50.9%. This may largely be explained by the fact that some big market participants (*Kit Finance, Sviaz Bank*) because of their financial problems were taken over by state-owned banks, as well as by the implementation, by *VEB* [Bank for Development and Foreign Economic Affairs], of the stock market support program funded by a Rb 175bn loan received by VEB from the National Welfare Fund. During the period of market recovery the participation of state-owned banks and their affiliations in the ex-

¹ VEB, VTB, VTB Capital, VTB24, Gazprombank, Sberbank, Kit Finance, Sviaz Bank, Bank of Moscow, TransCreditBank, and from 2011 onward – the investment company Troika Dialog.

change trade in shares declined, but from February 2011 onwards it was once again on the rise, climbing to 36.1% in December 2011. This happened due to the acquisition, by *Sberbank*, of the investment company *Troika Dialog*. In 2012 the share of state-owned financial organizations did not increase. However, from May 2012 onwards the share market of the stock exchange was entered by the Bank of Russia, whose monthly participation in trading amounted to 2% to 8% of the total value of transactions. In December, private financial organizations accounted for 60.0%, state-owned financial organization – for 32.1%, and the Bank of Russia – for 7.9% of the total volume of transactions with shares on the Moscow Exchange respectively.



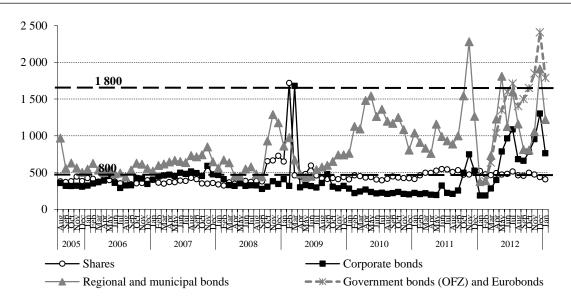
Source: calculations based on data released by the Moscow Exchange.



In 2012, the antimonopoly parameters of the majority of the Moscow Exchange's market segments worsened – with the exception of trading in shares. This is indicated by the movement of the Herfindahl–Hirschman Index, or HHI,¹ on the Moscow Exchange, by market segment, in the period from January 2005 through January 2013 (see *Fig. 15*). As estimated by the Federal Antimonopoly Service of the Russian Federation, the market has a low concentration if HHI is below 800; moderate concentration if 800 < HHI < 1800; and high concentration if HHI is above $1,800^2$. Over the course of 2012, the HHI for the transactions on the Moscow Exchange's main share market remained stable at a level of approximately 500, which means that this market segment was low-concentrated.

¹ The market concentration Herfindahl–Hirschman Index (HHI) is defined as the sum of squares of the volumes of participation of each participant in trading on an exchange: $HHI = (D1)^2 + (D2)^2 + ... + (Dm)^2$, where Di - is the per cent market share of i th participant; i = 1, 2, ..., m.

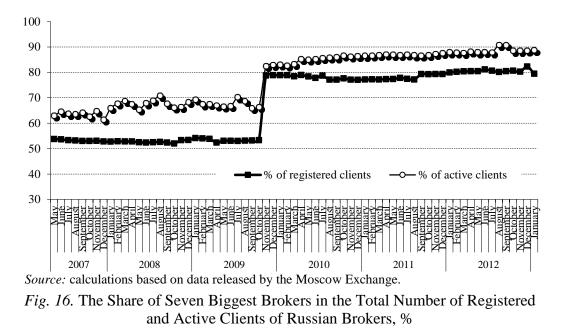
² See section 2.6.4 of the Methodological Recommendations for the Procedure of Analysis and Evaluation of the Competitive Environment on the Financial Services Market, approved by Order of the RF Ministry for Antimonopoly Policy of 31 March 2003, No. 86.



Source: calculations based on data released by the Moscow Exchange.

Fig. 15. The Herfindahl–Hirschman Index, Based on the Volume of Secondary Trading in the MICEX-RTS's Main Market (All Trade Modes)

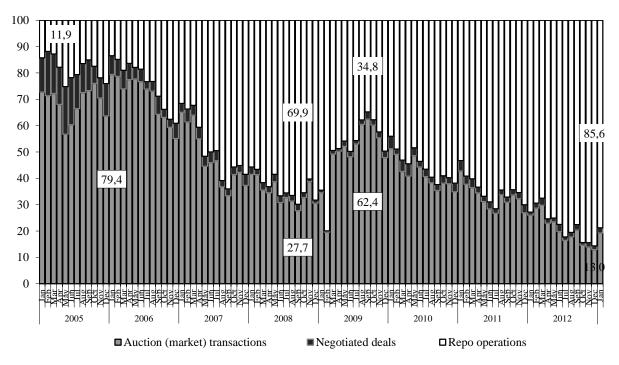
Fig. 16 shows the dynamics of the share of the seven biggest broker companies in the total number of registered and active clients¹ serviced by participants in the trading on the Moscow Exchange's Main Market. Over the period of 2010–2012, the share of that category of companies in both indexes was steadily on the rise, reaching as of January 2013 the level of nearly 90% for all registered clients and 80% of active clients of broker companies.



¹ According to the Moscow Exchange's rules, a client is to be recognized as 'active' if it carries out at least one transaction per month.

In 2012, the proportion of market (anonymous) transactions in shares on the Moscow Exchange hit its record low of 13.0% (*Fig. 17*), while that of repo operations, on the contrary, rose to 85.6%. By means of repo operations on the share market, brokers can implement some very risky strategies in order to attract short-term borrowed resources, which then enable them to provide their clients with marginal loans, as well as to carry out arbitration repo transactions with the same assets but with different contracting parties. According to media reports, arbitration on the market for repo operations with shares was one of the reasons why one of Russia's biggest investment banks – *Renaissance Bank* – in 2012 experienced problems that resulted in a change in its controlling interest¹.

The main causes of the decline in the volume of market transactions on the Moscow Exchange in 2012 were the continuing outflow of foreign portfolio investment, fewer opportunities for carrying on transactions after the merger of the MICEX and RTS², shortage of new attractive issues of shares on the exchange³, the flight of domestic private investors from risky assets⁴, and the indirect support coming from the Bank of Russia (first of all, for repo operations on the merged exchange).



Source: calculations based on data released by the Moscow Exchange.

¹ Tofaniuk E. V Afriku guliat'. [To Go for a Walk in Africa]. Forbes, No 1 (106), 2013, pp.100–101.

² Trifonov A. Brokery zhdut luchshikh vremen [Brokers Are Waiting for Better Times]. *Vedomosti*, 8 August 2012.

³ Trifonov A., Kamneva G. *Birzha sbavliaet oboroty* [The Exchange Slows Down Its Pace]. *Vedomosti*, 31 October 2012.

⁴ Rudenko P. *Bank Rossii vzial polbirzhi. V ob "eme torgov snizhaetsia dolia chastnykh investorov* [The Bank of Russia Takes Over Half of the Exchange. The Share of Private Investors in the Trading Volume Is Shrinking]. Kommersant, 6 June 2012.

Fig. 17. The Structure of Transactions with Shares on the Moscow Exchange's Main Market, %

The introduction, from 3 September 2012, of an additional commission payment on hyperactive trading machines which imposed a counterproductive burden on the trading system delivered a strong impact on the exchange-related activity in the Moscow Exchange's stock and currency markets. Each broker client was granted the right to submit up to 30,000 bids per trading session free of charge. For each ruble of the exchange commission paid on a completed transaction, a market participant could submit another 20 bids. Each bid submitted in excess of that limit would cost 10 kopecks. Simultaneously with these measures, from 17 September 2012, the Moscow Exchange doubled the minimum price tick and tick value for the most popular types of futures contracts – another measure designed to protect the exchange infrastructure from any excessive activity of trading robots in response to minimum changes in contract prices.

According to the Bank of Russia's overview of the financial market, in 2011 highfrequency trading systems (trading robots) accounted for approximately one-half of the trading turnover on the futures market Forts and 15% of the trading in shares on the MICEX. According to former First Deputy Chairman of the Moscow Exchange Roman Goryunov, such estimates of the volume of robotic transactions are conservative, but the order of the number is correct¹. The information published by *Expert* (with reference to data released by the Moscow Exchange), in 2012 trading robots conducted approximately 40% of the total volume of transactions on the stock market and handled a total of 97% of the submitted bids².

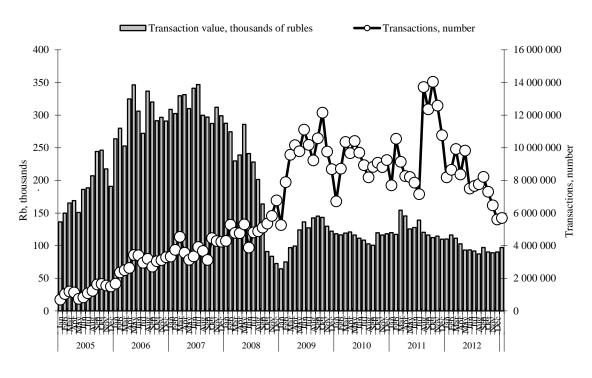
As stated by the Moscow Exchange's Managing Director of Securities Market Anna Kuznetsova, two months after restrictions were imposed on the number of bids submitted by hyperactive trading systems, if dropped fourfold – while the number of transactions did not decline³. Nevertheless, as shown in *Fig. 18*, in 2012 the volume of market transactions on the Moscow Exchange continued its downward movement; moreover, from September onwards the rate of this movement became much faster, which could indeed by the result of the measures introduced on the exchange in order to reduce the scale of robotic trading activity. The number of market transactions in December 2012 dropped by 47.9% on December 2011. At the same time, the value of one transaction over the same period shrank by 17.7%.

Nevertheless, the measures introduced in 2012 by way of regulating high-frequency trading on the exchange were of a limited nature. However, some other measures adopted in the same year were aimed at boosting the use of speculative strategies - for example, the launch of the so-called T+2 trade settlement system instead of the currently applied pre-settled trades mode T+0. The new settlement standard is more convenient for profiteers than for conservative investors because in practical terms it means that trade settlement occurs two days after the trade is enacted via the payment clearing and settlement system. Another booster of robotic activity is the annual contest Best Private Investor (BPI) held by the exchange, where winners get generous prizes – invariably snatched by the most active trading robots. Regretfully, the exchange offers no explanation of the risks associate with high-frequency trade.

¹ Trifonov A. *Birzha robotov*. [The Exchange of Robots]. *Vedomosti*, 26 March 2012.

² Obukhova E. *Birzha pobedila robotov*. [The Exchange Conquers Robots]. *Expert*, No 37, 17-23 September 2012.

³ Kamneva G. Chistka v stakane. [A Purge in a Glass]. Vedomosti, 19 November 2012.



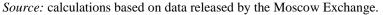


Fig. 18. Market Transactions with Shares on the Moscow Exchange's Main Market

The shrinking volume of private investor activity on the exchange and the increasing prominence of state-owned structures on the financial market (which enjoy preferential treatment when obtaining financial resources from monetary authorities)¹ have given rise to concerns about the ability to continue doing business for many private companies – brokers and asset managers. In 2011, after the appointment of a new head of the RF Federal Financial Markets Service (FFMS), some positive changes occurred in its regulatory activity – for example, it no longer resorted to administrative measures in order to oust small-sized companies from the legal stock market. By its Order of 24 May 2011, No. 11-23/pz-n, the FFMS renounced its intention to raise, in a stagnating market, the equity capital sufficiency standards for brokers and dealers in securities from Rb 35m to Rb 50m, and for depositaries – from Rb 40m to 60m. By doing so, it prevented a large-scale flight of financial intermediaries into the 'grey area' of financial business.

However, a simple removal of excessive administrative pressure on the business activities of non-bank financial organizations proved to be insufficient. For four years in a row – in fact, since 2009 – the number of professional participants of the securities market has been on the decline (*Table 7*). In 2012, the number of brokers dropped from 1,084 to 958, or by 11.6%; and the number of dealers – from 1,085 to 959, or by 11.6%.

¹ As estimated by Fitch Rating, state-owned banks accounted for 84% of the total volume of funding received by banks from the Bank of Russia and the RF Ministry of Finance, while their share in the banking sector's aggregate assets is approximately 55%¹.

The current problems that non-bank financial institutions are faced with when attempting to expand their business activity have largely arisen because the state authorities actually fail to exercise in full their powers relating to the development of the sphere of non-banking financial and investment services.

Table 7

	2007	2008	2009	2010	2011	2012
Number of holders of FFMS's license for:						
1. Broker activity	1,445	1,475	1,335	1,213	1,084	958*
Change on previous period, %		2.1	-9.5	-9.1	-10.6	-11.6
2. Dealer activity	1,422	1,470	1,337	1,198	1,085	959*
Change on previous period, %		3.4	-9.0	-10.4	-9.4	- 11.6

The Number of Professional Participants of the Securities Market

* as stated in the FFMS's register as of 8 February 2012.

Source: data released by the RF Federal Financial Markets Service (FFMS).

The executive bodies of state authority have so far failed to fulfill the assignment envisaged in the Strategy for the Development of the Financial Market in the Russian Federation, approved by the RF Government's Regulation of 29 December 2008, No. 2043-r (hereinafter - Development Strategy), on submitting to the State Duma, in September 2009, of the drafts for alterations to be introduced in Federal Law 'On the Securities Market' and other legislative acts of the Russian Federation in the part regulating the activity of investment consultants, as well as the services rendered to retail investors. The requirements stipulated in Part 3 of Section 4 of the Concept of Long-term Socio-Economic Development of the Russian Federation Until 2020, approved by the RF Government as of 17 November 2008, No. 1662-r (hereinafter – KDR-2020), on the introduction of measures designed to create tax incentives for Russian and foreign investors to apply long-term financial instruments have never been complied with. The government departments did not fulfill the assignment stipulated in Item 19 of the plan for implementing measures designed to create an international financial center in Moscow, approved by Regulation of the RF Government as of 11 July 2009, No. 911-r, which envisaged the preparation of a draft federal law aimed at augmenting existing legislation by stipulations concerning the creation of special targeted accounts (pension accounts, education accounts, etc.) for investing individual savings.

One can hardly recognize as effective the practice that has emerged in the sphere of financial market regulation, when the government approves new strategies and programs for the securities market's development without any more or less detailed analysis of the results achieved in the course of implementing previous programs and documents that address the same issue. As a result, the mechanisms that ensure officials' responsibility for implementing the adopted decisions are destabilized, the financial market's development proceeds at a slower pace, and investors lose confidence in the government's efforts to improve the institutional environment.

In January 2012, the transaction whereby *Sberbank* acquired the investment company *Troika Dialog* was finalized. From 8 October, the company was transformed into *Sberbank*'s corporate investment department named *Sberbank CIB*. This event had a symbolic significance for the Russian stock market because it demonstrated that private investment banks are giving way to big state-owned banks, which rely on their own resources and banking investment services in providing corporate financing to their clients. From 14 November 2012 on-

wards, *Renaissance Group* – second biggest private investment bank - by way of restructuring its debt replaced its controlling owner, but so far its solvency issues have not been resolved¹.

Preliminary Results of the Merger of the RTS and MICEX

The year 2011 saw a merger of Russia's two biggest exchanges - the MICEX and RTS. In June 2012, a general shareholder meeting approved the name of the new exchange - Open Joint Stock Company 'Moscow Exchange MICEX-RTS', or OJSC Moscow Exchange.

The merger of the two Russian exchanges had a strong positive influence on the development of Russia's stock market.

First of all, it now became possible to create, on the basis of the MICEX settlement chamber, the National Settlement Depository (NSD) and the Depository Clearing Company (DCC), a 'fully-fledged' central depository. In accordance with Order of the FFMS of 6 November 2012, No. 12-2761/PZ-I, this status was granted to non-bank credit institution Close-end Joint Stock Company National Settlement Depository (NSD). From 1 January 2013, the last provisions of Federal Law of 7 December 2011, No. 414-FZ 'On the Central Securities Depository' came into force, whereby it was envisaged that all the organizations operating on the stock market were to conform their activity to the requirements stipulated in that Law. In particular, the registers of holders of securities were from then on to include a new personal account – of the central depository's nominal holder. In due time, all registered securities kept on the personal accounts of nominal holders in the registers of other depositaries will have to be reregistered to that account.

The creation of a central depository will result in a qualitative improvement of the efficiency and reliability of the operations of re-registering the ownership right to securities and the trade settlements on the stock market². Besides, as the NSD is recognized by central legislation in conjunction with legislations of the leading developed countries, biggest foreign pension and investment funds will be able to raise the limits for their investment in the shares and bonds of Russian emitters. In 2012, the NSD's capital rose to \$ 180m – a level that, according to the *Thomas Murray* international agency which provides private and public ratings on the world's 120 biggest settlement depositories, appears to be adequate for a depository that has a restricted banking license to perform cash settlement services. The NSD also has at its disposal some additional resources in the form of reserves and insurance coverage with a responsibility limit of \$ 65m and the possibility to attract a daylight or overnight loan secured by the Bank of Russia. The value of securities kept at the NSD increased from Rb 8.1 trillion in 2011 to Rb 12.3 trillion in January 2013. According to the NSD's representatives, by 1 April 2013 they are going to open nominal holder accounts in the registers of Russia's 1,000 biggest emitters; the other joint-stock companies will join the system before 6 November 2013³.

The establishment of a central depository resulted in *Euroclear* and *Clearstream* opening their nominal holder accounts there, thus creating a competitive environment with adequate settlement technologies for attracting onto Russia's domestic market the resources of big for-

¹ Trifonov A. *Dzhennings ushel ot kreditorov*. [Jennings Escapes from the Creditors]. *Vedomosti*, 21 February 2013.

² This can be fraught with the risk of formal and informal follow-up of investment in Russian securities; one may hope that the State will attempt to minimize this risk by means of introducing some special procedures and rules.

³ Papanchenkova M., Trifonov A. *Velika Rossia, a pokupat' nekomu*. [Russia is Big, But There Are No Buyers in It]. *Vedomosti*, 4 February 2013.

eign institutional investors, investment banks, brokers and hedge funds. So far, the only type of transactions settled via these accounts has been the purchase of OFZ by foreign investors, and later on – the purchase of corporate bonds. From 2014, foreign investors will be also able to invest in shares issued by Russian joint-stock companies.

