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The review provides a detailed analysis of main trends in Russia's economy in 2014. 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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Section 1. Russia's Socioeconomic Policy: Emergence of New Horizons

1.1. Global Crisis and the Discourse on the Post-crisis Economic Agenda[1]

The global crisis, which first emerged in 2007–2008, has remained the major factor determining the socioeconomic development of the world's leading countries, Russia including. In this case, we view a crisis not as a phase in the cyclical fluctuations between growth and decline (or acceleration and slowdown) as part of the development of a given country or group of countries. Instead, we are speaking of a sufficiently lengthy turbulence period when, as a result of some profound shifts, a new economic growth model comes to the fore and begins to strongly influence the socioeconomic situation and the global economic and political equilibriums.

The evolvement of the current global crisis and the associated geopolitical and structural shifts has led to the following three major conclusions. Firstly, the driving force behind the exit from the crisis – just as it had happened during the previous similar crises over the course of the 20th century - was the USA. Secondly, the world economy has also underwent a structural shift, when hi-tech companies are assuming a dominating role, while that of the raw-materials and processing industries is becoming less prominent. Thirdly, a new agenda of economic growth and a new economic mainstream movement are taking shape.

The year 2014 demonstrated a gap between the economic development indicators of the world's key countries and regions (see *Table 1*). The assumption formulated five years ago – that the emerging economies may become a new locomotive for the exit from the crisis – has proved to be unrealistic.

The key factor responsible for the emergence of the new post-crisis economic and technological structures and the driving force of the exit from the global crisis has become the USA. That country is displaying a rising growth rate, the formation of new manufacturing sectors, and a narrowing gap between consumption and saving indices. US budget deficit shrank from 8.4% of GDP in 2011 to 2.9% of GDP in 2014; over the same period, the unemployment rate dropped from 8.6% to 5.8%. These positive changes enabled US monetary authorities to depart from their supersoft monetary policy course, thus strengthening the USD exchange rate. The flight-to-quality pattern has emerged once again – the improving situation in the US economy is pushing up the demand for the national currency. This is what always happens in

[1] The author should like to express his sincere gratitude to his colleagues K. Rogov, S. Sinelnikov-Murylev, M. Khromov for their assistance in preparing this section.

spite of the incessant warnings that the US dollar is 'a particularly risky asset, which is not secured by any tangible assets'.

Table 1

The GDP Growth Rates in the World's Major Countries, as % of Previous Year

	2008	2009	2010	2011	2012	2013	2014*
World, total	**3.0**	**0.0**	**5.4**	**4.1**	**3.4**	**3.3**	**3.3**
Developed economies	***0.1***	***-3.4***	***3.1***	***1.7***	***1.2***	***1.4***	***1.8***
G7	***-0.3***	***-3.8***	***2.9***	***1.5***	***1.4***	***1.5***	***1.7***
USA	-0.3	-2.8	2.5	1.6	2.3	2.2	2.2
Japan	-1.0	-5.5	4.7	-0.5	1.5	1.5	0.9
Germany	0.8	-5.1	3.9	3.4	0.9	0.5	1.4
UK	-0.8	-5.2	1.7	1.1	0.3	1.7	3.2
France	0.2	-2.9	2.0	2.1	0.3	0.3	0.4
Italy	-1.2	-5.5	1.7	0.5	-2.4	-1.9	-0.2
Canada	1.2	-2.7	3.4	2.5	1.7	2.0	2.3
Eurozone	***0.4***	***-4.5***	***2.0***	***1.6***	***-0.7***	***-0.4***	***0.8***
OECD member countries	***0.3***	***-3.5***	***3.0***	***1.9***	***1.4***	***1.4***	***1.9***
Emerging economies	***5.8***	***3.1***	***7.5***	***6.2***	***5.1***	***4.7***	***4.4***
BRICS	***6.9***	***5.0***	***9.1***	***7.2***	***5.6***	***5.6***	***5.3***
China	9.6	9.2	10.4	9.3	7.7	7.7	7.4
India	3.9	8.5	10.3	6.6	4.7	5.0	5.6
Russia	5.2	-7.8	4.5	4.3	3.4	1.3	0.2
Brazil	5.2	-0.3	7.5	2.7	1.0	2.5	0.3
SAR	3.6	-1.5	3.1	3.6	2.5	1.9	1.4

*Estimated values.
Source: IMF, WEO Database, October 2014.

One manifestation of a structural shift is that hi-tech companies (first of all those operating in IT and biotechnologies sectors) are becoming leaders in capitalization, getting ahead of the 'traditional' corporations, including energy companies (*Table 2*). While previously, about a decade and a half ago, this was interpreted as a sign of an economic bubble (the dot-com bubble), now this has already become a stable trend. Among the top ten capitalization leaders, nine were US companies, while the companies operating in the emerging markets (including Chinese ones) are losing their former positions.

China, while retaining a high rate of growth, did not become a significant factor of recovery in the framework of a global crisis. It is undergoing some important transformations in terms of strengthening its internal growth factors. The huge Chinese market is becoming relevant for the national economy, which is a testimony to the national political elite's increasing awareness of the importance of creating a new economic growth model.

The eurozone continues to display signs of 'ill health', although the rate of growth here is now once again on the rise. The key issue remains the complexity of the model that relies on a single currency without a single financial system. One may suppose that eventually some solution will be found, and so a euro crisis will be avoided. The current situation in some ways resembles that of the exit from the world crisis in the late 1970s and early 1980s, when the rate of economic growth in the West European countries began to gain impetus following the growth in the USA.

On important aspect of this global trend is its orientation to the prospects of prices for energy carriers. The fact that these prices nearly halved over the last few months of 2014, while still remaining above their record low of 2009, has given rise to the key question (or probably even a riddle) of the year 2015: will this new level of oil prices become stable (as it happened in the mid-1980s), or will it be only temporary (similarly to the situation in 2008–2009), followed by a rebound? No seriously substantiated (or 'scientific') answer to that question can

actually be offered: there exist valid arguments in favor of both scenarios. The only certain thing is that this factor will play a significant role in shaping the structure of the post-crisis global economy. For Europe, a sustainable decline in oil prices is more preferable. The position of the USA is neutral, because that country can, most probably, gain from either oil price movement vector, although the actual benefits will be different.

Table 2

The World's Top Ten Countries, by Capitalization in 1997, 2000 and 2014

	1997		2000		Q3 2014	
	Company	**Sector**	**Company**	**Sector**	**Company**	**Sector**
1	General Electric	Industry	General Electric	Industry	Apple	Technologies
2	Royal Dutch Shell	Oil and gas	Cisco Systems	Technologies	Exxon Mobil	Oil and gas
3	Microsoft	Software Development	Exxon Mobil	Oil and gas	Microsoft	Software Development
4	Exxon Mobil	Oil and gas	Pfizer	Pharmaceuticals	Google	Software Development
5	The Coca-Cola Company	Food	Microsoft	Software Development	Berkshire Hathaway	Investment
6	Intel Corporation	Technologies	WalMart	Retail	Johnson & Johnson	Pharmaceuticals and biotechnologies
7	Nippon Telegraph and Telephone	Telecommunications	Citigroup	Banking	Wells Fargo	Banking
8	Merck	Pharmaceuticals	Vodafone	Telecommunications	General Electric	Industrial
9	Toyota Motor Corporation	Machine-building	Intel Corporation	Technologies	Novartis	Pharmaceuticals and biotechnologies
10	Novartis	Pharmaceuticals	Royal Dutch Shell	Oil and gas	Hoffmann-La Roche	Pharmaceuticals and biotechnologies

Source: Financial Times Global 500.

For the developing countries importing energy carriers, the decline in their prices will be certainly beneficial. And finally, for oil producers this will be a period of trial, which will hopefully create incentives for them to implement institutional reform. Nevertheless, the answer to the question as to which form this institutional response will take remains open. In fact, two scenarios of institutional transformations are possible - one to follow the logic of mobilization (by administrative methods), the other – that of liberalization (via economic mechanisms). (Later in this section we are going to discuss this issue in more detail.)

As the global crisis was evolving, several issues were placed on both the national and global economic policy agendas, and the possible ways to deal with them will be the focus of attention of both researchers and practicing economists in the medium-term perspective.

The issue posed by the rate of economic growth. Over the decade preceding the crisis, the global economic growth rate was unprecedentedly high, and this phenomenon was then viewed as the sudden upshot of recent economic and political innovations, to be here to stay. This was the idea behind the reluctance of monetary authorities (especially in the USA) to restrict the growth of lending activity, thereby preventing the economy's overheating. We are not going to discuss here Alan Greenspan's policy in much detail, as much has already been written on this theme, and still more is yet to be written. High growth rates were demonstrated

by both the developed and developing countries, and this was an important result of economic policy, in spite of the fact that it ended in overheating and a crisis.

Now, growth has slowed down, thus giving rise to a new key question: can the low rate of growth be regarded precisely as part of that *new normality*, which had become the focus of discussion early in the crisis? Then, that term was mostly applied relative to the current monetary policy's specific features (quantitative easing and a low interest rate). The outcome of such a policy may be a stable period of low growth rates (the secular stagnation hypothesis). In other words, we will have to decode if the current rate of growth really reflects some short-term problems (the still persisting crisis phenomena, general political instability), or this is indeed a specific feature of the future post-crisis model of economic development.[1,2]

Consequently, there has arisen another issue – that of the prospects for the developing countries, especially those that were expected to produce an economic miracle. It should be remembered that the very idea of BRICS countries had initially been linked to that of 'economic miracle'. Much hope was invested in their dynamic development.

Unconventional macroeconomic (primarily monetary) policy. This issue is directly linked to that of economic growth. On the one hand, it must be understood just for how long the policy of quantitative easing can actually be implemented, and how its discontinuation may actually push down the growth rate, with the possibility of a new recession. On the other hand, we do not yet understand the long-term effects of this monetary policy, which has been unprecedented and largely contradicts the experience and logic of prudence in monetary matters, which was typical of the developed countries over the period 1980–2000 (after stagflation in the 1970s). The current situation is still fraught with the risk of a 'monetary policy trap': the low rate of growth will necessitate the downward movement of interest rates, while their growth in response to economic recovery will once again begin to push the rate of growth towards zero.

The contemporary situation in the developed countries resulted in a fundamental rethink of the key macroeconomic threats. After the stagflation issues of the 1970s, the main macroeconomic goal (in the developed world) was considered to be that of suppressing inflation, and this was also offered as a basic macroeconomic recommendation for the developing countries. Now, several decades later and with the experiences of the deflation issues of recent years, inflation is no longer perceived as the core macroeconomic issue, which is actually a replay of the theme voiced at the dawn of the Keynesian revolution. Now support is granted to proposals as to the feasibility of raising the inflation indices in the framework of inflation targeting.

Those economic and political recommendations that no so long ago were considered to be old-fashioned and *de facto* tabooed as a subject for economic and political discussions are now being tentatively recognized to be legitimate. Thus, in particular, the possibility of introducing some elements of foreign exchange control is mentioned increasingly often. The events of recent years have shown that capital market liberalization is sometimes fraught with significant risks that cannot be ignored. Besides, there is the positive experience of foreign

[1] Teulings Coen and Baldwin Richard (eds.) (2014). Secular Stagnation: Facts, Causes and Cures. A VoxEU.org eBook. London: CEPR Press.

[2] L. Summers questioned the possibility of sustainable growth in the USA in the foreseeable future, and so warned against any too drastic departure from the growth-triggering policy course pursued by the FRS (see Summers Laurence (2014). Reflections on the 'New Secular Stagnation Hypothesis'. Teulings Coen and Baldwin Richard (eds.). Secular Stagnation: Facts, Causes and Cures. A VoxEU.org eBook. London: CEPR Press).

exchange control having been introduced in some Asian countries (especially in Malaysia) as a tool to help deal with the 1997–1998 crisis. However, it should be specified that constraints imposed on free capital movement can only be justified if the following two conditions are observed. Firstly, these measures should be introduced as a structural device intended not to reduce capital flows, but to sustain macroeconomic stability and sustainability of the financial sector and to soften the effects of 'situational' fluctuations. Secondly, restrictive measures should be imposed for a short period of time, which will then be used for implementing institutional reform designed to improve the financial market's performance and create favorable conditions for investor activity. Otherwise the restrictions on capital movement will not yield any sustainable positive results, bringing about a decline in economic efficiency and giving rise to corruption[1]. As shown by historical experiences, it is very difficult to actually create such conditions, and so many of the recent attempts to apply this instrument have proved to be futile.

The situation with the regard to budget policy incentives for economic growth (the discourse on the feasibility of budget austerity) is becoming more understandable. In face of a severe budget crisis, the governments of a number of developed countries have begun to promote policies aimed at increasing budget expenditure as a traditional anti-cyclical policy measure. However, this can probably be afforded only by a country that issues a reserve currency – that is, the USA. European experiences have demonstrated that countries pursuing a tough budget policy coupled with a soft monetary policy (primarily the UK and Germany, but this is also true for Portugal) are more successful in their political and economic development. The attempts at implementing a soft budget policy in France can hardly be called successful – either in terms of economic growth or the popularity of the socialist government[2].

The prospects of globalization and global disequilibria. On the eve of the current crisis and during its initial phase, some economists were already viewing global disequilibria as the most important source of growing problems. In fact, this had to do with the *de facto* division of the world into consumer countries and saver countries, when consumption growth was occurring mainly in the developed countries (and especially in the USA), while the focus of production was shifting to the developing world (in the main to China). This process even gave rise to a new term - *Chimerica*[3].

Over the years that have passed since the onset of the crisis, these disequilibria have become somewhat less prominent due to the development of new technologies in the West and the rising labor costs in Asia (including China). However, this issue is liked to another, more complicated one – that of the prospects of globalization as the major phenomenon observed

[1] Similar conclusions can be found in Saborowski Christian, Sanya Sarah, Weisfeld Hans, Yepez Juan (2014). *Effectiveness of Capital Outflow Restrictions*. Washington D.C.: IMF. This study conducted by the IMF demonstrated that restrictions on capital movement may turn out to be beneficial on condition of the existence of at least one of the following three circumstances: strong macroeconomic fundamentals; well-developed institutional environment; and a fully fledged control system that has already been functioning for a long period of time.

[2] In support of the standpoint of France's socialist government – which is unwilling, in the foreseeable future, to reduce its budget deficit to 3% of GDP by way of complying with the Maastricht criteria, Italy's leftist Prime Minister Matteo Renzi declared that a higher deficit is better than the electoral victory of the rightists led by Marine Le Pen. 'I prefer to have a France with 4.4 per cent [deficit-to-GDP ratio] today than a France with Marine Le Pen tomorrow. This is very important for Europe' (Politi James (October 3, 2014). *Berlin has no right to lecture, says Renzi* // The Financial Times). This is just one example of how politics can prevail over economics, which has become a typical feature of the current global crisis.

[3] Ferguson N. *The Ascent of Money: A Financial History of the World*. N.Y.: The Penguin Press, 2008.

over the last quarter century. As a result of the growing wellbeing rates in some of the developing countries, they are now faced with a new reality, when they are increasingly losing their former capacity to compete with the developed world in terms of labor cost. Now, they have to devise ways to boost their competitive capacity by means of institutional reform and improved business climate. The emerging markets must now become less oriented to the support of exports (although this is also an important factor that can indeed be further boosted) than to the improvement of opportunities for doing business, no matter which markets the exporters are ultimately choosing as their target. Moreover, as the wellbeing index rises in the developing countries, their domestic markets are becoming increasingly more important for their growth that the markets in the developed countries, and not *vice versa*.

Thus, the growing costs in the developing countries coupled with growth of their domestic demand can become the factor responsible for a declining world trade growth rate, or even for shrinkage of world trade turnover. In other words, the possibility of deglobalization cannot be ruled out altogether.

This is by no means an unprecedented situation. In fact, deglobalization was observed previously in the 1870s and 1880s, and then in the mid-20th century. Evidently, the periods of globalization and deglobalization alternate over the course of history.

Another factor conducive to deglobalization may become the recent trend of *reindustrialization in the developed countries*. Over the last fifty years, these countries have been demonstrating shrinking industry shares in terms of GDP and the employment rate, and this trend has also become prominent in post-Communist Russia. The critics of modern capitalism view these processes as a sign of deindustrialization, while the majority of economists believe it to be an evolution towards postindustrial economy and society.

The current reindustrialization may be the result of the combined effects of several factors. And the rising labor costs in the emerging markets are by no means the determining factor here. Anyway, there still exist quite a few poor countries with relatively high levels of stability, which will willingly host the production entities moved there for the sake of lower costs. The reindustrialization trend – if its existence should be confirmed – represents not a return to the traditional production mode in the developed countries, but the creation of new branches of industry whose typical feature will be the declining labor share in production costs and the prominent role of factors like the proximity to the research base (due to the increasing share of R&D) and consumer demand. The rising labor costs in the leading developing countries are only an additional contributive factor.

Another important reindustrialization factor may become the energy resources market transformation. Energy is becoming cheaper due to the implementation of state-of-the-art technological solutions aimed at new unconventional methods of natural gas and petroleum production, and more efficient methods of their transportation. This has resulted in the 'energy price revolution'.

The inequality issues represent one more theme that is becoming increasingly prominent. While over the previous decades these issues were discussed mainly in a global context (from the point of view of the developed to developing country ratio, now it is inequality across the developed world that has become the focus of attention. This issue has two aspects.

On the one hand, there are the changes in inequality levels in the course of economic growth. In fact, this has to do with Simon Kuznets' hypothesis[1] concerning the changes in

[1] Kuznets S. *Modern Economic Growth: Rate, Structure, and Spread*. New Haven and London: Yale University Press, 1966.

economic growth to inequality ratios that occur as a result of departure from the traditional industrial model and the in-depth structural shifts in modern developed economies.

On the other hand, there is the important question of how inequality can influence the rate of economic growth – that is, the extent to which increasing inequality can become a factor that will determine a slowdown or acceleration of economic development. Evidently, this aspect of inequality has to do with the issue of long-term economic slowdown, as well as the discourse on the modern forms of social state (or welfare state) corresponding to the demographical and political realities of the 21st century.

This theme became the focus of special attention after the publication of Thomas Piketty's book[1], where he underlined the fact that in the modern world, beside inequality between countries, there is also an increasing trend towards disparity in the distribution of income, and especially savings. Importantly, the latter is characteristic not only of the developed countries, but also of the topmost group of the developing economies.

Inequality in the distribution of savings, according to Piketty, plays a major role in the currently observed slowdown in economic development. The concentration of the bulk of savings (generated, among other things. also by incomes from global operations) in the hands of a fraction of the population creates domestic market conditions where the supply of resources is higher than the demand for investment. This disparity pushes down the interest rates, However, in face of dwindling economic activity and low inflation rates, monetary authorities are deprived of opportunities for creating incentives for growth by offering low interest rates (the nominal interest rate cannot go below zero (the so-called zero lower bound)).

The existence of all these issues has necessitated a rethink of the theoretic foundations of the contemporary economic policy and the universally accepted practical recommendations. Over the course of three decades (from the 1980s through the 2000s) the key economic policy issue was to ensure economic growth and macroeconomic stability, while a high inflation rate and excessive government interference were considered to be the main obstacles to achieving these goals. The gist of this concept (based on this specific combination of goals and risks) can be found in the so-called Washington Consensus – a set of basic economic policy prescriptions devised predominantly for the developing economies[2]. While the issue of maintaining macroeconomic stability remained important, the economists and politicians alike were now faced with the task of finding some additional instruments for economic development regulation in order to avoid a lengthy period of stagnation against the backdrop of a low inflation rate.

All these new phenomena and trends need to be empirically confirmed and theoretically reviewed. It can be assumed that such issues will make an important part of economic study programs and become the components of a new economic paradigm.

1.2. Russia: the Economic and Political Trends

1.2.1. Overlapping Crises

The key feature of socioeconomic and political development in 2014 was the simultaneous occurrence of several overlapping crises. In this connection we mean a crisis not as a single

[1] Piketty T. *Capital in the Twenty First Century*. The Belknap Press of Harvard University Press. Cambridge, 2014.
[2] Williamson J. *What Washington Means by Policy Reform* // Williamson J. (ed.): *Latin American Readjustment: How Much Hhas Happened*. Washington D.C.: Institute for International Economics, 1989.

strictly defined process (for example, economic crisis), but as a stream of trends and events, each of which goes beyond the framework of any stable inertia-governed trend, and so significantly complicates the process of economic and political decision-making.

We may point to the following major crises and issues that Russia is currently faced with:

– the ongoing global structural crisis that has given rise to profound shifts in the economies and policies of the world's leading countries, to the emergence of new geoeconomic and geopolitical equilibriums; Russia has been experiencing this crisis at a lag behind the other main economies;

– the crisis of Russia's economic growth model of the 2000s, which has been based on increasing demand (including consumption) coupled with the existence of idle production capacities and long-term growth of prices for Russia's exports;

– the increasingly tense geopolitical situation, its causes including (but not limited to) Russia's noticeably higher political activity on the international arena; this higher activity in itself is the upshot of those major shifts that has resulted from the global crisis;

– the external economic shock created by the selective sanctions applied to some sectors of Russia's economy - first of all, in the financial sphere;

– the external economic shock created by the plummeting prices for oil – the most important source of revenue for the Russian budget;

– the foreign exchange crisis resulting from the double external shock (primarily the decline of oil prices, but also, in part, the effect of financial sanctions);

– the cyclical crisis phase associated with declining investment activity (however, this effect is cyclical only in part, because the low investment activity has also been caused by evident political factors);

– the demographic crisis, represented by the able-bodied population decline.

Each of these issues, when taken alone, is quite understandable and manageable in the framework of a responsible economic policy. It is their combination that creates some serious difficulties, because each issue, if it is to be properly dealt with, requires measures that may not only differ from the measures applicable to the other issues, but sometimes directly oppose those measures.

When discussing all those multiple crises, we must understand their varying roles in the current developments in Russia. The key role, in our opinion, belongs to the global crisis that produces structural shifts in the world economies and policies, which, in their turn, necessitate some transformations in the growth model currently existing in Russia. That model had already been demonstrating, by 2008, some signs of having exhausted its potential, and economists of practically any hue were then voicing their warnings. However, the crisis-triggered recession of 2009 and the resulting rebound of oil prices made it possible for that model to survive for several more years. The significant drop in the rate of economic growth, which occurred in 2013, was yet another reminder of the long-due structural and institutional reform. Geopolitical factors (including foreign sanctions), although important, are still playing a secondary role, making the situation more acute, while at the same time creating some additional opportunities for anti-crisis maneuvering and institutional renewal.

All these internal and external circumstances gave rise to some significant innovations in the economic and political life in this country, and intensified the mutual influence of the existing political and economic factors. As has already been noted earlier, politics is gaining an upper hand over economics - which is a typical feature of any period marked by crises and transformations.

1.2.2. The Ideological and Political context

The ideological background of the year 2014 was shaped by Russia's mounting confrontation with the West, still more intensified by the mutual misunderstanding and rejection. The Western ideological (and in part also political) model development was viewed by many in Russia's elite and middle class alike with an increasing negativism. Public opinion surveys are manifest of a high level of mistrust towards the West (and first of all, to the USA and the EU) and, as a consequence, of a high level of public support of Russia's political leadership with their loud criticism of 'our Western partners'[1].

The almost 20-year-long period of mutual attempts at getting together - which sometimes appeared to be sincere, but more often looked just awkward - has given way to a relationship governed by the logic of 'us and them', which in fact is better understandable and more habitual for both parties. Russia and the West returned to their traditional confrontational mode . The transition from the format of G8 to that of G7 put everything in place, and the problem was once again translated into its initial wording, which is now clear for all. Strictly speaking, this is simply yet another turn in the relationship cycle where alliance and mutual mistrust are phases that alternate over time, a pattern that has become well known in the course of the last three centuries. In this context, the Crimea was more like a catalyst that speeded up the reestablishment of the traditional relationship model[2].

However, in this connection several questions have arisen, which are significant from the point of view of Russia's and her partners' post-crisis development.

So, to what extent will Russia be able to achieve a political and, more importantly, economic reorientation to other countries and regions? In terms of politics, the most obvious option is represented by the BRICS group of countries, which in recent years has evolved from an abstract linguistic exercise of a banking analyst into a politically motivated association. Evidently the leaders of each of these countries are nursing ambitions of turning BRICS into a mechanism no less influential than G7. Russia in 2014, after the effective demise of G8, had an even greater vested interest in strengthening the influence of the new group, which can actually be boosted by Russia's chairmanship in BRICS. This format has yet another aspect which is important for Russia – the prevention of the emergence of an informal (let alone

[1] According to the results of surveys conducted by *Levada Center*, while almost 90% of respondents had displayed their positive attitude to the USA, and only about 10% disapproved of that country back in 1990, the situation in 2014 was exactly opposite – the distribution of negative and positive opinions was 17% and 75% respectively. Approximately the same results were obtained with regard to the Russians' attitude to the European Union. As for Vladimir Putin's rating, after Russia's annexation of the Crimea it has been stably above 80%.

[2] Some Western researchers have noted that this course of events was actually programmed by the attitude of the EU and NATO to post-Soviet Russia, which had been wary to say the least from the very outset. Jeffrey Sachs, who was involved as consultant in the implementation of Poland's reform, and in the early 1990s also tried to help the Russian government, points to the radical difference in the perception, by Western political establishment, of the problems existing in those two countries. As for Poland, it was encouraged to follow the course of close cooperation with the economically developed countries, which were willing to offer their comprehensive economic assistance, including the writing-off of Poland's foreign debt. However, such measures were not considered to be applicable to Russia (the fact of Russia shouldering the USSR's debt liabilities in full notwithstanding), a country that was regarded as a loser, and the policy suggested with regard to the latter was to be aimed at containment, in order to prevent her strengthening. It is only natural, according to Jeffrey Sachs, that once Russia had begun to gather strength, this triggered a crisis in her relationship with the West (see Sachs J. (2014) Why the shadow of WW1 and 1989 hangs over world events // http://www.bbc.com/news/magazine-30483873; Sachs J. (2014). Time to End the Cold War Once and for All // http://www.cnbc.com/id/102289227#).

formal) Group of Two consisting of the USA and China, of which Zbigniew Brzezinski already wrote a few years ago[1].

In terms of economics, the situation appears to be even more complex. On the one hand, the EU accounts for the bulk of EC Russia's foreign economic cooperation, and this circumstance cannot be changed promptly – although this is not a goal that really needs to be achieved. On the other hand, China as the world's second economy and Russia's natural neighbor, in spite of her willingness to cooperate, can hardly be expected to undertake any drastic economic measures in order to neutralize the effect of sanctions imposed by the West. The U-turn in the direction of China cannot become a self-sufficient economic and political strategy. Moreover, the key foreign trade issue for Russia is to gain access to capital (investment) and state-of-the-art technologies, and it has evidently little to do with establishing a partnership with the other members of the BRICS group and other developing countries.

One more alternative in this economic paradigm is integration across the post-Soviet space, and we can see an active development and institutionalization of this concept in recent years. The creation of the Customs Union (CU), and from 2015 - of the Eurasian Economic Union (EEU), and the expansion of this group to include a fifth member country, has been another important direction of Russia's economic policy. Although the process of integration by no means always goes smoothly, the very fact of such an evolution can hardly be overestimated.