As estimated by Executive Director of the *Euroclear* Bank Frédéric Hannequart, the possibility for European depositaries to open accounts with the the NSD may bring \$ 20bn of new investment¹. At the same time, many market participants have expressed their concerns that the existence of *Euroclear's* and *Clearstream*'s accounts with the the NSD may also result in a liquidity outflow from the Russian stock market, because the fees for settling securities transactions inside European depositaries are significantly lower than those set for the transactions settled via the NSD. In particular, objections against *Euroclear* and *Clearstream* having their accounts at Russia's central depository were voiced by NAUFOR and the head of the task force set up by the stock market development council under the RF President. On the other hand, the Bank of Russia, the RF Ministry of Finance, the National Securities Market Association (NSMA) and the NSD supported this decision². By now, the FFMS has approved the list of 66 central depositaries across the world granted the permission to open nominal holder accounts with NSD as the central depository for the Russian stock market.

The merger of the RTS and the MICEX has significantly simplified for market participants the settlement of transactions on the securities and futures markets, because the participants in trading are now able to concentrate all their liquidity earmarked for settling their transactions with government and corporate securities, as well as on the futures and currency markets, on their trading accounts in a single settlement and trading system. The diversification of the combined exchange's activity in servicing transactions with different monetary and investment assets has improved its financial sustainability in a situation of a general global decline in the volume of exchange trading and investor flight from risky assets.

The merger of the two exchanges resulted in the creation of a well-motivated manager team, who initiated development projects that were unprecedented in the history of the Russian stock market. Besides, it became easier for government bodies to deal with a unified exchange, which manifested itself in the active support of its projects by the RF Government, the Bank of Russia, the RF Ministry of Finance, the FFMS, the interdepartmental task force for the development of multi-function centers, and the legislative branch of state authority. In 2012, the Moscow Exchange group implemented the following major projects:

- the switchover of operations with OFZ into the Main Market sector, and the introduction of a single procedure for depository registration and settlement of transactions with OFZ and corporate securities;
- the creation, in accordance with the requirements of G-20 for national financial markets, of the first Russian repository on the basis of the NSD for the registration of off-floor transactions with different financial instruments³;
- cross-listing of benchmark equity index derivatives on the stock exchanges of the five founding members of the BRICS Exchanges Alliance;

¹ Department of finance. Euroclear. *Kommersant*, 7 February 2013.

² Rudenko P. *Evroklir pustili v Rossiu*. [Euroclear To be Let Into Russia]. *Kommersant*, 12 April 2012; Rudenko P. *Gosbumagam spriamili put' na zapad*. [Government Securities Are Given a Shortcut to the West]. *Kommersant*, 8 June 2012.

³ To be put in operation from 6 February 2013.

- the integration between the FORTS Derivatives market and MICEX Derivatives market;
- the adoption of the *Moscow Exchange Group IT strategy Until 2015*, the launch of its new trading platform *Spectra* to power FORTS and Standard markets in order to upgrade the trading, clearing and post trade infrastructure;
- the centralization of the clearing activity for all market segments, including the futures market, on the basis of the unified Clearing House created with CJSC JSCB National Clearing Centre (NCC);
- the transfer to the unified list of constituents for the calculation of the *Moscow Exchange* Group's indexes;
- the introduction of direct client access (based on DMA) to the currency exchange market for all categories of participants as an alternative to the FOREX system that involves tens of thousands of private clients in risky off-floor deals;
- the introduction of trading in options on the EUR/RUB FX futures contracts, the launch of new long-term swaps;
- the creation, by the National Securities Market Association (NSMA) and the NDR, with the support by the Bank of Russia, of a pricing center for evaluating bonds with low liquidity.

The most difficult decision for the Moscow Exchange in 2012 was that of transferring from the procedure whereby trades are pre-settled [T+0], meaning that you need to put money up front in order to execute the trade, to the so-called T+2 trade settlement system, which means that the trade is settled two days after the trade date, the settlement being guaranteed by a clearing center¹. The problems involved in the transfer to T+2 are associated with some substantial additional costs for the market participants, because they need to install new software, implement new procedures for their internal record keeping and new systems of contractual relations with their clients. After switching over to T+2, small-sized broker companies may lose their former direct access to the exchange's clearing and settlement system, and so be forced to operate through the mediation of big clearing agents, mainly banks². The switchover to T+2 is associated with different benefits for different groups of market participants. It will be helpful for non-residents, exchange brokers and their clients interested in getting an additional leverage for settling their transactions. The asset managers of pension saving funds, reserve funds and open-ended investment funds, for which operations with borrowed funds are forbidden by legislation, the introduction of the new exchange trading mode will, most probably, be fraught only with additional costs and risks without any business benefits.

By deciding to transfer to T+2, the Moscow Exchange, in our opinion, has made an uneasy but – on the whole – correct choice. Foreign investment can be attracted onto the domestic market only by means of creating for the investors the settlement modes that they are used to, the modes that are recognized by international regulators and the international expert community³. This category of investors can enter a country's internal market only if the settlement

¹ This transfer is to begin from March 2013.

 $^{^{2}}$ At present, the only condition of gaining access to the clearing system on the Moscow Exchange's securities market is that the participant must pay a contribution of Rb 2m to the guarantee fund; no additional requirements concerning the size of their own capital, loss-free operation, etc. have been introduced so far.

³ For more details on the requirements for and evolution of the settlement modes for exchange transactions on the global and national stock markets, see Thomas Murray. Capital Market Infrastructure (CMI) in Focus - Equities Settlement Cycles, 2 January, 2013. http://www.thomasmurray.com/

procedure on the national exchange is compatible with the universal standards. The Moscow Exchange's choice was supported – either explicitly or passively – by the RF government represented by the Bank of Russia, the RF Ministry of Finance and the RF Federal Financial Markets Service (FFMS).

However, such a decision meant a certain violation of the interests of domestic institutional investors on the exchange market. In this case, we believe that the adopted strategy for switching over to T+2 had a significant drawback, in that the reduced access to exchange transactions for domestic institutional investors entailed neither any changes in the regulation procedures nor appropriate infrastructural projects that could bring down the costs incurred by that category of market participants and open up for them some new opportunities for developing their businesses. Thus, for example, the Moscow Exchange did not accept the proposals put forth by the National League of Management Companies that a centralized system for settling the transactions with the stocks of open-ended investment funds should be created – a counterpart of *Fund/Serv* and *Vestima*+ applied in the international settlement and clearing systems DTCC and *Clearstream*. In 2012, no decisions were made to allow pension savings be invested in shares issued by Russia's biggest joint-stock companies that are not listed in A category, or in open-ended funds. Many of the professional community's proposals aimed at improving the taxation regime for pension accounts and collective investment schemes were not considered. Unlike their position with regard to the exchange's project, the regulatory bodies remained passive towards the discussion of the development issues faced by the domestic institutional investors.

It can only be hoped that, in the future, the business development problems of the domestic institutional investors may be dealt with as promptly as were the development projects put forth by the Moscow Exchange. In this connection, a gradual improvement of the existing settlement standards and their switchover to the T+0 mode may help in leveling down the problems and risks faced by domestic portfolio investors in the framework of T+2.

At the same time, the year that has already passed since the exchange's merger did not relieve the market participants' fears as to how it may influence the competitive capacity of Russia's domestic financial market. The merger eliminated the competition between the MICEX and the RTS which for many years has been the main driving force of the stock market's development. This factor, shortly after the event took place, was emphasized by former Deputy RF Minister of Finance Alexey Savatyugin in his interview with *Rynok tsennykh bumag* [The Securities Market]¹. A year later, the market participants are still lamenting the disappearance of inter-exchange competition².

With due regard for the risk that domestic competition may indeed disappear, when the merger of the two exchanges was effectuated it was intended that this factor should be counterbalanced by the external competition between the combined exchange and foreign exchanges. The RF Federal Financial Markets Service (FFMS) promised that, when a central depository was created, the rules for the access of Russian joint-stock companies to public

¹ Ubezhden v pravil'nosti sushchestvuiushchei sistemy regulirovaniia marketa. [I Am Convinced in the Correctness of the Existing Market Regulation System]. *Rynok tsennykh bumag* [The Securities Market], 2012, No. 1, p.19.

² According to Chairman of the Supervisory Board of Alor Group Anatoly Gavrilenko, the competition between the MICEX and the RTS 'was a real driver behind the exchange trade development in Russia'. After their merger, 'the drive was gone, and so was competition.' Obukhova E., Ogorodnikov E. *Bez Riazani ne budet Londona*. [Without Riazan There Will Be No London]. *Expert*, No. 43, 29 October – 4 November 2012, p. 46.

placement of their shares on foreign exchanges would be liberalized. For this end, on 4 August 2011, the FFMS sent to the RF Ministry of Justice an order whereby Russian emitters were allowed to put in circulation up to 100% of their shares on foreign exchanges in the form of notes, instead of the formerly existing ceiling of 25%. It was intended that the order should come into force from the day of enactment of the federal law designed to regulate the conditions and procedure for the central depository's operation – that is, from 1 January 2013. However, this rule has never been adopted in actual practice. Moreover, in anticipation of the forthcoming IPO on the exchanges, a number of other fundamental decisions were adopted in order to impose restrictions on the placement of securities by Russian issuers on foreign trading floors. At the general government meeting on 25 January 2013, President of the Russian Federation Vladimir Putin said that the shares issued as a result of privatization deals in the form of IPO must be circulated on Russian exchanges. This requirement will probably be duly reflected in normative legal acts.

In the course of implementing the legislation on a central depository, the authorities have by no means always undertaken logically arranged measures – a fact that is fraught with increased legal risks for the foreign investors purchasing depository notes for Russian securities. Thus, for example, in Article 2 of Federal Law of 7 December 2011, No. 415-FZ 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation in Connection with the Adoption of the Federal Law 'On the Central Securities Depository', it is stipulated that the information on the end holders of depository notes must be disclosed on a quarterly basis, and that failure to disclose that information should be punished by sanctions in the form of seizure of dividends. In some instances, it was impossible for global depositaries – the issuers of depository notes - to comply with such requirements, because some foreign investors refused to disclose the relevant information to Russian emitters. As a result, as late as the last workday of 2012, Federal Law of 29 December 2012, No. 282-FZ 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation and on the Recognition as Null and Void of Some Provisions of the Legislative Acts of the Russian Federation' was signed, whereby the mandatory quarterly disclosure on the holders of depository notes was abolished. At the same time, this requirement still applies to the instances of payment of income on issued securities and the lists of persons endowed with the right to participate in general shareholder meetings. Moreover, the alterations and amendments introduced by Federal Law No. 282 to Articles 214.6 and 232 of the RF Tax Cod have made it possible to interpret tax legislation as follows: if the holders of depository notes for basic securities fail to disclose their information, the tax on their income will be levied at a maximum rate of 30%. Such measures undermine the trust of foreign investors in Russian securities and create opportunities for arbitrary interpretation of the taxation rules by various state departments.

The creation of a merged exchange resulted in it being controlled by state-owned structures¹ (*Table 8*). Prior to the merger, the Russian market was operated by two exchanges: OJSC RTS was fully controlled by private shareholders, while the state-controlled stake in the charter capital of CJSC MICEX amounted to 61.1%. As a result of the merger, OJSC RTS

¹ The *Bank of Russia*, *Sberbank of Russia*, *VTB*, *VEB*, *Gazprombank* and the Russian Direct Investment Fund (RDIF). Part of shares in the merged exchanges is owned by its 100% daughter structure MICEX-Finance. In our calculations, the share held by state-owned entities in the structure of the exchange's property is not included in the state stake. However, it should be remembered that, as its capital is controlled by state-owned entities, the rights to the stake in MICEX-Finance are practically controlled by the state.

exists no longer, while the stake held by state-owned structures in the combined exchange is 56.1%. After the IPO undertaken in the framework of privatization of the Moscow Exchange, partly in the form of placement of an additional issue of shares, the size of the state stake declined to 50.3%. It was reduced also as a result of the sale, on 21 December 2012, of part of the stake held by *Gazprombank* to an officially unknown buyer; according to some media sources, this buyer could be a strategic investor from China¹. In fact, the state-owned stake in the Moscow Exchange's capital may be somewhat bigger because, at the moment of the IPO, approximately 2.69% of its shares were held by *Bank Saint Petersburg*, and 0.18% - by the *Bank of Moscow*, controlled by *VTB*.

Table 8

	Prior to re	eorganization	After merger: OJSC	After the IPO: Moscow	
	OJSC "RTS"	CJSC «MICEX»	MICEX-RTS as of 1 February 2012 ²	Exchange as of 15 Febru- ary 2013 – estimated ³	
Bank of Russia		28.6	24.3	22.5	
Sberbank of Russia		7.5	10.4	9.6	
VTB		7.1	6.1	5.6	
VEB		10.5	8.7	8.0	
Gazprombank		6.2	5.4		
RDIF		1.3	1.3	4.6	
State-owned structures	0	61.1	56.1	50.3	
MICEX-Finance		2.8	2.8	5.5	
Other shareholders	89.0	27.9	32.9	38.7	
Total	100.0	100.0	100.0	100.0	

The Structure of Shareholders of the Russian Exchanges Before and After their Merger

Source: data released by the Bank of Russia; publications by Vedomosti and Kommersant.

In the recognized competitive capacity ratings of countries, the presence of state-owned structures in the management bodies of a stock exchange is estimated as a negative factor. Thus, for example, this is the main reason why, in the World Economic Forum's Global Competitiveness Report (GCR), Russia ranks near the bottom in terms of stock exchange regulation efficiency. The WEF's ranking released in September 2012 – that is, almost 9 months after the merger of the two Russian exchanges – effectively ignores this positive fact. By the level of stock exchange regulation efficiency, in 2011 Russia was ranked 116th among 142 countries, in $2012 - 114^{th}$ among 144 countries. By contrast, Brazil, India and China in 2012 were ranked 8th, 28th and 58th respectively.

The domination of state-owned structures not only in the sphere of regulation and supervision, but also in the direct management of infrastructure results in a diminished role of private organizations in dealing with the key issues of financial development. According to Alexey Savatyugin, the then Deputy RF Minister of Finance, one of the major trends in the financial market in 2012 was 'the domination of government institutions (and the strengthening of that domination) in the most important sectors of the financial market', 'the transfer of

¹ Rudenko P. *Na Moskovskuiu birzhu vyshel tainstvenniy pokupatel*. [A Mysterious Buyer Enters the Moscow Exchange]. *Kommersant*, 25 December 2012.

² Mazunin A., Rudenko P., Khvostik E. *Birzhevoi capital utek na zapad*. [The Exchange's Capital Has Flown to the West]. *Kommersant*, 13 March 2012.

³ According to data released by the Moscow Exchange as of 16 January 2013, as well as the information on the biggest stakeholders in the Moscow Exchange published in the statistics section of *Kommersant* on 18 February 2013.

the function of generating market development ideas to state-owned structures and in favor of state-owned structures'. He also believes that 'market factors play a minimum role in the elaboration of decisions – let alone the decision-making, unless they are connected – formally or informally – with the State'¹. The key projects for the exchange in 2012 were the development of direct repo operations, the opening of accounts for the international settlement and clearing systems at the central depository (primarily for servicing OFZ), the participation in IPO of *Sberbank of Russia*, and the development of the currency market.

The prevalence of state-owned structures in the running of an exchange is associated with two sets of risks. First, it is difficult to put an end to the expansion of state-owned structures on the market, because in the process of their expansion they can attract a lot of resources and receive high incomes; this also holds true for the Bank of Russia and the RF Ministry of Finance as the issuer of government securities. Secondly – and especially in view of the creation of a mega-regulator controlled by the Bank of Russia – the Russian market has practically been deprived of an independent mechanism whereby an excessive expansion of risky activity as part of the general functioning of the RF Ministry of Finance and the Bank of Russia can be prevented, for example in an event of the emergence of an unfavorable financial situation in Russia.

In this connection, it appears necessary that a clearly defined strategy should be developed in order to withdraw the Bank of Russia from participation in the capital of the Moscow Exchange and to restrict its participation in any organizations forming the stock market's infrastructure. At the first stage of the merger of the two exchanges it was planned that the Bank of Russia will give up its stake in 2011, but later on it announced that this act would be postponed until 2013–2015². According to *RBC*, on 15 February 2013 the RF President approved the plan of the Bank of Russia's withdrawal from the charter capital of the Moscow Exchange (RTS-MICEX). He reminded that, in accordance with the established plan, the final withdrawal of the Bank of Russia from the Moscow Exchange's capital would happen two years later. At the same time, the Bank of Russia signed the document whereby it assumed the obligation not to alienate its shares over a period of six months. As stated by Deputy Chairman of the Bank of Russia (and also Chairman of the Moscow Exchange Supervisory Board) at the press conference on 15 February 2013, any real actions aimed at withdrawing the Bank of Russia's assets from the exchange's capital will be undertaken only in six months.

The ownership structure remains non-transparent for the Moscow Exchange's clients and the public alike; the identity of only a few of its shareholders with stakes of 5% or more has been disclosed. Considering its position on the market, the preferences granted to it (justly) in the sphere of legislative initiatives and the availability of the administrative resource, this situation can hardly be considered as tolerable. The government itself admitted the importance of the choice of stakeholders for ensuring state security when, in the summer of 2010, the FFMS and the Federal Security Service vetoed the attempt to sell the stake in OJSC *FB RTS* owned by *Kit Finance* to a foreign bank – the EBRD. As a result of the FSS's interference,

¹ *Itogi 2012 goda: mnenie uchastnikov rynka* [The Results of the Year 2012: The Opinion of Market Participants]. See http://finparty.ru/section/news/17508/

² Ulyukaev A. *My ne dorabotali v chasti nadzora*. [We Are Less Than Perfect As Far As Supervision Is Concerned]. An interview with the newspaper *Vedomosti* of 6 June 2011; the Bank of Russia's presentation 'On the Merger of CJSC MICEX and OJSC RTS and the Procedure for the Bank of Russia's Withdrawal of Its Share in CJSC MICEX'.

11% of shares in the RTS were finally acquired by a structure belonging to the MICEX Group. The Bank of Russia also requires that banks disclose complete lists of their beneficiaries.

According to Alexander Afanasiev, Chairman of the Executive Board of the Moscow Exchange, 'the exchange must set an example for efficiency and openness for the whole financial market'¹. Another factor conducive to the achievement of that goal can be the introduction of the rule whereby the Moscow Exchange should be obliged to disclose the information on its shareholders owning stakes of one or more percent.

At present, it is still not evident just how strong has been the synergic effect of the merger of the RTS and the MICEX on the market – and the exchange itself. Prior to the merger, in early 2011, the value of OJSC RTS was estimated to be \$ 1.15bn, or Rb 34.5bn; and the value of CJSC MICEX – \$ 3.45bn, or Rb 103.5bn. In other words, the value of the two exchanges put together was estimated to be \$ 4.6 bn. The complicated process of mutual settlements of the owners of the exchanges during their merger did not conduce to capitalization growth – although the latter is considered to be the most objective indicator of a transaction's success. According to our estimations, with due regard for all the paid dividends – including the shares in OJSC RTS, the total amount paid to the former shareholders from the exchange's assets was roughly equal to Rb 28.4 bn, or \$ 1bn².

Another sum of approximately Rb 35bn was to be paid by the Moscow Exchange to the former shareholders in the RTS in the event of no initial public offering being held by the combined exchange in the first half-year of 2013 – which, luckily, did not happen due to the relatively successful IPO undertaken by the Moscow Exchange in February 2013.

In January 2012, 7.54% of shares in the MICEX-RTS was bought by the European Bank for Reconstruction and Development and the RDIF. As estimated by the newspaper *Vedomos*-ti, the transaction's value amounted to Rb 8.5bn³, which means that the entire value of the combined exchange was estimated to be only \$ 3.75bn.

As was announced by First Deputy Chairman of the Bank of Russia Alexey Ulyukaev and the exchange's representatives in February 2012, in Q4 2012 the combined exchange was planning to achieve a capitalization level of \$ 6bn⁴. A similar figure was cited in March 2012 in the mass media by 'a source close to the exchange's board of directors', who confirmed that, by the moment of the IPO, its value would be estimated at \$ 6bn⁵.

Over the period from 4 through 15 February 2013, the Moscow Exchange launched an IPO of its own shares, with successfully placed shares to the value of Rb 15bn, or \$ 500m. While the announced offer price range was Rb 55–63 per share, the actual quote was set at its bottom margin, or Rb 55. Thus, the Moscow Exchange's capitalization amounted to \$ 4.2bn, which is 8.7% below the estimated value of the MICEX and the RTS on the eve of their merger, and 30.0% below the predicted value of the combined exchange announced in early 2012.

¹ Trifonov A. *Krov' ekonomiki ne dolzhns zastaivat'sia*. [The Economy's Blood Circulation System Must Not Get Clotted]. An interview with Chairman of the Executive Board of the Moscow Exchange A. Afanasiev. *Ve-domosti*, 22 November 2012.

² The Russian Economy in 2011. Trends and Outlooks (Issue 33) – M.: Gaidar Institute, 2012. P. 120-121.

³ Pis'mennaia E., Trifonov A. Fond Ulyukaeva [Ulyukaev's Fund]. Vedomosti, 16 February 2012.

⁴ Rudenko P. *Birzha pereotsenila razmeshchenie*. [The Exchange Overestimates the Placement Size]. *Kommersant*, 13 February 2012.

⁵ Interfax-AFI. *Fondovaia birzha otsenila sebia k IPO* [The Stock Exchange Evaluated Itself for an IPO]. *Kommersant*, 26 March 2012.

The expected synergy effect of the joint business so far has not been justified, in the sense that the preliminary value of both exchanges was evidently overestimated.

At the same time, the IPO by the Moscow Exchange had a generally positive influence on the domestic stock market's development. It clearly demonstrated that it was indeed possible to launch big IPOs on the domestic market, and by doing so, attract large-scale foreign investors. According to reports in the mass media, the participants in the IPO were the state-owned Chinese Investment Company (CIC), *OppenheimerFunds*, *Blackrock* and many other foreign investment funds from Germany, Scandinavia, the UK, the USA, and Asia¹. In spite of the per share price being set at the bottom margin, it is still sufficiently high in terms of the price/earnings ratio (P/E) against the prices of shares circulated on the world's major stock exchanges. For the first 9 months of 2012, that index for the Moscow Exchange was 16 against 6 for the London Stock Exchange, 13.3 for the Warsaw Exchange, 13 for *Deutsche Börse, and* 17 for the New York Stock Exchange².

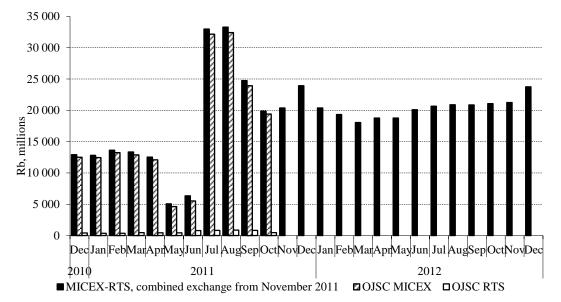
On the first trading day, 15 February 2013, the underestimation of the Moscow Exchange's shares against the placement price amounted to 0%. Usually, the low underestimation index on the first trading day of an IPO launched by a Russian joint-stock company points to an overestimated per share price as of the moment if the IPO launch. Later on, this often results in negative surplus earnings per share against the basis index, for many years³.

The movement of the Moscow Exchange's shareholder equity is demonstrated in *Fig. 19*. Its size was very volatile - a fact that may alarm its potential investors. Probably it will be necessary to supplement the official report by a note explaining the causes of such broad fluctuations of the recorded data.

¹ Trifonov A., Papchenkova M., Kamneva G. Global'nye gosti stolitsy [The Capital's Global Guests]. *Vedomosti*, 15 February 2013; Shlygin I. Kitaiskoe IPO. [A Chinese IPO]. RBC Daily, 15 February 2013; Gaidaev V., Kuznetsov I. Klubnoe IPO. [A Club-style IPO]. 15 February 2013.

² Rudenko P. *Moskovskaia birzha dlia* IPO *otsenena v \$4,4-5 mlrd*. [The Moscow Exchange is Evaluated for an IPO in the Amount of \$4.4-5 bn]. Forbes, 1 February 2013. Published at http://m.forbes.ru/article. php?id=233700

³ Abramov A.E. *Problemy IPO-SPO Rossiiskikh kompanii. Ekonomiko-politichaskaia situatsiia v Rossii.* [The Problems of IPO-SPO Faced by Russian Companies. The Economic and Political situation in Russia]. Ye. T. Gaidar Institute for Economic Policy, No. 10, 2012. pp. 58-54.



Source: calculations based on data released by Russian exchanges on their own assets, published on their official websites.

Fig. 19. The RTS, the MICEX and the Combined Moscow Exchange's Shareholder Equity

The integration of the IT, trading and settlement systems is a slower process by comparison with the legal and administrative merger of the two exchanges. One manifestation of the existence of such problems was the serious technical errors and technology glitches in the exchange's operation in 2011. On 9 August, the trades on the RTS futures market were suspended for 1.5 hours. On 17 August, the trades in securities on the MICEX were likewise suspended for 1.5 hours, and for the 15 minutes no information on the technology glitch was posted by the exchange¹. On 1 and 8 November 2011, the MICEX suspended its trades in securities for technical reasons. It was explained that the two-hour-long suspension of trading on 1 November happened because of the incorrect interaction of software components on a number of servers providing the access of participants to the trading system; and the more than one-hour-long suspension on 8 November - the incorrect transmission of information on the residuals available to the participants in trades². On 24 November 2011, OJSC RTS suspended its evening trading session on the futures and Standard market for half-an-hour: instead of 19:00, it started at 19:30. An unprecedented technology glitch occurred on the futures market on the day when the legal merger of the exchanges was finalized – 19 December 2011. After the clearing session based on the main session's results, unsanctioned transactions began to be recorded on the accounts of the participants in trading. Many private investors suffered losses³. In this connection, the exchange's management and many brokers through whom the bids had been placed declared that they were not obliged to compensate those investors for their losses⁴. The exchange's explanation was that, after the main session's results

¹ Mazunin A., Rudenko P. *MMVB prikryla Ameriku*. [The MICEX Un-discovers America]. *Kommersant*, 19 August 2011.

² Trifonov A. Utro bez *birzhi*. [A Morning without the *Exchange*]. *Vedomosti*, 9 November 2011.

³ Rudenko P., Mazunin A. *Fond-Mazhor* [Fund-majeure]. *Kommersant*, 20 December 2011.

⁴ Rudenko P., Mazunin A. *Klientov MMVB–RTS pustili v raskhod* [The Clients of the MICEX-RTS Have Been Bumped Off]. *Kommersant*, 21 December 2011.

had been drawn up, some incorrect data on the trades and cash positions of the participants were downloaded into the trading system. Another technology glitch occurred on the exchange on 6 March 2012: for twenty minutes, the trade participants in FORTS and Standard markets failed to receive part of the information on their positions¹.

According to the FFMS's head Dmitry Pankin, the MICEX and the RTS, being too busy dealing with the financial and legal aspects of their merger, failed to ensure smooth-running trades². After considering the results of its audit of the exchange after the December 2011 technology glitch, the FFMS published a statement that 'the process of development, testing and exploitation of the technologies applied in conducting trades on the exchange is not compliant with the performance and reliability requirements that are presented, first of all, by the users of its services'³. However, no sanctions were imposed on the exchange, and the regulator only issued an instruction that mandatory audits of the technical devices were to be conducted by an independent organization. The exchange designated the *PwC* company to be that organization.

Technical problems continued to plague the trading sessions on the Moscow Exchange throughout 2012 and 2013. On 23 April 2012, the Moscow Exchange's securities market was halted for 4 hours, and the situation – for the first time in the exchange's history – was declared to be an emergency⁴. In the FFMS statement of 24 April 2012 concerning that incident it was noted that, in spite of the instructions issued to the exchange and its reports on the correction of violations duly submitted to the FFMS, as well as the plans being developed by the exchange for the purpose of modernizing its information technologies complex, the exchange still had failed to pay sufficient attention to strategic development of IT issues, and in particular the reliability of its software and hardware. There followed no serious sanctions against the Moscow Exchange, the FFMS only imposed a fine in the amount of Rb 300,000. However, from May onwards, the exchange began to implement certain measures, which finally resulted in a complete replacement of its CEOs.

On 20 August 2012, the Moscow Exchange accepted no bids for its Main Market sector because of an operational error of one of its employees⁵. On 14 November 2012, there was a major technology glitch in the Moscow Exchange's foreign exchange market, and trading was discontinued for nearly 3 hours⁶. On 21 February 2013, for technical reasons, trading in foreign currencies was suspended at the UTS.

The Moscow Exchange was also less than perfect in managing its staff. In the midst of preparations to the IPO, the old managerial team was replaced. In May 2012, the Moscow Exchange introduced two separate posts of Chairman of the Executive Board and President of the Exchange – both formerly occupied by Ruben Aganbegyan. Alexander Afanasiev became the new Chairman of the Executive Board of the Moscow Exchange. Senior Managing Director and First Deputy Chairman of the Moscow Exchange Roman Goryunov quit his job from

¹ Rudenko P. *Birzha pokrivila otrazheniem*. [The Exchange Distorts Its Reflection]. *Kommersant*, 7 March 2012.

² Verzhbitskiy A. *Dmitrii Pankin nedovolen sboiami*. [Dmitry Pankin Is Displeased with the Technology Glitches]. *RBC daily*, 17 November 2011.

³ Rudenko P., Mazunin A. *FSFR sdelala sbivchivye vyvody*. [The FFMS Made Confused Conclusions]. *Kommersant*, 24 January 2012.

⁴ Trifonov A. *Birzha ob "iavila ChP*. [The Exchange Declares an Emergency]. *Vedomosti*, 24 August 2012.

⁵ Otdel finansov. Moskovskaia birzha. [The Finance Department. Moscow Exchange]. Kommersant, 21 August 2012.

⁶ Papchenkova M., Kamneva G. Valiutnaia pauza. [A Foreign Exchange Pause]. Vedomosti, 15 November 2012.

1 July 2012. From 25 September 2012, the Moscow Exchange was left by its President Aganbegyan.

A New Regulation Model in the Financial Market

In 2012, a number of decisions were made concerning the regulation model to be applied on the Russian financial market, which can be regarded as a landmark in its entire history. As a result of lengthy discussions, it was deemed necessary to create a mega-regulator of the financial market as part of the Bank of Russia's structure and to transfer to it certain regulatory and supervisory powers formerly exercised by other government departments.

The idea of creating a mega-regulator emerged largely due to those rather controversial changes that had occurred in the sphere of financial market regulation in 2011. In accordance with the RF President's Edict of 4 March 2011, No. 270 'On the Measures Designed to Improve Government Regulation in the Sphere of the Financial Market of the Russian Federation', the functions relating to stock market regulation were divided between the FFMS and the RF Ministry of Finance.

The task of elaborating and implementing the government policy and normative legal regulation in the sphere of financial markets was effectively reassigned from the FFMS to the RF Ministry of Finance. At the same time, in accordance with Item 5.2 of the Provision on the FFMS, the Service may only be allowed to take part in preparing the drafts of the main directions for the development of financial markets, draft federal laws and the normative legal acts to be issued by the President of the Russian Federation and the Government of the Russian Federation to address the fields that lie within the range of the Service's competence. So far, the function relating to the stock market's development has been performed inadequately which, in particular, is demonstrated in Section 3.2.4. The regulatory bodies have been more interested in the issue of power distribution than that of developing the financial market.

By the RF Government's Decree of 29 August 2011, No. 717 'On Some Issues of Government Regulation in the Sphere of the Financial Market of the Russian Federation', the RF Ministry of Finance was granted the right to work out the main directions of the securities market's development and to coordinate the functions of the federal bodies of executive authority relating to the regulation of the securities market. The same decree established a unique procedure for adopting normative legal acts in the sphere of regulation of the financial market and institutional investors. Such acts are to be approved either by the RF Ministry of Finance in coordination with the FFMS or, vice versa by the FFMS in coordination with the RF Ministry of Finance. Thus, for example, under Item 5.3.17 of the Provision on the FFMS, approved by the RF Government's Decree No. 717, the FFMS is obliged to coordinate with the RF Ministry of Finance the following documents, standards, guidelines, requirements, etc.: standards for the issuance of securities, the prospectuses of securities to be issued by the emitters, the procedure for State registration of securities issues (or an additional issue), State registration of reports on the results of placement of a securities issue (or an additional issue); the mandatory requirements for the procedure of keeping the register of owners of inscribed securities, and the requirements for the procedure of keeping the register of owners of investment units; standards for accepting securities for public placement, circulation, quotation and listing; the procedure for granting access to the initial placement and circulation beyond the territory of the Russian Federation for the securities of emitters registered in the Russian Federation; the procedure and timelines for the disclosure of information by the emitters of securities; the procedure for issuing licenses for different types of professional activity on the securities market; and many other documents.

In its turn, the RF Ministry of Finance must coordinate with the FFMS the following normative legal acts on financial market issues: the requirements to the qualification and professional experience of persons acting as single executives of different institutional investors; the requirements to the qualification of professional securities market participants; the equity sufficiency norms for professional securities market participants, with the exception of credit institutions, and other requirements aimed at lowering the risks associated with professional activities on the securities market, including the procedure for calculating the size of equity for professional securities market participants, with the exception of credit institutions; the requirements to and the procedure for calculating the size of equity of an open-ended investment fund and the asset manager of an investment fund, open-ended investment fund or private pension fund; the procedure for calculating the size of equity of an applicant for a license for exchange trade organization, or an applicant for a license for mediation in transacting exchange-traded derivative contracts; the requirements to the asset structure of close-ended and open-ended investment fund; and many other types of documents.

Simply by going through the list of these powers one can easily understand just how unreasonable will be the practice of duplicating the functions of the two government agencies in the sphere of financial market regulation. The new power distribution pattern between the RF Ministry of Finance and the FFMS had a purely subjective foundation because it relied on the FFMS being *de facto* subordinated to the RF Ministry of Finance, and head of the Ministry, Alexey Kudrin, was simultaneously Russia's Vice Prime Minister. After he had left this post, that connection disappeared, and the mechanism of interaction based on personal communication between the heads of two government departments became dysfunctional. In the newspaper *Vedomosti*, an anonymous source from the RF Ministry of Finance commented the situation as follows: '... as a result, the coordination between the two departments was transformed into perpetual argument, all issues were submitted to the government for discussion, and the decisions were made there'¹.

The fact that the decisions relating to the redistribution of powers between the RF Ministry of Finance and the FFMS were subjective and lacked proper substantiation becomes especially noticeable in view of the decline of activity and the level of earnings of the market participants coupled with the complaints that the funding provided by the government for the purpose of market regulation and supervision is insufficient. Besides, this principle of distributing the responsibilities reduces personal responsibility of the officials involved in the process and results in excessive budget expenditure being allocated to the upkeep of the staff of the two government structures performing parallel functions. In the first half of the 1990s, the unreasonably arranged division of functions relating to market regulation and supervision between the RF Ministry of Finance, the Bank of Russia, *Goskomimushchestvo* (the State Committee for State Property Management of the Russian Federation), and some other departments was the reason why this was the time of flourishing financial pyramids and other types of unlicensed financial activities that resulted in large-scale violations of the rights of private investors.

¹ Papchenkova M., Trifonov A., Rozhkov A. *Novye polnomochiia dlia TsB*. [New Powers for the CB]. *Vedomosti*, 24 September 2012.

The measures introduced in 2011 in order to restructure the system of regulation and supervision of the financial market did not provide adequate solutions to many of the existing law enforcement problems. Although the FFMS became the only agency responsible for control and supervision in the sphere of financial markets – including the control and supervision of insurance companies, credit cooperation, microfinance, commodity exchanges, exchange mediators and brokers, government control over compliance with legislation of the Russian Federation on the use of insider information and market manipulation, - its sphere of responsibility was not extended to banks, audit companies, many aspects of the activity of private pension funds and pension saving managers, the latter being regulated by the RF Ministry of Finance and the RF Ministry of Health Care and Social Development. The inadequacy of supervision over the non-banking sector on the financial market was largely associated with the shortage of highly qualified staff at the FFMS caused by insufficient financing. As admitted by deputy head of the FFMS Alexander Sinenko, an average salary size at the FFMS is Rb 32,000, whereas at the RF Ministry of Finance it amounts to Rb 93,000, and at the Bank of Russia – to Rb 110,000. At the same time, one FFMS official supervises approximately 10 subjects, and the norm for the Bank of Russia is 10 officials per supervised subject¹. Two years after the enactment of Federal Law of 27 July 2010, No. 224-FZ 'On Counteracting the Unlawful Use of Insider Information and Market Manipulation', and on Introducing Alterations in Some Legislative Acts of the Russian Federation', this area, as of July 2012, was supervised by only three FFMS officials. The proposals of the FFMS to the effect that its staff should be increased in a proportion necessary for implementing that Law were not accepted by the RF Government, and so its actual implementation, in fact, never happened². It is not a coincidence that, also two years later, First Deputy Prime Minister Igor Shuvalov said that the attempt to create a mega-regulator on the basis of the FFMS was 'such an awkward compromise'³.