We cannot yet fully estimate the scale of the recent ideological split with the West. Over the past three centuries, Russia has visualized herself as part of the Western civilization, and the desire 'to catch up and overtake' was often interlaced with the conviction that, by a number of parameters, Russia runs ahead of the West, being a precursor of things to come in the political and economic fields. Even the USSR, in its classical form, was viewed not as an alternative to the West, but as a model visualizing for the West its pathway towards its own 'Communist tomorrow'.

Today, it seems, the baseline targets are undergoing a transformation: in the logic of a 'multi-polar world' and 'conflict of civilizations',[2] the model of a 'special way' is not clearly visualized. However, an important crossroads still lies ahead. On the one hand, this can be a special development model, which will fundamentally differ from that followed by the West. On the other hand, this model also incorporates some components of the purely Western ideology of conservatism and traditionalism. Besides, this trend may also reflect a return to the traditional values of the Christian civilization, as well as a resurrection of the idea of European nationalism of the 19th century, or the principles of *Realpolitik* (in the style of Alexander Gorchakov, Otto Bismarck or Benjamin Disraeli). The latter assumption is confirmed by the inclination of some representatives of Europe's right wing to solidarity with present-day Russia.

So, we come to the logical conclusion that we also need to rethink the terminology applied to the key challenges that this country is currently faced with. When the transformation crisis was already over - that is, in the 2000s, we spoke of the necessity of *innovation development*. Then the focus of attention shifted towards *modernization*. And today, the main slogan is *import substitution*.

[1] Brzezinski Z. (2009). *The Group of Two that could change the world* // The Financial Times. January 14. P. 9.
[2] Huntington S. *The Clash of Civilizations and the Remaking of World Order*. N.Y.: Simon&Schuster, 1996.

1.2.3. The Economic Specificities of the Year 2014

The presence of several overlapping crises has created some serious difficulties for economic development in Russia, and created specific demands with regard to economic policy. In this connection, a well-substantiated analysis of the negative trends and the issues associated with these trends will be necessary, as well as a sound understanding of the positive elements that can be relied upon whilst elaborating an adequate anti-crisis policy.

So, what are the main features of the economic situation as it emerged in 2014, which will influence the course of this country's development in the medium term? (See *Tables 3, 4* and *5*)

Table 3

Main Economic Indicators of the Russian Federation for 2008–2014

	2008	2009	2010	2011	2012	2013	2014
GDP, growth on same period of previous year, %	5.2	-7.8	4.5	4.3	3.4	1.3	0.6
Industry, growth on same period of previous year, %	0.6	-10.7	7.3	5.0	3.4	0.4	1.7
Agriculture, growth on same period of previous year, %	10.8	1.4	-11.3	23.0	-4.8	5.8	3.7
Household final consumption expenditure, growth on same period of previous year, %	10.6	-5.1	5.5	6.8	7.8	5.0	1.9
Investment in fixed assets, growth on same period of previous year, %	9.5	-13.5	6.3	10.8	6.8	-0.2	-2.5
Consolidated budget surplus (+)/deficit (–), % of GDP	4.9	-6.3	-3.4	1.5	0.4	1.3	-1.2
Reserve Fund (2007 – Stabilization Fund), year-end data, bn USD	137.09	60.52	25.44	25.21	62.08	87.38	–
National Welfare Fund, year-end data, bn USD	87.97	91.56	88.44	86.79	88.59	88.63	78.00
Bank of Russia's year-end international reserves, bn Rb	427.1	439.0	479.4	498.6	537.6	509.6	385.5
Consumer price index, December-to-December	13.3	8.8	8.8	6.1	6.6	6.5	11.4
Producer price index, December-to-December	-7.0	13.9	16.7	12.0	5.1	3.7	5.9
Bank of Russia's key rate, annual average, % per annum	6.9	8.3	5.3	5.3	5.3	5.5	7.9
Average interest rate on corporate credits, in Rb, annual average, % per annum	12.2	15.3	10.8	8.5	9.1	9.5	11.1
Average interest rate on individual deposits (except demand deposits)	7.6	10.4	6.8	5.4	6.5	6.6	6.7
Total unemployment rate (ILO methodology), per annum average	6.2	8.3	7.3	6.5	5.5	5.5	5.2

Source: Rosstat, RF Ministry of Finance, Bank of Russia.

Table 4

Some Parameters of the RF Balance of Payments and External Debt in 2008–2014, bn USD

	2008	2009	2010	2011	2012	2013	2014
Current account balance	**103.9**	**50.4**	**67.5**	**97.3**	**71.3**	**34.1**	**56.7**
Trade equilibrium	177.6	113.2	147.0	196.9	191.7	181.9	185.6
Exports	466.3	297.2	392.7	515.4	527.4	523.3	493.6
Imports	-288.7	-183.9	-245.7	-318.6	-335.8	-341.3	-308.0
Direct investment*	19.1	-6.7	-9.4	-11.8	1.8	-16.1	–28.5
In RF economy	74.8	36.6	43.2	55.1	50.6	70.7	18.6
Abroad	-55.7	-43.3	-52.6	-66.9	-48.8	-86.7	–47.1
Reserve assets ('-' – growth)	**38.9**	**-3.4**	**-36.8**	**-12.6**	**-30.0**	**22.1**	**107.5**
Foreign year-end debt							
Total	**480.5**	**467.2**	**488.9**	**538.9**	**636.4**	**728.9**	**599.5**
Government bodies	29.5	31.3	34.5	34.7	54.4	61.7	41.5
Central Bank	2.8	14.6	12.0	11.5	15.6	16.0	10.4
Banks	166.3	127.2	144.2	162.8	201.6	214.4	171.1
Other sectors	282.0	294.1	298.2	329.8	364.8	436.8	376.5

* 2014 – less banks

Source: Bank of Russia.

Table 5

The Structure of Capital Operations in the RF Private Sector in 2008–2014, bn USD

	2008	2009	2010	2011	2012	2013	2014
Total	**-133.7**	**-57.9**	**-35.3**	**-83.0**	**-56.5**	**-62.1**	**–151.5**
including							
Banking sector	**-56.9**	**-30.4**	**15.9**	**-23.9**	**18.5**	**-7.5**	**-49.8**
External liabilities	*8.2*	*-42.1*	*17.7*	*7.8*	*33.3*	*20.4*	-37.1
External assets	*-65.1*	*11.8*	*-1.8*	*-31.8*	*-14.8*	*-27.9*	-12.7
Other sectors	**-76.8**	**-27.6**	**-51.2**	**-59.1**	**-75.0**	**-54.6**	**–101.7**
External liabilities	*98.6*	*34.2*	*24.9*	*58.9*	*39.8*	*95.6*	0.9
of these							
FDI	64.9	30.1	37.8	50.0	42.8	61.5	18.6
Other obligations	33.7	4.1	-13.0	8.9	-3.0	34.1	-17.7
External assets	*-175.4*	*-61.7*	*-76.1*	*-118.0*	*-114.8*	*-150.2*	–102.6
of these							
currency in cash	-25.2	4.3	14.2	4.0	-1.4	0.3	-33.9
Other assets	-150.2	-66.0	-90.2	-122.0	-113.4	-150.5	-68.7

Source: Bank of Russia.

The topmost factor is the slowdown in the rate of economic growth, the first signs of which had appeared back in 2012, and in 2015 the growth rate may become negative. Economic decline in itself cannot become a big issue if it is short-lived. Danger is associated with a protracted recession, which may result from an inadequate anti-crisis economic policy. One example of such a course is the notorious 'acceleration policy' as it was implemented in 1986–1989, which translated itself into a lengthy crisis[1].

Another issue is the destabilization of Russia's national currency. It would have been wrong to explain the sharp depreciation of the ruble in December 2014 by mistakes committed by the monetary authorities. The main causes of depreciation are the structural issues that have been plaguing the Russian economy, and that have been pointed out over the past 10 years by practically all economists, many of whom differ in their opinions on other issues. The low degree of diversification in the national economy, the low competitive capacity of

[1] V. Mau. *V ozhidanii novoi modeli rosta: sotsial'no-ekonomicheskoe razvitie Rossii v 2013 godu* [Waiting for a new model of growth: Russia's social and economic development in 2013]. *Voprosy Ekonomiki* [Issues of Economics]. 2014. No 2, pp. 22–24.

many of Russian enterprises, the low level of trust in society, and the high inflation rate persisting over the past two decades have been the factors that made the economy extremely sensitive to the movement of oil prices and availability of external sources of cheap money. So the country's isolation from external financial markets coupled with plummeting oil prices could not but push down the exchange rate of the Russian ruble against major foreign currencies. We may look for (and find) many other contributing factors, both objective and subjective, but they will be of secondary importance by comparison with the first two exogenous factors.

It is the combination of these circumstances that was actually responsible for the ruble being much more vulnerable than the national currencies of the other economies dependent on raw materials. It is in this that the current situation differs from that in 2009, when the rate of the ruble's weakening was comparable to that of the other national currencies (*Fig. 1 and 2*).

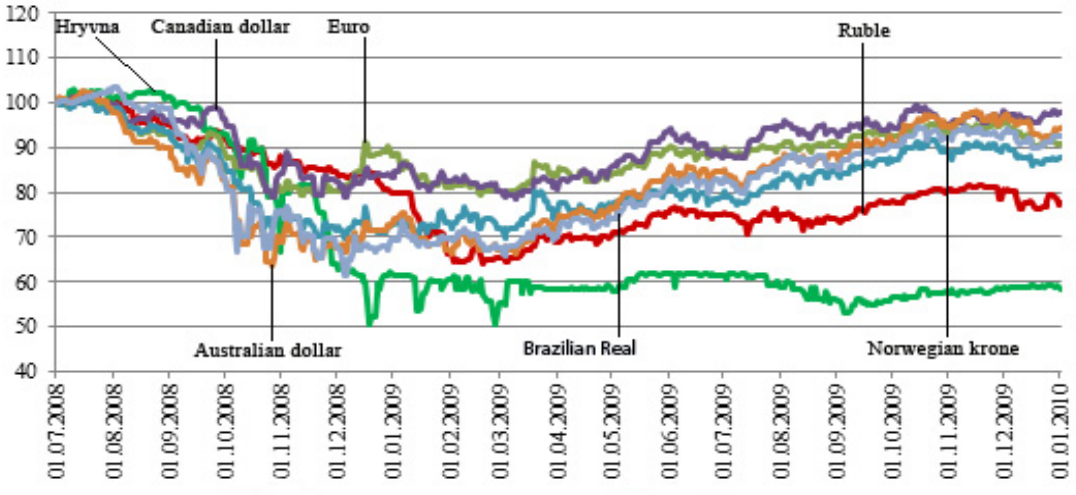

Fig. 1. The Movement of the Ruble's Foreign Exchange Rate in 2008–2009 against the National Currencies of Some Other Countries (1 July 2008 = 100)

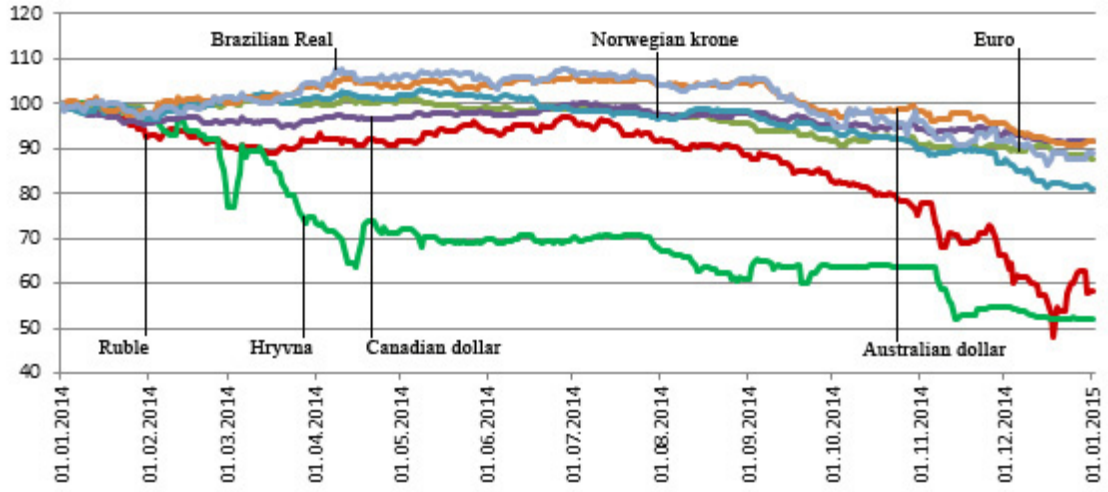

Fig. 2. The Movement of the Ruble's Foreign Exchange Rate in 2014 against the National Currencies of Some Other Countries (1 January 2014 = 100)

Growing political uncertainty was one more factor responsible for the decline in entrepreneurial and investment activity. It triggered capital outflow at a rate comparable to that in 2009. However, then the situation was further aggravated by a simultaneous nearly 9-percent drop in GDP.

The growth rate of prices accelerated, which was a natural consequence of the ruble's depreciation. The inflation rate once again rose to two-digit values, thus making more acute the existing economic problems (through the mechanism of interest rates) and social issues. To bring down the inflation rate – this has once again become one of major goals of Russia's economic policy.

A serious issue emerged when Russian companies were denied access to world financial markets. This factor reduced their opportunities both for attracting credits (which they needed, among other things, in order to refinance their accumulated debt) and for placing their securities abroad. The volume of mergers and absorptions (M&A) dropped threefold on 2013, and that of attracted syndicated loans dropped more than fourfold ($ 48.4bn to $ 11.7bn). The volume of eurobonds held by Russian companies shrank from $ 52.6bn to approximately $ 10bn.

This was caused not only by the direct restrictions on the access of Russian companies to the capital markets of those countries that had officially introduced sanctions against Russia (the USA, the EU, Canada, Japan). Firstly, capital substitution from the markets of other countries, including the fast-growing Asian economies, appears to be problematic, because under the conditions of globalization the financial institutions in 'third countries' are very cautious and circumspect in their policies towards corporations that are subject to economic sanctions, not wishing to spoil their relations with the regulators in those countries that have imposed the sanctions. Secondly, the access to capital markets also becomes somewhat constrained for those companies that are not subject to formal sanctions, because investors now rate their country risks very high. Thirdly, Russia's business environment inevitably reflects the situation on world markets, with their uncertain global growth prospects (the prospects of secular stagnation) and the declining demand for the core items of Russian exports (energy, metallurgy, etc.).

The sharp depreciation of the ruble, the restricted access to financial markets in combination with the downgraded investment ratings of the country as a whole, as well as some selective companies, have become the factors that complicate the task of foreign debt redemption for banks and corporations. By late 2014, it had risen to $ 651bn, and by 1 January declined to $ 548bn (*Table 4*). Although this can be regarded as a positive achievement from the point of view of the prospects of macroeconomic recovery, in the short term the reduced presence of Russian companies in world financial markets will become an additional negative economic growth factor.

The scale of capital outflow from Russia has also increased significantly, which is also a manifestation of the flight-to-quality pattern. The movement of the capital outflow index should be viewed in comparison not only with the data for the year 2013, which was marked by a high degree of stability, but also the data for the crisis period 2008–2009, when capital outflow indices peaked in the period from Q3 2008 through Q2 2009 at $ 183bn, which is by $ 31bn more than in 2014. True, that was the period when Russian non-banking corporations were able to increase their foreign assets, including direct investment. During the crisis of 2008–2009 the amount of those assets increased by $ 41bn more than they did in 2014 ($ 142bn vs. $ 101bn). The amount of capital outflow from the banking sector during the crisis of 2008–2009 was by $ 32bn higher than the same index for the three quarters of 2014,

and at that time, in addition to the high scale of foreign debt redemption, banks were intensively increasing the amount of their foreign assets (*Table 5*).

In 2014, the main factor that was pushing up the net capital outflow index was the slowdown in the inflow of foreign loans and foreign investment, as well as investment in foreign currency cash. If the indices for 2013 are cleared of the effects of the deal of purchase, by *Rosneft*, of TNK-BP, as well as those of the foreign loan taken in order to complete the deal, the net outflow index for will increase by $ 98.0bn to $ 151.5bn.

The growth in investment in foreign assets in the non-banking sector occurred almost entirely due to the increased investment in foreign currency cash. If in 2013, according to the Bank of Russia's estimates, the volume of foreign exchange assets held by Russian residents shrank by $ 0.3bn, over the course of 2014 it increased by $ 34.1bn - nearly at the same pace as during the crisis of 2008–2009.

One of sign of the mounting problems in the Russian economy was the movement of wages and profits in terms of share in GDP. We have already pointed out the fact that, over the last 20 years, the surge of the share of wages above 50% of GDP is a sign of an approaching crisis[1]. As seen from *Fig. 3*, the key role here is played by the real foreign exchange rate of the ruble. Its strengthening results in a shrinkage of the share of exports in GDP (even in face of rising oil prices), which means that the share of labor is increasing. In response to the ruble's depreciation the share of labor shrinks, thus becoming one of the factors responsible for the upward movement of the competitive capacity index and the increasing share of exports in GDP. This is exactly what happened in the period 1998–1999. To some extent this pattern also occurred in 2009, but due to the negligible depreciation rate the resulting boosting effect on competitive capacity was also rather limited.

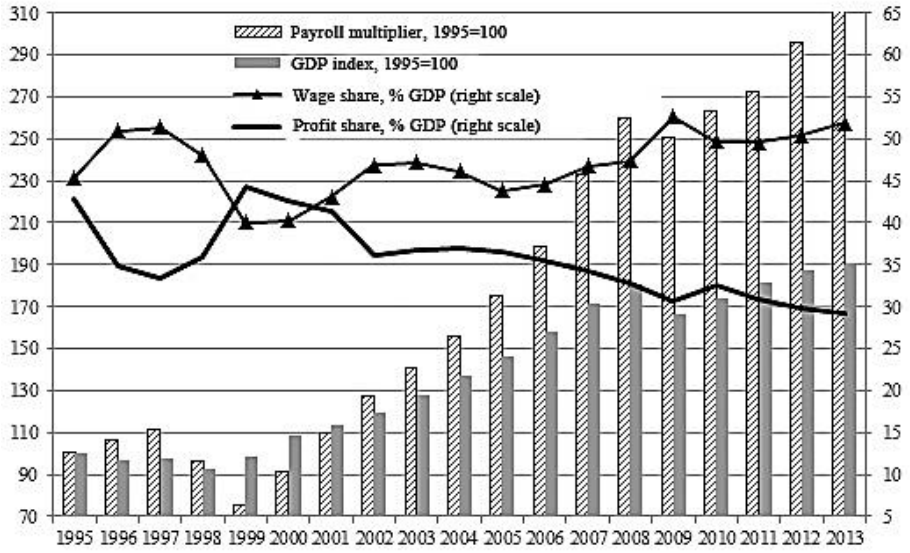

Fig. 3. The Movement of Wages and Profits Russia, as Share in GDP, in 1995–2013

[1] V. Mau. *V ozhidanii novoi modeli rosta: sotsial'no-ekonomicheskoe razvitie Rossii v 2013 godu* [Waiting for a new model of growth: Russia's social and economic development in 2013]. *Voprosy Ekonomiki* [Issues of Economics]. 2014. No 2, p. 14.

Alongside all these problems that occurred in 2014, it is also important not to overlook the positive elements in Russia's macroeconomic situation, which can become the levers that can be employed to overcome the forthcoming crisis. They are as follows:

– a well-balanced budget, which could be kept under control thanks to the existence of the 'budgetary rule';

– low government debt, and in particular the amount of debt denominated in foreign currencies;

– the considerable amount of foreign exchange reserves held by the Bank of Russia and the RF Government;

– a low unemployment rate as a factor ensuring social stability.

To these positive indicators, we can add Russia's significantly improved position in the World Bank's Doing Business ranking, which is the proof of this country's steady progress towards the goal outlined in the May 2012 Presidential executive order. Meanwhile, at the present moment the fact of this progress seems paradoxical, because the improved ranking correlates with a slower rate of growth, whereas over the previous decade the economy was displaying growth at a high rate against the backdrop of Russia's steadily declining ranking. However, this does not mean that from now on this index should be ignored. But it is evident that economic growth occurs as a result of interaction of various and multi-vectored factors.

One more positive outcome of the year 2014 is the recognition of the fact that the RF Central Bank is capable of acting independently and contrary to the opinions of the majority in the economic and political elite. This is true with regard to its interest rate policy, as well as its consistent efforts to 'clean up' the banking sector. Over the course of that year, the RF Central Bank revoked 85 licenses, including 72 bank licenses and 13 licenses of non-banking credit institutions, after distortions in their balance sheet data had been revealed.

In spite of all the hardship associated with the decision to proceed with the switchover to inflation targeting in accordance with the earlier established timelines (that is, by 2015), that decision appears to be appropriate and timely. Due to this measure, a significant part of foreign exchange reserves could be saved. This last circumstance is of particular importance, if we set it against the situation in 2008–2009. Then, over the course of 5 months (from September 2008 through January 2009) the Bank of Russia sold about 40% of its reserves (or $ 209bn) in order to keep in check the ruble's foreign exchange rate in face of the uncertainty produced by the ongoing crisis and the plummeting prices of oil. As a result, the ruble remained stable, while later on the amount of foreign exchange reserves was increased (although the pre-crisis record high could never be achieved) as oil prices once again went up. However, the downside was the overestimated foreign exchange rate of the ruble in the new conditions, and consequently, a slowdown in the process of structural modernization – after the rebound of 2009–2010, the *business as usual* model prevailed.

Thus, the following key features of the current situation in Russia should be underlines, as they will determine the further course of events:

– political consolidation of society;

– stagflation as a key macroeconomic issue, which should be recognized in spite of the absence (so far) of any growth in the rate of unemployment;

– the need for consistent institutional reform capable of securing the competitive capacity of individual companies and the national economy at large.

1.2.4. Economic Policy in the Context of Accumulated Experience

The currently observed issues and challenges are by no means an unprecedented phenomenon. So, when analyzing the present-day situation, we should rely on the available Russian and international experiences and the precedents of the not-so-distant past. These experiences, however, must not be treated as a directly applicable model. Nevertheless, they are important for an adequate understanding of the context in which the tasks to be tackled are currently set.

So, the following events and circumstances should become the focus of special attention.

To begin with, it might be appropriate to analyze the experiences of the two previous structural crises of the 20th century that occurred in the 1930s and then in the 1970s. A structural crisis is not equivalent to a slump; it may actually encompass alternating periods of recession and growth. It is approximately a decade-long period of turbulence, the upshot of which as a new model of economic growth, new foreign exchange patterns, and a new prevalent economic doctrine. Its political and intellectual effects can be felt for decades[1]. Experience has shown that every crisis is qualitatively different from the previous one, so it is impossible to adequately prepare for it. No matter how convincingly Ben Bernanke argued vis-à-vis Milton Friedman[2] that the new generation of economists would avoid the mistakes made by the regulators during the Great Depression of the 1930s, their avoidance of past mistakes did nothing to prevent the emergence of serious macroeconomic issues and problems, or to make unnecessary an in-depth structural reform needed to overcome the 'great recession'.

For present-day Russia, it is essential to study both the experiences of the stagflation economy of the 1970s and the methods applied in securing an exit from that crisis - that is, the combination of structural reform (consistent liberalization), tough monetary policy, and budget stimulation. An exit from stagflation requires tougher macroeconomic solutions, and it cannot be achieved on the basis of the standard Keynesian recipes alone. In the early 1980s, the USA managed to put an end to the crisis thanks to the combined implementation of liberalization measures (launched in the late 1970s under President Carter), the tough monetary policy pursued by the FRS's Chairman Paul A. Volcker[3] (which in the early phase of its implementation produced recession), and the budgetary expansion policy of the Reagan Administration. The budgetary expansion of the 1980s effectively scaled down the effects of monetary toughness and the high interest rates associated with it by boosting additional demand in the economy.

The lessons that can be derived from the course of economic development in the USSR during the last decade of its existence are no less important. Around 1980, the economic and political situation in the country appeared to be super-stable. 'The unity of the party and the

[1] According to Ben S. Bernanke, 'Not only did the Depression give birth to macroeconomics as a distinct field of study, but also – to an extent that is not always fully appreciated – the experience of the 1930s continues to influence macroeconomists' beliefs, policy recommendations and research agendas.'. (See Bernanke Ben S. *The Macroeconomics of the Great Depression. A Comparative Approach*. Journal of Money, Credit and Banking. 1995. Vol. 27. No 1. P. 1.

[2] In his speech in honor of Milton Friedman issued at at his 90th anniversary, Ben Bernanke (the then Chairman and member of the Board of Directors of the FRC) said: 'Let me end my talk by abusing slightly my status as an official representative of the Federal Reserve. I would like to say to Milton [Friedman] and Anna [Schwartzz]. Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again'.

[3] When swearing in as Chairman of the Federal Reserve in June 1979 Paul A. Volcker said: 'We are face to face with economic difficulties really unique to our experience. We have lost that euphoria [….] that we knew all the answers to managing the economy.'

people' coupled with the high prices for oil (which in real terms were approximately at the same level as in 2013) made it possible to pursue practically any chosen course in domestic and foreign policy alike, and render support to the friendly regimes in any region across the globe. The West was in the throes of a systemic crisis, and its former influence seemed to be waning. However, in the early 1980s the capitalist countries managed to exit from the crisis in the wake of their structural renewal, and their growth rate began to run ahead of that of the USSR. The USSR responded by implementing an acceleration policy (which preceded *perestroika* - that is, institutional reform), which coincided with the decline of oil prices by 2.5–3 times and produced a two-year-long rise in the economic growth rate, followed by an economic disaster. In other words, we can see that the rate of economic growth in conditions of a structural crisis cannot become a goal per se, and that only three years (two of which will be marked by an accelerated rate of economic growth) can pass between a period of economic stability and the collapse of the entire economy.

And finally, we should pay attention to the experiences of the New Economic Policy (NEP) of the period 1921–1927. It represented an attempt to combine a state-owned economy with market principles of economic management. The key problem in that context was the open mistrust displayed by the Communist leaders of the USSR towards the private sector, which was at that time quantitatively prevalent in the national economy. The lack of mutual trust between authorities and businesses in combination with the regularly issued decisions in favor of public trust companies which ran contrary to the interests of private producers resulted in a situation where business were very cautious in their plans concerning any production growth, which was especially true in the case of peasant households, which then dominated the economy. Nearly all the eminent economists insisted (with citations from the works by Vladimir Lenin) that, in order to secure sustainable growth and modernization, it was necessary to properly balance the interests of the public and private sectors (the so-called *smychka* or coalescence), and of industry and agriculture, and to ensure proper proportions in the development of each sector[1].

However, this scenario was oriented to a modest rate of growth and was fraught with the risk, for the Communist party leadership, of losing their political power exercised in the framework of their State still formally ruled by the dictatorship of the proletariat. So, they decided to depart from the logic of economics and opted instead for administrative and political measures as a tool for tackling the existing economic problems: the private sector was speedily destroyed, and its confiscated resources poured into the industrialization project. The economic and political goals were thus achieved, but the cost was tremendous – not only in terms of institutional, but also human losses. In other words, the State has always the option to go beyond the limits imposed by a purely economic logic, because political tasks in the short term usually prevail over economic issues.[2]

[1] The balanced industrialization model was developed by N. Kondratiev, V. Bazarov and other economists attached to Narkomfin [People's Commissariat of Finance] and Gosplan [the State Planning Committee]. On the political level, it was supported by N. Bukharin, A. Rykov and G. Sokolnikov. The slogan applied to that model called peasants 'to get rich', expecting that ‘the kulacks would grow peacefully into socialism’. (For further detail on this discussion, see Erlikh A. *Diskussii ob industrializatsii v SSSR, 1924–1928* [Discussions on industrialization in the USSR, 1924–1928]. M.: DELO, 2010; Yasniy N. *Sovetskie ekonomisty 1920-kh godov. Dolg paniati* [Soviet Economists of the 1920s. Lest We Forget]. M.: DELO, 2012).

[2] 'Politics is a concentrated expression of economics', Vladimir Lenin said in his 1921 article *Once Again on the Trade Unions.* But he immediately added: 'Politics cannot but have primacy over economics.' (Lenin V. I. Complete Works, 5th ed. Vol. 42. P. 278).

In this connection it is noteworthy that China's leaders, after three decades of experiments with the traditional Soviet (mobilization) model, in 1978 took the fundamental decision, from then onwards, to rely on the logic of economics in their industrialization projects, and so in the course of the next three decades they reestablished China's status (lost in the 19th century) of the biggest economy in the world.

1.3. The Discourse on Economic Policy and Growth Stimulation

The key issue in the framework of Russia's present-day development is economic growth. Since 2000, the rate of growth in this country was generally above the average global growth rate, which gave rose to certain well-formed expectations – not only economic, but also (and in the main) political. But the situation over the past two years turned out to be different, and in this connection practically all economists and politicians have recognized the fact that this slowdown is determined not by the current conditions, but by certain fundamental, and primarily institutional, factors. Almost all of them have also written that the growth model that relies on the involvement of available resources (production capacities, rent-generated incomes), and is thus oriented to boosting demand, cannot be sustainable and viable in the long run. In order to achieve a sustainable growth trajectory, institutional reform is needed - that is, the elaboration of coherent rules of the game that can be easily understood by economic subjects and enable them to reliably predict the consequences of one or other economic decisions. In this connection, what is important is not so much the specific choice of a set of measures – but rather the fact of existence of such rules *per se*, so that they could be complied with and be understandable for any economic subject.

As noted earlier, short-term economic growth (growth no matter what its costs may be) should not be a goal in itself; growth is a valuable achievement when it is sustainable in the long run, and when it is accompanies by modernization.

It is the sources of such growth that have become the main focus of the ongoing discourse.

1.3.1. Two Models

To achieve economic growth, investment is needed. Under the conditions of restrictions imposed on Russia's access to external markets, the focus of attention should be shifted to domestic sources of investment. And so we come to the traditional choice between two alternatives: should the bulk of investment be allocated by the government, or is this the function of private businesses?

The first scenario is administrative in its form, but essentially it is a mobilization scenario. The government, having been disappointed in the willingness of businesses to invest, may concentrate the resources in its own hands and then transfer them to the top priority sectors of the economy. This approach is well known from the experiences of the 19th and 20th centuries; it may indeed boost the rate of growth, but this is the way that can hardly ensure a high-rate performance and global-scale competitive capacity of the national economy. To achieve the goal of accelerated industrialization, the best method is to rely on state budget resources and to employ state-owned banks – this is, indeed, how Alexander Gerschenkron [1] described the institutional development typical of that epoch. Investment sources are taxes, accumulated reserves, government borrowings and the printing press (lending to the government by a lend-

[1] Gerschenkron A. *Economic Backwardness in Historical Perspective*. Gerschenkron, Alexander. Economic Backwardness in Historical Perspective: A Book of Essays. Cambridge, Mass.: The Belknap Press of Harvard University Press, 1962.

er of last resort). The last two sources are closely interlaced – government loans are ultimately funded by the central bank.

At present we often here suggestions to the effect that the Bank of Russia should be assigned the task of issuing loans to fund large-scale investment projects launched by enterprises (and evidently approved by the government), and charge an 'affordable' interest rate (well below the inflation rate). It is obvious that the mobilization scenario implies emission-based funding – allocated if not to the budget, then to quasi-budget operations. This process inevitably involves the following three steps: to collect or print money; to distribute it among correctly selected enterprises; and introduce foreign exchange control (to impose constraints on foreign exchange operations with the national currency) in order to prevent the entry of the newly issued money to the foreign exchange market. If we follow this logic, inevitably the next step will be (as confirmed by the experiences of many countries over the course of the 20th century) to freeze prices (that is, to impose government control over prices) and wages at their current level. initially, these rules are never explicitly stated, but they are the necessary preconditions for the implementation of the administrative (or mobilization) scenario.

The other economic policy scenario is the economic (or, more precisely, liberalization) scenario; it is aimed at creating incentives for private saving, then transforming savings into investment, which then will serve as the foundation for economic growth acceleration. This scenario is more complicated, as it requires more intellectual and organizational effort, because many decisions must be properly discussed and thoroughly elaborated. It never yields speedy results, because time is required to build mutual trust among economic agents (entrepreneurs, workers, government officials), without which no 'economic transmission' can be possible. The advantage of this approach is that it the achieved results are more sustainable, and the amplitude of political and economic fluctuations is much shorter.

The liberalization scenario was unpopular under the conditions of classical catching-up industrialization of the first half of the 20th century. However, over recent decade, as the postindustrial model began to evolve, it has become increasingly widespread not only in the framework of measures implemented in order to deal with crises in the developed economies, but also as part of the catching-up development projects in the developing countries. The one large-scale example of this development pattern is China after 1978, and especially after the suppression of the student unrest in 1989, economic sanctions were introduced against that country. In spite of the domination of mobilization champions in the Political Bureau of the Central Committee of the Communist Party of China, Deng Xiaoping insisted on the implementation measures aimed at consistent liberalization and promotion of private initiative. It is this liberalization in China which, from 1992 onwards, gave rise to rapid growth of investment and GDP[1].

There also exist other examples of accelerated growth triggered by liberalization (Chile, Finland, Ireland, the Republic of South Africa, Poland); however, over the last half-century, accelerated growth has never been observed in the framework of the mobilization model.

Since every structural crisis prompts a reassessment and revision of the existing economic regulation model, the question as to the prospects of the liberalization model and the possibility of reintroduction of large-scale government interference was raised as early as 2008, shortly after the collapse of *Lehman Brothers,* one of US biggest investment banks. At first it seemed that indeed the crisis will translate itself into a return of the 'Big State'. But very soon

[1] Kissinger H. On China. P. 469–475; Kadochnikov P., Ptashkina M. Trade *Liberalization in China: A Response to the Challenges in the Beginning of the 1990s*. Economic Policy. 2014. No 6, pp. 103–113.

warnings could be heard against any rough interference of the State with economic life, the so-called crass Keynesianism. Vladimir Putin was one of the first to voice such a warning as early as January 2009: 'One is sorely tempted to make simple and popular decisions on times of crisis [….] Excessive intervention in economic activity and blind faith in the State's omnipotence is another possible mistake. True, the State's increased role in times of crisis is a natural reaction to market setbacks. Instead of streamlining market mechanisms, some are tempted to expand state economic intervention to the greatest possible extent. [….] In the 20th century, the Soviet Union made the State's role absolute. In the long run, this made our economy totally uncompetitive. This lesson cost us dearly. I am sure nobody wants to see it repeated'[1]. The necessity of liberalization of the conditions for doing business, and the entrepreneurial freedom was also one of the core themes of Vladimir Putin's Presidential Address to the Federal Assembly in December 2014.

1.3.2. Growth-boosting Mechanisms

The practical experience associated with the introduction of budget and monetary incentives has become one of the most popular themes in the economic discourse. The developed countries of the West (including Japan, if 'the West' is to be understood as an economic and political entity, and not as a geographical term) have been actively applying such methods, albeit with sometimes controversial results. We can often hear suggestions that such instruments should also be applied in Russia. However, the macroeconomic situation in this country differs drastically from that in the West.

In stark contrast to the West, where the main issues are high debt and (or) budget deficit coupled with an exceptionally low inflation rate (or sometimes even deflation), in Russia the economic slowdown is happening against the backdrop of a sufficiently sustainable budget, low government debt and a high inflation rate, which in 2014 once again mover into two-digit zone. In other words, Russia is faced with stagflation, which cannot be dealt with by means of quantitative easing. On the contrary, in order to overcome stagflation, monetary policy should be tightened, the inflation rate should be pushed down to a level that would make possible a revival of economic growth, and only after these conditions are satisfied, the interest rates can be reduced. To emphasize it once again: for Russia, the experiences of the West in the late 1970s and early 1980s appear to be a more appropriate model to follow.

For Russia today, to resort to quantitative easing would have been impossible, because it would lead to further destabilization, accelerated inflation, and economic activity decline. Moreover, Russia's 'inflation history' is rather bad – this country has been plagued by a high inflation rate for a quarter of a century.

This problem cannot be solved by means of applying administrative measures in order to boost growth and bring down interest rates. Credits are expensive in Russia not so much because of the high rate of refinancing (or its substitutes, say, in the form of the key rate); the main factor here is the level of trust in the policies being implemented, and the reliability of the contracting parties. This can be easily noticed if we look at the gap between the rate set by the RF Central Bank and the commercial rates on credits issued to businesses. In Russia, this gap is rather wide by comparison with the other developed countries (*Table 6*).

[1] Vladimir Putin's speech at the Davos World Economic Forum on January 29, 2009. http://www.vesti.ru/doc.html?id=246949

Table 6

The Spread between the Loan Rates and the Discount Rates of the Central Banks of Some Countries of the World, 2013

Country	Discount rate	Loan rate	Spread
	% per annum	% per annum	pp.
USA	0.75	3.25	2.50
Canada	1.25	3.00	1.75
Japan	0.30	1.30	1.00
Brazil	16.49	27.39	10.90
China	3.25	6.00	2.75
India	8.75	10.29	1.54
SAR	5.00	8.50	3.50
Russia	5.50	9.47	3.97

Another important trust-boosting factor is the sustainability of the exchange rate of the national currency against major foreign currencies. From this point of view, the year 2014 was a period of hard trial for the ruble. The ruble was under the pressure of two powerful external factors – the difficult geopolitical situation and the movement of oil prices.

The interest rates on loans (i.e., money affordability) are not the only monetary policy factor that can influence the rate of economic growth. The level of trust in the national currency is no less important. In a situation when economic sanctions were conjoined with plummeting oil prices, the ruble turned out to be one of the least stable currencies, and this is the main difference between the current situation and the situation in 2008–2009. Now, the main issue is not the ruble's exchange rate *per se*, but its sustainability at a new equilibrium level.

Although Russia's authorities, over the course of 2014, repeatedly denied the possibility of introducing any foreign exchange control, it would be wrong to 'throw out' for good this instrument from the monetary policy 'arsenal'. Indeed, some circumstances may arise when certain elements of foreign exchange control can prove to be feasible, and in such a situation it will be important not to overlook the limitations that we have discussed earlier[1].

From the point of view of monetary policy, the key goal of the forthcoming period will be to suppress inflation. The two-digit inflation rate and the resulting high interest rates in nominal terms are now the main macroeconomic factors that restrict economic growth. It is necessary to consistently work towards bringing down the inflation to the established target of 4% over the next three years. This goal is not to be easily achieved, but it is nevertheless achievable. In spite of all the budget issues created by the low oil prices (if such a scenario is indeed implemented), it becomes possible to avoid the Dutch disease, thus making disinflation much easier.

While the monetary situation in Russia is much more complicated than that in the West, the budget situation, on the contrary, appears to be much more stable due to the low government debt and the near-zero budget deficit. So, there seemingly appears to be certain extra space for budget stimulation. However, in reality the opportunities for any quantitative growth of budget expenditure are very limited, and there are several reasons why this is so.

Firstly, there are few resources for any additional funding allocation. Foreign debt markets are closed to Russia. An increasing domestic debt coupled with a near-zero growth rate will steer the available resources away from private investment, or they will be spent only on the redemption of government debt by the RF Central Bank. In both cases, there is the risk that

[1] Jeanne O. *Putin Has One Weapon to Protect the Rouble – He Must Use It Wisely* // The Financial Times. 2014. December 23.

the actual effect will be contrary to what has been expected: instead of boosting economic growth, the additional budget demand will translate itself into inflation. The extra demand created by the allocation of funding from the accumulated sovereign funds may indeed produce a certain effect, but this money will evidently be insufficient in view of the existing external and internal constraints.

Secondly, the question as to the availability of internal reserves for an adequate response to the rising demand has remained open. The production capacity estimates, which are currently being discussed in the economist community, are controversial. On the one hand, a number of studies have demonstrated that the economy is almost operating at maximum capacity, and any further growth can be possible only if the combined factor productivity is also increased[1]. On the other, according to data released by *Rosstat*, the current load on production capacities amounts to approximately 60–65%; it is noteworthy that somewhat similar results are yielded by the business surveys carried out by the Gaidar Institute[2].

However, if the issue of idle production capacities is open to dispute, the low unemployment rate and shrinkage of the able-bodies population groups have created serious obstacles for businesses to react positively to the rising demand. Migration from abroad is also ceasing to be a source of supplementary workforce, because the ruble's depreciation has rendered the prospects of employment in Russia less attractive, and the inflow of migrants in late 2014 began to dwindle.

Thirdly, the structure of budget expenditure from the point of view of its impact on economic growth presents yet another problem[3]. In recent years, this structure has undergone some significant changes. The amount of expenditure allocated to items that can increase the inputs and improve the quality of production factors (labor and capital), as well as boost the combined factor productivity index (which measures efficiency of the use of production factors, and first of all of investment in infrastructure), has not grown, and under some items it even declined in terms of share in GDP. Simultaneously the share of non-production expenditure items (defense; government administration; law enforcement) has been increasing. While the political significance of some of these items is evident, the fact that this structural shift plays down the effects of budget stimulation cannot be altogether ignored[4].

In short, budget incentives (or stimulation), to be effective, for their part also require relevant institutional reforms and more efficient budget expenditure allocation. The latter, in its

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[1] Sinelnikov-Murylev S., Drobyshevsky S., Kazakova M. *Decomposition of Russian GDP Growth Rates in 1999–2014*. Economic Policy. 2014. No 5. P. 7–37.

[2] 'In December 2014, the average load on production capacities, as estimated by the heads of enterprises participating in the survey, amounted to 62%. 91% of respondents believe that their production capacities will ensure that the demand for their product over the next 6 months be satisfied, 11% of them point to redundancy of their available production capacities.' (Rosstat. *Delovaiia aktivnost' organizatsii v Rossii. Dekabr' 2014*. [Business Activity of Organizations in Russia. December 2014.] // http://www.gks.ru/bgd/free/B04_03/IssWWW.exe/Stg/d04/264.htm).

[3] IMF. *Unproductive Public Expenditures: A Pragmatic Approach to Policy Analysis*. Prepared by Ke-young Chu, Sanjeev Gupta, Benedict Clements, Daniel Hewitt, Sergio Lugaresi, Jerald Schiff, Ludger Schuknecht, and Gerd Schwartz // IMF Pamphlet Series. 1995. No 48.

[4] Knobel A. Yu., Sokolov I. A. *Otsenka biudzhetnoi politiki RF na srednesrochnuiu perspektivu* [Assessment of the RF Medium-term Budget Policy]. *Ekonomicheaskoe razvitie Rossii* [Russia's Economic Development]. 2012. No 12 (19), pp. 23–32; Idrisov G. I., Sinelnikov-Murylev S. G. Budget Policy and Economic Growth. *Voprosy ekonomiki* [Issues of Economics]. 2013. No 8, pp. 35–59; Idrisov G. I., Sinelnikov-Murylev S. G. *Forming Sources of Long-run Growth: How to Understand Them? Voprosy ekonomiki* [Issues of Economics]. 2014. No 3, pp. 4–20.

turn, necessitates more changes at least in two directions: a budget maneuver in favor of sectors with higher budget efficiency (these are primarily the social and transport infrastructures), and the introduction of improvements to budgetary procedures.

The functioning of the budgetary rule – the method for the allocation of additional revenue generated by 'situational' factors in the framework of current budget policy - represents an issue in its own right. In 2014, a heated discussion was underway as to the feasibility of preserving the rule whereby it is required that the surplus oil-and-gas should be earmarked for the reserve fund. While oil prices were high, the RF Ministry of Finance was constantly being pressurized to transfer all the surplus revenue to the budget, in order to compensate for the effects of the declining business activity by the corresponding allocation of government funding. But when oil prices began their downward slide and, in accordance with the budgetary rule, the accumulated reserves were to be allocated so as to compensate for the resulting loss of revenue, the Ministry of Finance of the Russian Federation suggested that the budgetary rule should be recognized to be effectively abolished, and budget expenditures to be revised and cut accordingly, in order to save the reserves for future needs.

However, the discourse on the budgetary rule has one important aspect that has to do with the principles of economic policy to be applied in a situation determined by a strong influence of rent-generated revenue. No doubt, it is necessary to create special mechanisms designed to decrease the dependence of the budget (and the entire economic system) on any unpredictable fluctuations in response to newly emerging situations. Over the course of the previous decade this problem was solved by withdrawing part of the surplus revenue to sovereign funds (the Reserve Fund and the National Welfare Fund). This option was much more expedient that the allocation of the entire amount of rent to the current budget expenditure, as it had been the usual practice in the USSR in the 1970s and the 1980s. However, the experience of the period 2009–2012 revealed one serious drawback associated with this type of saving: the existence of a 'safety cushion' is a negative incentive for modernization. Crisis, on the contrary, is the time when modernization can be speeded up. However, the availability of supplementary resources can soften the process in accordance with the business-as-usual logic.

In our opinion, time has come for us to rethink the entire ideology behind the spending patterns applied to the reserves created by the 'situational' super-revenues, and consequently, to rethink the budgetary rule. With due regard for Russia's political realities, it appears feasible to more strictly re-determine the cap on non-situational revenues (to set it at a sufficiently low level) and to properly balance the current budget (i.e., the budget for renewable liabilities) at the revenue level that would be maximally protected from the effects of external factors. If any surplus rent-generated revenue is received, it should be allocated to the development budget, i.e. to cover expenditures with a limited time horizon. This model would make it possible to actively invest in development when the external situation if favorable, while at the same to resist the temptation to pour money over the 'problem zones' in a time of crisis.

While the macroeconomic stability issues are coming to the fore as a necessary precondition for economic growth, this is still faced with the task of carrying out comprehensive institutional reform, which has already been discussed at length in recent years[1]. Among the *priorities* for the nearest future, we may point out the following ones:

– to ensure legal and political protection of entrepreneurial activity as the fundamental prerequisite of the very existence of a market economy;

[1] Mau V. *Between Modernization and Stagnation: Economic Policy in 2012*. [Economicheskaya Politika]. 2013. No 2, pp. 4–23.

– to ensure competition across all the sectors of the national economy (this is especially important under the present conditions of imposed economic sanctions and the ruble's depreciation, which are the factors responsible for significant constraints on competition with foreign producers);

– to lower the administrative barriers in the way of doing business;

– to ensure priority development of the sectors oriented to human capital – education and public healthcare;

– to improve the proficiency of the financial system while continuing the activities oriented to the creation, in Russia, of an international financial center as one of the established institutional targets;

– to improve the performance of infrastructure monopolies and companies with state stakes, turning them from an institutional source of inflation into instruments of countercyclical investment policy;

– to boost the proficiency of the labor market, ensure its flexibility, and promote workforce mobility and migration towards economic growth points (sectors and/or regions);

– elaboration of a modern foreign trade policy model based on active participation in the emerging integration groups and global value added chains.

* * *

Back in 2008, it was often pointed out that 'the crisis must be made use of' as an opportunity to carry out economic and social modernization. At that time, this principle could not be implemented. It remains to be hoped that this time, the lesson delivered five years ago will finally be brought home.

Section 2. Monetary and Fiscal Policies

2.1. Monetary policy

The key developments in Russia's monetary policy in 2014 were determined by adverse processes in the Russian economy, which related to the tense geopolitical situation, massive capital outflow and the decline in the price of energy resources.

In 2014, the Bank of Russia encountered a series of global challenges while pursuing its monetary policy. The economic situation in 2014 was distinguished by bilateral sanctions and the drastic depreciation of the national currency in January-December 2014, which resulted in an inflation of 11.4%, above the target level of 5% set forth for 2014 in the central bank's Guidelines for the Single State Monetary Policy for 2014–2016. In an effort to stabilize the ruble's exchange rate and inflations expectations, the Bank of Russia more than once lifted the CBR key rate, from 5.5% in January to 17% in December 2014.

On 10 November 2014, the Bank of Russia abolished the previously applicable exchange rate policy mechanism, revoking the acceptable range of the ruble value of dual-currency basket and regular interventions within/outside the specified operational band. In fact, the Bank of Russia migrated to a floating exchange rate for the first time in Russia's contemporary history, reserving the right to undertake operations in the domestic FX market only when financial sustainability is at threat.

2.1.1. Money market

In the period between January 2014 and December 2014, the monetary base (broad definition) increased 7,9%, running at Rb 11,3 trillion as of 1 January 2015. The Bank of Russia's operations aimed at providing commercial banks with money remained the key factor responsible for the growth in the monetary base in 2014, whereas the factor responsible for the shrinking of monetary base in 2014 was the Bank of Russia's transactions aimed at selling foreign currency in the domestic market. As a reminder, the monetary base increased 6.6%, up to Rb 10,5 trillion in 2013.

It is worthwhile noting that, despite the central bank's statements about migrating by 2015 to an inflation targeting regime and implementing measures aimed at increasing the flexibility of the exchange rate regime, the central bank in 2014 increased largely its presence in the FX market, selling considerable amounts of foreign currency through respective transactions. To compare, net purchases of foreign currency saw a decline in annual volume beginning with 2010 ($34,1bn in 2010, $12,4bn in 2011, $7,6bn in 2012). On the other hand, net sales of for-

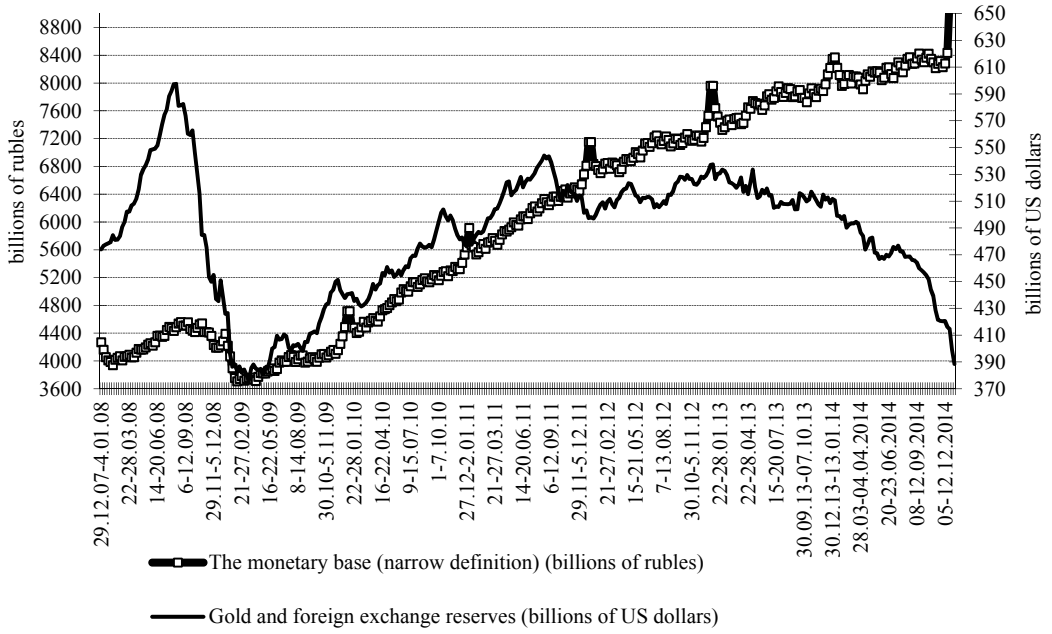
eign currency reached $27bn in 2013 and more than $83,4bn in 2014. Those measures were caused by the Bank of Russia seeking to set back the depreciation of the national currency exchange rate, considering the adverse foreign economic and geopolitical conditions.

Such an intervention policy of the central bank meets in general the objective of migrating to inflation targeting, because due to the effect of exchange-rate pass-through to prices, the ruble's depreciation appeared to be a key factor of the accelerated inflation in 2014. However, the spending of international reserves to support the national currency exchange rate eventually appeared to be inefficient, considering the actual scope of ruble's depreciation. Apparently, the central bank should have either undertaken stronger interventions to be able to reduce the possibilities for market players to benefit from short-term exchange rate volatility and prevent devaluation expectations from growing, or a one-time, sharp depreciation of the ruble's exchange rate, instead of making it a longer-lasting process. Additionally, a well-timed imposing of limits on the provision of ruble liquidity, thus making it less possible for commercial banks to play against the ruble, would have allowed the regulator's policy to be more efficient. As a reminder, it was not until November 2014 that the $2bn limit on the provision of ruble liquidity through FX swap transactions was introduced.

However, the key short-term measure of the monetary policy should have been a timely lifting of the CBR key rate to a level making it economically inefficient to use short-term ruble-denominated loans to purchase foreign currencies, expecting the ruble to depreciate. It is worthwhile noting that it was not until December 2014 that the central bank decided to considerably increase the CBR key rate (to 17% p.a.) (see Section 2.3.1. "The main decisions concerning the monetary and exchange rate policies").

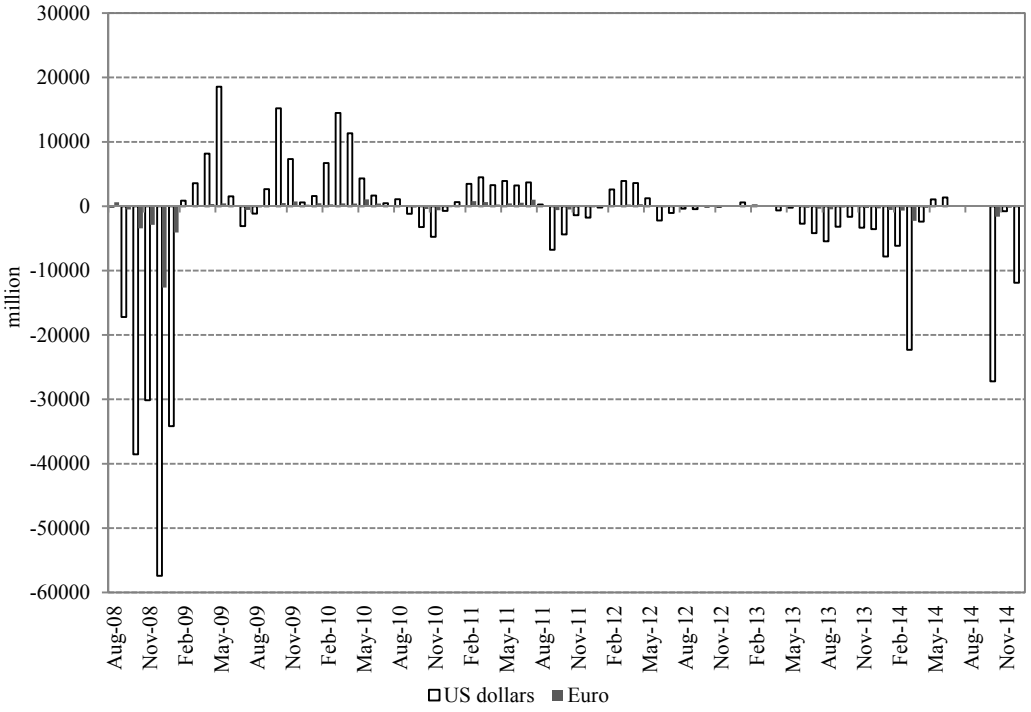
In the 12 months of 2014, Russia's international reserves shrank by $124,1bn (24.4%) and were running at $385,5bn as of the beginning of January 2015 (see *Fig. 1* and *2*). In 2014, Russia's foreign exchange reserves declined by $130,2bn (–27.7%). In 2013, the same reserves lost $17bn (–3.5%). The monetary gold stock increased $6,1bn (+15.3%) compared to that seen early in the year, the increase was basically determined by an upward revaluation of the stock. As a result, as of 1 January 2015, the foreign exchange reserves accounted for 88.0% (92.2% in 2013) of the total amount of reserve assets, while gold did for 12.0% (7.9% in 2013). At present, the reserves are sufficient to maintain a stable balance of payments, because they cover both 10 months of imports of goods and services in the Russian Federation (13 months in 2013) and external debt repayments due in 2014–2015. However, should the reserves see further shrinking, they may be found to be below the level allowing Russia to be rewarded a credit rating and maintain its macroeconomic sustainability.