Against the backdrop of all these problems typical of the Russian stock market in 2011 and early 2012, the RF Government-initiated decision to create a single mega-regulator for regulating the financial market appears to be quite logical. However, so far no official documents determining its powers, responsibilities and the organization process have been adopted. Judging by the available official documents and statements made by government officials at different levels it may be assumed that the mega-regulator will be created in the form of a subdivision (main executive office) of the Bank of Russia that will 'take over' the FFMS. The source of financing for the mega-regulator will be the Bank of Russia, without any participation on the part of the federal budget⁴. The mega-regulator's powers will include the regulation and supervision of her financial markets. The exceptions will probably be the RF Pension Fund, the activity of insurance companies relating to medical insurance, the insurance of military servicemen, and other types of insurance services where insurers act as the govern-

¹ Materials of the round table discussion on the creation in Russia of a mega-regulator on the basis of the Bank of Russia, held by the Russian Union of Industrialists and Entrepreneurs (RSPP) on 12 September 2012. See the Finmarket agency's website: http://www.finmarket.ru/z/bw/banks_anlinf.asp?id=3056778&sec=1443&p=1

² Kamneva G. FSFR ne khvataet insaiderov. [The FFMS Lacks Insiders]. Vedomosti, 10 July 2012.

³ Rudenko P., Kuznetsov I., Yakovleva M. *Megaregulirovshchik*. [Mega-regulator]. *Kommersant*, 27 December 2012.

⁴ Sapozhkov O., Grishina T. *Belyi dom ustupil TsB polnomochiia po regulirovaniiu strakhovshchikov i NPF*. [The White House Cedes to the CB Its Powers to Regulate Insurers and PPF]. *Kommersant*, 20 February 2013.

ment's agents. It is still unclear if the mega-regulator will also perform the functions pertaining to the regulation and development of the financial market that are currently consolidated to the RF Ministry of Finance. It is not determined which body will be responsible for the supervision of insiders and insider trade on the financial and foreign exchange markets.

On the whole, the idea of creating a mega-regulator in Russia follows the course of recent global changes in the world financial markets. This measure can probably provide solutions to some of the key problems involved in the development of the domestic financial market, and will help foster investor confidence in its reliability. First of all, it may improve the level of qualification of the personnel responsible for the regulation, supervision and development of financial markets. The supervision of non-bank financial institutions will be more efficient if based on the principle of prudential supervision, when performance problems are identified as they emerge, and not *post factum*, after a crisis situation has already developed¹. One important consideration, however, is that prudential supervision should be applied with caution, and its specific mechanisms designed for banks should not be automatically extended also to non-bank financial institutions and investment funds. And finally, the existence of a megaregulator will eliminate the duplication of functions by government executive bodies, thus saving billions of rubles for Russia's budget.

At the same time, some positive aspects of international best practices of running a megaregulator on a financial market have not been properly considered yet; there also remain some doubts as to whether this supervision will indeed be efficient.

Besides, Russia's non-bank financial institutions express their serious concerns about the risk of a conflict of interests, because the Bank of Russia is simultaneously the biggest market participant, a stakeholder in Russia's biggest stock exchange, the owner of the biggest bank, and the regulator may underestimate the importance of non-bank institutions if it created on the basis of the Bank of Russia². As seen from international practice, among the 115 full members of the International Organization of Securities Commissions (IOSCO), only in 13 countries – which, besides, by no means represent the world's biggest stock markets – the functions of a mega-regulator are executed by national (central) banks³.

As far as the sources of funding for Russia's financial mega-regulator are concerned, the plan of its creation was not tested against the experience of the world's most important financial markets. According to the preliminary decisions, the mega-regulator will be funded from the Bank of Russia's budget. Given the fact that, at present, 75% of the Bank of Russia's profits is transferred to the federal budget, the cost of the mega-regulator's upkeep will be covered at the expense of reducing federal budget revenue by the same 75%. Many countries apply a mixed approach to arranging the financing sources. Bearing in mind that the principal benefi-

¹ In 2012, under order of the FFMS, NAUFOR conducted a study that provided a foundation for elaborating concrete proposals concerning the mechanism of organizing and exercising prudential supervision of non-bank financial institutions. On the basis of these proposals, special pilot zones will be created for testing the principles of prudential supervision in order to avoid a situation when the excessive requirements applicable to banking institutions may be automatically extended to non-bank financial institutions (Kamneva G. *Plan deistvii dlia FSFR*. [A Plan of Action for the FFMS]. *Vedomosti*, 21 November 2012).

² As Chairman of NAUFOR's Board of Directors Alexey Timofeev noted during the round table discussion of the issues of creatig a mega-regulator on the basis of the Bank of Russia, held by the Russian Union of Industrialists and Entrepreneurs (RSPP) on 12 September 2012. See http://www.finmarket.ru/z/bw/banks_anlinf.asp?id=3056778&sec=1443&p=1

³ Danilov Yu. Ostanovit' monstra! [Stop the moster!] Expert, No. 46, 19-25 November 2012.

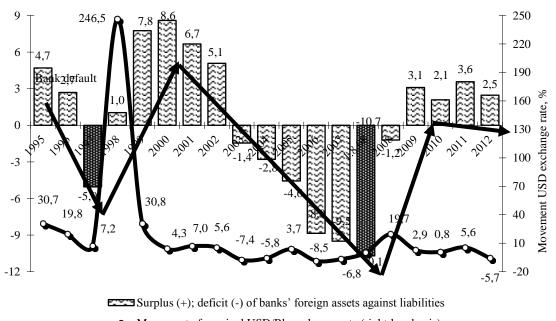
ciaries of the financial market are by no means the entire population of a country, but, as a rule, only a relatively narrow circle of market participants and investors – part of the costs is covered by targeted contributions of the participants in the stock market. In the USA, the SEC is funded from the federal budget. Meanwhile, the regulatory body generates an income in the form of duties levied on the volume of trading operations, as well as the registration of issues of securities. In 2011, a duty of \$ 19.1 was levied on each million of dollars in the overall volume of exchange and off-exchange trading. The payer of this duty on exchange transactions is the exchange itself, and broker pay it on off-floor transactions. In Australia, the UK and Germany the mega-regulators are not funded from the state budget. Instead, all the costs are covered by market participants.

It can be hoped that many of the problems that are as yet unsolved will be provided with adequate solutions in the course of implementing the current approaches to organizing the mega-regulator's activity.

Financial Institutions in Search of New Ideas for Growth

Restrictions on Carry Trading and Growth of Financial Leverage

In 2012, Russia's banking system was in search of an appropriate model for sustainable development in conditions of limited access to carry trading (CT) strategies. The constraints had arisen due to global financial markets now being closed to borrowers from the developing countries, as well as to capital outflow from Russia and to the Bank of Russia's foreign exchange and monetary policies. The scale of involvement of banks in CT can be estimated by means of setting the index of deficit (–) or surplus (+) of the banks' foreign assets against the value of non-residents' claims to the banks, and then comparing it with the total value of bank assets (*Fig. 20*). In 2012, for a fourth year in a row, the value of the banks' foreign currency assets was higher than the sum of their liabilities to non-residents, amounting to 2.5% of the total bank asset value.



Movement of nominal USD/Rb exchange rate (right-hand axis)

Source: calculations based on data released by the Bank of Russia.

Fig. 20. Surplus (+) / Deficit (-) of Banks' Foreign Assets Against Liabilities (% of the Value of Banks' Assets (Liabilities) – Left-hand Scale)

From the first half-year of 2011 onwards, the Bank of Russia raised the required reserves norms (RRN) against liabilities to non-resident legal entities denominated in foreign currencies from 2.5% to 5.5% to the value of these liabilities, and for other liabilities denominated in foreign currencies – from 2.5% to 4.0% (*Fig. 21*). This move resulted in a noticeable increase in the surplus of foreign currency assets over liabilities. The Bank of Russia's strategy of allowing broader fluctuations of the ruble's exchange rate as part of its switchover to inflation targeting is also aimed at restricting carry trading. In December 2011, the RF Central Bank announced that it would expand the bi-currency basket corridor from Rb 5 to Rb 6.

However, from 1 March 2013, the Bank of Russia introduces a single required reserves norm of 4.25% for all liabilities, including liabilities to non-residents denominated in foreign currencies. The RRN for the liabilities to non-resident legal entities denominated in foreign currencies will be decreased from 5.5% to 4.25%. Although the Bank of Russia stated that this 'does not mean a reversal of the monetary policy', a number of experts regard this measure as a kind of signal to banks that they should borrow from abroad¹. We believe that the CT risks are also increasing for another reason: this decision comes into force simultaneously with the liberalization of access to Russia's financial market for the settlement and clearing systems *Clearstream* and *Euroclear*, as a result of which the OFZ market will receive a total of Rb 200–300bn of domestic investment in compensation for the losses that it may expect in 2013 due to the re-orientation of the pension saving portfolio towards investment in infrastructure bonds. Besides, the risk of pension savings withdrawal from OFZ is associated with the possibility of the funded pension system being abolished or reduced.

¹ Plotonova O. *TsB otkryl granitsu*. [The CB Opens the Border]. *Vedomosti*, 13 February 2013.

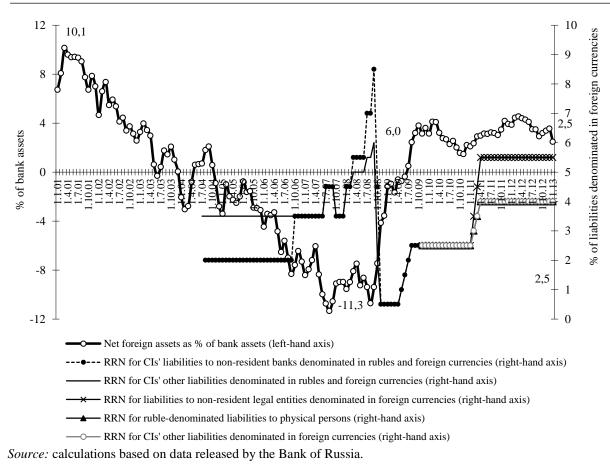
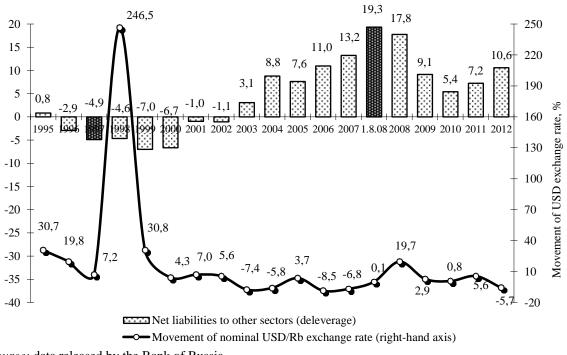


Fig. 21. Carry Trading Regulation by the Bank of Russia, as of 1 January 2013

From 2011, the period of banking system deleveraging¹ was over (*Fig. 22*), which means that the credit portfolio was once again increasing at an accelerated rate by comparison with deposits. In 2012, the ratio of the credit portfolio value to bank assets exceeded that of deposits to bank assets by 10.6 percentage points. This roughly corresponds to the level of leveraging in 2006. However, while in 2006 the leverage was provided by CT, in 2012 it was sustained by short-term borrowings by the Bank of Russia.

¹ The index of net claims of banks to the population and businesses against aggregate bank assets



Source: data released by the Bank of Russia.

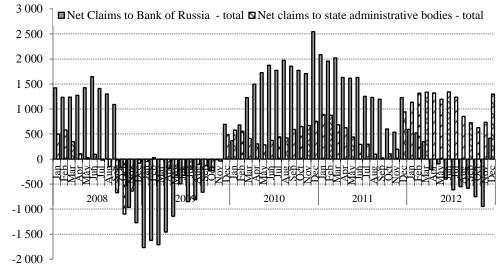
Fig. 22. Credit Surplus over Deposits (as % of Bank Asset Value – Left-hand Axis)

Liquidity and the Current Stability of the Banking System

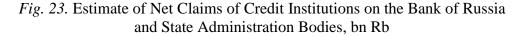
Fig. 23 shows two trends typical of the banking system in 2012. On the one hand, over the period from April to December,¹ there occurred an unprecedented growth in the net debt of credit institutions to the Bank of Russia. By the scale of expansion, the support rendered to banks by means of loans in 2012 is comparable only with that observed in the acute phase of the financial crisis in September - December 2008. On the other hand, in 2012 the volume of net government borrowing from banks in the form of OFZ hit its all-time record high. So, judging by these facts, it can be assumed that the monetary authorities did everything in their power to sterilize the increasing cash inflow into the banking system from the central bank by means of selling federal bonds to banks.

The RF Ministry of Finance's orientation towards the domestic debt market can be explained by its desire to replenish the Reserve Fund in conditions of declining revenues caused by a halt in the upward movement of prices for energy carriers on international markets. In accordance with the *Main Directions of Government Debt Policy in the Russian Federation for 2013–2015* (hereinafter – *Main Directions*), government borrowings on capital markets will become the principal source for covering budget deficit. All these factors put together will urge the monetary authorities to return to CT in 2012 – at least in part, so as to promote new purchases of federal securities. According to *Main Directions*, it is expected that in the medium-term perspective the share of non-residents in the OFZ market will go up from the current 5.5% to 10%, while in the long-term perspective it will increase to 25%.

¹ The December 2012 net borrowing situation favorable to the Bank of Russia was temporary and atypical. It was caused by the traditionally occurring anomalous and temporary growth of deposits with banks as a result of 'de-freezing' of budget funds.



Source: the Bank of Russia's overview of credit institutions



The data presented in *Fig. 24* explain why the excessive support of banks by loans issued by the Bank of Russia did not result in a surge in the volume of banks' investment in government securities. This phenomenon occurred due to a sharp drop in the volume of deposits held by credit institutions with the Bank of Russia, which previously served as one of the sources for sterilizing the excess of liquidity in the banking system. Its average monthly level declined from its record high of Rb 937.3bn in February 2011 to Rb 132bn in December 2012. Now this function has been taken over by OFZ, whose yield is approximately by 2 p.p. higher than the interest rate on deposits with the Bank of Russia.

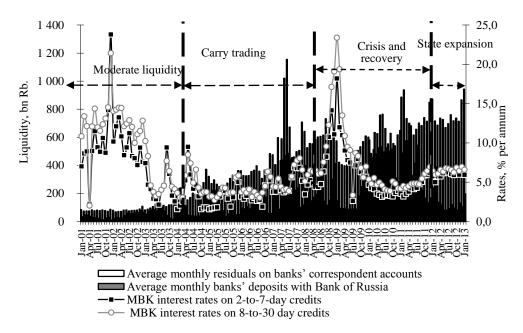
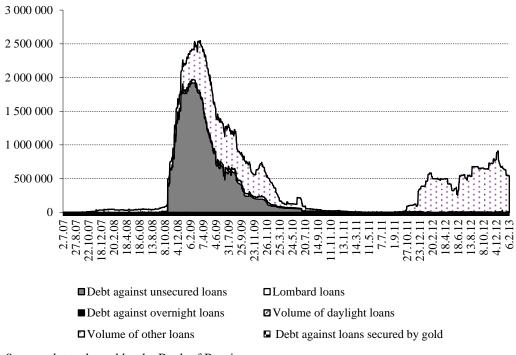


Fig. 24. Average Monthly Banking Liquidity Indices and the Interest Rates on the Interbank Credit Market in 2001 – January 2013

The main form of support rendered to the banking system by the Bank of Russia is the funding that banks receive via direct repo operations. This type of funding is designated in *Fig. 25* as debt against other credits. The level of banks' debt against repo operations in 2012 became significantly higher than the volume of these operations observed during the crisis period of 2008–2009. However, at the time of crisis the main form of crediting was the issuance of unsecured loans to banks.



Source: data released by the Bank of Russia.

Fig. 25. Credit Institutions' Outstanding Debt against Loans Received from the Bank of Russia, million Rb

Fig. 26 depicts different periods in the history of the Russian banking system's development, depending on the sources of bank liquidity support. The period from the second halfyear of 2004 through July 2008 saw the peak of carry trading (CT). After Russia was included in the investment ratings of the leading international rating agencies, from late 2004 and until the onset of the financial crisis in 2008 banks could borrow cheap money on foreign markets. The period from August 2008 through March 2012 was a time of crisis and post- crisis recovery. During the acute phase of the crisis the government was actively resorting to various forms of loans to banks, including unsecured loans. In the period of recovery, it would periodically resort to direct repo operations in response to problems with bank liquidity. From April 2012 onwards, the Bank of Russia began to regularly apply direct repo operations as a mechanism of lending money to banks by way of supporting them. That period, with certain reservations, may be described as a time of growing government credit expansion in the banking system. The volume of loans increased in qualitative terms, and the periods of loans granted against the pledge of securities were lengthened. In some instances, the daily amount of credit on the direct repo market exceeded Rb 1.6 trillion.

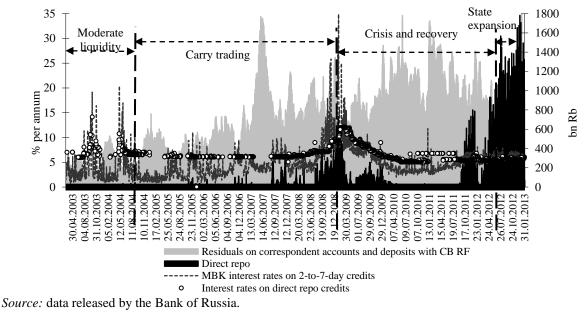
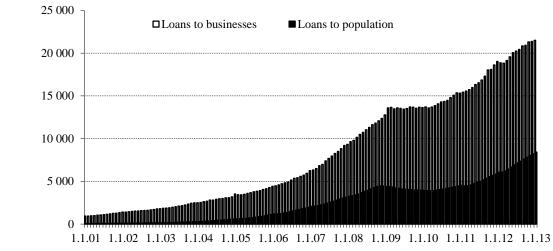


Fig. 26. Direct Repo Operations as a Mechanism of Bank Liquidity Regulation in 2003 – January 2013

Growth of Crediting

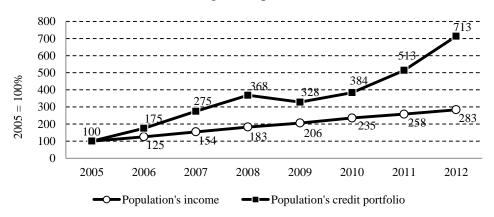
One positive consequence of the support rendered to the banking system by the Bank of Russia in 2012 (in contrast to the situation on many developed financial markets) was an accelerated growth of the volume of crediting granted to the population and businesses (*Fig. 27*). This was one of the most important measures aimed at promoting domestic demand growth and the volume of investment by non-financial businesses; as a result, economic growth in Russia was sustained at the level of 3.4%. In 2011, the share of loans to the non-financial sector in the bank's credit portfolio increased by 24.0%, that of loans issued to the population – by 33.8%. In 2012, the amount of debt outstanding owed by these two categories of borrowers increased by 13.2% and 38.9% respectively.