The general government's funds accumulated on accounts with the central bank in the first 11 months of 2014 saw a Rb 2,7 trillion (46%) increase in volume, which basically can be explained by an upward revaluation of the foreign currency assets accumulated in the Reserve Fund and the National Wealth Fund (see *Table 1*).



Source: The Bank of Russia.

Fig. 1. The dynamics of monetary base (narrow definition) and the gold and foreign exchange (international) reserves of the Russian Federation in 2008–2014.



Source: The Bank of Russia.

Fig. 2. The Bank of Russia currency interventions (foreign currency net purchases) in 2008–2014

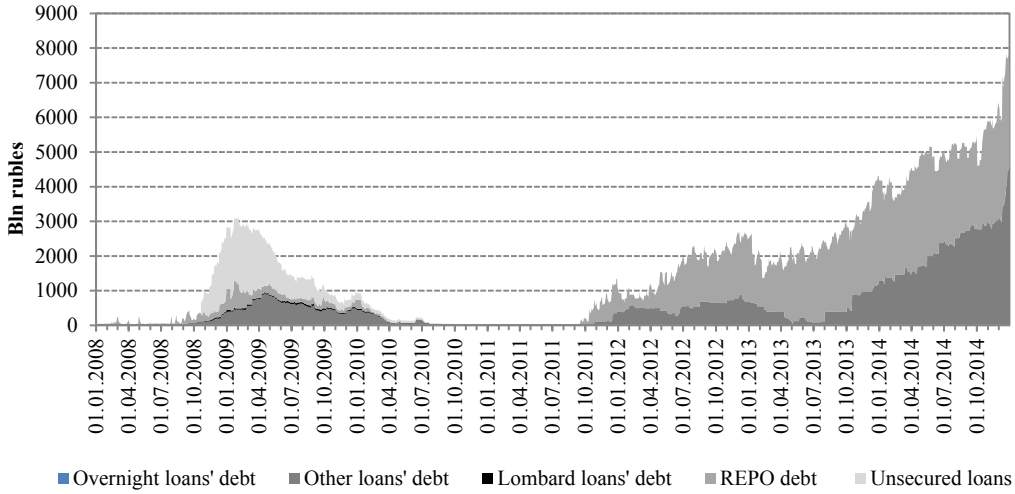
Table 1

The Bank of Russia Balance Sheet in 2013–2014

	01.01.2013		01.01.2014		12.01.2014	
	billions of rubles	**as a percentage of assets/ liabilities**	**billions of rubles**	**as a percentage of assets/ liabilities**	**billions of rubles**	**as a percentage of assets/ liabilities**
Funds placed with nonresidents and securities issued by nonresidents	14,525,436	70.4	15,091,147	66.9	17,366,198	60.8
Credits and deposits	3,158,355	15.3	4,881,376	21.6	7,263,702	25.4
Precious metals	1,646,187	8.0	1,394,150	6.2	2,299,460	8.1
Securities	456,314	2.2	450,306	2.0	630,958	2.2
Other assets	251,549	1.2	99,468	0.4	128,815	0.5
Total assets	**20,630,744**	100	**22,562,411**	100	**28,580,786**	100
Cash in circulation	7,667,950	37.2	8,307,755	36.8	7,922,408	27.7
Funds in accounts with the Bank of Russia	9,404,984	45.6	10,358,984	45.9	12,577,139	44.0
of which: Russian government funds	4,913,764	23.8	5,848,761	25.9	8,536,119	29.9
funds of resident credit institutions	2,185,349	10.6	2,196,821	9.7	2,174,339	7.6
Float	158	0.0	5,680	0.03	17,415	0.06
Bank of Russia bonds	–	–	–	–	–	–
Liabilities to the IMF	447,686	2.2	500,028	2.2	695,697	2.4
Other liabilities	138,183	0.7	108,785	0.5	4,199,069	14.7
Capital	2,724,457	13.2	3,151,918	14	3,169,058	11.1
Profit of a fiscal year	247,326	1.2	–	–	–	–
Total liabilities	**20,630,744**	100	**22,562,411**	100	**28,580,786**	100

Source: The Bank of Russia.

The dynamics of commercial banks' debt owed to the central bank is shown in *Fig. 3*. The uptrend in volumes of the Bank of Russia liquidity provision to credit institution has been observed since 2011. In the 12 months of 2014, the debt doubled (2.1 times) the peak levels seen in the crisis-hit 2009 and was running at Rb 9,3 trillion as of 1 January 2015. As of 1 January 2014, five banks accounted for 70% of the total debt of Rb 6,7 trillion owed by credit institutions to the regulator. Credit institutions raised liquidity from the regulator basically from the single source as repo auctions, on which the debt averaged Rb 2,69 trillion in the 12 months of 2014 (Rb 2,63 trillion in 2013, Rb 1,9 trillion in 2012, Rb 1,1 trillion in 2011), as well as loans secured by non-marketable assets and guarantees, on which the debt averaged Rb 2,3 trillion in the 12 months of 2014 (Rb 0,46 trillion in 2013, Rb 0,55 trillion in 2012). The maximum amount of funds can be raised at 1-week repo auctions (an average of Rb 2,6 trillion in 2014, Rb 1,6 trillion in 2013).



Source: The Bank of Russia.

Fig. 3. Commercial bank's debt owed to the Bank of Russia in 2008–2014

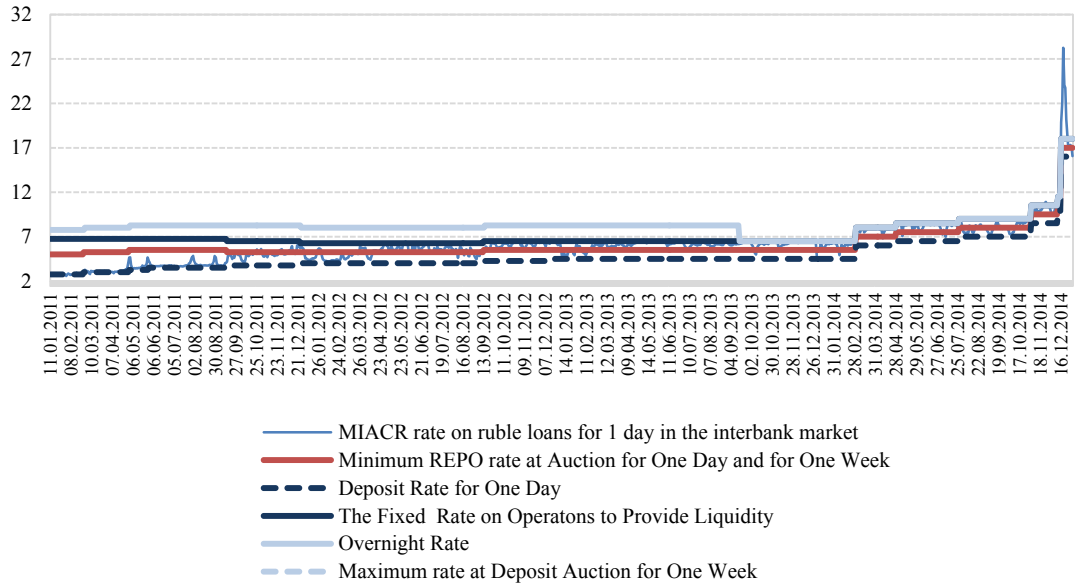
Weighted average interest rates on short-term repo operations were 8.3% in the period between January 2014 and December 2014. The debt of the banking sector on central bank loans secured by non-marketable assets and guarantees saw a rapid increase in 2014, because of the dried up collateral base for repo transactions. However, the increase in the debt secured by non-marketable assets and guarantees in Q2 and Q3 2014 had a positive effect on the volume of unencumbered market collateral. In particular, in Q3 2014, the utilization of marketable assets declined to 51% from 53%. According to the Bank of Russia's estimates, risks of the market collateral facing a deficit in the short run can be regarded as low given the slowdown in lending rates and the monetary base.

In 2013, the Bank of Russia introduced a 3-month repo auction to provide loans secured by non-marketable assets (promissory notes, credit claims) at variable interest rate. In 2014, the regulator allotted through this tool an average of Rb 490bn at an weighted average rate of 7.8%. As a reminder, the minimum value of a loan is linked to the 1-week repo key rate, plus 0.25 p.p. A 18-month repo auction secured by non-marketable assets was held on 10 November 2014, banks raised Rb 150bn at a rate of 9.75%, corresponding to the maximum amount of allotted funds. The advantage of 3-month auctions over similar longer-term auctions is that the former provides readily available collateral with a required term for credit institutions and a higher value of the collateral available at banks through a reduced term of the provision of funds. Despite the easy terms of lending at a variable interest rate, such an auction is available only for large banks whose collateral base is visibly bigger.

The interest rate in the interbank lending market[1] increased by 2.5 times in the 12 months of 2014 (to 15.5% on average in December 2014 from 6.3% on average in January 2014). The interbank loan interest rate was at the upper level of the central bank interest band, nearing closer to its cap from time to time (see *Fig. 4*). The most critical crossing of the MIACR on overnight interbank ruble-denominated loans was seen in 10 thru 24 December 2014 due to panic sentiments in the interbank lending market caused by the lifted CBR key rate and the

[1] Interbank interest rate is (Moscow InterBank Actual Credit Rate) MIACR on overnight interbank ruble-denominated loans

limits imposed on the ruble liquidity provision. Overall, the annual average MIACR on overnight interbank ruble-denominated loans increased by 2.6 times to 16.1% in 2014 from 6.1% in 2013. It is worthwhile noting that in the situation when central bank operations is the main channel to increase the monetary base, it is Bank of Russia's decisions that determine the dynamics of interest rates. The fact that the United States and the European Union restricted the access of certain Russian state-controlled banks to external financing, and the central bank lifted the CBR key rate, turned out to be a supplementary growth factor for the interest rate in the interbank lending market, beginning with Q2 2014.



Source: The Bank of Russia, calculated at the Gaidar Institute.

Fig. 4. The Bank of Russia interest rate band and the dynamics of interbank lending market in 2012–2014

It is worthwhile noting that further expansion of Bank of Russia tools designed to provide liquidity for long terms (3-months, 1-year repo auctions secured by non-marketable assets) will allow banks to release the market collateral and create conditions for further growth of interbank lending volumes and making the same more available.

Let's take a closer look at the structure of the monetary base (broad definition) (see *Table 2*).

Table 2

The dynamics of monetary base (broad definition) in 2014 (billions of rubles)

	01.01.2014	01.04.2014	01.07.2014	01.10.2014	01.01.2015
Monetary base (broad definition)	10504	9344,7	9672,4	9947,9	11332
- cash in circulation, including cash on hand at credit institutions	8308	7620,7	7779,9	7943,8	8840,5
- correspondent accounts of credit institutions with the Bank of Russia	1270	1162,6	1371,5	1358,6	1215,5
- mandatory reserves	442,7	450	432,1	429,4	471,3
- credit institutions' with the Bank of Russia	118,7	220	89	216,1	804,6
- Bank of Russia's bonds held by credit institutions	0	0	0	0	0
For reference: excess reserves	1788	1281	1461	1575	2020

Source: The Bank of Russia.

The following monetary base (broad definition) components saw an increase in volume mandatory reserves of banks (up 15.3% to Rb 471bn), deposits of credit institutions with the Bank of Russia (up 55% to Rb 804,6bn), cash in circulation (up 6.4% to Rb 8840,5bn in 2014). Correspondent accounts of credit institutions declined (down 4.3% to Rb 1215,5bn).

In the period between January and November 2014, the money supply M2 increased at an average rate of 8.7% on an annualized basis (compared to the same period previous year). The monetary base M2 saw a slowdown in annual growth rates over much of 2014, to 6% in November from 14.6% in January. The monetary base saw average growth rates of 32.5% in 2010, 24.3% in 2011, 19.4% in 2012, 15.3% in 2013.

Therefore, the monetary aggregate M2 saw quite moderate growth rates in the first 11 months of 2014 compared to previous periods and by itself creates no preconditions for monetary factors to be able to affect the price stability.

Given that in the first 11 months of 2014 the monetary base and money supply shrank by 8.2% and 3.6%, respectively, the money multiplier (M2/monetary base ratio) increased 5%. In the period between January по November 2014, the money multiplier averaged 3.2. This value of money multiplier is average for developing economies (Ukraine, Belarus, Kazakhstan), whereas in developed countries it tends to vary within a range of 5 and 8. It is worthwhile noting that over the last two decades the money multiplier has been growing with the development of the banking system in the East European countries. For example, in Poland, the money multiplier increased to 6.1 from 3.1 in the period between 1993 and 2013.

In the period between 1999 and 2013, the level of monetization of the Russian economy (M2/GDP ratio) increased 2.7 times to 55.8% in 2013. To compare, in Belarus, the M2/GDP ratio increased by 1.8 times to 30.4% during the same period, in Kazakhstan by 2.5 times to 34.0% in 2013, in Ukraine by 3.7 times to 62.5%. Relatively slower growth rates of GDP monetization in the period of 1999–2013 were typical of most of the Central and East European countries, for example, the M2/GDP ratio in Poland increased by 1.5 times to 59.9% in 2013, in Germany it remained relatively stable and reached 163% in 2013. It is worthwhile noting that a relatively low level of monetization of the Russian economy is determined by a lower level of the development of Russia's financial system.

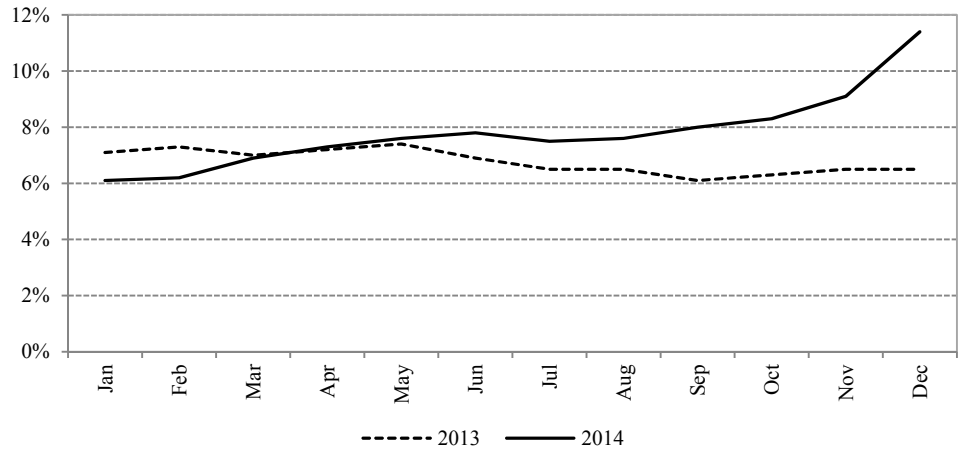
Analyzing the monetary base components, one can notice that in January–November 2014 retail deposits saw an average growth of 8.6% on an annualized basis (18.3% in 2013), deposits of nonfinancial organizations and financial organizations increased by an average of 8.3% (12% in 2013). The monetary aggregate M0 saw an average growth of 7.2% in 2014 on an annualized basis (8.2% in 2013), while its share in M2 averaged 22.4% (22.6% in 2013). It is worthwhile noting that the M0/M2 ratio in Poland was 17.1% in 2013 (18.5% in 2012), in Ukraine it was 26.2% (26.4% in 2012). The downtrend in the ratio of cash in circulation to M2 in developing countries is also related to the financial system development.

2.1.2. Inflation processes

In 2014, inflation turned out to be far above the target level of 5% for 2014 set forth in the central bank's Guidelines for the Single State Monetary Policy for 2014–2016. The year-end inflation was 11.4% (6.5% in 2013) (see *Fig. 5*).

The increase of inflation above the upper level of target range was basically caused by other than monetary factors. It is the ruble's depreciation induced by the geopolitical tensions, massive capital outflow and the decline in crude oil prices, as well as the ban on imports of food products of certain categories to Russia from the countries which imposed sanctions

against Russia that were responsible for most of the acceleration of inflation given a substantial share of imported goods in the consumption of Russian economic agents. It is worthwhile noting that our estimates show that the 2014 year-end double depreciation of the ruble against the U.S. dollar and the Euro will boost inflation at least by 10–15 p.p. in 2015.



Source: Rosstat (Russia's Federal State Statistics Service); calculated at the Gaidar Institute.

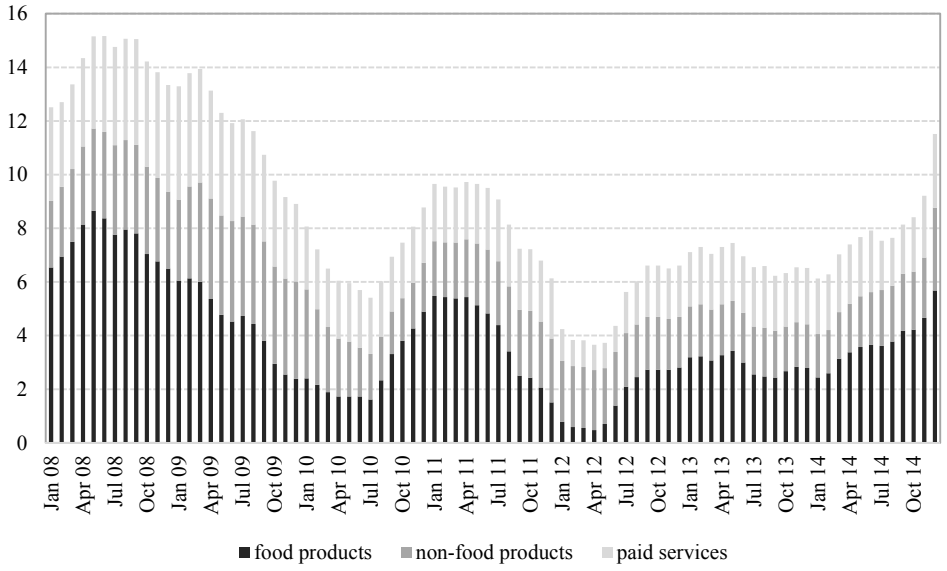
Fig. 5. The growth rate in consumer price index in 2013–2014 (% y-o-y)

Overall, despite the fact that the failure to maintain the target inflation level has little in common with the plans to migrate to inflation targeting. The central bank is not the one to be blamed for the failure, because such an adverse development of geopolitical processes can hardly be foreseen.

Let's take a closer look at the inflation processes in 2014. It is shown in *Table 3* that in the period between January 2014 and December 2014 the prices of consumer products were growing much faster than those in 2013. The price of the following food products contributed most to the price growth of food products: cereals and beans (+34.6%), fruits and vegetables (+22.0%), meat and poultry (+20.1%), fish and seafood products (+19.1%), butter (14.5%), milk and dairy products (+14.4%), alcoholic beverages (+13.7). The price growth of the foregoing food products was determined basically by the ban on imports of food products from the United States, Canada, Australia, Norway and the European Union.

The growth rate of prices of non-food products increased as well (+8.1%) in 2014. The prices of the following products of this commodity group saw faster growth rates due to the increase in excise duties as well as the ruble's exchange rate depreciation: tobacco products (+27.1). The price growth of electric products and other household appliances (+17.9%), audio visual goods (+15.8%), medicaments (+13.1%) and motor gasoline (+8.9%) is worth noting. Overall, the price growth of non-food products was associated with the ruble's depreciation amid the Russian market large dependence on foreign supplies.

In 2014, the prices of paid services to individuals increased 10.5% compared with those in 2013. The price growth of outbound tourism services (41.1%), insurance services (21.7%), utility services (19%), early childhood education services (15.6%), education services (13.8%) made a noticeable contribution to the price growth of paid services. The considerable price growth of outbound tourism services and insurance services was associated with the depreciated exchange rate of the national currency.



Source: Rosstat; calculated at the Gaidar Institute.

Fig. 6. The structure of inflation in 2008–2014 (in percent compared to same month previous year)

Table 3

The annual growth rate of prices of consumer goods and services of certain types in 2012–2014 (in percent compared to December previous year)

	2012	2013	2014	2012–2014
Consumer Price Index	**6.6**	**6.5**	**11.4**	**26.5**
Food products	**7.5**	**7.3**	**15.4**	**33.1**
Cereals and beans	–7.0	3.2	34.6	**29.2**
Butter	3.0	18.6	14.5	**39.9**
Sunflower oil	3.4	–3	5.0	**5.3**
Macaroni products	7.6	4.7	8.4	**22.1**
Milk and dairy products	4.4	13.1	14.4	**35.1**
Eggs	5.1	28.8	4.6	**41.6**
Bread and flour products	12.0	8.0	7.5	**30.0**
Meat and poultry	8.3	–3	20.1	**26.2**
Fish and seafood products	1.9	7.6	19.1	**30.6**
Fruits and vegetables	11.0	9.3	22.0	**48.0**
Alcoholic beverages	12.1	14.6	13.7	**46.1**
Non-food products	**5.2**	**4.5**	**8.1**	**18.8**
Medicaments	5.1	2.5	13.1	**21.8**
Motor gasoline	6.8	5.7	8.9	**22.9**
Tobacco products	22.6	29.3	27.1	**101.5**
Services	**7.3**	**8.0**	**10.5**	**28.1**
Utility services	9.4	9.8	9.4	**31.4**
Early childhood education services	6.4	9.9	15.6	**35.2**
Convalescence services	5.9	5.7	7.6	**20.4**
Passenger transportation services	6.9	8.9	7.3	**24.9**
Cultural organizations' services	8.8	10.5	9.9	**32.1**

Source: Rosstat.

Finally, the consumer price growth rates in Russia are compared with those in other countries in *Table 4*.

Table 4

The dynamics of consumer price indices in various countries in 2012–2014, % annual

	2012	2013	2014*	2012–2014*
Azerbaijan	–0.3	3.5	–0.8	2.4
Armenia	3.2	5.6	0.2	9.2
Belarus	21.8	16.5	14.8	62.9
Kazakhstan	6.0	4.8	6.3	18.1
Kyrgyzstan	7.5	4.0	6.8	19.4
Moldova	4.1	5.2	3.1	12.9
Russia	*6.6*	*6.5*	*7.1*	*21.6*
Tajikistan	6.4	3.7	6.1	17.1
Ukraine	–0.2	0.5	19	19.4
Germany	2.0	1.5	0.4	3.9
France	2.0	0.9	0.8	3.7
The United States	2.1	1.5	2.1	5.8
The Netherlands	2.5	2.5	1.5	6.6

* the data on January–October.

Source: the CIS Interstate Statistical Committee (CISSTAT) (http://www.cisstat.com/), the OECD data base (http://stats.oecd.org/).

In the period between January 2014 and October 2014, Russia was ranked 3rd after Ukraine and Belarus on consumer price growth rates among the CIS member countries. In the first 10 months of 2014, the rate of inflation in Ukraine and in Belarus was 19% and 14.8%, respectively. Inflation in Russia in January-October 2014 was 4.5 times that in developed countries (see *Table 4*). Hence Russia is facing a high level of inflation compared to both the developed countries and emerging economies.

In 2015, the economic decline and a moderate growth in money supply will be the factors that will constrain inflation. However, the effect of ruble's exchange rate pass-through to prices will definitely boost inflation which is most likely to be above 10–12% at 2015 year-end.

At the same time, the target-level inflation of 4% can be reached by 2017 given the fact that the effect of the ruble's depreciation on prices will cease to exist in the mid run, while there is almost no monetary prerequisites for the acceleration of inflation.

2.1.3. The main decisions concerning the monetary and exchange rate policies

In 2014, while gradually migrating to an inflation targeting regime, the Bank of Russia made a series of important decisions aimed at enhancing its interest-bearing toolkit, as well as making the exchange rate formation a more flexible process.

The decision to gradually increase the CBR key rate to 17% in January from 5.5% on 16 December 2014 was the most significant one the Bank of Russia made in 2014. On 3 March, the CBR key rate was lifted to 7% p.a. from 5.5% p.a., on 28 April to 7.5% p.a. from 0.5 p.p., to 8% p.a. on 25 July, to 9.5% on 5 November, and to 10.5% p.a. on 12 December. These decisions were intended to lower inflation expectations and maintain a financial stability.

It is worthwhile noting that the regulator was expected in 2014 to adopt a floating exchange rate regime and inflation targeting, increase gradually the CBR key rate in response to the rapid decline of the international reserves. It is our opinion that the Bank of Russia's decision to lift the interest rates was correct given the circumstances. With inflation getting higher, a lower real interest rate would have resulted in further depreciation of the ruble, having no effect on economic growth rates, because with the FX market being unsettled, economic

agents tend to curtail their fixed investment. At the same time, with lower inflation, the central bank may need to lower the CBR key rate in order to support economic activity.

In 2014, the central bank gradually upgraded the monetary policy mechanism based on interest rate management. In particular, fine-tuning operations to provide liquidity were introduced on 3 February in response to abolished daily overnight repo auctions. The regulator allotted an average of Rb 212bn as part of each "fine tuning" repo during the year. No such operations were conducted in February, June, August 2014. It is worthwhile noting that the demand for such operations in certain periods was governed by the substantial oversupply of liquidity in the banking sector. On 17 February 2014, the Bank of Russia complemented its monetary policy toolkit with fine-tuning operations to absorb liquidity. Such operations were undertaken as 1–6 day fine-tuning deposit auction at maximum interest rate equal to the CBR key rate. In the period between January 2014 and December 2014, only five such operations were undertaken – in July, August, and November – with the liquidity absorption varying between Rb 64,6bn to Rb 360bn per auction. From 12 to 44 business entities participated in such auctions, being indicative of weak demand for this tool.

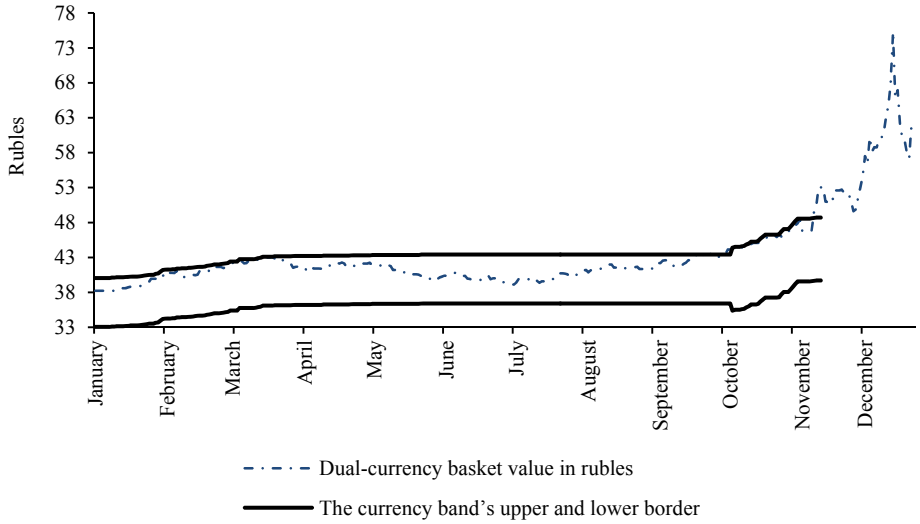
Credit institutions' stronger demand for Bank of Russia refinancing operations amid limited volumes of the collateral base for repo operations resulted in bigger volumes of bidding and the frequency of 3-month auctions for loans secured by non-marketable assets. Additionally, in June 2014, the maximum term of money provision were extended to 549 from 365 days for standing facilities, namely loans secured by non-marketable assets, guarantees or gold. This measure had an insignificant effect on the liquidity of the banking sector. It is 1-3-month loans that show the strongest demand among secured loans, which accounted for an average of 63% of the banks' total debt on secured loans in 2014, whereas 181-365-day secured loans accounted for as little as 7% on average. This liquidity provision tool shows a weak demand because of its high fixed interest rate, most banks have no collateral available for the required term (12 months), as well as high alternative costs from the decline of collateral available to credit institutions (lost opportunities to obtain short-term loans because of running short of the collateral available).

The Bank of Russia decided on 25 April to introduce an new tool designed to refinance credit institutions. The regulator employs this tool to provide loans to banks for a term less or equal to 3 years at a rate of 6.5% p.a.. The foregoing mechanism of refinancing is secured by claims on credits provided to finance investment projects guaranteed by the state. At the initial stage, the new mechanism is available only for large banks with an equity more than Rb 50bn. The tool is intended to stimulate investment, however, in our opinion, it is the financial system as a whole, not the central bank, that is to be involved in the formation of long money in economy. It is therefore the issues of enhancing the financial sector depth and the investment potential of Russian assets, not the growth in money supply, that are still quite relevant for the Russian economy.

The situation in the FX market in 2014 became, perhaps, the key challenge for the Bank of Russia, as the drastic ruble's depreciation made it impossible to reach the target level of inflation and put financial sustainability at threat. Let's take a closer look at the central bank exchange policy in 2014.

Early in 2014, the Bank of Russia implemented a series of policies aimed at increasing the flexibility of exchange rate formation mechanisms. As part of the planned migration to a floating exchange rate, the Bank of Russia decided on 13 January to discontinue target interventions. Having revoked the flattening of exchange rate volatility caused by fundamental

factors regarding the change in the foreign trade balance, the Bank of Russia participation in the process of exchange rate formation has been restricted since January 2014 to flattening a sharp short-term volatility of the exchange rate. The revocation of CBR target currency interventions increased the sensitivity of operational band boarders of the currency-band exchange rate policy to the volume of regulator's currency interventions. As a result, the currency band borders were gradually going up 2–3 times a week since early in the second half of January, reaching Rb 35,40 and Rb 42,40 late in February, whereas earlier in the year they were at Rb 33,05 and Rb 40,05 (see *Fig. 7*).



Source: The Bank of Russia, www.cbr.ru, the authors' calculations.

Fig. 7. The value of the dual-currency basket in rubles and the operational band border in 2014

Since 19 February, the Bank of Russia began to adjust currency interventions to the operations, taking into account the transfer of funds in foreign currencies by the Ministry of Finance of the Russian Federation and the Federal Treasury to the Reserve Fund.

In the period between January and February 2014, the monthly average volume of Bank of Russia sales of the European currency increased to 0,6bn Euro, US dollar to $7,0bn. Therefore, the value of net sales of U.S. dollars in January-February 2014 outperformed that in September 2011 ($6,8bn), only being less than the value seen in January 2009[1].

Further acceleration of the Russian currency depreciation against the world's primary currencies was sparked by the escalated conflict in Ukraine and raised geopolitical tensions. CBR currency interventions hit a record volume early in March, thus being the cause of the sharp reversal in of the exchange rate policy. The Bank of Russia decided on 3 March 2014 to increase the amount of accumulated interventions resulting in the 5-kopek shift of the operational band borders of the exchange rate policy, to $1,5bn from $350m. Operations related to foreign currency purchases by the Federal Treasury were suspended too.

The decisive measures of the Bank of Russia allowed foreign currency sales to be substantially reduced in volume and resumed operations in order to purchase the same as early as

[1] As a reminder, at the height of the crisis 2008–2009, the Bank of Russia monthly average sales of US dollars amounted to more than $35,4bn in the period between September 2008 and January 2009.

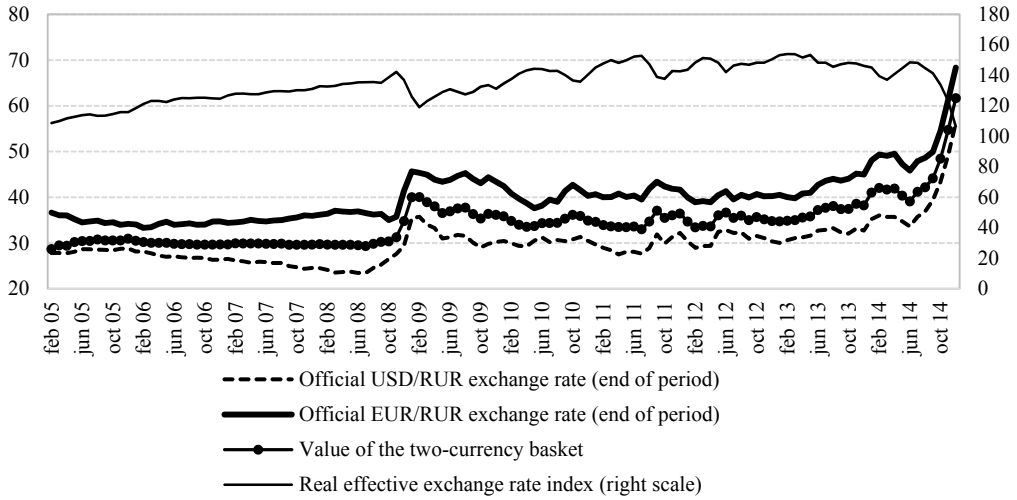
May–June. Furthermore, a decision was made to resume FX operations, effective 14 April, of Russia's Finance Ministry and the Federal Treasury, and gradually relax by the end of May the participation of the Bank of Russia in the exchange rate formation. On 22 May, the Bank firstly reduced by $100m the volume of CBR currency interventions within the range of the floating operational band and aimed at flattening the volatility of the exchange rate, while other parameters of the exchange rate policy remained unchanged. On 17 June, the Bank of Russia, first, further reduced by $100m CBR currency interventions within the range of operational band. Second, the Bank of Russia widened the range within which the Bank is not supposed to interfere with the exchange rate formation, to Rb 5,1 compared with Rb 3,1 in effect since 7 October 2013. And, finally, the Bank reduced to $1000m from $1500m the amount of accumulated interventions resulting in automatic shifting by 5 kopeks of the operational band boundaries. As a consequence, the Bank of Russia fully discontinued as early as July its operations in the domestic FX market.

Furthermore, despite the ongoing aggravation of the geopolitical situation and further sanctions, not only did the Bank of Russia decided on 18 August to reduce to $350m the volume of CBR currency interventions and revoke CBR currency interventions within the range of floating operational band, but it also decided to symmetrically widen the same to Rb 9 from Rb 7. As a result, the Bank of Russia conducted no CBR currency interventions in the period between August and September. Therefore, the of exchange rate formation of the Russian currency was driven exclusively by market factors within the three months (July–September) of 2014.

The situation worsened in the market in mid-September, when the decline in global prices of energy resources accelerated. At the same time, the Bank of Russia made a few statements that it will keep implementing its plan to completely migrate to a floating exchange rate in 2014. In September, the ruble weakened against the US dollar and the Euro by 13.1% and 7.9%, respectively, compared to previous period. As a result, the Bank of Russia resumed early in October sales of both U.S. dollars and Euros, and the volume of interventions exceeded $27bn and 1,6bn Euro, respectively, in the same month.

In an effort to ease the feverish demand for foreign currencies, the Bank of Russia employed additional tools designed to provide foreign currencies. First, the Bank of Russia began on 17 September to hold overnight FX swap operations in order to sell U.S. dollars for rubles to be subsequently purchased. Second, a new tool designed to provide foreign-currency liquidity – repo transactions denominated in foreign currencies – was introduced on 27 October. Initially, the term of repo US$/Euro transactions in the form of auctions was restricted to 1 week and 28 days. Minimum rates were equal to the LIBOR in terms of respective foreign currencies and with comparable terms, increased by 2 and 2,25 p.p. for operations for a term of 1 week and 28 days, respectively. At the same time, only four of the 33 currency FX swap auctions in the period between 17 September and 5 November can be recognized as held, with the volume of raised funds totaling $1476,5m. The demand for foreign currencies allotted by the Bank of Russia through repo operations was found to be weak. During the initial auctions in November, the volume of raised U.S. dollars for 1-weak term was running at $12,5m against the maximum limit of $2bn, whereas the volume of funds raised for 28-day term was running at $199,9m against the limit of $1,5bn. The currency band range was shifted upwards 17 times in October, and in certain months, e.g., on 23, 28 and 29 October, by 40 kopeks within a day. As a result, the operational band floor was Rb 38,55 while the cap was Rb 48,55

by the end of October (see *Fig. 8*). In October 2014 курс Russian currency depreciation weakened against the US dollar and the Euro by 7.1% and 5.4%, respectively.



Source: The Bank of Russia, calculated at the Gaidar Institute.

Fig. 8. Ruble exchange rate in January 2005 to December 2014

The weak demand for new tools from credit institutions resulted in softer terms of foreign-currency liquidity provision. Therefore, the central bank decided on 5 November to lower minimum interest rates on FX repo transactions for 1-week and 28-day term, equaling the same to the LIBOR expressed in corresponding foreign currencies and comparable terms, increased by 1.5 p.p. Additionally, the Bank of Russia decided to introduce another tool designed to provide long-term FX liquidity as FX repo transactions for 12-month term. The minimum interest rate on this tool was also equal to LIBOR expressed in corresponding foreign currencies, increased by 1.5 p.p. However, the total amount of funds allotted during the auctions in November was small, running at $403,8m. The auction for foreign-currency liquidity provision for 28-day term was most in-demand, during which $312,4m were allotted. A total of $87,7m were allotted, with the limit of $10bn during the initial annual auction. The 1-week repo results testified that there was no demand for в short-term liquidity: with the limit of $2bn, the volume of closed transactions was running at as little as $3,7m despite the growing demand for foreign currencies in the domestic FX market. According to the Bank of Russia estimates, in Q3 2014, the private sector's net capital export was running at $13,0bn. At the same time, the banks' net capital export was running at $20,8bn, and other sectors' net capital export was running at $33,8bn (nonfinancial and other financial corporations, as well as individuals) in the period between July and September. It is worthwhile noting that it is only Q4 2008 that saw no big volumes of exported financial resources ($78,1bn).

Under the circumstances, the Bank of Russia limited to $350m the volume of overnight operations on 5 November 2014. Additionally, the regulator reserved the right to conduct currency interventions only when during the entire trading session the value of dual-currency basket is within or outside the borders of the operational band. As a result, as recently as the following day the official ruble value of the dual-currency basket was above the cap of the operational band, whose role became nominal against the preset parameters of the exchange rate policy. And, finally, the Bank of Russia revoked on 10 November 2014 the previously

applicable exchange rate policy mechanism, revoking the acceptable range of the ruble value of dual-currency basket and regular interventions within/outside the specified operational band. In fact, the Bank of Russia migrated to a floating exchange rate for the first time in Russia's contemporary history, reserving the right to undertake operations in the domestic FX market only when financial sustainability is at threat. At the same time, having reached on 10 November the peak of Rb 53,02, the ruble value of dual-currency basket stopped to increase for a certain period of time, which supports the significant role of the speculative factors that boosted the depreciation of the Russian currency. However, the Russian currency resumed its depreciation by the end of the month amid the drastic fall of crude oil prices. As a result, the Russian ruble lost 16.2% year-on-year in 2014 against the U.S. dollar and the Euro. In the end, the USD/RUB and EUR/RUB exchange rate increased by the end of December to Rb 56,26 per US$ and Rb 68,34 per Euro, respectively, compared to Rb 32,73 and Rb 44,97 as of the end of December 2013. The depreciation of the ruble's real effective exchange rate in the period between January and December 2014 is estimated 8.3% compared to its 1.2% strengthening during the same period of 2013.

In December 2014, the Bank of Russia resumed currency interventions aimed at selling foreign currencies. As a result, while flattening the short-tem volatility of the ruble's exchange rate, the Bank of Russia sold more than $10,3bn in December.

It is worthwhile noting that there was no demand for the central bank's new tools designed to provide foreign currencies, because economic agents expected the ruble to depreciate and would rather purchase than borrow foreign currencies given that borrowed currencies had to be repaid at a much lower ruble's exchange rate against the US dollar and the Euro. Furthermore, the Bank of Russia provides commercial banks with ruble-denominated funds in big volumes and at an interest rate which can be easily covered with the plummeting ruble's exchange rate. The Bank of Russia conducted interventions in the FX market whereby reducing the monetary base in other words, in order to prevent the exchange rate sharp volatility. However, to be able to maintain the money market interest rate within the band, the central bank provided on a regular basis credit institutions with new ruble liquidity which the latter instantly transferred back to the FX market. Under such circumstances, the situation in the FX market (with the same macroeconomic and political factors) can be stabilized by contracting the surplus reserves at commercial banks. Therefore, the Bank of Russia announced on 11 November the introduction of a limit on the provision of ruble liquidity through FX swaps. The daily limit was set in rubles equivalent to $2bn in the period of 12 thru 30 November, as well as 15 thru 21 December 2014. Additionally, the regulator limited volumes of funds allotted through 1-week repo operations of more than Rb 100bn, compared to the formerly set parameters. It is noteworthy that the ruble liquidity limit may create problems for some banks, including large banks, and increase risks of worsening the banking crisis. Target support of ailing banks may be required to address the issue.

On 25 November 2014, the regulator announced that the maximum volume of funds for fine-tuning operations to provide ruble liquidity was set at Rb 200bn. It is worthwhile noting that the regulator's measures failed to contract the reserves at commercial banks. In particular, according to the data on the beginning of December 2014, the value saw a positive growth, 29.5% by the beginning of November and 50% compared to the same period previous year. Early in January 2015, the surplus reserves at commercial banks gained another 28.6%. Despite the limits on the provision of ruble liquidity, the regulator held repo auctions intended to replace Rb 1 trillion on the deposits withdrawn by Russia's Finance Ministry from the ac-

counts with commercial banks, in order to prevent the money market rates from a substantial increase. Therefore, the Bank of Russia increased Rb 400bn the limits on repo auctions early in December. There is no way to prevent the ruble's exchange rate from falling with such volumes of liquidity provision, while panic sentiments are developing in the market.

Overall, the objective to maintain both the ruble's exchange rate and the interbank market rate within the interest rate band cannot be met amid a feverish demand for foreign currencies. An upsurge of interest rates or massive interventions in the FX market should be required to stabilize the exchange rate amid the worsening fundamental factors (the decline in crude oil prices and capital outflow). However, it is worthwhile noting that such measures only should help prevent panic and stabilize the exchange rate in the short run, whereas in the long run the dynamics of ruble's exchange rate should be determined by the dynamics of prices of energy resources, market evaluations of foreign policy risks, as well as Russia's investment potential.

2.1.4. Balance of payments and ruble's exchange rate

The adverse foreign policy conditions, as well as the trend in the global markets of raw materials had a strong impact on Russia's balance of payments in the period between January and December 2014. As noted above, the central bank increased its presence in the FX market in 2014 despite the migration to an inflation targeting regime. In the 12 months of 2014, net capital outflow from the country appeared to be more than that in 2013, which was caused by closing down Russian economic agents, who have to repay their external debt, from foreign capital markets.

According to the Bank of Russia preliminary assessment of Russia's balance of payments in January–December 2014, current account surplus was running at $56,7bn, up 66% compared to that in 2013. Additionally, trade surplus increased 2.0% (to $185,6bn from $181,9bn). Export of goods dropped by 5.7% (to $494bn from $523bn), except that exports were running at $34,2bn in December 2014 compared to $45,9bn in December 2013. Import of goods contracted by 9.8% (to $308bn from $341,3bn) due to the ruble's depreciation and sanctions on food products, except that in imports were running at $44,6bn in December 2014 compared to $56,1bn in December 2013. It seems that if the current exchange rate remains the same, the decline of imports in 2015 would see a harder decline than that in December 2014, because supplies in December were made mostly under the previously concluded contracts, factoring in a different ruble's exchange rate.

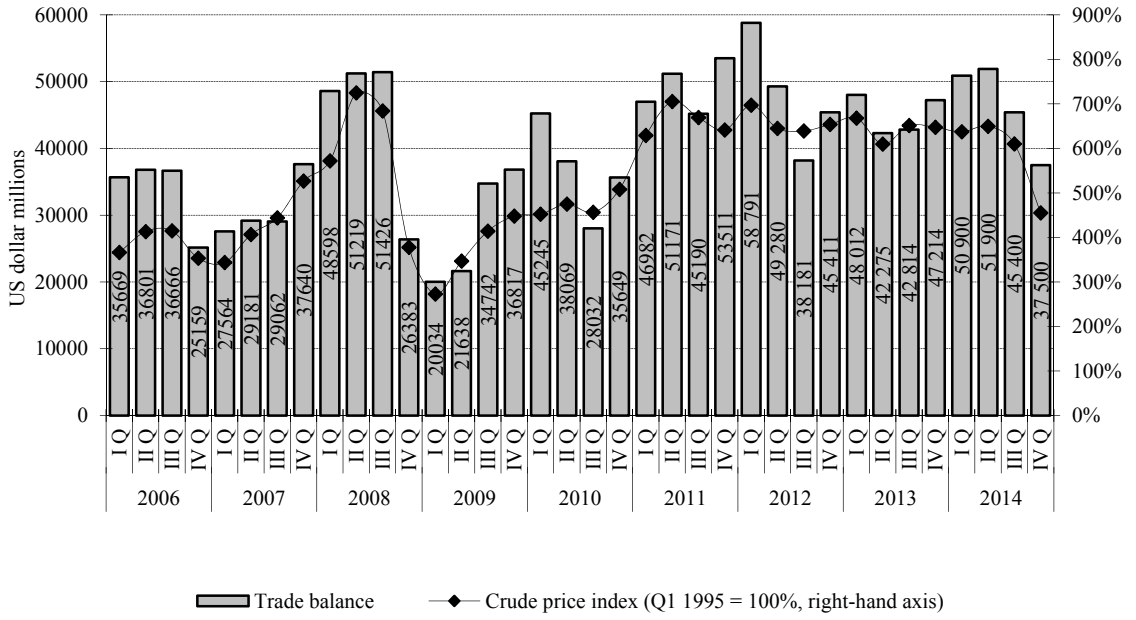
The trade balance whose balance in turn depends largely on the dynamics of prices of hydrocarbons was the key factor which determined the value of balance of the current account in the Russian economy throughout the 2000s. The same trend was observed in 2014 too (see *Fig. 9*).

Exports of crude oil, oil products and natural gas accounted for 65.3% of the total exports, down 1.6 p.p. compared to the corresponding period of 2013, given the 43% decline of crude oil prices in 2014, reaching $63 per barrel on average in December 2014, as well as the contraction of physical volumes of supplies (see *Fig. 10*).

Supplies of the key exported commodities were contracting while the terms of trade were worsening on all commodity items, except nickel and fertilizers of certain types.

In 2014, imports contracted basically on all commodity items, especially for engineering products from countries other than CIS member states, i.e., for explicitly investment products. Furthermore, supplies saw most of the contraction in December (–24% in December 2014 against December 2013 on engineering products).

In 2014, the deficit balance on services reached $54,6bn and declined by 6.3% (in absolute terms) compared to the corresponding period of 2013. Export of services were running at $66,6bn, a decline of $4bn (–5%) compared to previous year. Import of services in the 12 months of 2013 lost 5.6% to $121bn compared to the value seen 2013, which is for the most part determined by the decline in individuals' outbound travelling costs. The balance on the compensation of employees contracted by 32% to –$9,0bn in the period between January and December 2014 ((−13,2)bn US$ in 2013). The deficit balance on the investment income declined by 10% year-on-year in 2014 and reached $56,9bn. Investment income receivable increased 6% to $43,5bn from $37,9bn. The income payable declined by 2% to $81,1bn on non-financial organizations and 12.4% to $16,2bn on banks, which governed a 4.6% decline of the total revenue receivable to $100,3bn. The balance on the rent[1] was running at +$0,1bn in 2014 (+$0,1bn in 2013). The balance on the secondary income[2] in the 12 months of 2014 was running at (−8,7)bn US$ ((–9,3)bn US$ in 2013), and the balance on capital transfers was running at (–42,0)bn US$, ((–0,4)bn US$) in 2013) due to the write-off of the debts owed by Cuba, Uzbekistan and North Korea.

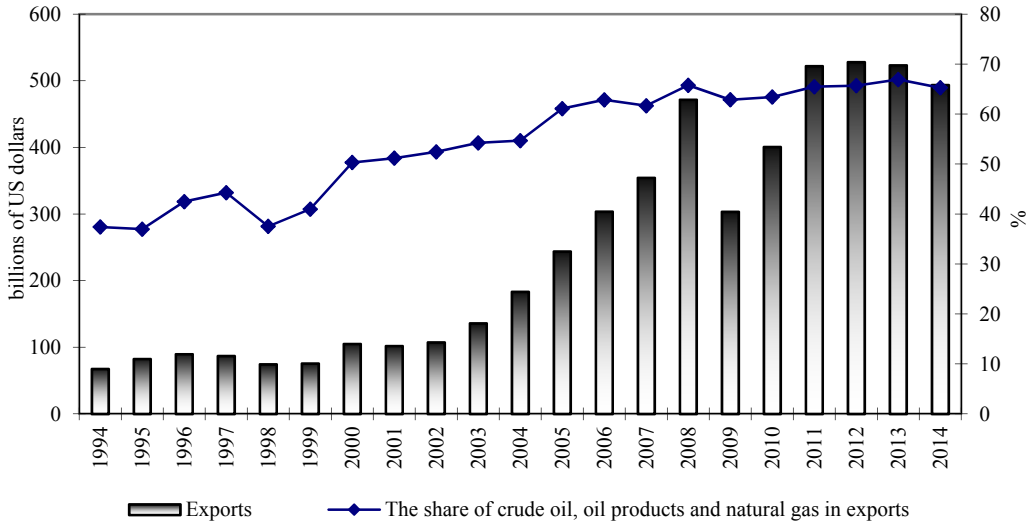


Source: the Bank of Russia; EIA; calculated at the Gaidar Institute.

Fig. 9. Russia's trade balance and the crude oil price index in 2006–2014

[1] The rent means an income receivable for making natural (mineral) resources available for other institutional entity. Examples of the rent include sums payable for land utilization, extraction of mineral resources and other extractable resources, as well as the right of fishing, forest and pasture utilization.

[2] The former balance on current transfers. According to the Central Bank of Russia, current transfers tend to increase the level of disposable income and consumption of goods and services of the recipient and reduce the disposable income and consumption potential of the donor, for example, a humanitarian aid provided in the form of consumer goods and services. Current transfers are recognized in the current account. Non-current transfers are inherently recognized as capital transfers. Capital transfers result in changes in the volume of assets or liabilities of the donor and the recipient and recognized in the capital account. If the donor and the recipient are residents of various countries, then capital transfer results in changes in the level of national wealth of the economies they represent. An example of capital transfers is free transfer of the title to fixed assets, waiver of debts.



Source: The Bank of Russia.

Fig. 10. The dynamics of exports of goods and the share of energy sector in 1994–2014

In 2014, the balance on the financial account was running at –$125,6bn (–$45bn in 2013) (see *Table 5*). The growth in the liabilities of Russian economic agents to foreign economic agents reached $48,7bn in the 12 months of 2014, 2.6 times less than the previous year growth ($125,8bn). The external liabilities of federal administration agencies declined by $9,4bn in 2014. The external liabilities of constituent territories of the Russian Federation were running at $0,1bn. A negative growth of the liabilities of monetary authorities in 2014 was less or equal to $3bn. The banking sector ceased to raise funds through external loans in 2014 due to sanctions and kept repaying on previously accumulated external liabilities. For instance, Russian banks' external debt increased $20bn in 2013, whereas in 2014 it decreased $37bn. The non-bank sector reduced drastically fundraising from non-residents in 2014, increasing its external liabilities as little as $1bn compared to $49bn raised in 2013. The inflow of foreign direct investment declined by $27bn (19 against $46bn). Other external liabilities (portfolio investment, credits and loans and other liabilities) declined by $18bn and by $3bn after the growth in 2013.

The foreign assets of residents (foreign economic agents' liabilities to Russian economic agents) increased by $76,9bn in the 12 months of 2014 ($170,8bn in 2013), whereas the foreign assets of monetary authorities contracted by $0,5bn (down $0,6bn in 2013). The foreign assets of the banking sector increased $12,7bn in 2014 ($27,9bn in 2013). Capital export from other sectors decreased 25% year-on-year in 2014 and reached $104,4bn, of which direct and portfolio investment in foreign assets was running at $47,1bn and $4,2bn respectively (–$85,4bn and –$2,2bn in 2013, respectively). The growth in investment in the foreign assets of the non-bank sector was basically determined by a growth in investment in foreign currencies in cash. According to the Bank of Russia estimates, the volume of foreign currencies in cash held by Russian residents increased $34bn in 2014, whereas it remained basically unchanged in 2013. Other assets of the non-bank sector increased in 2014 nearly 30% less than those of the previous year (67bn against 95bn), thus offsetting the growth in demand for foreign currencies in cash.