Source: the Bank of Russia's overview of credit institutions.

Fig. 27. Russia: the Volume of Loans |Issued, bn Rb, as of 1 January 2013

However, a rapid growth of banks' loans to the population is fraught with increasing risks of household insolvency. The data presented in *Fig. 28* are indicative of an increasing gap between the growth rate of the population's incomes and the volume of debt outstanding against bank loans. The volume of loans extended to the population rose 7.1 times on 2005, while the population's aggregate incomes over the same period increased only 2.8 times. In recent years, the Bank of Russia has been publishing a lot of analytical materials and statistical data on various aspects the financial market's functioning and the financial sustainability of its different sectors. However, the results of its surveys of banks, including the information concerning the share of loan redemption in the composition of incomes of different categories of banks' clients, are still unavailable to the general public.



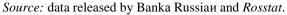
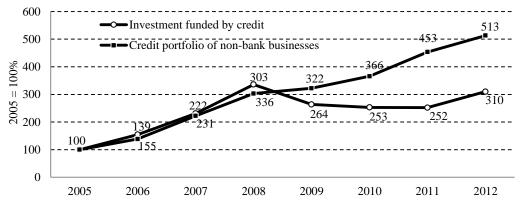


Fig. 28. The Movement of the Population's Incomes and Loans, %

Some concerns have been raised by the information on the growth of the share of the nonfinancial sector in the banks' credit portfolio and the movement of the volume of investment made by businesses (less small-sized businesses) at the expense of bank credits (*Fig. 29*). The amount of loans issued to non-bank businesses rose 5.1 times on 2005, while the volume of investment funded by this type of loans increased only 3.1 times.



Source: data released by the Bank of Russia and Rosstat.

Fig. 29. The Dynamics of Credit-financed Investment¹ and the Movement of the Credit Portfolio of Non-financial Businesses, %

The Market for Ruble-denominated Bonds

The Government Securities Market

In 2012, the market for ruble-denominated federal bonds was developing very successfully. This happened largely due to the measures implemented in order to achieve a unification, on the domestic market, of the rules for trades, settlements and depository record-keeping of OFZ and other types of securities, as well as to liberalize access to the OFZ market for nonresidents (which primarily manifested itself in the opening of accounts with the NSD by Euroclear and Clearstream). From 13 February 2012, all the operations with OFZ were transferred onto the Moscow Exchange's Main Market. The Exchange estimated that the number of participants in trades in this category would increase from 304 to 640^2 . The depository operations on the organized securities market were simplified and brought to a unified standard. Thus, in particular, the main depository for GKO-OFZ was no longer obliged to duplicate the data on the depo accounts of the holders of securities kept on the subdepositories' records, in the framework of the so-called SDTSC system (subdepository dealer technical support center). On the off-exchange market, from 1 January 2012 onwards, investors for the first time were allowed to trade in government securities by means of opening depo accounts for keeping records of the rights to government securities at the Russian depository, without mediators (subdepositories).

In accordance with the *Main Directions*, the OFZ market in 2012 was demonstrating the following changes: the liquidity of OFZ issues was on the rise (the average daily turnover of the secondary market of OFZ rose by 20%); the average size of a tradable OFZ issue doubled (from Rb 45bn to 87bn); the OFZ portfolio duration increased by 5.6% - from 3.6 to 3.8 years; and for the first time in the market's history an OFZ issue with a yield to maturity of 15 years was placed.

¹ The estimates for Q4 2012 are based on calculations.

² Mazunin A. *Investory prishli za dlinnym rublem* [Investors are Chasing the Big Money]. *Kommersant*, 9 February 2012.

At the same time, in 2012 the trend towards accelerated growth of placement of government securities against that of corporate bonds was no longer visible (*Fig. 30*). Consequently, the fears that federal bonds may begin to oust from the market the bonds of corporate emitters proved to be unsubstantiated. In 2011, the volume of corporate bond placement amounted to Rb 924bn, and the value of new issues of government securities – to Rb 1,371bn. In 2012, the value of placed corporate securities increased to Rb 1,214bn, while the volume of placed federal bonds declined to Rb 919bn. Given the fact that in the *Main Directions* it is envisaged that the value of issued federal bonds should amount to Rb 1,213bn in 2013, Rb 842.2bn in 2014, and Rb 1,115bn in 2015, it is evident that, in the next few years, no accelerated growth in the volume of government securities placement against that of corporate bonds should reasonably be expected. It appears to be a more important goal for the government to replace the loss of the domestic pension system as the source of investment in government bonds by attracting a broad range of foreign investors – which can also be helpful in the event of a significant global market downturn.

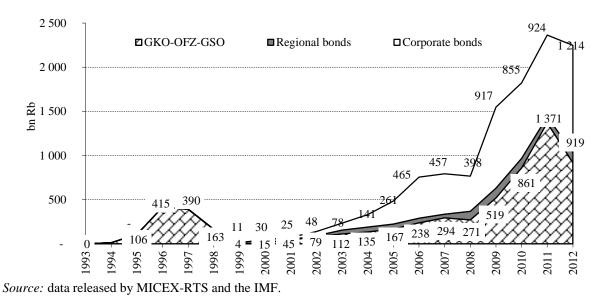
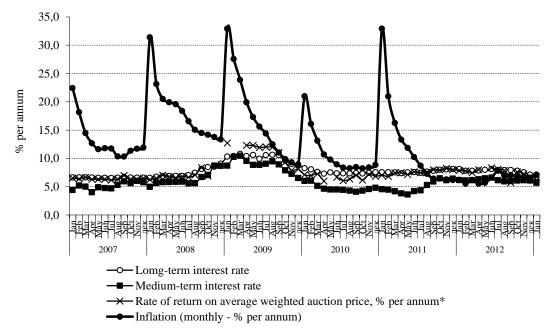


Fig. 30. Placement of Ruble-denominated Bonds in 1993-2012

An additional factor conducive to successful placement of government securities in 2011–2012 was the relatively stable macroeconomic situation in Russia and the moderate inflation rate at the level of 6.1% in 2011 and 6.6% in 2012. Thus, it was possible to maintain the rate return on investment in OFZ for domestic investors at a level above the rate of inflation (*Fig. 31*). For example, in December 2012, the rate on long-term OFZ was 7.1% per annum, the average weighted auction price of OFZ was 6.72% per annum, and the inflation rate amounted to 6.59%.



* average monthly rate of return by the results of auctions, weighted for the bond placement volume. *Source*: data released by Bank of Russia and *Rosstat*.

Fig. 31. Average Monthly Rates of Return on the OFZ Market and Inflation, % per annum

At the same time, any increase of the share of foreign investors in OFZ will inevitably reduce their yields. Although in the *Main Directions* the influence of this factor is estimated to be on the level of only 1 percent point, if the situation with inflation becomes unfavorable, this may once again push the real rate of return on OFZ into negative zone, thus making investment in OFZ unattractive in the eyes of domestic investors, who have to deal in the national currency.

The Situation on the Corporate Bond Market

Fig. 32 shows the monthly data on the issue volumes and the turnover of the secondary market for ruble-denominated corporate bonds on the Moscow Exchange for the period from 2001 through January 2013. In addition, there are data on bank liquidity, represented by the average monthly residuals on banks' correspondent accounts and deposits with the Bank of Russia. In 2012, the secondary corporate bond market's volume increased to Rb 58.0 trillion against Rb 36.3 trillion in 2011 and Rb 23.0 trillion in 2010. For the first time in the contemporary history of Russian stock exchanges, in 2012 the volume of secondary trading in corporate bonds exceeded that of exchange trading in shares in all modes, amounting to Rb 47.8 trillion.

The liquidity of the corporate bond market is highly dependent on the level of liquidity in the banking system, so the same phases as in the movement of bank assets kept with the Bank of Russia can also be distinguished in the movement of exchange trades in these instruments (CT, crisis and recovery, expansion of state-owned structures) (see *Fig. 26*). In the pre-crisis years the turnover growth corporate bond market was sustained in the main by the carry trading strategy. In the period of crisis and post-crisis recovery it relied on the Bank of Russia's resources flowing into the banking system in the form of unsecured loans and other forms of

crediting. From April 2012 onwards, the corporate bond market's liquidity is sustained by direct repo operations with the Bank of Russia.

Another distinctive feature of the corporate bond market is the constantly increasing importance of the secondary market against that of initial bond placement. The ratio of issue volume to secondary trades in corporate bonds declined from 3.7% in 2010 to 2.5% in 2011 and 2.1% in 2012. On the one hand, the accelerated growth of the secondary corporate bond market's liquidity has a positive effect on interest rates and the duration of loan periods. On the other, the attraction of short-term resources for funding long-term loans increases the risks of that market, including the issuers' capacity to refinance their loans in the future.

The most urgent problem for ruble-denominated bond markets, as before, is how to attract the resources of domestic investors. So far, banks serve as the principal source of money on that market, although their share in the structure of corporate bond holders had dropped from 42.7% in 2010 to 40.9% in 2011 and 30.6% in 2012. Supposedly, the declining share of Russian banks was counterbalanced by the increasing presence of non-residents. The share of pension saving in the compositing of bond value rose from 3.5% in 2010 to 4.9% in 2011 and 5.6% in the first 9 months of 2012. The share of open-ended investment funds in the structure of corporate bond holders amounted to only 0.5% in 2010, 0.6% in 2011 and 0.7% in 2012.

The fact that the corporate bond market is increasingly becoming an instrument for servicing interbank crediting operations – which, in fact, is contrary to the long-term nature of corporate bonds – can be seen from the structure of exchange transactions with corporate bonds on the Moscow Exchange (*Fig. 33*). In December 2012, the share of repo operations in the total value of exchange transactions with corporate bonds hit its absolute record high of 92.2%, getting beyond its level observed during the 2008 crisis. At the same time, only 2.2% of trades in corporate bonds are market transactions – that is, their real purpose is to create or restructure a portfolio. This sharp decline in the share of market transactions significantly increases the risks that the prices of corporate bonds may not be set on an objective basis in the course of trading on the Moscow Exchange.

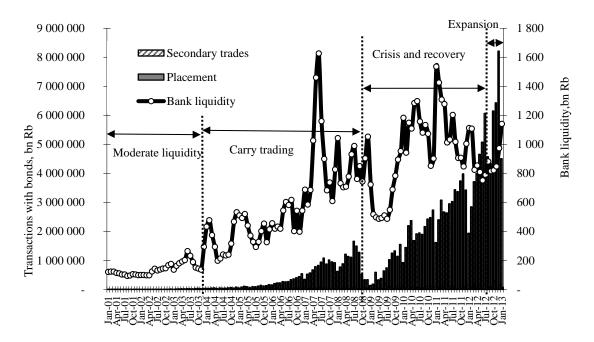
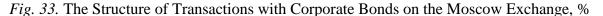
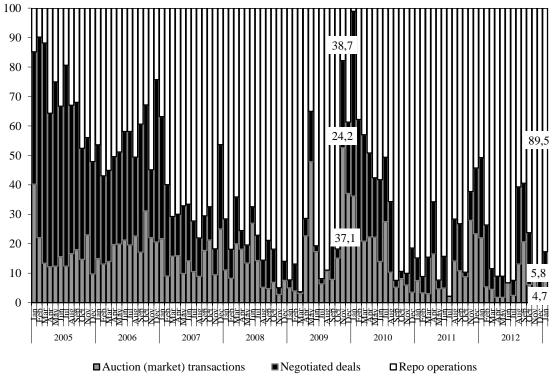


Fig. 32. Operations with Corporate Bonds and Bank Liquidity in the Period from January 2001 through January 2013 15,5 2012 2,2 ■Auction (market) transactions Negotiated deals □Repo operations Source: calculations based on data released by the Moscow Exchange.

Source: data released by the Bank of Russia and the Moscow Exchange.



Similar problems, caused by the shrinking share of market transactions, are experienced by the exchange market for regional bonds (*Fig. 34*). In December 2012, the share of market transactions there declined to 4.7%, while the share of repo operations rose to 89.5%.



Source: calculations based on data released by the Moscow Exchange.

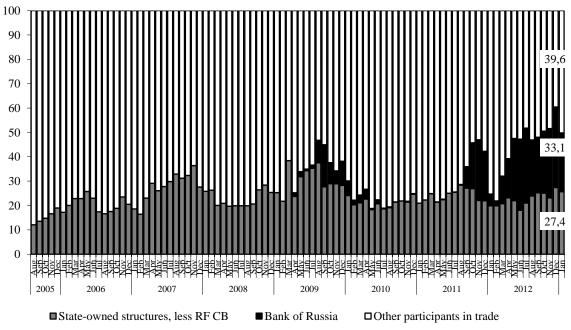


Competition on the Corporate and Regional Bond Market

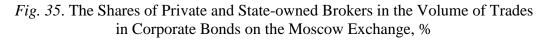
Fig. 35 shows an analysis of the shares of different groups of trade participants (private and state-owned companies¹, the Bank of Russia) in the overall volume of exchange trades in corporate bonds on the Moscow Exchange in all modes, including market transactions, negotiated deals and repo operations. In 2012, the participation of state-owned structures and the Bank of Russia in the volume of exchange trades in corporate bonds surged to 27.4% and 33.1% respectively in December of that year. This was associated with the corresponding surge in the volume of crediting provided to banks by the Bank of Russia on the repo market. The scale of the Bank of Russia's participation in the operations on the corporate bond market was significantly higher than during the crisis of 2008–2009.

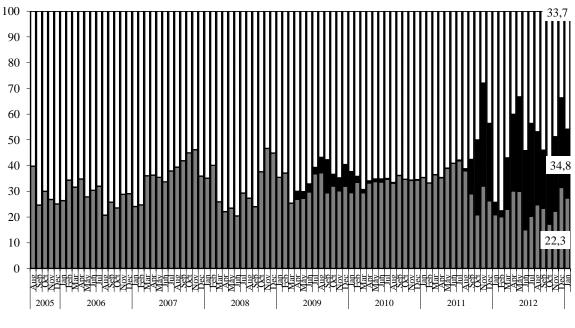
Fig. 36 depicts the share of state-owned structures and the Bank of Russia in the volume of exchange trades in regional bonds. In 2012, this index was even higher than its counterpart for the exchange corporate bond market. In December 2012, the share of state-owned structures and the Bank of Russia in transactions with regional bonds was 22.3% and 34.8% respectively.

¹ For the list of state-owned structure, see p. 108, note 1 to *Fig. 14*.



Source: calculations based on data released by the Moscow Exchange.



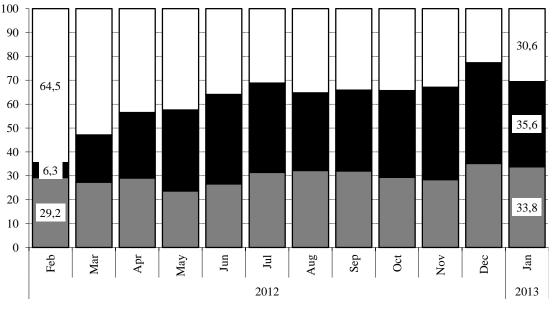


■State-owned structures, less RF CB ■Bank of Russia □Other participants in trade

Source: calculations based on data released by the Moscow Exchange.

Fig. 36. The Shares of Private and State-owned Brokers in the Volume of Trades in Regional Bonds on the Moscow Exchange, %

Fig. 37 shows data on the share of state-owned structures and the Bank of Russia in the exchange market for federal bonds (the Moscow Exchange began to disclose such data from February 2012). Here, state-owned structures and the Bank of Russia accounted for 33.8% and 35.6% respectively of the total volume of exchange transactions with government securities in all trade modes.

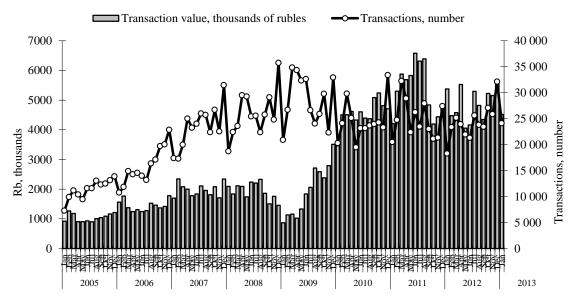


■State-owned structures, less RF CB ■Bank of Russia □Other participants in trade *Source*: calculations based on data released by the Moscow Exchange.

Fig. 37. The Shares of Private and State-owned Brokers in the Volume of Trades in Federal Loan Bonds (OFZ) and Eurobonds on the Moscow Exchange, %

The markets for corporate and regional bonds significantly differ by the levels of concentration measured by the Herfindahl–Hirschman Index (see *Fig. 15*). Prior to 2012, the corporate bond market had a low concentration level, its HHI was nearly twice as low as the HHI for the Moscow Exchange's market for shares. However, as a result of the increased activity of the Bank of Russia on the repo market in 2012, the antimonopoly properties of the Moscow Exchange's markets for bonds significantly deteriorated. Over the greater part of 2012, the markets for corporate, regional and federal bonds displayed features of moderately concentrated markets, their monthly HHI values being within the range of 800 - 1800. At the same time, the monthly HHI for the OFZ market was above 1800, which means that this market segment on the Moscow Exchange complied with the highly concentrated market criteria. In our opinion, a further course towards the accelerated growth of the volume of repo operations on the exchange must be backed by measures aimed at increasing the level of supervision over various segments of the exchange market by the antimonopoly regulation agency.

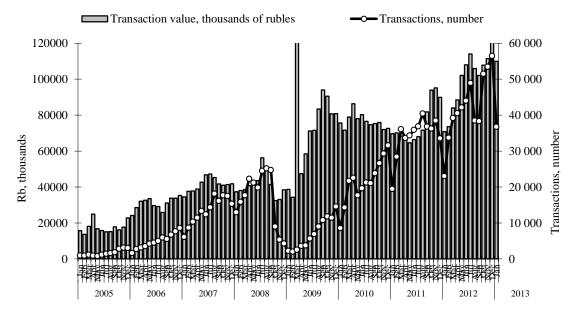
In *Fig. 38*, the data on the number of transactions and the average value per transaction with corporate bonds carried on in the anonymous trade mode on the MICEX-RTS. In contrast to the market segment where shares are traded (*Fig. 18*), here, in 2012, the number of market transactions with corporate bonds displayed an upward trend, while the mean transaction volume slightly declined.



Source: calculations based on data released by the Moscow Exchange.

Fig. 38. Market Transactions with Corporate Bonds on the Moscow Exchange

Fig. 39 illustrates the results of an analysis of the segment of repo operations with corporate bonds on the Moscow Exchange. In contrast to the market mode, the repo segment in 2012 showed a stable rise both in the number of transactions and the mean transaction volume. The value of an average repo operation is also approximately twice as high as that of a market transaction with corporate bonds, which is not surprising because the amount of money loaned by banks to financial companies cannot be small.



Source: calculations based on data released by the Moscow Exchange.

Fig. 39. Repo Operations with Corporate Bonds on the Moscow Exchange

In the post-crisis period, the leading role in the process of securities issuance is played by big – predominantly state-owned - companies. This is illustrated by the data in *Table 9*, which demonstrate that, in 2009, 24 biggest emitters accounted for 87.7% of the total value of corporate bond issues, and in 2010, 2011 and 2012 – for 60%, 59% and 57% respectively. In 2007, the share of these 24 emitters in the total volume of corporate bond placement to the value of Rb 476.7bn had amounted to only 42.1%.

The number of state-owned companies in the top ten emitters of corporate bonds was 6 in 2009 and 2010, 8 in 2011, and 7 in 2012.

Table 9

		2009)		201)		2011	[201	2
	Emitters	Billions of Rb	%	Emitters	Billions of Rb	%	Emitters	Billions of Rb	%	Emitters	Billions of Rb	%
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Russian Railways	145	15.8	FGC UES	50	5.8	Russian Agricultural Bank	Billions of Rb	5.7	VTB	60	5.0
2	Transneft	135	14.7	Russian Agricul- tural Bank	35	4.1	FGC UES	55	5.0	Gazprom bank	60	5.0
3	VEB	60	6.6	Rusnano	33	3.9	Uralkali	50	4.6	FGC UES	55	4.6
4	LUKoil	50	5.5	Evraz Holding	30	3.5	Rostelecom	39	3.5	AHML	54	4.5
5	Atomener- goprom	50	5.5	AHML	29	3.3	AHML	35	3.2	VEB	36	3.0
6	Bashoil	50	5.5	VEB	27	3.2	Rusnano	33	3.0	Vimpel- Com	35	2.9
7	AFK Sys- tema	39	4.3	Alrosa	26	3	VEB	30	2.8	Russian Agricul- tural Bank	35	2.9
8	MTS	30	3.3	MTS	25	2.9	Gazprom Neft	30	2.8	RTK	35	2.9
9	AHML	28	3.1	Mechel	25	2.9	RUSAL Bratsk	30	2.8	Transneft	34	2.8
10	VTB (VTB 24)	23	2.5	Wimm- Bill-Dann	24	2.8	VEB-leasing	25	2.3	Metalloin- vest	25	2.1
11	SIBMETIN- VEST	20	2.2	VTB (VTB 24)	20	2.3	Mechel	25	2.3	NLMK	25	2.1
12	Gazprom Neft	18	2	Gazprom Neft	20	2.3	Oboronprom	21	1.9	Gazprom Neft	20	1.7
13	VTB- Leasing Finance	15	1.6	Vimpel- Com- Invest	20	2.3	Mortgage Agent of AHML	20	1.9	Mechel	20	1.7
14	Mechel	15	1.6	Russian Railways	15	1.8	Gazprom- bank	20	1.8	NovaTek	20	1.7
15	MMK	15	1.6	Severstal	15	1.8	NLMK	20	1.8	Promsvyaz bank	20	1.7
16	Gazprom	15	1.6	Globex Bank	15	1.8	RusHydro	20	1.8	Rusnano	20	1.7
17	NLMK	15	1.6	Norilsk Nickel	15	1.8	AFK Systema	20	1.8	Rosneft	20	1.7
18	Severstal	15	1.6	UniCredit Bank	15	1.8	NK Alliance	17	1.6	UniCredit Bank	20	1.7
19	IA VTB	14	1.6	EBRR	14	1.6	Uranium One Inc.	17	1.5	IA VTB24	19	1.6

Biggest Emitters of Ruble-denominated Corporate Bonds in 2009–2012

											СС	ont'd
1	2	3	4	5	6	7	8	9	10	11	12	13
20	Bank Petro- commerce	11	1.2	ММК	13	1.5	Gazprom- Capital	15	1.4	Bank ZENIT	16	1.3
21	MBRD	10	1.1	Bank Saint Petersburg	13	1.5	Evraz Holding	15	1.4	URALSIB Leasing Company	16	1.3
22	Rosbank	10	1.1	Aeroflot	12	1.4	Kuzbas- senergo- Finance	15	1.4	Sviaz- Bank	15	1.3
23	Russian Agricultural Bank	10	1.1	Trans Credit- Bank	12	1.4	ММК	15	1.4	WHSD	15	1.3
24	VimpelCom- Invest	10	1.1	Atomener- goprom	10	1.2	Credit Bank of Moscow	13	1.2	Alfa-Bank	15	1.3
	Other emitters	113	12.3	Other emitters	342	40.0	Other emitters	448	41.2	Other emitters	509	42.5
	Total	917	100	Total	855	100	Total	1089	100	Total	1199	100

Source: data published at www.cBonds.ru, www.rusbonds.ru and released by the MICEX-RTS.

Every year the corporate bond market increasingly focuses on the provision of cash flow services to various state structures, which increases cash flows between them. State-owned companies borrow money from state structures. The secondary market is also kept afloat mainly by state structures and the Bank of Russia. Furthermore, state-owned investment banks act as underwriters and investment consultants with regard to any corporate bond placement (*Table 10*). In 2007, state-owned banks acted as underwriters for 36.3% of corporate bond issues (in value terms). In 2008, their share increased to 46.8%, in 2009 – to 62.4%. After a slight decline in 2010, it resumed growth in 2012, climbing up to 59.4%.

A similar situation has emerged with respect to investment banking services on the market for regional bonds. In 2008 and 2009, the share of state-owned banks in the total amount of money invested in bond issues increased from 14.2% in 2007 to 58.7% and 85.6% respectively. However, over the next two years - 2010 and 2011 – this index once again declined, first to 75.4%, and then to as low as 14.4%. The cause of this sharp drop of state investment in regional bonds in 2011 was the discontinuation of the activity of *Mosfinagentstvo* [Financial Agency of the City of Moscow] in accordance with the changed priorities of the Moscow Government's budget strategy; previously, *Mosfinagentstvo* had been a key player on the market for regional loans. In 2012, the share of state-owned structures in this market segment was once again on the rise, and increased to 51.8%.

Table 10

The Shares of State-owned and Private Financial Organizations in the Market for the Services of Domestic Bond Loan Organizers in Russia

	Bond issue organizers:							
	со	rporate bonds		reg	regional bonds			
	State financial organizations	Private finan- cial organiza- tions	State financial					
1	2	3	4	5	6	7		
		2	007					
Rb, million	169, 668	298, 302	467, 970	7, 551	45, 481	53, 032		
Share, %	36.3	63.7	100.0	14.2	85.8	100.0		
		2	008					
Rb, million	219, 892	249,900	469, 792	42, 227	29,716	71, 943		
Share, %	46.8	53.2	100.0	58.7	41.3	100.0		

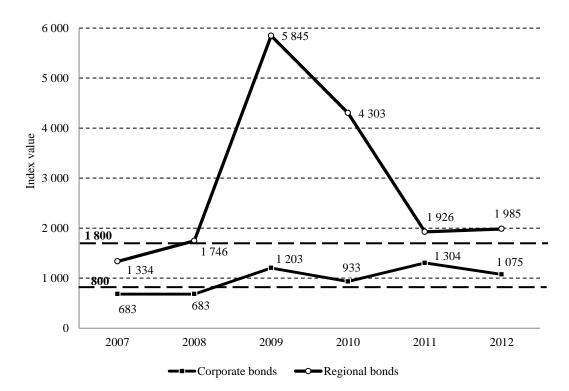
	Section 3
Financial Markets and	Financial Institutions

			2009			
Rb, million	620, 044	373, 978	994, 022	133, 325	22, 511	155, 836
Share, %	62.4	37.6	100.0	85.6	14.4	100.0
						cont'd
1	2	3	4	5	6	7
			2010			
Rb, million	393, 743	461, 292	855,035	86, 613	28, 288	114,901
Share,. %	46.0	54.0	100.0	75.4	24.6	100.0
			2011			
Rb, million	620, 698	374, 146	994, 844	7,767	46, 177	53, 944
Share, %	62.4	37.6	100.0	14.4	85.6	100.0
			2012			
Rb, million	734, 697	502, 831	1, 237, 528	61, 925	57, 637	119, 562
Share, %	59.4	40.6	100.0	51.8	48.2	100.0

Source: data on the ratings of organizers of bond issue placements; see www.cBonds.ru for 2007-2012.

That the conditions for competition with regard to bond placement on the market for investment banking services are far from perfect is demonstrated by the data on its concentration level measured by the Herfindahl–Hirschman Index (*Fig. 40*).

From 2009 onwards, the market for services rendered on the corporate bond market has been transforming from a highly competitive one into a moderately concentrated market, with monthly HHI values falling within the range between 800 and 1,800. The market for investment banking services, in its segment of regional bond issues, invariably displays high concentration levels. Its HHI is stable at a level above 1,800. All these circumstances point to the necessity to make the role of antimonopoly regulation on the securities market more prominent.



Source: data on the ratings of organizers of bond issue placements; see www.cBonds.ru for 2007 to 2012.

Fig. 40. The Herfindahl–Hirschman Index: Services Related to Organizing the Issuance of Ruble-denominated Corporate and Regional Bonds

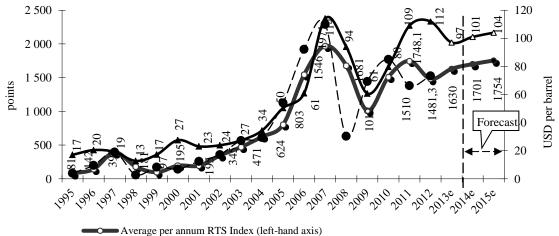
An Analysis of Financial Market Risks

The principal risks faced by the financial market are associated with the following factors: stagnation on the share market caused by a halt in the upward movement of prices for energy carriers; a significant outflow of foreign capital; a depreciation of the ruble; an accelerated growth of foreign loans made by banks and the non-financial sector; a revival of CT strategies; growth in the volumes of trades on the futures market coupled with insufficient backing for the transactions; increasing risks on the repo market; the low capacity of the financial services market as an obstacle to the growth of financial intermediaries.

The Halt in the Share Market Growth Caused by the Price Factor

As demonstrated in Section 3.2.1, the movement of the Russian stock market strongly depends on that of oil prices. The price of oil acts as an indicator of the situation in the global economy, as well as of the financial system's sustainability and liquidity. The current forecasts released by the RF Ministry of Economic Development and international financial organizations – while unanimously indicating that oil prices are not going to increase in the medium-term perspective – reflect their concerns with the slowdown in the rate of global economic growth and the existing risks for the world financial system's stability. A relatively new factor is the emergence of new technologies for the extraction of oil and natural gas, which will enable many countries to gradually switch over to providing their economies with their own oil and gas.

If the dependence equation shown in *Fig.* 7 is applied to the RF Ministry of Economic Development's medium-term forecast of oil prices for the period of 2013-2015, we will see that the average per annum value of the RTS Index will indeed be increasing, but at a low rate. In 2013, it may rach the level of 1,630 points against 1,481 points in 2012 – that is, the per annum growth rate displayed by the Index will be 10.1%.



Average per annum RTS index (ieit-nand axis) → RTS Index as of year's end (left-hand axis) Average per annum price of Urals, 2013-2030 RF MED's forecast (right-hand axis)

Source: calculations based on data released by the forecasta MED and MICEX-RTS.

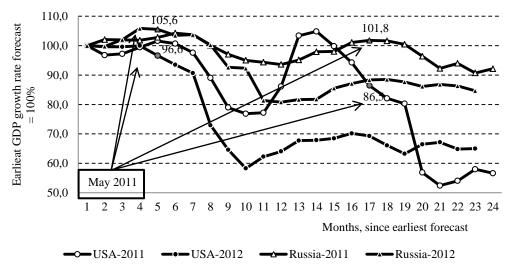
Fig. 41. A Forecast of the Movement of the RTS Index until 2015, Based on the Forecast of Oil Prices Released by the RF Ministry of Economic Development

This method of predicting the average per annum growth rate of the stock index is by means ideal; this, however, may also be said about the other methods applied in the forecasts of stock market indicators. According to the 2011 forecast for 2012, the average per annum value of the RTS Index was to rise from 1,748 to 1,842 points, or by 5.4%. But its actual value in 2012 amounted to 1,481 points – that is, noticeably lower than in 2011. The error in the forecast based on the historic ratios of oil prices and the RTS Index is caused by the negative effect of the investment outflow from Russia, which turned out to be stronger than its average value over the entire period of the RTS Index's history.

The Risks of Foreign Capital Outflow

It Section 3.2.2., we analyzed the dependence of the Russian share market on the movement of the assets of foreign investment funds invested in Russia. As indicated by the abovementioned study carried out by the IMF, the investment decisions of portfolio investors rely on the dynamics and volatility of the forecasted GDP growth indices (for example, by international financial institutions), the volatility estimates of currency exchange rates, and the indices of the expected volatility of developed and developing markets.

As shown in *Fig. 10*, the year 2012 saw a continuation of the outflow trend among the foreign funds specializing in investment in Russia that had first manifested itself in May 2011. Further data presented in *Fig. 42* indicate that the onset of the cash outflow from the funds in May 2011 coincided with the emergence of another trend – that of dramatic worsening of the forecasts of economic growth in the USA for 2012, which confirms our hypothesis that the strongest influence on the behavior of foreign portfolio investors investing in Russia is exerted by the changes in the global economic growth forecast released by *Consensus Economics* and by the IMF's quarterly reports on the situation in the world economy. The IMF's forecasts for 2013 published in January 2013 once again pointed to a slight slowdown in the global economy's growth rate. The growth rates of GDP in Russia and the USA predicted for 2013 were reduced by 0.1 percentage point. This provides some grounds for assuming that, in the first half-year of 2013, the Russian market will be experiencing a small-scale outflow of portfolio investment, which may cease as soon as the economic growth forecasts for 2013– 2014 display the beginning of an upward trend.



Source: calculations based on data released by Consensus Economics.

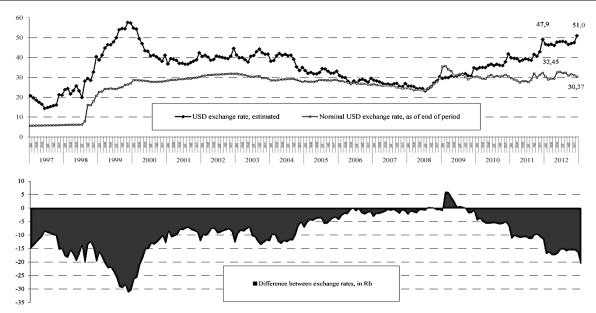
Fig. 42. The Movement of GDP Growth According to Consensus Economics's Forecasts for 2011 and 2012

The Risks of the Ruble's Depreciation in the Medium-term Perspective

The slower foreign currency inflow into Russia as a result of the stabilization of prices on global raw materials markets coupled with foreign investment outflows from that country, the switchover to a more liberal foreign exchange policy, the energetic support of the banking system's liquidity by the monetary authorities resulted in the movement of money supply becoming more independent of the foreign currency inflow. In the medium-term perspective, due to the RF Government's preparedness to pursue a more active economic policy and to orientate it towards accelerated economic growth, the gap between the value of gold and foreign-exchange reserves (G&FX reserves) and the ruble-denominated money mass will become wider.

All these circumstances are fraught with a higher risk of the national currency's dramatic depreciation, if the effect of the accelerated growth of the ruble-denominated money mass against that of foreign-exchange reserves is combined with shocks on the financial markets. In an event of a crisis on the global market or a panic on the domestic financial market, when the population and companies alike begin to display feverish demand for foreign currencies, the government and the central bank may experience a shortage of foreign-exchange reserves necessary for satisfying such a high level of demand, and so they will be forced to depreciate the national currency.

The depth of such depreciation is illustrated by the data presented in *Fig. 43*. It depicts the ratio between the official US-dollar-to-ruble exchange rate as of a month's end and the estimated US dollar's exchange rate determined by dividing money supply (M2) by the value of RF gold and foreign-exchange reserves. From late 2009 onwards, the official exchange rate of the ruble began to display an increasing deviation from its estimated values, and in December 2012 this difference hit a ten-year record high. The gap between the estimated and actual exchange rate of the ruble (see the lower graph) became as wide as in the crisis year 1998.



Source: calculations based on data released by the Bank of Russia and the RF Ministry of Finance.

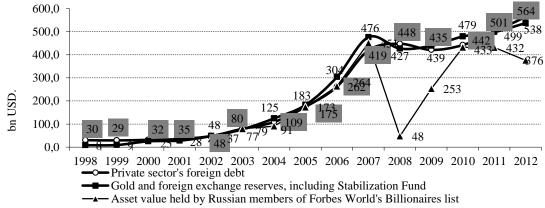
Fig. 43. The Dependence of the USD-to-Ruble Nominal Exchange Rate on its Estimated Value in January 1997 – December 2012.

For December 2012, the estimated exchange rate was 51.00 Rb/USD, while the actual official exchange rate as of the year's end amounted to 30.37 Rb/USD. In the present situation, given the difference between the ruble's official exchange rate and its real exchange rate against major foreign currencies, the monetary authorities or the market's 'invisible hand' will be gradually weakening the ruble's position in the medium-term perspective. This scenario would be more preferable from the point of view of the goals of economic (industrial) policy, because the gradual depreciation of a national currency represents an instrument for rendering support to national producers that can be both effective and compatible with the WTO's principles.