Table 5

The key accounts of the balance of payments and the dynamics of external debt in 2012–2014 (billions of US dollars)

Indicator	2012					2013					2014				
	Q1	Q2	Q3	Q4	*Year*	Q1	Q2	Q3	Q4	*Year*	Q1	Q2	Q3	Q4*	*Year*
Balance from current and capital accounts	34,7	16,1	5,6	10,3	*66,8*	25	1,8	-0,7	8	*34,1*	26,8	12,9	6,4	10,5	*26,8*
Financial account (excluding reserve assets)**	-24,8	0,8	-4,0	1,6	*-26,5*	-13,3	-7,8	-4,5	-19,3	*-45*	-50,7	-30	-5,1	-39,8	*-125,6*
Change in the foreign exchange reserves ('+' corresponds to an increase, '–' corresponds to a decrease in the reserves)	-4,6	-15,0	-1,5	-8,9	*-30,0*	-4,9	4,4	7,4	15,2	*22,1*	27,4	10,3	5,7	64,2	*107,5*
Net errors and omissions	-5,3	-2,0	-0,1	-2,9	*-10,3*	-6,8	1,6	-1,9	-3,8	*-10,8*	-3,3	6,8	3	-3,1	*3,4*
Change in Russia's external debt ('+' corresponds to an increase, '–' corresponds to a decrease of the debt)	18,6	13,1	28,3	37,5	*97,6*	55,3	16,1	8,5	12,6	*92,4*	-13,2	16,8	-53,0	-79,9	*-92,5*
Change in Russia's sovereign external debt	1,7	5,1	5,0	7,9	*19,7*	3,1	-1,5	6,7	-0,9	*7,3*	-8,1	3,5	-7,7	-7,9	*-20,2*
Change in Russian private sector's external debt	16,5	8,0	21,7	27,6	*73,8*	48,3	18,2	3,2	15,1	*84,8*	-4,5	12,8	-45,0	-66,9	*-103,6*

* – preliminary estimate; ** – net of foreign exchange reserves.
Source: The Bank of Russia.

Russia's external debt declined by 17.7% in 2014, being $599bn as of 1 January 2015. It is worthwhile noting that in 2014 the external debt of Russia's private sector dropped by $103,6bn (+$84,8bn in 2013) due to the imposed sanctions limiting the access to global capital markets (see *Table 5*). The sovereign external debt contracted by $20,2bn in 2014, whereas it saw a positive increase of $7,3bn in 2013.

The decline in the prices of Russia's key export commodities and high inflation in Russia for all of 2014 year-end pushed down the ruble's real effective exchange rate by 27.2% (a 2.8% decline in 2013), reaching the value seen in April 2014 (see *Fig. 9*). In the period between January and December 2014, the USD/RUB official exchange rate increased 69.6% to Rb 55,8 on average in December 2014 from Rb 32,9 on average in January 2014. At the same time, the EUR/RUB exchange rate in December averaged Rb 68,8, an annual growth of 49.2%. Eventually, the ruble depreciated against the dual-currency basket: the value of the dual-currency basket increased 56.8% during the same period to Rb 61,6 from Rb 39,3.

According to the Bank of Russia preliminary estimation, a trend setter in the dynamics of the balance of payments in 2014 was the dynamics of net capital outflow from the nonfinancial sector, running at $151,5bn, up $96bn above the value seen in the 12 months of 2013[1]. Given the adjustment for the amount of FX swaps between the Bank of Russia and resident banks, the amount of funds the Bank of Russia allotted in foreign currencies on a reverse basis (FX repos) to resident banks, as well as the funds held on the correspondent accounts of resident banks with the Bank of Russia – $130,5bn. At the same time, capital outflow was seen basically throughout the entire year, except June and September, when the net exports of capital through the private sector was running at $12,5bn and $0,1bn, respectively. In the period between January 2014 and December 2014, net capital outflow through banks and the private non-financial sector reached $49,8bn and $101,7bn, respectively.

In 2014, the migration to repayment of external loans and investment from fundraising was the key cause that triggered the growth in net capital outflow. Additionally, there was an upsurge in investment in foreign currencies in cash. Nonetheless, the capital outflow in 2014 was outperformed by that caused by the crisis of 2008–2009. The biggest capital outflow over a comparable period was seen during the four quarters between Q3 2008 and Q2 2009, when net capital outflow from the private sector was running at $183bn, nearly $31bn above that in 2014.

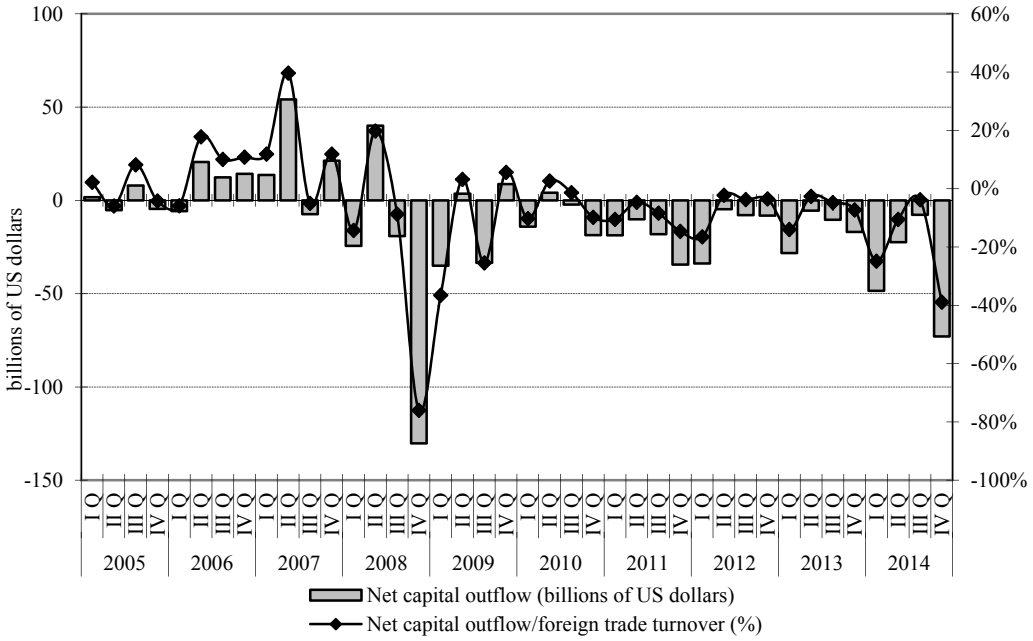
Even during the latest crisis, Russia's banking sector managed to increase its external liabilities, including direct investment, reaching a bigger volume than that in 2014 ($41bn during the crisis of 2008–09 against $18bn in 2014). Furthermore, at present, the stronger demand for foreign currencies in cash has been found to be more positive. During the crisis of 2008–2009, the growth in foreign currencies in cash was positive only within two quarters (Q4 2008 and Q1 2009), whereupon Russian residents began to gradually sell foreign currencies. This trend, however, is by no means surprising given the much more serious depreciation of the ruble in 2014.

Regarding the rest of net capital outflow components, the situation in 2014 remained visibly better than that amid the crisis of 2008–2009. The capital outflow from the banking sector in 2008–2009 was running at $32bn above the value seen in 2014. At that time banks were accumulating more intensively their foreign assets while making substantial repayments on their external debt. In 2008–2009, the foreign assets of the non-bank sector (save for foreign currencies in cash) increased more, running at $48bn above the value seen in 2014 ($115bn against $67bn)

The 2014 year-end capital flight (see *Fig. 12*) was running at $10,9bn, based on our estimates (in 2013 – $47,6bn)[2].

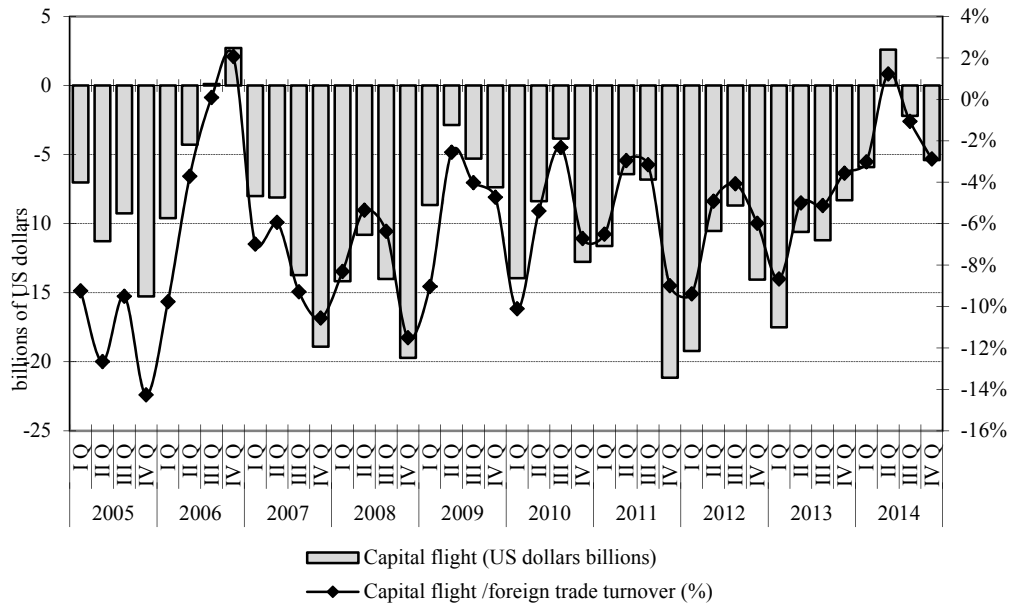
[1] While comparing the volumes of capital flows, the data on 2013 was purged from the effect of the Rosneft TNK-BP-purchase deal, Rosneft external fundraising for the purpose and the related increase in BP investment in the Rosneft's capital.

[2] The IMF capital flight measurement was used: the sum of "trade credits and advances", "timely not received export revenue and goods and services prepaid according to import contracts" and "net errors and omissions".



Source: The Bank of Russia; measured at the Gaidar Institute.

Fig. 11. The dynamics of net capital outflow in 2005–2014



Source: The Bank of Russia; measured at the Gaidar Institute.

Fig. 12. The dynamics of capital flight in 2005–2014

It is worthwhile noting that future trends concerning the state of Russia's balance of payments are mixed. On the one hand, the 2014 uptrend of the balance on the current account is likely to prevail in the mid run due to the ruble's depreciation and the respective fall in imports. On the other hand, the massive decline of crude oil prices, the geopolitical tensions, the downgrade of the credit rating for Russia are the factors that worsen the state of the balance of payments.

2.2. The State Budget

In 2014, Russia's budgetary sphere was operating under the cumulative influence of several negative factors. A further slowdown in the national economy's growth rate to 0.6% (vs. 1.3% in 2013) occurred due to the declining prices of oil in the second half-year of 2014. The average annual price of Urals in 2014 dropped to $ 97.6 vs. $ 107.9 per barrel in 2013. At the same time, it is necessary to emphasize that the slowdown in the Russian economy had first been noted during an earlier period, while oil prices had been even higher, and so this was by no means a decisive factor of economic development. However, for the budgetary system, and primarily from the point of view of the 'oil and gas' component of federal budget revenue, it was the price of oil that became the key determining parameter. As for the negative factors that the economy has been faced with, it is also necessary to point to the economic sanctions introduced against Russia from the spring of 2014 by the West, as a result of which investment activity declined and borrowed funds became far less easily obtainable. All these factors produced a negative effect on the growth rate of revenue inflow in the RF budgetary system. As estimated by the RF Ministry of Finance, Russia's loss of federal budget revenue in 2014 amounted to $ 150bn as a result of the downward movement of prices for oil, and to about $ 50bn due to the economic sanctions[1]. It is only thanks to the relatively high prices for energy carriers in the international raw materials markets over the period of January–June 2014, when the price of Urals never dropped below $ 106 per barrel, that the execution of budget revenue resulted in no shrinkage in the volume of receipts, neither in absolute nor in relative terms. Besides, another factor that conduced to increasing receipts was the decline of the ruble's foreign exchange rate, which in part compensated for the downward movement of oil prices over the second half of the year. On the whole over that year, the ruble-to-USD exchange rate rose from 33.5 in January to 55.5 in December 2014.

While the federal budget targets for 2014 were being planned, it was decided that the Pension Fund's retirement savings should be frozen, to be redistributed in favor of the fund current retirees' pensions, as a result of which the amount of federal budget transfers to the Pension Fund could be reduced. On the one hand, this measure helped to more economically spend the federal budget resources, while on the other the reliance on that mechanism further undermined the population's already feeble trust in pension reform and deprived the financial system of a new inflow of funds from one of the principal sources of 'long money'. The decision, taken in the autumn of 2014, that this measure should be prolonged into 2015, cast doubts as to the ultimate success of one of the major directions of pension reform, thus also significantly increasing the long-term risks for the budgetary system in view of the ongoing population ageing.

In late 2014, the federal government launched its antirecession package designed to support the national economy; the most impressive undertaking, in terms of volume of financing, was the measure aimed at recapitalization of the banking system, in the form of issue of new OFZ bonds to the total value of Rb 1 trillion, to be transferred to the Deposit Insurance Agency.

[1] http://1prime.ru/energy/20150129/801293885.html

2.2.1. The Main Parameters of the Budgetary System of the Russian Federation in 2014

According to data released by the RF Federal Treasury, the RF budgetary system's revenue for 2014 rose on 2013, both in absolute and in relative terms, to 37.2% of GDP (or Rb 26,371.1bn) vs. 36.1% of GDP (or 24,082.4bn) a year earlier (see *Table 6*). General government budget expenditure increased to 38.3% of GDP (or Rb 27,215.9bn), whereas in 2013 its volume had amounted to 37.3% of GDP (or Rb 24,931.1bn). As a result, in spite of the rising revenue, in 2014 the general government budget was executed with a deficit of 1.2% of GDP, which is only 0.1 pp. below the corresponding index for 2013.

Table 6

The Movement of the Budgetary System's Revenue and Expenditure in 2010–2014

	2010		2011		2012		2013		2014		Deviation, pp. of GDP, 2014 on 2013
	bn Rb	% of GDP	bn Rb	% of GDP	bn Rb	% of GDP	bn Rb	% GDP	bn Rb	% of GDP	
Federal budget											
Revenue	8, 305	17.9	11, 366	20.3	12, 854	20.7	13, 020	19.5	14, 497	20.4	0.9
Expenditure	10, 117	21.8	10, 935	19.5	12, 891	20.7	13, 343	20.0	14, 831	20.9	0.9
Deficit (–) / Surplus (+)	–1,812	–3.9	431	0.77	–37.0	–0.06	–322.9	–0.5	–333.8	–0.5	0.0
Consolidated budget of RF subjects											
Revenue	6, 537	14.5	7, 644	13.7	8, 064	13.0	8, 165	12.2	8, 906	12.5	0.3
Including inter-budgetary transfers	1, 399	3.1	1, 644	2.9	1, 680	2.6	1577	2.3	1, 728	2.4	0.1
Expenditure	6, 637	14.7	7, 679	13.7	8, 343	13.4	8,807	13.2	9, 353	13.2	0.0
Deficit (–) / Surplus (+)	–99.6	–0.2	–35.4	–0.06	–278.4	–0.5	–642	–1.0	–447.8	–0.6	0.4
General government budget											
Revenue	15, 716	33.9	20,853	37.2	23, 089	37.1	24, 082	36.1	26, 371	37.2	1.1
Expenditure	17, 301	37.4	20,005	35.7	22, 826	36.7	24, 931	37.3	27, 216	38.3	1.0
Deficit (–) / Surplus (+)	–15 851	–3.4	849	1.5	262.9	0.4	–848.7	–1.3	–844.8	–1.2	0.1
For reference: GDP, bn Rb	*66,755*		*62,218*		*55,967*		*66, 755*		*70,976*		–

Source: Rosstat; RF Ministry of Finance; IEP's calculations.

Over the course of the year 2014, the volume of federal budget revenue and expenditure increased by approximately the same amount: their growth in relative terms on 2013 amounted to 0.9 pp. of GDP. Federal budget deficit in 2014 remained at its 2013 level of 0.5% of GDP. According to preliminary estimates, the federal budget was expected to be executed with a surplus of approximately 0.4% of GDP. However, towards the year's end the government made the decision of a 1-trillion ruble recapitalization of the banking system (for further detail concerning this operation, see the sections on the budgetary system's expenditures and the RF government debt later in the text). The launch of this measure resulted in a 'technical' deficit in the year-end federal budget for 2014 (in view of the respective increase in the amount of expenditure by Rb 1 trillion).

In accordance with the initial budget targets stipulated in the Federal Law 'On the Federal Budget for 2014 and Planning Period 2015 and 2016', the amount of federal budget revenue was to be reduced by 1 pp. of GDP, with a simultaneous cut in expenditure by 1 pp. of GDP being planned for the year 2014. The approval of this cut in budget expenditure was effectuated in compliance with the budget rule whereby the budget deficit should be capped at 1% of GDP above the amount of revenue, provided that the price of oil stayed at its basic level.

Throughout the course of 2014, the discussion was underway as to the feasibility of softening the budget rule, to allow for the possibility to spend the surplus oil and gas revenues. Besides, that year saw the fundamental decision to the effect that part of the National Welfare Fund (NWF) should be spent on the infrastructure projects designed to boost economic growth. However, there remain certain issues relating to the choice of most efficient procedures for selecting such projects and assessing their real long-term effects on economic growth.

In late May 2014, the RF submitted to the State Duma a draft law whereby an adjustment of the main parameters of the federal budget for 2014 was envisaged.[1] Thus, in particular, the planned volume of GDP was to be reduced from Rb 73,315bn to Rb 71,493bn. At the same time, the increasing amount of oil and gas revenues produced by the relatively high prices of oil in early 2014 (over January–May 2014, oil prices never dropped below $ 106.7 per barrel) resulted in an upward adjustment of federal budget revenue from 18.5% of GDP to 19.9% of GDP. However, as early as July, the prices of oil went down to $ 95.6 per barrel, thus also bringing down the amount of budget revenue. The volume of federal budget expenditure was not revised, but due to the altered GDP index, the volume of expenditure amounted to 19.5% of GDP. As a result of these adjustments to budget parameters, the initially planned deficit gave way to a surplus of 0.4% of GDP. However, as noted earlier, after the issuance of new OFZ bonds this surplus once again gave way to a 'technical deficit'.

The Reserve Fund in 2014 increased by 72.9% to Rb 4,945.5bn, an equivalent of $ 87.9bn; the National Welfare Fund – by 51.3% to Rb 4,388.1bn, or $ 78bn. Such an impressive growth of Russia's sovereign funds can largely be explained by the downward movement of the national currency's foreign exchange rate, which had been observed since the autumn of 2014. As a result of foreign exchange rate adjustments over the period from 1 January through 31 December 2014, the growth in value of the Reserve Fund residuals denominated in foreign currencies, kept on its accounts with the Bank of Russia, amounted to Rb 1.9 trillion, and that of the NWF residuals – to Rb 1.5 trillion.

The consolidated budget revenue of RF subjects increased by 0.3% of GDP. At the same time, in early 2014 this index somewhat declined due to interbudgetary transfers. Thus, in particular, in January 2014, the amount of regional budget revenue shrank not only as a result of lower gratis receipts from other budgets of the RF budgetary system – by 0.7 pp. of GDP on January 2013, but also due to the back transfer, in the amount of Rb 187bn, of the residual amounts of subsidies, subventions and other targeted interbudgetary transfers received over the past years by the consolidated budgets of RF regions; later on, towards the end of 2014, this index shrank to Rb 74bn. From this fact it follows that, as far as the procedure of allocation of targeted interbudgetary transfers is concerned, the system of interbudgetary relations between the federal center and regions is still less than perfect. The volume of expenditure in the consolidated budget of RF subjects remained at its 2013 level of 13.2% of GDP. The consolidated budget deficit of RF subjects in 2014 shrank by 0.4 pp. of GDP – to 0.6% of GDP[2].

2.2.2. Analysis of the Receipts of Main Taxes in the Federal Budgetary System

In 2014, the amount of tax burden shouldered by Russia's economy rose on 2013 by 0.4 pp. of GDP; however when taken in real terms, the amount of tax-generated revenues

[1] Federal Law of 28 June 2014, No 201-FZ 'On Introducing Alterations to the Federal Law "On the Federal Budget for 2014 and Planning Period 2015 and 2016"'.
[2] For further detail on the situation in the sphere of regional budgets, see the corresponding section.

shrank by 2.7%[1] (see *Table 7*). This fact points to the increasing risks associated with the revenue sustainability of Russia's budgetary system. As for revenue growth in terms of share of GDP, this index reflects only the varying elasticity of revenue components with regard to the growth rate of GDP.

Table 7

Receipts of the Main Taxes in the General Government Budget of the Russian Federation in 2008–2014, % of GDP

	2008	2009	2010	2011	2012	2013	2014	Change in 2014 on 2013	
								pp. of GDP	in 2013 prices, %
Tax burden index	35.7	30.8	31.1	34.9	34.6	34.3	34.7	0.4	–2.7
Profits tax	6.1	3.3	3.8	4.1	3.8	3.1	3.3	0.2	2.9
Personal income tax	4	4.3	3.9	3.6	3.7	3.8	3.8	0.0	–3.0
SST / insurance contributions *	5.1	5.5	4.9	6.3	6.3	6.7	6.7	0.0	–3.8
VAT	5.1	5.3	5.4	5.8	5.7	5.3	5.6	0.2	–0.1
Excises	0.8	0.9	1.0	1.2	1.4	1.5	1.5	0.0	–5.3
Tax on mineral resources extraction	4.1	2.7	3.0	3.7	4.0	3.9	4.1	0.2	1.2
Customs duties and levies	8.6	6.8	6.8	8.3	8.0	7.6	7.7	0.1	–2.5

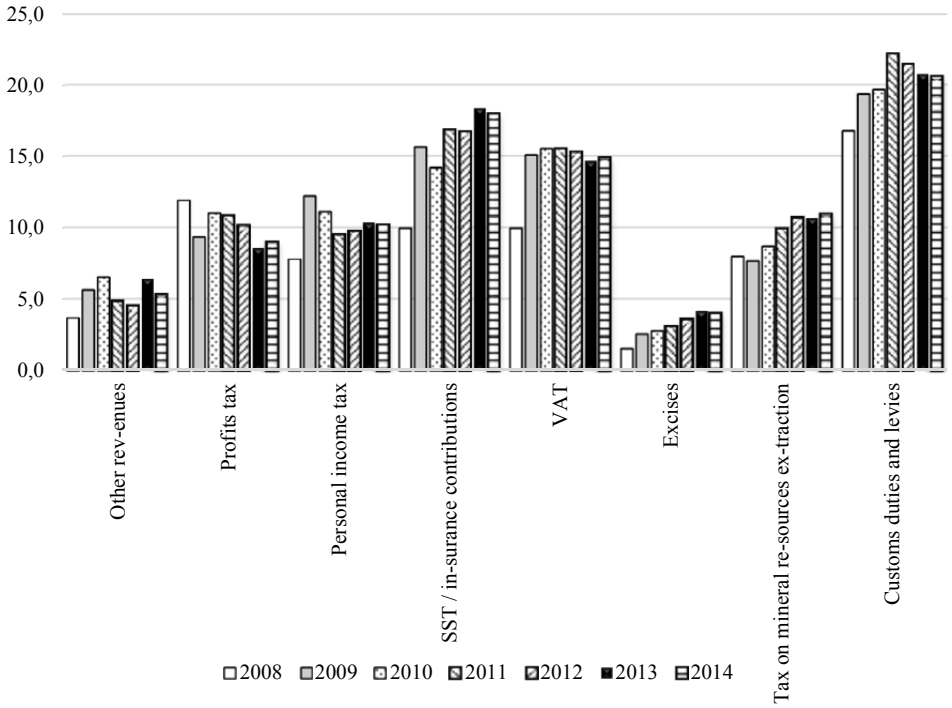
* from 2010 onwards, single social tax (SST) is transformed into insurance contributions, to be transferred directly to off-budget funds.
Source: RF Ministry of Finance; *Rosstat*; IEP's calculations.

From the general government budget revenue statistics presented in the table it follows that, in 2014, the tax burden in terms of percentage points of GDP increased on 2013 as follows: profits tax – 3.3 pp. vs. 3.1 pp.; VAT – 5.6 pp. vs. 5.3 pp.; tax on mineral resources extraction – 4.1 pp. vs. 3.9 pp.; and customs duties and levies – 7.7 pp. vs. 7.6 pp. of respectively. As for the other taxes, their burden in terms of share in GDP remained unchanged. However, when the movement of tax receipts is reviewed in real terms (with an adjustment by CPI), it becomes clear that all the relevant tax receipts declined in real terms, with the exception of tax on mineral resources extraction (growth by 1.2%) and profits tax (growth by 2.9%).

The structure of tax-generated revenues in the general government budget is shown in *Fig. 13*. In this connection, two circumstances are noteworthy. Firstly, personal income tax (PIT) retained its priority over profits tax as a major revenue source for the general government budget. Secondly, excise receipts, which since 2009 had been demonstrating a steady growth due to the indexation of their rates ahead of the inflation rate, in 2014 dropped in terms of share in GDP, while in real terms they were leaders in decline among all the other types of receipts (decline by 5.3%).

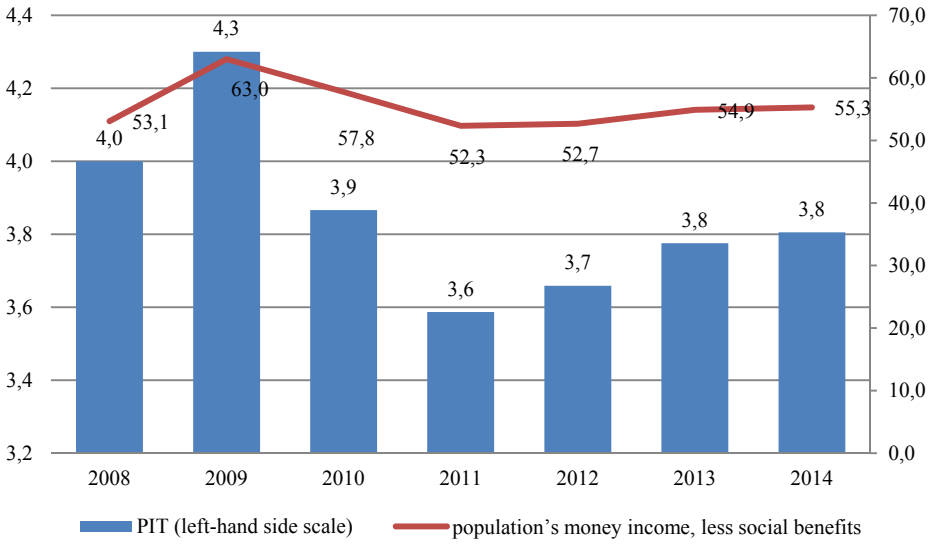
The receipts of PIT, as well as the index of their 'macro-base' – money income of the population less social benefits – in 2014 remained almost at the same level as in the previous year (see *Fig. 14*).

[1] In 2013 prices, adjusted by CPI.



Source: RF Federal Treasury.

Fig. 13. The Share of Tax Receipts in Aggregate General Government Budget Revenue in 2008–2014, as %



Source: RF Federal Tax Service; *Rosstat*.

Fig. 14. The Comparative Movement of PIT Receipts and Money Income of the Population less Social Benefits in 2008–2014, as % of GDP

The amount of oil and gas revenues in the federal budget in 2014 returned to their previous level of 10.6 pp. of GDP (see *Table 8)*. Their first component – tax on mineral resources extraction levied on hydrocarbons increased by 0.2 pp. of GDP. A sharp drop of price for oil

occurred in Q4 2014, as a result of which the average supply price for crude oil amounted to $ 93.9 (according to customs statistics). The negative effect of the decline of the average price by nearly $ 14 was compensated for by the decline of the ruble-to-USD exchange rate from Rb 31.2 in 2013 to Rb 38.6 in 2014[1].