The Risks Presented by the Foreign Debt of Banks and Non-financial Businesses

The volume of foreign debt owed by Russian banks and non-financial companies in 2012 increased by \$ 61bn, or 12.6%, and for the first time since 2008 exceeded the value of the Russian Federation's gold and foreign-exchange reserves (*Fig. 44*). The volume of that debt was \$ 564bn, while Russia's G&FX reserves amounted to \$ 538bn. On the one hand, the accelerated growth of overseas borrowings made by businesses may be regarded as a positive trend indicative of an active inflow of resources necessary for economic growth and development. The centralization, in the form of G&FX reserves, of part of the value created by businesses increases the financial system's stability and imposes constraints on the ruble's excessive strengthening. On the other hand, in terms of the global economy, the withdrawal of these resources from businesses' incomes makes it difficult for entrepreneurs to sustain the process of expanded reproduction. In order to keep it at the same level, they are forced to compensate for part of their foreign exchange assets withdrawn by the State in order to generate its gold and foreign-exchange reserves by increasing the amount of their overseas borrowing.

At the same time, if the amount of foreign debt of businesses is maintained at a level significantly higher than that of national gold and foreign-exchange reserves, the State has fewer opportunities for rendering support to businesses in an event of a crisis and a decline in their asset value. Besides, the availability of cheaper money to be borrowed on foreign markets by comparison with the domestic market triggers a revival of CT strategies - which, in case the inflation rate goes up, can restrict the development potential of domestic institutional investors and their opportunities for investing their assets against a real interest rate.



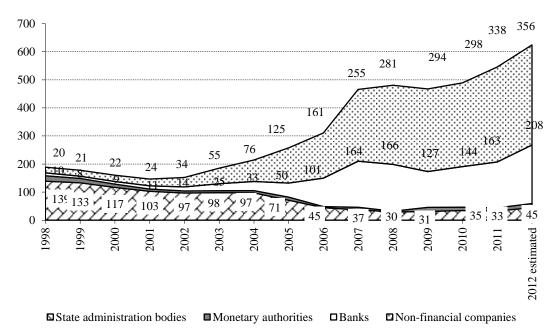
Source: Russia's balance of payments for a number of years.

Fig. 44. Growth of the Private Sector's Debt, the State's Gold and Foreign-exchange Reserves, and the Assets of the Russian Members of the Forbes World's Billionaires List

For a second year in row, an interesting trend has been displayed by the ratings of the Russian members of the Forbes World's Billionaires list. The total value of their personal assets dropped from \$ 433bn in 2010 to \$ 376bn in 2012, or by 13.2%. This may have happened due to the gradual dispersion of the initial owners' estates among their heirs, as well as due to unsuccessful investment. In terms of investment activity, this fact is indicative of a noticeable decline in Russia's wealthiest citizens' potential for investment in the Russian economy. To a certain extent, this can be interpreted as a sign of failure of the strategy of orienting Russia's economy towards relying on her national oligarchic capital's potential.

In *Fig. 45*, the data on foreign debt are shown separately for banks and non-bank companies. The foreign debt of banks increased from \$ 163bn in 2011 to \$ 208bn in 2012, or by 27.6%. The accelerated growth rate displayed by banks' foreign debt confirms our assumptions that CT is gradually reviving on the Russian financial market.

The amount of debt owed by non-bank companies rose from \$ 338bn in 2011 to \$ 356bn in 2012, or by 5.3%. As in the previous year, in 2012 the amount of the private sector's foreign debt increased in spite of the impressive net capital outflow from Russia in the amount of approximately \$ 57bn. There is no generally accepted explanation for the phenomenon of net investment outflow from Russia, which is indicative of the insufficiency of analytical research carried on at the Bank of Russia and the other government departments with access to the primary documentation on this type of operations. In our opinion, net capital outflow from Russia can be primarily explained by the fact that businesses and wealthy individuals alike do not believe in the prospects of profitable investment in Russia in the currently existing institutional environment and the uncertain prospects for growth in the Russian economy with its strong reliance on raw materials.



Source: Russia's balance of payments for a number of years.

Fig. 45. The Russian Federation's Foreign Debt in 1998–2012, bn USD

The Risks Associated with Carry Trading

In 2012 and early 2013, Russia's financial market displayed many signs of a revival of CT strategies, which had already resulted in two banking crises in 1998 and 2008. The accounts at the international settlement and clearing systems have created adequate technological conditions for the inflow of speculative foreign capital, and the rules whereby restrictions formerly imposed on banks' borrowings from non-residents have been amended. The amount of the banking sector's foreign debt is increasing at an accelerated rate, and it resorts with increasing frequency to the use of financial leverage in order to expand its credit portfolio.

Why is the carry trading strategy so dangerous, and what are its consequences? Let us point out the following three aspects: the growing risk of a liquidity crisis in the banking system; the threat of gold and foreign-exchange reserves being wasted by the State on the support of inefficient businesses; and the suppression of the population's stimuli to invest their savings in ruble-denominated bonds.

In the banking system that strategy maintains the misbalance between the amounts of banks' foreign-exchange assets and liabilities, with the significant excess of the former over the latter. This represents the main risk factor in terms of the possibility of a liquidity crisis in the banking system. The IMF experts believe that the involvement of banks from the developing countries in carry trading in order to raise funds for issuing loans to the population is one of the principal risks faced by their financial markets¹.

¹ IMF. Global Financial Stability Report. Financial Market Turbulence: Causes, Consequences, and Policies. September 2007, pp.22–25.

The Operational Risks in the Stock and Futures Markets

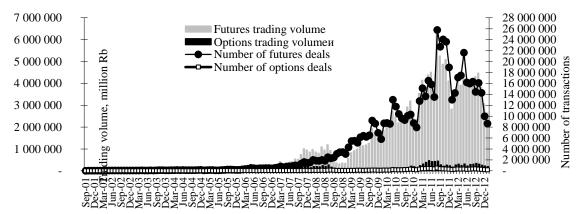
A typical feature displayed by the securities market over recent years has been the accelerated growth of trading volumes by comparison with the growth of assets held by market participants and their clients. High-frequency trading is becoming increasingly popular. The annual Best Private Investor contest held by the exchange, in effect, has been turned into indirect promotion of the high-frequency trading methods. The information on client operations occasionally appearing in the media has provided some grounds for assuming that the private clients of big broker companies completely renovate their portfolios, on the average, every two or three days¹. The Moscow Exchange itself, in its presentation of the development strategy for 2012–2015 published on 22 March 2012 on its website, admits that the 'distortion of the investor base and the trade volumes towards algo traders' is indeed one of its weaknesses.

Hyperactive trading is often not only detrimental to the investment results achieved by the bulk of private investors, but is also fraught with increased operational risks for the trading systems. In Section 3.2.5 we discussed the issue of frequent technical glitches on the Russian exchange in 2010–2012. Every year, the exchange gets deeper and deeper involved in the competition for processing a constantly increasing flow of bids with approximately 700 other market participants, each of them possessing all the necessary resources for increasing their own operational activity. And it is by no means obvious that this competition has increased the capitalization of the emitters, attracted of new money, and improved the results of investment. Thus, in the next few years, we may expect the infrastructure to experience continuing operational problems, which may, in their turn, necessitate further measures aimed at regulating high-frequency trading.

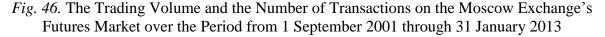
The futures market FORTS gives rise to similar concerns. The number of transactions and trading volume on that market are increasing at a fast rate (*Fig. 46*), the growth rate displayed by client assets is slower, and the information on the number of market participants and their operational activity is not transparent.

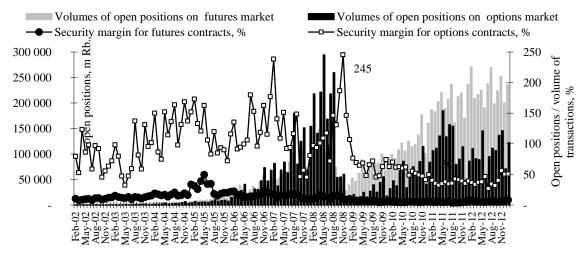
At the same time, by comparison with the early phase of the futures market's development in the mid-2000s, it displays a lower level of security margin for futures and options contracts, as confirmed by data, shown in *Fig. 47*, on the volumes of open positions on the futures and options market, as well as on the transaction margins for each segment of that market. The latter index was calculated by dividing the monthly volume of open positions by the volume of trading in each category of futures contracts. The growth of trading volumes on the futures and options markets over the period from March 2009 to early 2013 was associated with the reduction of the minimum margin requirements for futures and options. From 21 February 2013, the minimum basic margin requirements for futures contracts on stock indexes on the Moscow Exchange's futures market were decreased from 10% to 7.5%.

¹ BKS stroit plany. [BKS [Broker Invest Company] Elaborates Its Plans]. Vedomosti, 22 June 2010.

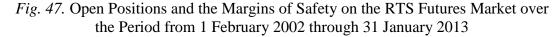


Source: calculations based on data released by the Moscow Exchange.





Source: calculations based on data released by the Moscow Exchange.



The Risks of Repo Operations

From Q2 2012 onwards, the repo market once again became the most important instrument applied by the Bank of Russia in its support of bank liquidity. Some important measures were implemented on the market in order to manage the risks in that particular segment: the National Securities Market Association (NSMA) adopted model repo operation contracts, and the mechanism of settling repo operations via a central contractor was put in operation.

We believe the main risks on the repo market to be those associated with the economic consequences of the large-scale and relatively short-term crediting of Russia's banking system by the monetary authorities. In terms of its influence on the banking system, the direct repo mechanism in many of its aspects strongly resembles CT. It enables banks to obtain relatively cheap short-term financial resources that can be used in high-margin operations like loans issued to individuals and organizations, or investment in risky bonds or other assets, including foreign investment. In this connection, banks can be tempted to invest short-term resources in

projects with delayed return, as well as to ease their requirements as to the financial status of households seeking consumer loans. Once direct repo operations are transformed into a permanent refinancing mechanism, it will be difficult to reverse the spontaneous growth of credit expansion. The industrial and banking lobby will always have enough strength and argumentation for substantiating the necessity of continuing the crediting process, even in face of certain signs that the existing risks are excessive.

At a certain stage, it may even become difficult for the Bank of Russia to make the decision to discontinue refinancing, because its income, personnel number and personnel remuneration will be increasingly dependent on the Bank's activity on the domestic market.

These risks, however, can be avoided by a mega-regulator that will be truly independent of various market participants, including state structures.

The Problems Involved in Implementing the Financial Market Development Policy

A serious risk for the Russian financial market is posed by the absence of an effective development policy. Over the last few years, it has failed to implement adequate technologies and logistics for decision-making, elaboration and implementation of necessary measures, including the transfer of new information. There is no distinct definition of the rights and responsibilities of the various participants in the decision-making process in the sphere of financial market development, including government departments, self-regulatory organizations, universities and research institutes, market participants and the regions. The program documents addressing the issues of the financial market's development (the Concept of Longterm Socio-economic Development of the Russian Federation for the Period Until 2020 (*KDR-2020*), the *Development Strategy*, the roadmaps for the creation of multi-functional centers (MFC), the RF Ministry of Finance's *Program for the Development of Financial and Insurance Markets, Creation of an International Financial Center*) contain no references to any studies on financial market issues and the financial market's economy.

A positive development in 2012 and early 2013 was the elaboration, by the RF Ministry of Finance within the framework of target program budgeting, of the *Program for the Development of Financial and Insurance Markets, Creation of an International Financial Center.* However, so far it is too early to make any conclusive assessment of its effectiveness. The program has a rather fragmentary structure, as it overlooks some important market sectors like pension reserves and pension savings, collective investment, investment companies, tax incentives for domestic investors, and foreign expansion of Russian financial businesses. It is not quite clear who is going to implement the programs, as it has been written by one government agency (the RF Ministry of Finance) for another government agency (the FFMS or the mega-regulator). The set of quantitative indices included in the program is by no means exhaustive, and the procedure for their calculation is less than perfect.

In absence of any coordinated development policy, financial organizations – especially non-state ones – have to deal with some serious problems associated with their development prospects and the dramatic shrinkage of their income base. In 2009–2010, on the basis of detailed data on the economic status of non-bank financial organizations, we prepared a forecast of their capitalization growth in the period until 2020.¹ It was found that the aggregate value of all the investment banks, broker companies and asset managers operating in Russia might

¹ For more details concerning the results, see *Vestnik NAUFOR* No 3, March 2010.

amount to \$ 22.7bn under an optimistic scenario, to \$ 20.5bn under a basic scenario, and to \$ 11.8bn under a moderate scenario. An analysis of the actual data for 2011–2012 has demonstrated that the development of the domestic market for financial services follows a trend that is much worse than our moderate scenario.

The Issues Involved in Attracting Conservative Institutional Investors

The attitude of big foreign institutional investors towards Russia's stock market has so far remained conservative. This conclusion can be drawn on the basis of the data on investments in the shares issued by Russian joint-stock companies made by a big US public pension fund – the California Public Employees' Retirement System (CalPERS), whose asset value in 2012 amounted to \$ 233bn (*Table 11*).

Table 11

	2008*	2009*	2010*	2011*
Gazprom	144.7	46.0	55.1	154.4
LUKoil	189.1	93.5	80.6	78.7
Mechel	9.1	1.0	1.8	9.8
Norilsk Nickel	4.6	1.4	14.3	12.1
NovaTek		20.6	10.4	45.4
Novorossiysk Commercial Sea Port	10.3	8.4	7.7	6.3
Rosneft	11.4	31.4	15.7	59.7
Polyus Gold		5.5	2.3	5.8
Rostelecom		3.4	1.0	16.4
Sberbank of Russia	5.5	30.8	9.3	53.7
Severstal	7.0	4.7	7.0	9.4
AFK Systema (including MTS)	9.7	3.8	62.0	71.9
Surgutneftegas	4.5	20.5	18.9	23.5
Wimm-Bill-Dann		20.2	2.2	0
Magnit		7.3	15.5	37.5
MMK		6.1	2.0	2.8
VTB	31.6	6.9	14.3	22.8
LSR Group		2.9	4.4	4.5
Other OJSC			12.9	60.1
Shares in Russian companies – total	427.4	314.4	337.4	674.8
Shares traded in foreign and domestic markets	122, 281.2	80, 728.6	91, 776.3	117, 640
Shares in Russian companies as a proportion of CalPERS' portfolio	0.35	0.39	0.37	0.57
Shares in Russian companies as a proportion of world market capitalization	1.21	1.85	1.91	2.43

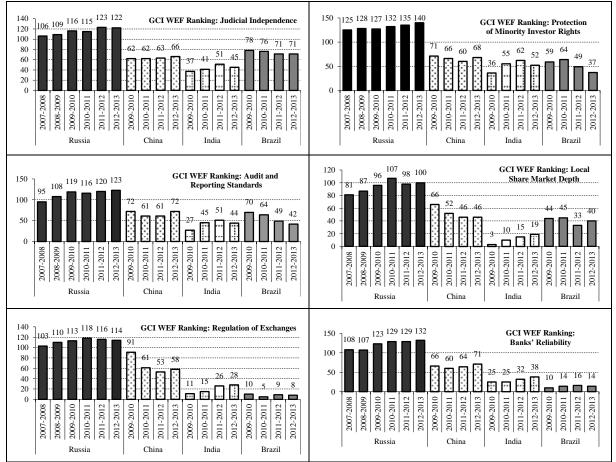
CalPERS' Investment in Shares Issued by Russian Companies, Million USD

* a financial year ends in June; for detailed information on the portfolio's composition and structure, see CalPERS' website. CalPERS releases its data with a lag of approximately one year, probably because it does not wants its portfolio strategy to be followed too closely.

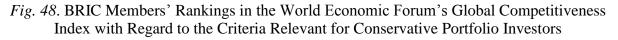
Source: based on annual investment reports released by CalPERS.

The value of CalPERS's investment in Russian stocks is low. It rose from \$ 427m (or 0.35% of its total portfolio value) in 2008 to \$ 675m (or 0.57%) in 2011. For reference: the shares in Russian companies amounted to 1.21% of the world market capitalization index in 2008, and to 2.43% in 2011. In other words, the relative share of portfolio Russian stocks in that pension fund's portfolio is lower than the world's average – a fact indicative of CalPERS's cautious attitude towards them.

CalPERS began to invest in the depository notes issued by Russian joint-stock companies only from 2008 onwards. Until that year, CalPERS had been traditionally applying the methodology of rating the developing markets from the point of view of their investment potential, and for a long time Russia's rating was such that it was not considered to be eligible for investing in. In 2007, CalPERS abandoned that rule and allowed its portfolio asset managers operating in the developing markets to make independent decisions concerning the eligibility of some or other emitters for investing in their stocks. However, our analysis of their formerly applied methodology made it possible to identify those key factors that for many years had prevented CalPERS from investing in Russia. The factors, arranged in accordance with Countries' Ranking Based on the World Economic Forum's Global Competitiveness Index, are shown in *Fig. 48*.



Source: World Economic Forum's Global Competitiveness Index for a number of years.



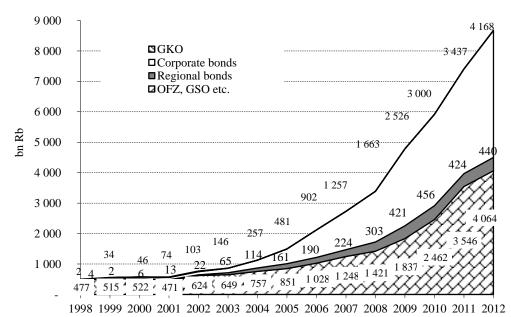
In terms of the most relevant issues – independence of the judicial system, the level of protection of minority investor rights, the audit and reporting standards, the depth of the share market, the proficiency of the regulation of exchanges and banks' reliability, Russia's market falls significantly behind the markets of the other BRIC members. Besides, in 2012, Russia's ranking with regard to four out of the six parameters deteriorated, and with regard to the other two is only slightly improved – by one or two positions.

The Stock Market's Role in the Modernization of the National Economy

The crisis revealed some deep problems and controversies underlying the Russian economy, its unpreparedness to adequately respond to the challenges posed by the globalization process. Russia's society has announced its course towards economic modernization, where the financial market is assigned one of the key roles. But is Russia's financial market really ready for coping with such comprehensive tasks?

The Contribution of the Corporate Bond Market to Real Capital Growth

An important financial phenomenon of the 2000s was the development of the market for ruble-denominated bonds (*Fig. 49*). The capitalization of the ruble-denominated bond market increased from Rb 0.6 trillion in 2000 to Rb 8.7 trillion in 2012, or 14.5 times. Among all the categories of ruble-denominated bonds, the most rapid growth rate was observed on the market for corporate bonds. Their aggregate capitalization increased from Rb 46bn in 2000 to Rb 4.2 trillion in 2012, or by 91.3 times.



Source: data released by the RF Ministry of Finance and Cbonds.ru.

Fig. 49. The Volume of Ruble-denominated Bonds in Circulation, Billions of Rubles.

Table 12 shows the parameters of the ruble-denominated corporate bond market in 2000-2012, expressed in US dollars. In spite of the rapidly increasing corporate bond placement volume - from \$ 1.1bn in 2000 to \$ 39.1bn in 2012, the volume of proceeds invested in fixed assets has so far remained low. While the total volume of bond placement in 2011 amounted to \$ 31.5bn, only \$ 0.0003bn out of that amount (or 0.001% of the total bond placement volume) was spent on the acquisition of fixed assets. If we look at the entire period of 2000–2012, the share of the proceeds from the placement of corporate bonds that were spent on the acquisition of fixed assets hovered within the range from 0.00% to 3.0%. The data for January-September 2012 present no exception. Out of the total volume of corporate bond issues placed over that year to the value of \$ 39.1bn, in the first nine months of 2012 the emitters spent \$ 0.002bn, or 0.004%, on the acquisition of fixed assets.

Table 12

The Parameters of the Ruble-denominated Corporate Bond Market (bn USD)

Section 3 Financial Markets and Financial Institutions

		Secondary		Proceeds from be	Proceeds from bond placements, that were invested in assets		
	Capitalization	market, including REPO	Placement	Bn USD	The same, as % of capitalization	The same, as % of placement volume	
2000	2	0.2	1.1				
2001	3	1	0.8				
2002	3	2	2	0.1	3.0	6.7	
2003	5	8	3	0.1	2.1	3.8	
2004	9	15	5	0.1	1.1	2.0	
2005	17	44	9	0.3	1.8	3.3	
2006	33	135	17	0.1	0.3	0.6	
2007	49	371	18	0.2	0.4	1.1	
2008	67	457	16	0.2	0.3	1.2	
2009	80	293	29	0.1	0.1	0.3	
2010	99	757	28	0.03	0.03	0.1	
2011	117	1237	32	0.0003	0.0003	0.001	
2012*	134	1866	39	0.002*	0.001	0.004	

* for January-September 2012.

Source: calculations based on data released by the Moscow Exchange, cBonds, the Bank of Russia and Rosstat.

The Impact of IPOs on the Economy

As far as the attraction of money for fixed asset financing is concerned, the placement of shares in the form of IPO or SPO is by far a more effective instrument than the issuance of corporate bonds. The reason is that the proceeds from an IPO have a more long-term nature. *Table 13* shows the parameters of the market for shares issued by Russian companies. These demonstrate that the peak of IPO activity was observed in 2006 and 2007, when companies attracted a total of \$ 17.0bn and \$ 33.0bn respectively. Out of the total amount of money generated for companies by their IPO-SPO in 2006, 18.8% was spent on the acquisition of fixed assets; in 2007, this indicator dropped to 10.9%. In some years – for example, in 2008 – 110.5%, and in 2009 – 117.6% of the IPO volume was spent on fixed assets. This happened because part of the money to be invested in fixed assets was generated not through IPOs and SPOs, but by means of distribution of additional shares by limited subscription.

In 2011, out of the total value of IPOs in the amount of \$ 11.3bn, \$ 2.6bn was invested in fixed assets; in 2012, out of the total of \$ 9.5bn, - \$ 2.0bn. A substantial part of the resources attracted in the stock market was spent on buying out businesses from their former owners, refinancing of debt, and the servicing of merger and takeover deals, including the acquisition of big blocks of shares. So far, the volumes of IPOs and investment in fixed assets funded by the issuance of shares have been lagging rather far behind the volume of merger and takeover deals. In the period from 2000 through 2012, the total volume of IPO-SPO by Russian companies amounted to \$ 91.5bn, and that of merger and takeover deals – to \$ 778.8bn, which is 8.5 times more.

Table 13

	Capitaliz	Secondary market,	IPOs of	sets		Volume of merger and	
	ation	including foreign exchanges	shares	Billions of USD	The same, as % of capitaliza- tion	The same, as % of IPO volume	takeover deals
2000	41	47	0.5	0.2	0.5	40.0	5
2001	75	49	0.2	0.1	0.1	50.0	12
2002	106	87	1.3	0.2	0.2	15.4	18
2003	176	188	0.6	0.2	0.1	33.3	32

The Parameters of the Market for Shares Issued by Russian Companies (bn USD)

Section 3	3
Financial Markets and Financial Institutions	3

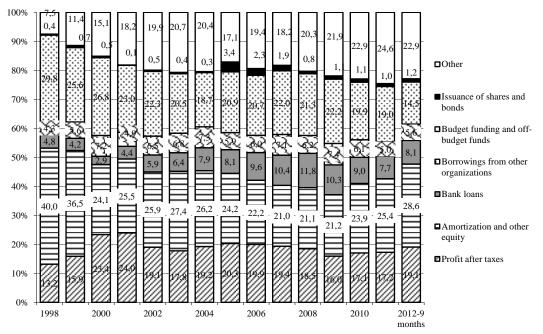
r				1	1	1	
2004	230	541	3	0.1	0.0	3.3	27
2005	549	374	5.2	3.2	0.6	61.5	60
2006	1057	914	17	3.2	0.3	18.8	62
2007	1503	1687	33	3.6	0.2	10.9	126
2008	397	1983	1.9	2.1	0.5	110.5*	110
2009	861	1156	1.7	2.0	0.2	117.6*	56
2010	1379	1431	6.3	2.4	0.2	37.9	56
2011	1096	2222	11.3	2.6	0.2	23.1	79
2012	1079	1901	9.5	2.0**	0.2	21.3	135

* the value is above 100% because part of the amount invested in fixed assets could be generated by private placement of shares;

** over the period of January-September 2012.

Source: calculations based on data released by the Moscow Exchange, cBonds, the Bank of Russia and Rosstat.

However, it is still too early to draw the conclusion that a considerable part of the proceeds from the placement of shares – let alone corporate bonds – is being spent on modernizing the national economy and promoting Russia's economic growth. The amount of money attracted by companies through the placement of shares and corporate bonds and then invested in fixed assets constitutes only a small part of the financial resources allocated to the acquisition of fixed assets. This is illustrated in *Fig. 50*, where the sources of financing for investment in fixed assets are presented.



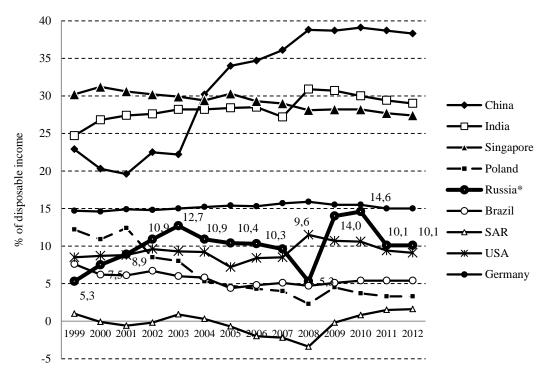
Source: calculations based on data released by Rosstat.

Fig. 50. The Structure of the Sources for Investment in Fixed Assets

Over the period from 2000 through 2012, the amount of resources obtained through the issuance of bonds and shares constituted only a very small fraction of financial resources earmarked for investment in fixed assets. Their share fluctuated between 0.1% in 2001 and 3.4% in 2005. In 2011, this index amounted to 1.0%, and in the first 9 months of 2012 - to 1.2%.

The Development of Russia's Domestic Savings System

In order to achieve a high rate of growth and modernization, Russia's economy must keep the norms for domestic saving at a high level. The amount of savings will grow if the house-hold savings rate is on the rise. According to the official statistics released by *Rosstat*, Russian households save approximately 10% of their income (*Fig. 51*). In the countries whose economies are leaders in economic growth and modernization (China, India, Singapore, Hong Kong), the ratio of the household savings rate to disposable income is much higher. The social and demographic situations in these countries are certainly different from that in Russia, but it must be admitted that any large-scale modernization can only rely on domestic sources of financing. Besides, the currently high consumption rate in Russia in the present situation implies that domestic demand creates incentives mostly for foreign producers.



* Rosstat's data, less savings kept as deposits denominated in major foreign currencies and foreign currency cash.

Source: calculations based on data released by Euromonitor International.

Fig. 51. Household Savings Rate, as % of Disposable Income

In order to raise the population's savings rate and attract long-term resources, there must be institutional investors operating on a stable basis – just as in the case with government reserves. Their keeping a relatively low profile in Russia (*Table 14*) poses a major problem for the Russian financial market. The most important negative development of 2012 was the decision that the rate of compulsory deduction to the funded pension component should be decreased, in order to ensure the Russian pension system's gradual transition towards distribution-based pension funding. In the sphere of pension provision, Russia is increasingly resem-

bling Argentina and Kazakhstan where, as a result of inconsistent government policies in the sphere of pension reform, private pension funds were nationalized.

Table 14

	Number of countries in	Russia's place	Assets, % of GDP		
Average index for 2001–2011	ICI ¹ and OECD samples	in sample	Average for 2001–2011	2011	
Assets of open-ended investment funds*	49	49	0.3	0.2	
Savings and reserves of private pension funds**	67	53	2.1	4.5	
Assets of insurance organizations***	41	40	1.4	1.7	

The Development Levels of Institutional Investors in Russia

* Russia – open-ended and interval pension investment funds;

** Russia – pension savings and reserves of private pension funds;

*** Russia – insurance reserves

Source: calculations based on data released by the Investment Company Institute, stat.org OECD and IMF IFS.

Against the backdrop of all the other countries with domestic stock markets Russia is the world's only outsider in terms of the levels of development of all three forms of institutional investors. Thus, Russia ranks 49th (the lowest) among the 49 countries for which statistics on their open-ended investment funds' assets are available; ranks 53^{rd} out of 67 by the relative level of private pension funds' development; and ranks 40th out of 41 by the size of insurance organizations' assets. In 2011, the assets of open-ended and interval pension investment funds accounted for 0.2% of Russia's GDP; pension savings and reserves of private pension funds – for 4.5% of GDP, and the assets of insurance organization – for approximately 1.7% of GDP. This is indicative of the almost complete absence in Russia of an effectively operating mechanism of savings mobilization via institutional investors. In contrast to all the other countries of the world, the principal savings methods applied by Russia's population are investment in housing and bank deposits (*Fig. 52*)

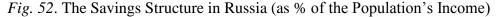
Fig. 53 presents data on the number of individual investors' brokerage accounts and the number of individual accounts on the registers of investment stakes kept by private pension funds. Regretfully, at present the National League of Management Companies (NLMC) does not release timely information on market stakeholders in pension investment funds. However, if we assume that the number of stakeholders in pension investment funds in 2009–2012 did not significantly decline on 2008, the resulting number of individual investors dealing in securities directly or via collective investment will be approximately one million. In this connection, the distinctive feature of the period of 2010–2012 was the newly emerged downward trend in the growth rate of the number of broker clients registered in the MICEX's trading system. Thus, in 2009 the number of registered clients increased by 112.2 thousand, in 2010 by only 42.8 thousand, in 2011– by 66.5 thousand, and in 2012 – by 24.8 thousand. At the same time, the number of *active* broker clients dropped dramatically – from 114.1 thousand in 2009 to 70.3 thousand in 2012. This dynamics may point to the fact that the model formerly applied in attracting clients into the Russian stock market is no longer as effective as it used to be. Anyway, the number of people interested in speculation on the stock exchange is relatively limited in any country. The new growth model implies the presence on the market of longterm investors, and these cannot be attracted without creating an effectively operating pension savings system and restructuring the services rendered by financial institutions. However, the government is evidently not very anxious to promptly create in Russia a new model for the

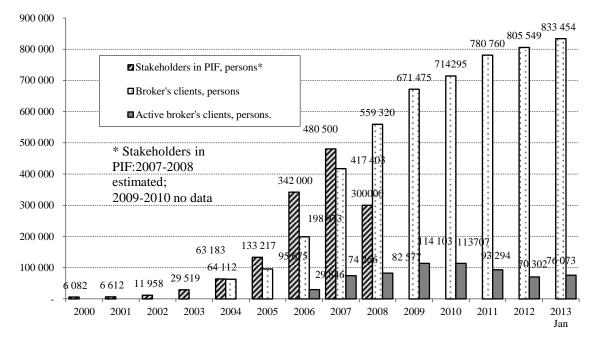
¹ Investment Company Institute.

20 0,3 0,2 0,2 0,7 0,5 0,6 0,8 0,5 15 0,8 1,1 0,5 10 1,3 0,3 1.1 0.7 5 0 1995 1996 1997 1998 $2000\ \ 2001\ \ 2002$ 2003 2010 1999 00 2009 -5 d) movement of debt against loans issued to population -10 c) in real estate and other assets □b) in securities a) on accounts and deposits with banks **----**Saving norm (% of income)

operation of non-bank financial organizations oriented towards servicing long-term private investors.

Source: calculations based on the balances of population incomes and expenditures released by Rosstat.





Source: calculations based on data released by the Moscow Exchange and the National League of Management Companies (NLMC).

Fig. 53. The Number of Market Retail Clients of Asset Managers and Brokers

Market Failures and the State's Presence on the Financial Market

In 2012 it finally became clear that the State was going to play a key role on the financial market – not only in the sphere of its regulation and supervision, but also in elaborating its development strategies and directly managing the projects aimed at creating market infrastructure and the international financial center. On the one hand, this was a response to the challenges and threats that the domestic financial market had to deal with in the course of the protracted recession in the world economy coupled with the growing global competition in the financial sphere. On the other, this activity followed the current general trends in economic policy, when the government relied on its active involvement in the economy and the potential of government development institutions and big state-owned companies. The idea behind this policy was that such an approach would help in correcting 'market failures' and overcoming Russia's inadequacy in global economic competition.

The state expansion on the financial market in 2011–2012 helped to sustain the banking system through short-term loans, to prevent the collapse of exchange liquidity that could result from global investor flight and the absence of domestic institutional investors in Russia, to relatively successfully carry out the public placements of the Moscow Exchange and *Sberbank of Russia*'s shares, to boost the population's trust in the bank deposits guaranteed by the government, consolidate the exchange infrastructure, and to grant to foreign investors the access to the Russian debt market. The reliability of financial organizations and investor confidence in them may be increased by creating a mega-regulator of the financial market.

However, it also is becoming increasingly evident that by no means all the existing problems can be adequately solved by replacing the market forces by the government's activity. Moreover, there are some signs that in place of the market's failures we may now witness failures of the State – that is, the negative consequences visible on the market and in the behavior of market subjects as a result of excessive interference of the authorities in market relations and the constraints imposed on competition.

The interference of the State results in the development of paternalistic attitudes and in the lack of private initiative in dealing with the key issues of managing private finances. As demonstrated by the *Levada-Centre*'s survey of consumer behaviors conducted in February 2013, 60% of the respondents believe that it is the duty of the State to provide them with adequate earnings. According to the survey's authors, this is the result of the State's cultivation of a paternalist model. If the citizens feel that they are unable to influence the existing situation in any way, they become increasingly irresponsible – among other things, in the financial sphere. Family budget planning with a view towards 'life in retirement', illness or unemployment is the consideration that is most seldom mentioned by the respondents as one of the most relevant issues¹. All this poses a serious obstacle in the way of elaborating an efficiently functioning domestic savings system.

It becomes easier for the monetary authorities and exchanges alike to promote the formation of a financial system and exchange infrastructure by means of issuing preferential

¹ Surveys conducted by *Levada-Centre* by order of the *Sberbank of Russia*'s Centre for Macroeconomic Research. February 2013. See *Sberbank*'s website: http://www.sbrf.ru/common/img/uploaded/files/ pdf/press_center/2013/Levada_potreblenie_doverie_i_otvetstvennost_.pdf

loans to banks via direct repo operations and by implementing infrastructure projects designed to attract investors onto the financial market (the issuance of federal bonds, the attraction of foreign portfolio investors – including the speculative CT strategy), than to create the conditions necessary for an accelerated development of domestic institutional investors (private pension funds, investment funds, life insurance companies). As a result, Russia is increasingly becoming an outsider on a global scale in terms of the level of development of her institutional investors, whose presence offers the only possibility for the population to build long-term savings. The government agencies brought pension reform to a complete failure. None of the issues relating to the granting of tax exemptions to private investors operating on the domestic market has been provided with an adequate solution.

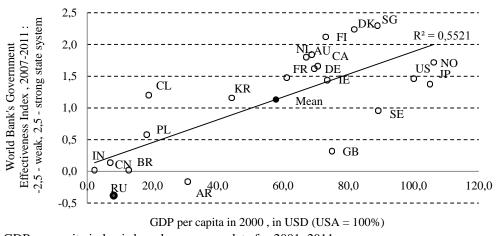
For many years, the dynamic development of the banking system has depended on an easy access to cheap money attracted via CT or preferential loans issued by the Bank of Russia. This eliminated any incentives for the banking system to attract capital in the form of foreign direct investment or public placement of shares on an exchange. Over the past two years, out of the entire banking system, only two state-owned banks resorted to trading on the open market. The IPO by *Nomos Bank* can hardly be called successful, because the bank was taken over by the Financial Corporation *Otkritie*.

The prevalence of the State in the capital of biggest commercial banks and the Moscow Exchange makes it impossible to create market conditions conducive to the private sector's successful development in the financial market. In 2012, various segments of the exchange trade demonstrated a significantly increased participation of state structures and the Bank of Russia. The exchange market and the market for investment banking services displayed a marked deterioration of the indicators describing the level of competition. Many serious initiatives put forth by self-regulated organizations with regard to investment consultants, individual investment accounts, the taxation of individual incomes, and collective investment were met with indifference by government bodies.

So far, the World Economic Forum's Global Competitiveness and Financial Development Indexes and the ratings by major international credit rating agencies have demonstrated no signs of any positive developments in Russia's institutional environment, business climate, performance levels and accessibility of services rendered by financial institutions, banks' reliability, and exchange regulation quality.

In our opinion, the optimal form of the State's response to market failures in Russia is yet to be found – both in terms of the financial market's functioning and the government policy at large. As shown in *Fig. 54*, Russia's government performance rating, as estimated by the World Bank, is very low - even by comparison with the major developing countries.

The government performance level is an inert indicator; few countries have ever succeeded in improving its value within a period of only two or three years. From this it follows that many of the decisions concerning the financial market's functioning must be geared for the low efficiency of the State in the sphere of economics. Another implication is that the State's expansion in the capacity of a participant in the financial market, its regulator and manager must be subject to certain constraints. As far as the sphere of the financial market's regulation, supervision and development is concerned, it is more feasible to rely on the self-regulation of market participants and on private initiatives.



Note. The GDP per capita index is based on average data for 2001–2011. *Source:* World Development Indicators, the World Bank.