Table 8

The Receipts of Oil and Gas Revenue and Tax on Mineral Resources Extraction in 2008–2014

	2008	2009	2010	2011	2012	2013	2014
Oil and gas revenues, as % of GDP	10.9	7.9	8.4	10.3	10.6	10.0	10.6
Tax on mineral resources extraction, as % of GDP	4.1	2.7	3.0	3.7	4.0	3.9	4.1
Oil extraction, including gas condensate, m tons	488	494	506	512	519	522	525
Average annual price of Urals, USD per barrel[2]	90.7	60.7	76.2	107.3	109.7	108.4	93.9
RF Central Bank's official average annual exchange rate of USD, Rb/USD	24.78	31.90	30.37	29.31	31.05	31.20	38.6

Source: Rosstat; RF Central Bank; RF Federal Tax Service; IEP's calculations.

The movement of the second component – the export customs duties on hydrocarbons – played an even greater role in pushing up the index of oil and gas revenues in terms of share in GDP (approximately 6.5% of GDP in 2014 vs. 6.1% in 2013). Importantly, growth of receipts occurred due to the increasing exports of crude oil and petroleum products (see *Table 9*). The plummeting foreign exchange rate of the ruble obliterated not only the effect of declining oil prices, but also the shrinkage of crude oil export by 5.6% in terms of physical volume (according to data released by Rosstat).

Table 9

The Receipts of Customs Duties in 2008–2014, % of GDP

	2008	2009	2010	2011	2012	2013	2014
Exporte duties on energy carriers	6.8	5.2	5.3	6.6	6.6	6.1	6.5
- on crude oil	4.3	3.1	3.6	4.2	4.0	3.5	3.7
- on natural gas	1.2	1.1	0.4	0.7	0.7	0.7	0.7
- on petroleum products	1.3	1.0	1.3	1.7	1.8	1.8	2.1
Customs duties and levies, total	**8.6**	**6.8**	**7.0**	**8.4**	**8.0**	**7.6**	**7.7**

Source: Rosstat; RF Federal Treasury; IEP's calculations.

Value added tax (VAT) is the only significant component of budget receipts that remained practically unchanged in real terms (-0.1%), and even somewhat increased in terms of share in GDP (see *Table 10)*. VAT receipts were pushed up by the increased receipts of VAT on goods sold in RF territory ('domestic VAT'), while the corresponding index for goods imported into RF territory demonstrated no noticeable change in terms of share in GDP. It should be noted that, for Russia, a typical phenomenon has always been the higher amount of receipts of VAT on imports by comparison with VAT on domestic products. However, the data for recent years point to the emergence of a new downward trend displayed by the effective rate of VAT on imported goods.

[1] The rate of tax on mineral resources extraction levied on oil includes the coefficient of the movement of world oil prices (Ct) pegged to the average USD exchange rate for a given tax period.
[2] Ratio of crude oil exports in money terms to crude oil exports in terms of physical volume (according to data released by the Federal Customs Service).

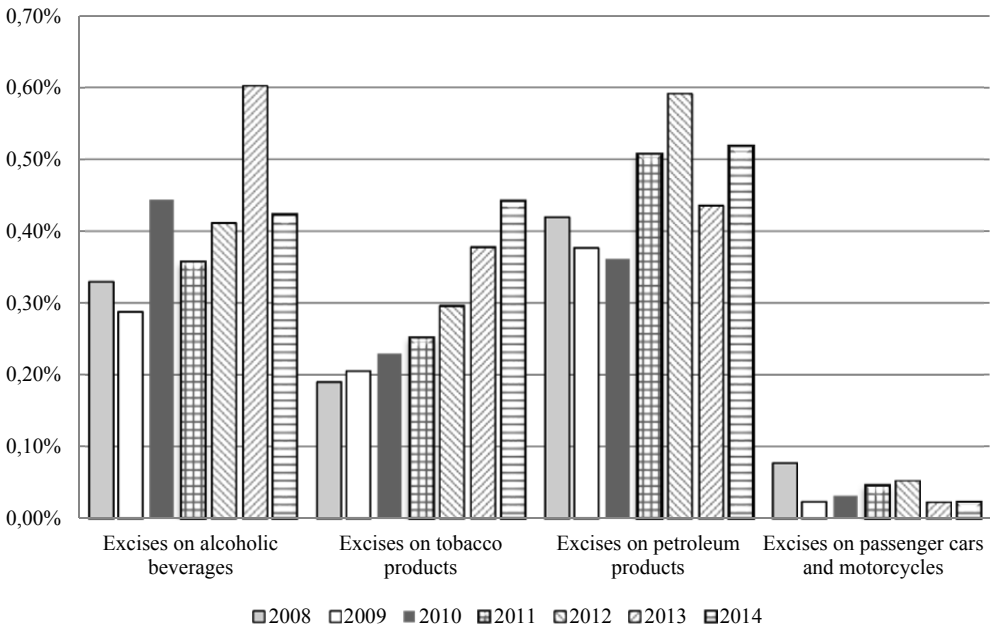
Table 10

The Movement of End-use Consumption, Imports and VAT Receipts in the RF Budgetary System in 2008–2014, % of GDP

	2008	2009	2010	2011	2012	2013	2014
VAT, total	5.2	5.3	5.4	5.8	5.7	5.3	5.6
VAT on goods sold in RF territory	2.4	3.0	2.9	3.1	3.0	2.8	3.1
VAT on goods imported into RF territory	2.8	2.3	2.5	2.7	2.7	2.5	2.5
Effective rate of VAT[1], %	8.4	7.6	8.2	9.3	8.3	7.4	7.5
Effective rate of VAT on goods sold in RF territory[2]	5.4	5.5	5.8	6.9	6.4	5.7	6.1
Effective rate of VAT on goods imported into RF territory[3]	12.5	11.0	11.9	12.3	12.1	11.1	10.7
Imports*	22.1	20.5	21.1	21.9	22.4	22.7	23.0

* The share of imports in GDP was determined as the ratios of imports indices (based on *Rosstat*'s data) to GDP.
Source: Rosstat; RF Ministry of Finance; IEP's calculations.

As seen from *Fig. 15,* the year 2014 saw increasing receipts, in terms of share in GDP, of excises on tobacco and petroleum products: from 0.38% and 0.44% in 2013 to 0.44% and 0.52% in 2014 respectively. In 2014, the excises on petroleum products once again became leaders among excises. It is noteworthy that the receipts of domestic excises increased, while those of excises on imported petroleum products declined. As before, the excises on sold passenger cars and motorcycles accounted only for a negligible part of this type of budget revenue.



Source: RF Federal Treasury.

Fig. 15. The Receipts of Excises for the Period 2008–2014, by Group of Excisable Goods, as % of GDP

[1] The VAT receipts to end-use consumption ratio.
[2] The ratio of the receipts of VAT on goods sold in RF territory to end-use consumption, less imports in money terms.
[3] The ratio of the receipts of VAT on goods imported into RF territory to imports in money terms.

At the same time, the decline in the amount of receipts of excises on alcoholic beverages was so steep that the index of 'alcohol-generated' excises fell below not only that of the excises on petroleum products, but also the excises on tobacco products. In *Table 11* one can see that the consumption rates declined with regard to practically every type of alcoholic beverage. The most impressive decline was observed with regard to the retail turnover of vodka and liquors – from 133.6 to 124.7 m dal. The retail turnover of wines and cognacs also somewhat shrank, but the sales volumes of beer and sparkling wines slightly increased.

Table 11

Consumption of Alcoholic Beverages and Tobacco Products in the RF in 2008–2014, m *dal*

Product type	2008	2009	2010	2011	2012	2013	2014
vodka and liquors	177.2	166.1	157.8	156.4	153.0	133.6	124.7
wines (less champagnes and sparkling wines)[1)]	102.9	102.5	103.4	97.1	93.6	83.6	83.3
cognacs, cognac products (including brandy, calvados)	10.8	10.6	11.1	11.6	12.4	12.1	11.9
champagnes and sparkling wines	26.0	25.5	27.3	28.5	28.3	27.7	28.6
beer	1,138.2	1,024.7	1,004.0	1,011.5	1,017.5	984.2	1,001.2
Cigarettes (including with cardboard mouthpieces), bn items	393.6	398.7	382.4	395.0	391.8	384.0	362.1

[1)] Prior to 2012: 'Grape wines and fruit wines'.
Source: *Rosstat*.

2.2.3. The Expenditure of Russia's Budgetary System in 2014

The expenditure side of the RF budgetary system in 2014 amounted to 38.3% of GDP, which is 1 pp. above the corresponding index for 2013 (see *Table 12*).

Table 12

General Government Budget Expenditure in 2009–2014, % of GDP

	2009	2010	2011	2012	2013	2014	Deviation for 2014 on 2013
Expenditure, total	40.8	37.4	35.7	36.7	37.3	38.3	1.0
Nationwide issues	2.7	2.5	2.4	2.3	2.3	2.3	0.0
Government and municipal debt servicing	0.6	0.6	0.6	0.6	0.7	0.7	0.0
National defense	3.1	2.8	2.7	2.9	3.2	3.5	0.3
National security and law-enforcement activity	3.2	2.9	2.7	3.1	3.2	3.1	-0.1
National economy	7.2	5.0	5.0	5.3	4.9	6.4	1.5
Housing and utilities sector	2.6	2.3	2.1	1.7	1.6	1.4	-0.2
Environment protection	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Education	4.6	4.1	4.0	4.1	4.3	4.3	0.0
Culture, cinematography and mass media	0.8	0.8	0.7	0.7	0.7	0.7	0.0
Healthcare and sports	4.3	3.7	3.8	4.0	3.8	3.9	0.1
Social policy	11.7	12.7	11.6	11.9	12.6	11.8	-0.8

Source: RF Federal Treasury; IEP's calculations.

The amount of allocations to the majority of expenditure items for 2014 changed on 2013 by no more than 0.1-0.3 pp. of GDP. The most substantial shrinkage in the amount of expenditure occurred under the item *Social Policy* (-0.8 pp. of GDP). This happened first of all due to the redistribution of accumulated pension contributions to the funded component of the pension system in favor of the current retirees' pensions, so as to bring down the amount of transfers from the federal budget to the Pension Fund. On the one hand, this resulted in more economical spending of federal budget funds, while on the other, the introduction of this particular mechanism further undermined the population's already feeble trust in pension reform

and deprived the financial system of the inflow of funds from one of the major sources of 'long money'.

At the same time, government spending under the item *National Economy* increased at a record rate to 6.4% of GDP (+1.5 pp. of GDP). A higher value of 7.2% of GDP had been observed only back in 2009; it was associated with the implementation of anti-crisis measures designed to support the national economy. The significant growth in expenditure under the item *National Economy* observed in 2014 was also associated with the launch of a new anti-recession package in support of the financial sector of the economy. Thus, in December 2014, a total of Rb 1 trillion was transferred from the federal budget as a property contribution to the Deposit Insurance Agency (DIA), in the form of a new issue of OFZ bonds. With this contribution, the DIA was granted the right to recapitalize the banks considered to be systemically important — with equity to the value of no less than Rb 100bn. If this transfer had not taken place, the amount of expenditure allocated to *National Economy* in 2014 would have amounted to 5% of GDP.

The budget allocations to *National Defense* continued to be on the rise, demonstrating growth by 0.3 pp. of GDP on 2013. The allocations to defense had been increasing consistently since 2012 (when their amount increased from 2.7% to 2.9% of GDP), with a subsequent surge to 3.5% of GDP in 2014. The boost to army expenditures is associated with the launch of the government armaments program for the period 2011-2020, as well as with the introduction of a new system of money allowance for military servicemen and army retiree pensions.

The amount of expenditure under the item *Healthcare and Sports* in the general government budget for 2014 increased by 0.1% of GDP on 2013 due to the allocation of funding through off-budget funds (compulsory medical insurance system CMI)). At the same time, the amount of federal budget expenditure and the budget expenditure of RF subjects remained at its 2013 level. For many years already, gradual reform has been underway in the healthcare funding system that included, among other things, the switchover to a 'one-channel' allocation of CMI funds.

On the whole, in recent years there has emerged a distinct trend towards increasing the amount of government spending obligations, which takes place notwithstanding the existing constraints on the growth of resources (the revenue part) of the budgetary system. In 2012, the budget expenditure index began to increase, moving from 35.7% of GDP in 2011 to 38.3% of GDP in 2014. At the same time, the amount of the budgetary system's revenue over the same period fluctuated around 37% of GDP (with a marked drop, in 2013, to 36.1% of GDP). It should be noted however, that the changes occurring in the structure of expenditures are rather controversial. On the one hand, the amount of expenditure allocated to education was increased over the period 2013-2014, primarily in compliance with the May 2012 Presidential Executive Orders, while the expenditures on healthcare and sports in terms of share in GDP were reduced. In other words, on the whole the 'productive expenditures' (that is, those intended to boost long-term economic growth) and targeted investments in human capital rose on 2012 by only 0.1 pp. of GDP. Over the same period, the amount of expenditure allocated to defense ('nonproductive expenditures' in excess of the necessary minimum) increased by 0.6 pp. of GDP (on 2012). So, the structure of the budgetary system's expenditure is becoming less effective from the point of view of long-term socioeconomic development.

2.2.4. Government Debt of the Russian Federation in 2014

As of 1 January 2015, the volume of Russia's government domestic debt amounted to Rb 7241bn, or approximately to 10% of GDP, having increased over the previous year by Rb 1519bn. The volume of government domestic debt increased in the main over the month of December (+Rb 1 482bn), due to the RF Government's decision to recapitalize Russian banks by issuing a federal bond issue to the value of Rb 1 trillion (federal loan bonds with variable coupon rate – OFZ-PK). Over the same period, the volume of government guarantees increased by Rb 433bn. As of 1 January 2015, the share of government guarantees in the total government domestic debt volume amounted to 24.4%.

The year-end results of 2014 for the first time demonstrated a shrinkage in the volume of market debt in nominal terms, represented by exchange-traded federal loan bonds with fixed coupon rate (OFZ-PD), federal loan bonds with debt amortization (OFZ-AD), and the new market instrument launched in December – zero coupon federal loan bonds (BOFZ). In face of the deteriorating international political situation, mounting pressure produced by the economic sanctions, and declining economic growth rate, only 20 out of the 48 auctions on placement of OFZ bonds planned for 2014 were actually held. The aggregate face value volume of placed bonds amounted to Rb 158bn, or 21% of the planned bond offer volume (see *Table 13*).

Table 13

The Final Results of Auctions on Placement of OFZ Bonds

bn Rb	Q1 2014	Q2 2014	Q3 2014	Q4 2014	2014
1. Aggregate planned OFZ bond offer volume	275	150	140	200	765
2. OFZ bond offer volume at auctions that actually took place	90	90	45	40	265
3. OFZ bond placement volume, face value	38	65	40	16	158
4. Bond placement coefficient, as % of bond offer at auctions that actually took place (3/2)	42	72	88	40	60
5. Bond placement coefficient, as % of planned aggregate offer volume (3/1)	14	43	28	8	21

Source: RF Ministry of Finance.

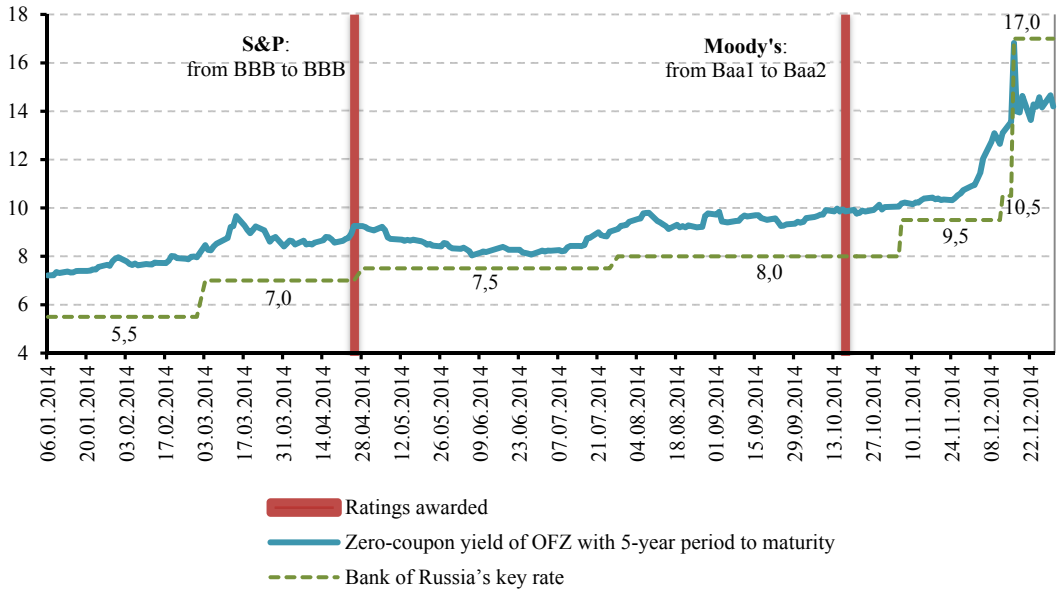
The proceeds from the placement of OFZ bonds by the RF Ministry of Finance in 2014 amounted to Rb 146bn, or approximately to 93% of the placed volume of bonds at face value. It should be pointed out that, in Q4, the placement was less successful due to the plummeting bond prices – the proceeds amounted to only 85.5% of the face value of bonds vs. 96.4% in Q1.[1]

As shown by the year-end results of 2014, the RF Ministry of Finance had not managed to properly refinance market debt[2]: the net sum yielded by OFZ-PD, OFZ-AD and BOFZ amounted to Rb 60bn[3], and if the cost of their servicing is added up – to Rb 318bn.

In 2014, two international rating agencies (Standard&Poor's and Moody's) downgraded Russia's sovereign credit ratings one notch from BBB to BBB- (25 April 2014) and from Baa1 to Baa2 (17 October 2014) respectively. The new rating assigned to Russia by S&P came close to speculative status (BB+); Moody's rating still stood one notch above the non-investment grade (Baa3). The knocking-down of Russia's sovereign rating came as no surprise for market participants – the zero-coupon yield curve of OFZ showed no 'jerks and starts' on the rating reduction dates (see *Fig. 16*). The movement of yields on government bonds was determined by

[1] For reference: in Q2 and Q3 2014 – 92.3% and 92.5% respectively.
[2] Less the new OFZ-PK issue to the value of Rb 1 trillion for recapitalization of Russian banks.
[3] Net borrowing is the amount of attracted market loans less the amount of market debt redemption.

the worsening international political situation as a result of sanctions levied against Russia, and Russia's retaliatory measures (the introduction of an embargo on certain imported foodstuffs), as well as by the rising recession trends in the Russian economy.



Source: data released by the Bank of Russia; Standard&Poor's; Moody's.

Fig. 16. The Movement of OFZ Yields in 2014

Thus, if the tense economic and international political situation should persist throughout the course of 2015, the federal budget may be weighed down with an additional burden due to the impossibility to refinance government debt in full through the issuance of new bond loans on the domestic market (the redemption of government securities in 2015 should amount to approximately Rb 627bn[1]).

As of 1 January 2015, Russia's foreign debt amounted to $ 54.4bn, having shrunk over the past year by $ 1.5bn. However, if taken in terms of the ruble's foreign exchange rate (which markedly declined in 2014), the amount of foreign debt rose by more than 1 trillion Rb: from Rb 1.8 trillion (as estimated on the basis of the Bank of Russia's exchange rate as of 1 January 2014) to Rb 3.1 trillion (as estimated on the basis of the Bank of Russia's exchange rate as of 1 January 2015). The reduction in the amount of foreign debt denominated in USD was noted with regard to all items except government guarantees, which demonstrated growth by nearly $ 700bn. The absence, in 2014, of foreign loans in the form of Eurobonds can be explained by the tricky international politicaloй situation and the reassessment, by foreign investors, of the risks associated with investing in Russia's government bonds. The cost of servicing and redemption of Eurobonds in 2014 amounted to $ 1.4bn. On the whole, it can be concluded that foreign loans cannot become a major source of funding to cover federal budget deficit in 2015.

[1] Based on data released by the RF Ministry of Finance. The debt redemption volume is calculated as of 1 February 2015.

2.2.5. The Prospects for Medium-term Budget Policy

Thanks to the relatively high oil prices in the first half year of 2014 and the ruble's depreciation over the second half year, it became possible to avoid the shrinkage of oil and gas revenues, which had been largely determining the availability of resources in the budgetary system. However, in the medium-term perspective the decline of oil prices may acquire a critical momentum. In absence of opportunities for attracting foreign loans, and given the limited domestic resources available for borrowing, the Reserve Fund may be fully spent, by way of covering federal budget deficit, within the next two years. In view of these grim prospects, it will be necessary to exercise an even greater caution when making decisions concerning the launch of 'mega-projects' funded from the NWF, to prevent rapid evaporation of Russia's sovereign funds.

Under the conditions of limited economic growth sources, both domestic and foreign ones, it will be necessary to boost budget spending efficiency. Part of budget expenditure could be redistributed in favor of items representing investment in human capital (education, healthcare) or fixed assets (infrastructure), while correspondingly reducing the allocations to the upkeep of the government apparatus and the power structures (the so-called *budget maneuver*). Another important goal is to boost the efficiency of 'anti-recession' budget expenditures. Thus, for example, it may be feasible to create incentives for the recapitalized banks to use their resources as corporate and individual loans, and not as a source of funding for speculations in the foreign exchange or stock market.

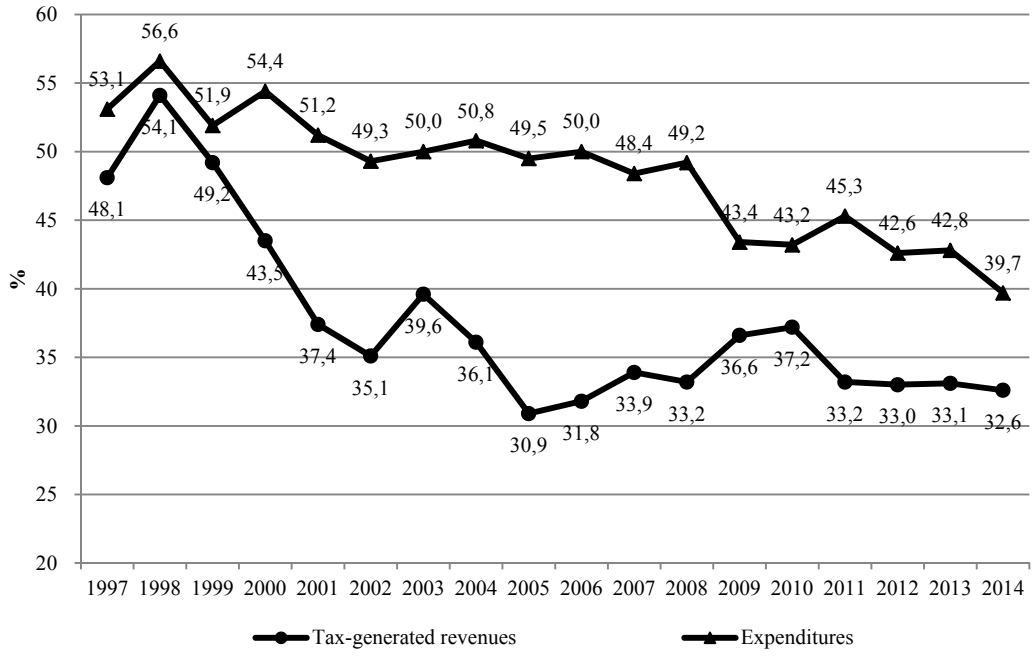
Besides, it is necessary to take into consideration the fact that the federal budget is 'the budget of last resort', and that the problems arising throughout the budgetary system will, sooner or later, but inevitably be translated into an additional burden shifted onto it. This effect can be further enhanced by the significant shortcomings of Russia's federalism model where, in spite of the formal division of powers between the Federation and regions, the federal government is the principal decision-maker on issues that directly influence the actual volume of subnational budget expenditure (one example being the May 2012 Presidential Executive Orders). The attempt to solve the problems faced by subnational budgets by applying the instrument of budget loans can only delay the ultimate solution – the achievement of a well-balanced budget status. In the medium term, this policy will either necessitate the issuance of new loans in order to redeem the old ones, or make inevitable the writing-off (or restructuring) of part of outstanding debt to the federal budget. Both scenarios imply a very negative course of events, because the fiscal incentives for regional administrations will become even more distorted, and the issues relating to the soft budget constraints imposed on subnational authorities will become still more complicated.

Another important precondition for maintaining well-balanced federal budget over a long-term period is the solution to the pension reform issue, including the issue of raising the retirement age. Instead of putting forth strategic initiatives in this sphere, the government has chosen to 'freeze' the accumulated insurance contributions to the funded pension component for a second year in a row (2014 and 2015), thus increasing the risk that this direction of pension reform may ultimately result in a failure. In the long run, this will inevitably become translated into an increasing burden on the budgetary system, which will become responsible for providing funding to the solidarity (distributive) pension component under the conditions of population ageing.

2.3. Interbudgetary Relations and Subnational Finance

2.3.1. Analysis of the Main Parameters of the Consolidated Budget of Subjects of the Russian Federation

The main trends observable in the relations between different tiers of government authority are reflected by the structure of revenue and expenditure in the consolidated budget of the Russian Federation. *Fig. 17* presents data on the movement of the relative shares of tax-generated revenues and expenditures of subjects of the Russian Federation in Russia's consolidated budget.



Note. No calculations were done for the Crimean Federal District's regions.
Source: RF Federal Treasury; authors' calculations.

Fig. 17. The Share of Subnational Tax-generated Revenues and Expenditures in Russia's Consolidated Budget in 1997–2014

The year 2014 saw a slight shrinkage in the share of tax-generated revenues received by subnational budgets in the consolidated budget of the Russian Federation - from 33.1% in 2013 to 32.6% in 2014. Over the same period, the share of expenditure demonstrated a more notable decline - from 42.8 to 39.7% (less the amount of expenditure for the Crimean Federal District). The shrinkage of the share of subnational budget expenditure in the total consolidated budget expenditure of the Russian Federation can largely be explained by the accelerated growth of federal budget expenditure (by 11.4% in nominal terms). The leaders in growth in the federal budget were the expenditures earmarked for national defense and national economy. Over the same period, the amount of subnational budget expenditure increased by only 4.6% (less the amount of expenditure for the Crimean Federal District).

Now let us take a closer look at the revenue side of subnational budgets. The movement of the main components of the consolidated budget revenue of subjects of the Russian Federation is shown in *Table 14.*

Table 14

Consolidated Budget Expenditure of Subjects of the Russian Federation in 2008–2014

	Volume of revenue (in nominal terms), bn Rb							Growth in real terms, %				
	2008	2009	2010	2011	2012	2013	2014	2009/ 2008	2010/ 2009	2014/ 2008	2014/ 2009	2014/ 2013
Revenue, total	**6,196**	**5,924**	**6,537**	**7,644**	**8,064**	**8,165**	**8,743**	**-12.1**	**1.4**	**-11.2**	**1.1**	**-3.9**
Tax-generated and non-tax revenues	**4,912**	**4,243**	**4,980**	**5,827**	**6,385**	**6,588**	**7,141**	**-20.6**	**7.9**	**-8.5**	**15.3**	**-2.7**
including tax-generated revenues:	*4,384*	*3,792*	*4,520*	*5,273*	*5,800*	*5,967*	*6,461*	*-20.5*	*9.6*	*-7.2*	*16.7*	*-2.8*
profits tax	1,752	1,069	1,520	1,928	1,980	1,720	1,962	-43.9	30.6	-29.5	25.7	2.4
PIT	1,666	1,665	1,790	1,996	2,261	2,499	2,679	-8.1	-1.2	1.3	10.2	-3.8
taxes on aggregate incomes	161	152	179	215	272	293	314	-13.6	8.5	22.6	42.0	-3.7
taxes on property	493	570	628	678	785	901	955	6.1	1.4	21.9	14.9	-4.8
excises	189	246	327	372	442	491	479	19.2	22.5	59.2	33.6	-12.5
Transfers	**1,131**	**1,486**	**1,398**	**1,644**	**1,624**	**1,515**	**1,545**	**20.7**	**-13.5**	**-14.0**	**-28.8**	**-8.5**
Other revenues	**153**	**195**	**159**	**173**	**56**	**62**	**57**	**17.4**	**-25.1**	**-76.3**	**-79.8**	**-16.4**

Note. No calculations were done for the Crimean Federal District's regions.
Source: RF Federal Treasury; authors' calculations.

As can be seen from the data presented in *Table 14*, in 2014 the amount consolidated budget revenue of subjects of the Russian Federation in 2014 on the whole declined on 2013 - by 3.9% in real terms. The total amount of revenue in real terms in 2014 shrank due to the declining rate of economico growth, and also because the rate of growth (in nominal terms) of the main revenue sources was lagging behind the inflation rate[1]. Among all the main sources of revenue in 2014, only the profits tax receipts in real terms displayed a positive rate of growth of 2.4% on the previous year. At the same time, another main source of tax-generated revenues – PIT – moved in the opposite direction, declining in 2014 by 3.8% in real terms. As a result, the structure of tax-generated revenues also changed: the share of profits tax in the total volume of tax-generated revenues increased from 28.8 to 30.2%, while the share of PIT somewhat declined - from 41.9% to 41.3%. Growth of the profits tax receipts can largely be explained by the low base effect of 2013, while even when taken in nominal terms, the revenue volume is below its 2012 level (Rb 1,962bn vs. Rb 1,980bn respectively). With regard to PIT it should be noted that, in 2014, for the first time over several years, the population's real disposable income declined (by 1% on 2013), which was the main reason why the receipts of PIT in 2014 dropped for the first time since 2011 (in real terms).

We can also note the uneven spread of the receipts of main tax-generated revenues over the course of each year. Thus, the monthly amount of profits tax receipts in October and November 2014 shrank, in nominal terms, by 22.8% and 26.7% respectively on the corresponding periods of 2013; a decline of this index was also observed in January 2014 (-12.7%). In November 2014, a sharp slowdown in the flow of receipts from another major revenue source (PIT). In December the revenue growth index more or less returned to its usual value, which happened due in the main to the profits tax receipts. So, if the situation in the national econo-

[1] Thus, while in 2010 Russia's GDP growth rate amounted to 4.5%, and in 2011 – to 4.3%, in 2012 it dropped to 3.4%, in 2013 to 1.3%, and then in 2014 to 0.6%. At the same time, in 2014 the inflation rate amounted to 11.4%, which is its record high for the period under consideration (2010–2014).

my should deteriorate any further, the vector of the main tax receipts (PIT and profits tax) will be persistently negative; however, these taxes largely determine the level of budget revenue in those regions that receive no dotations or only a small amount of dotations (whereas the situation in those RF subjects that are highly dependent on dotationsis more strongly dependent on the movement of transfers from the federal budget).

The downward movement of total consolidated budget revenue of RF subjects was also influenced by the movement of receipts of excises on petroleum products, which happened in part due to the introduction of the Customs Union's new technical regulation (on the whole, the amount of excise receipts shrank by 12.5% in real terms).

In 2014, the amount of non-tax revenues remained practically at the same level as over the previous year (a decline in real terms by 1.7%). However, in spite of this decline, the share of that source of revenue in the overall structure of consolidated budget revenue of RF subjects slightly increased – from 7.6% to 7.8%. It much be emphasized in this connection that, while the amount of consolidated budget revenue proper (tax-generated and non-tax) was on the decline, the amount of transfers in 2014 likewise declined, and at a faster rate – by 8.5% in real terms. The movement of transfers from the federal budget is dealt with in more detail in Section 2.3.2.

Here we are going to view more closely the situation with regard to receipts of tax-generated and non-tax revenues in various subjects of the Russian Federation (*Table 15*).

Table 15

Russia's Regions Grouped in Accordance with the Movement of Major Tax-generated and Non-tax Revenues in the Consolidated Budget of Subjects of the Russian Federation

	Movement of major tax-generated and non-tax revenues in consolidated budgets of RF subjects					
	growth by more than 25%	growth between 10% and 25%	growth by less than 10%	decline by less than 10%	decline between 10% and 25%	decline by more than 25%
in nominal terms						
Tax-generated and non-tax revenues, total	5	9	62	5	1	0
Profits tax	19	15	20	16	11	1
PIT	0	6	74	2	0	0
in real terms						
Tax-generated and non-tax revenues, total	1	5	5	63	8	0
Profits tax	9	12	12	20	25	4
PIT	0	0	2	78	2	0

Note. 1) Arkhangelsk Oblast and Nenets Autonomous Okrug are treated for the purpose of our calculations as one and the same subject of the Russian Federation. 2) No calculations were done for the Crimean Federal District's regions.
Source: RF Federal Treasury; authors' calculations.

As seen from the data presented above, the majority of Russian regions continued to experience difficulties with regard to the availability of subnational budget revenue proper (just as they did in 2013[1]). Thus, in 2014, a decline of subnational budget revenue proper in real terms was observed in 71 regions, and in 63 of these the revenue decline was within 10%. In spite of the general rise in the profits tax receipts on a national scale, in 4 regions the revenues gener-

[1] In 2013, 51 subjects of the Russian Federation experienced a decline in the amount of their revenue proper in real terms. Over the same period the amount of profits tax receipts in real terms dropped by more than 25% in 23 regions. Meanwhile, the receipts of PIT increased practically in every region.

ated by this source dropped by more than 25% in real terms: in Belgorod Oblast (-25.9%), in Kaluga Oblast (-27.7%), in the Republic of Karelia (-25%), and in the Republic of Buryatia (-39.1%). Overall, the amount of profits tax receipts in real terms declined in 49 regions. In the other 33 regions this index displayed growth in real terms, and in 9 RF subjects it increased by more than 25%: in Lipetsk Oblast (28.2%), in Kaliningrad Oblast (57%), in Leningrad Oblast (53.9%), in the Republic of Mordovia (201.9%), in Tyumen Oblast (39,4%), in the Khanty-Mansi Autonomous Okrug (61.2%), in the Republic of Sakha (Yakutia) (42.3%), in Sakhalin Oblast (109.8%), and in Chukotka Autonomous Okrug (59.9%). Due to the increased profits tax receipts, Sakhalin Oblast managed to push up its revenue proper by more than by 25% (55.1%), which represents an exceptional case by comparison with the general situation in this country. As far as PIT receipts are concerned, the majority of regions (78) experienced a decline in the range of 10%. Growth could be observed only in Samara Oblast (0.2%) and Tambov Oblast (2%).

Now let us analyze the changes that occurred in 2014 in the expenditure side of the consolidated budget of subjects of the Russian Federation (*Table 16*). On the whole, the amount of aggregate expenditure declined on 2013 both in real terms (-4.7%), and in terms of share of GDP (by 0.12 pp. - from 13.30 to 13.18%).

Table 16

Consolidated Budget Expenditure of Subjects of the Russian Federation in 2013–2014

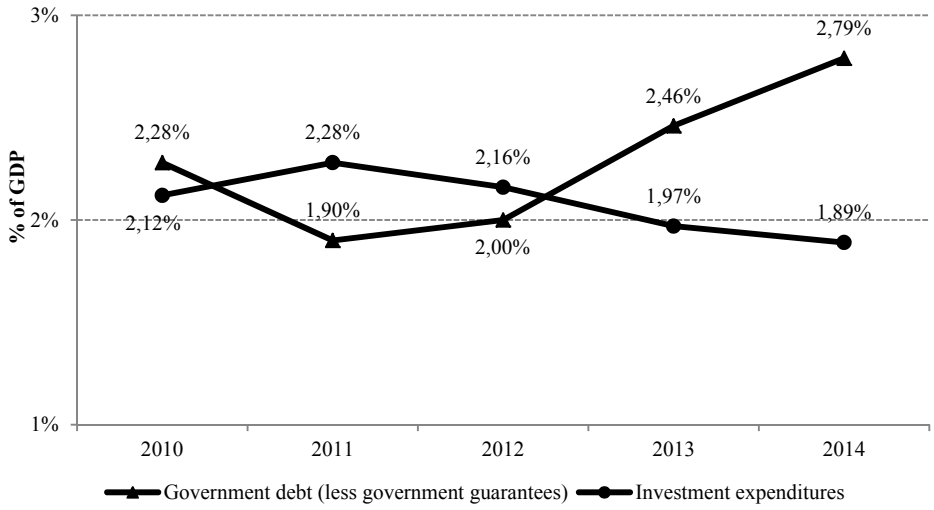
	% of total		% of GDP		Growth, %	
					in nominal terms	in real terms
	2013	2014	2013	2014		
Nationwide issues	6.2	6.2	0.82	0.81	5.8	-5.1
National security and law-enforcement activity	1.2	1.1	0.16	0.15	0.4	-9.8
National economy, including:	19.6	18.8	2.61	2.48	1.6	-8.8
Agriculture and fishery	3.4	3.0	0.45	0.39	-7.0	-16.5
Transport	3.4	4.1	0.45	0.54	29.4	16.2
Road sector (road funds)	8.3	7.6	1.10	1.00	-3.1	-13.0
Other national economy issues	2.5	2.3	0.33	0.31	1.4	-9.0
Housing and utilities sector	10.2	9.6	1.36	1.27	-0.1	-10.4
Environment protection	0.3	0.3	0.04	0.04	2.5	-8.0
Education, including:	26.5	26.2	3.53	3.45	5.1	-5.7
Pre-school education	6.7	7.0	0.90	0.92	10.3	-1.0
General education	15.0	15.0	1.99	1.97	6.1	-4.8
Secondary professional education	1.6	2.1	0.21	0.27	36.8	22.8
Other education issues	1.6	1.4	0.22	0.19	-8.0	-17.4
Culture and cinematography	3.3	3.4	0.44	0.45	10.6	-0.7
Health care	14.2	13.9	1.89	1.83	3.7	-6.9
Social policy	14.9	15.1	1.98	1.99	7.8	-3.2
Physical culture and sports	1.9	2.0	0.26	0.27	11.6	0.2
Mass media	0.5	0.5	0.06	0.06	4.7	-6.1
Government and municipal debt servicing	1.0	1.3	0.14	0.17	33.5	19.8
Expenditure – total	**100.0**	**100.0**	**13.30**	**13.18**	**6.2**	**-4.7**

Source: RF Federal Treasury; authors' calculations.

Our analysis of the movement of various expenditure items in regional budgets has led to the following observations. In 2014, the most impressive expenditure decline was demonstrated by *Housing and Utilities Sector* (-0.1% in nominal terms and -10.4% in real terms). As shown by the year-end results, the share of housing and utilities expenditures in the total amount of expenditure shrank from 10.2% to 9.6%. This happened in the main due to the decline in regions' allocations to investment. On the whole, expenditure decline in real terms was observed with regard to every budget item, with the exception of *Physical Culture and Sports* (growth by

0.2%) and *Government and Municipal Debt Servicing* (19.8%). The positive dynamics of expenditures allocated to *Physical Culture and Sports* can be explained, among other things, by the necessity to provide funding for the infrastructure projects launched in the framework of preparations for the 2018 FIFA World Cup. The amount of expenditure allocated to *Government and Municipal Debt Servicing* increased due to growth in the volume of government and municipal debt by 20.2% and 8.4% respectively (for further detail, see Section 2.3.3). First of all, the year 2014 saw an increase in the volume of regions' commercial debt (by 28.6% on the year-end index for 2013), simultaneously with the increasing share of expenditure allocated to the servicing of this relatively costly debt in the overall structure of expenditure (from 1.0 to 1.3%) and their share in GDP (by 0.03 pp. – from 0.14 to 0.17% of GDP).

On the whole, the amount of expenditures в in nominal terms rose with regard to all budget items except *Housing and Utilities Sector*. At the same time, the trajectory of by-subitem movement of expenditure was less homogenous. Thus, the amount of expenditure allocated *Agriculture and Fishery* and *Road Sector (Road Funds)* dropped not only in real terms (by 16.5% and 13.0% respectively), but also in nominal terms (by 7.0% and 3.1% respectively). The decline by 8.8% in real terms in the amount of expenditure allocated to *National Economy* was caused primarily by the shrinking investment under all the major budget items. In recent years, the amount of government investment in the regions has been displaying a stable downward trend (*Fig. 18*).



Note. Investment expenditures are understood as operations compatible with the definitions stipulated in Articles 310–330, 530 of the Classification of Operations in the State Management Sector (COSMS [*KOSGU*]).
Source: RF Federal Treasury; RF Ministry of Finance; *Rosstat*; authors' calculations.

Fig. 18. Government Debt and Investment Expenditures of Subjects of the Russian Federation in 2010–2014[1]

[1] It should be noted that reliance on data grouped in accordance with the Classification of Operations in the State Management Sector (COSMS [*KOSGU*]). is fraught with certain problems, because part of the expenditures that should be treated as investment may instead be charged to the item 'gratis transfers to state and municipal organizations' (as part of subsidies to autonomous and budget-funded organizations). However, the bulk of investment expenditures, as before, is being recorded separately.

From 2012 onwards, investment expenditures have been on the decline, and the amount of government debt in terms of share in GDP – on the rise. Thus, in the interval from 2011 through 2014, government debt increased from 1.9% to 2.8% of GDP, while investment expenditures, on the contrary, shrank from 2.4% to 1.9% of GDP. As a result, it appears that there is no connection between the level of investment expenditures and the volume of government debt, and so at least some part of newly borrowed funds is earmarked for covering running expenditures. When borrowed funds are used to solve current problems, the debt burden is thus shifted onto the next generations. A short-term decline in investment expenditures, especially when it occurs in a difficult economic situation, represents a measure traditionally applied in the management of public finance in order to boost budget sustainability. The process of public infrastructure development is usually only slightly affected by a reduced funding flow. However, cuts in investment expenditures over a long-term period may produce a grossly underdeveloped infrastructure in the long run, and consequently these territories can become economically backward.

Besides, it is very important also to look at the movement of the main parameters of RF subjects' consolidated budgets in terms of share of GDP (and not only consolidated budget expenditure) (*Table 17*).

Table 17

The Movement of Consolidated Budget Revenue and Expenditure of Subjects of the Russian Federation in 2007–2014, as % of GDP

	2008	2009	2010	2011	2012	2013	2014
Revenue	**15.02**	**15.27**	**14.12**	**13.66**	**12.98**	**12.33**	**12.32**
including:							
Profits tax	4.24	2.76	3.28	3.44	3.19	2.60	2.96
PIT	4.04	4.29	3.87	3.57	3.64	3.78	4.05
Transfers from FB	2.65	3.81	2.98	2.58	2.32	2.29	2.18
Expenditure	**15.15**	**16.12**	**14.33**	**13.72**	**13.42**	**13.30**	**12.98**
Deficit (-)/ Surplus (+)	**-0.13**	**-0.85**	**-0.22**	**-0.06**	**-0.45**	**-0.97**	**-0.66**
For reference: GDP, bn Rb	41, 277	38, 807	46, 309	55, 967	62, 147	66, 194	70, 976

Note. Data for 2014, less data for the Crimean Federal District.
Source: RF Federal Treasury; *Rosstat*; authors' calculations.

Over the period 2008–2014, the highest volume of both consolidated regional budget revenue and consolidated regional budget expenditure in terms of share in GDP was observed in 2009. Growth of revenue in 2009 occurred due to the significantly increased amount of transfers from the federal center to the regions (from 2.7% of GDP in 2008 to 3.8% of GDP in 2009), while the rising volume of expenditure can be explained by the implementation of the anti-crisis program (both federal expenditure through the allocation of subsidies and subventions, and expenditure on the regional level). However, the volume of revenue in regional budgets actually *fell in 2009* on the previous year - by 12% in real terms. Thus, it would be more correct to apply as a base for comparison the data for the entire pre-crisis year-long period 2008 (the crisis-linked trends in the budgetary sphere became noticeable only in the last few months of 2008).

From the data presented in *Table 17* it follows that, while the receipts of PIT in 2014, when taken in terms of share in GDP, rose to their pre-crisis level recorded in 2008, the other two major revenue sources – profits tax and interbudgetary transfers – were significantly below their 2008 indices (this is especially true for profits tax). As for the volume of expenditure, it also became significantly lower: 13% of GDP in 2014 vs. 15.2% of GDP in 2008. However, as noted earlier, this was achieved in the main by bringing down the volume of investment

expenditures. The financial pattern visible in the consolidated regional budgets for 2014 can also be compared with the situation in 2011, when under the conditions of post-crisis economic recovery the subnational budgets were for most part drawn up without a deficit. In this case it is obvious that over the period 2012–2014 the volume of regional revenue dropped by 1.3 pp. of GDP, while expenditure could be reduced by only 0.7 pp. of GDP, which resulted in a general deficit displayed by regional budgets. At the same time, the sum of receipts from the two major source of tax-generated revenue in 2014 turned out to be the same as in 2011 – 7% of GDP (due to the increased PIT receipts and the shrinkage of the profits tax receipts in terms of share in GDP over the period under consideration). Meanwhile, the volume of interbudgetary transfers declined by 0/4 pp. of GDP, which was ultimately the principal factor responsible for the reduced total sum of revenue in terms of share in GDP received by RF subjects.

It only thanks to the decline in the volume of expenditure from 13.3% of GDP in 2013 to 13.0% of GDP in 2014 that the consolidated budget of RF subjects for 2014 could be drawn up with a lower deficit than the corresponding budget for 2013 (-0.66 vs. -0.97% of GDP respectively), while the volume of revenue remained practically at the same level as in the previous year (12.3% of GDP). In 18 regions, expenditure declined on 2013 even in nominal terms. The most impressive decline could be noted in Chukotka Autonomous Okrug (-20%), in Amur Oblast (-16.7%), in Belgorod Oblast (-9,2%), in Jewish Autonomous Oblast (-7.2%), in Smolensk Oblast (-6.4%), and in Ryazan Oblast (-5.6%). It is noteworthy that in 2014, 17 out of the 18 regions where budget expenditure declined were dependent on dotations from the federal budget. Only Tyumen Oblast, with its high budget sufficiency level, managed to bring down the volume of its expenditure on its own.[1]

Now we are going to discuss in more detail the situation with regard to execution of the consolidated budget of RF subjects (deficit/surplus) in each individual region (*Table 18*).

Table 18

The Execution (deficit/surplus) of the Consolidated Budgets of Subjects of the Russian Federation in 2008–2014

Year	Number of RF subjects where budget is executed with	
	deficit	surplus
2008	45	39
2009	62	21
2010	63	20
2011	57	26
2012	67	16
2013	78	5
2014*	74	9

* less data for the Crimean Federal District's regions.

Source: RF Federal Treasury; authors' calculations.

The data presented in *Table 18* point to the fact that the 2014 index for how well-balanced the consolidated budgets of RF subjects are has remained practically at the same level as in 2013. While in the previous year 78 regions had executed their budget with a deficit, their number in 2014 dropped to 74. It should be noted that in 2014, budget deficit was displayed by 5 RF subjects that in 2013 had had a surplus (Moscow Oblast, St. Petersburg, the Republic of Karachaevo-Cherkessia, the Republic of Chechnya, and Kamchatka Krai). At the same

[1] Besides, that particular region was able to bring down its volume of government debt by 55.6% on the corresponding index as of 1 January 2014.

time, in 3 of these 5 regions the amount of expenditure increased at a rate that was above Russia's national average (4.6% in nominal terms).[1]

On the whole it can be said that, in 2014, the situation with regard to execution of the consolidated budget of RF subjects remained rather tense. In spite of the observable decline in the volume of expenditure, the volume of revenue was such that regional budgets could not for most part become well-balanced. One of the main factors responsible for stagnation in the sphere of regional revenue over recent year was the movement of transfers allocated from the federal budget.

2.3.2. Financial Aid from the Federal Budget

In 2014, the total volume of interbudgetary transfers received by the consolidated budget of RF subjects dropped on 2013 by 3.1% in real terms (*Table 19*).

Table 19

Transfers from the Federal Budget to Subjects of the Russian Federation in 2008–2009 and 2013–2014

	2008		2009		2013		2014		Growth in 2014 on 2013, %	
	bn Rb	% of total	bn Rb	% of total	bn Rb	% of total	bn Rb	% of total	in nominal terms	in real terms
Transfers to regions, total	**1,094.7**	**100.0**	**1,480.3**	**100.0**	**1,487.9**	**100.0**	**1,607.0**	**100.0**	**8.0**	**-3.1**
Dotations	**390.4**	**35.7**	**578.3**	**39.1**	**609.1**	**40.9**	**774.7**	**48.2**	**27.2**	**14.2**
Including:										
dotations to budget sufficiency equalization	328.6	30.0	374.0	25.3	418.8	28.1	439.8	27.4	5.0	-5.7
dotations to support measures designed to ensure well-balanced budgets	46.0	4.2	191.9	13.0	177.8	12.0	334.9	20.8	88.3	69.1
Subsidies	**435.9**	**39.8**	**530.0**	**35.8**	**515.6**	**34.7**	**409.9**	**25.5**	**-20.5**	**-28.6**
Including:										
subsidies to sustain national economy's development	181.2	16.5	214.3	14.5	268.3	18.0	241.9	15.1	-9.8	-19.1
Subventions	**153.2**	**14.0**	**284.4**	**19.2**	**273.7**	**18.4**	**308.2**	**19.2**	**12.6**	**1.1**
Other interbudgetary transfers	**115.2**	**10.5**	**87.6**	**5.9**	**89.5**	**6.0**	**114.2**	**7.1**	**27.7**	**14.6**

Source: RF Federal Treasury; authors' calculations.

The trends displayed by various types of transfers had different vectors, thus altering the overall structure of financial aid. Thus, in 2014, the volumes of the following types of transfers increased on 2013: transfers in the form of dotations (growth by 14.2% in real terms); other interbudgetary transfers (hereinafter 'other IBT) – by 14.6%; and subventions - by 1.1%. At the same time, the movement of various components within each transfer category differed. In particular, the total volume of dotations increased in the main due to the higher amount of dotations earmarked for the support of measures designed to ensure well-balanced budgets (growth by 69.1%). Such a surge was caused by the expenditures allocated in the framework of the government subprogram *Support of Sustainable Budget Execution by Subjects of the Russian Federation and Local Budget Execution* (49.5% of the total sum of dotations to support measures designed to ensure well-balanced budgets (Rb 165.9bn)), as well as

[1] Less the expenditures of the Crimean Federal District's regions.

the expenditures earmarked for compensation, in part, for the increased salaries in the budget-funded sphere (35.8% (Rb 120bn)) in connection with the implementation of the RF President's Executive Order of 7 May 2012. At the same time, in 2014, the amount of dotations to budget sufficiency equalization, on the contrary, shrank by 5.7% in real terms on 2013. Meanwhile, the share of dotations in the total volume of transfers on the whole increased from 40.9% in 2013 to 48.2% in 2014. On the one hand, the higher share of non-targeted transfers in the total volume of transfers boosts the regions' ability to independently implement their socioeconomic policies. However, on the other hand, from the point of view of economics, the dotations earmarked as compensation for the increased salaries in the budget-funded sphere are more like a substitute for subsidies. Consequently, the substantially increased share of dotations coupled with a shrinking share of subsidies (from 34.7 to 25.5%) cannot be regarded as an important move towards greater financial autonomy of Russian regions. And in a more general sense the increased share of dotations designed to ensure well-balanced budgets is a negative factor, because this channel of funding distribution is far less transparent than that of dotations to budget sufficiency equalization.

Subsidies turned out to be the only type of interbudgetary transfers whose amount in 2014 declined both in nominal and in real terms (by 20.5 and 28.6% respectively). The amount of subsidies shrank primarily due to a cut in the expenditures earmarked for the support of the national economy (by 19.1%). The positive vectors displayed by subventions and other IBT (growth in real terms by 1.1% and 14.6% respectively on 2013) also contributed to changes in the overall structure of transfers. Thus, the share of subventions increased from 18.4% to 19.2%, while that of other IBT in the total volume of interbudgetary transfers increased from 6% to 7.1%.

When analyzing the process of transfer allocation by the federal center to the regions, it is essential to review the impact of federal aid from the federal budget on the differentiation of the budget revenue of subjects of the Russian Federation, and to assess its actual equalizing effect (*Table 20*).

Table 20

The Variance Coefficient of the Consolidated Regional Budget Revenue (per Capita, with Due Regard for the Budget Expenditure Index) in 2008–2014., as %

Year	Tax-generated revenues	Tax-generated revenues and dotations to budget sufficiency equalization	Tax-generated revenues, dotations, subsidies
2008	90.6	80.4	71.5
2009	78.3	66.5	54.5
2010	74.2	63.9	57.8
2011	77.8	68.4	61.6
2012	66.1	57.8	51.9
2013	63.7	55.3	48.1
2014	59.0	51.2	49.9

Note. No calculations were done for the Crimean Federal District's regions.
Source: RF Federal Treasury; RF Ministry of Finance; authors' calculations.

As can be seen from data presented in *Table 20*, the year 2014 saw a continuation of the downward trend in revenue differentiation displayed by subnational budgets. The variance coefficient of tax-generated revenue in the consolidated budget of RF subjects declined from 63.7% in 2013 to 59% in 2014. After the allocation of dotations to budget sufficiency equalization, the variance coefficient of regional budget revenue dropped to 51.2% in 2014. If we wish to adequately assess the resulting figure after the allocation of all dotations and subsi-

dies, it must be borne in mind that the instrument of dotations has become less efficient from the point of view of budget sufficiency differentiation among the regions: the relevant variance coefficient slightly increased in 2014 to 49.9% (vs. 48.1% in 2013) and so, as the values of the first two variance coefficient declined, their ratios significantly dropped.

It is important to note that, from 2010 onwards, the total volume of transfers to subnational budgets has been gradually declining (*Fig. 20*). When taken in real terms, the volume of transfers displays a downward trend. While in 2008 this index amounted to Rb 1,094.1bn, in 2014 it was Rb 1,077.4bn, and by 2017 the amount of transfers may shrink to Rb 897.6bn (in 2008 prices). In the medium-term period (from 2014 through 2017) it can be expected that three types of transfers will be on the decline: subsidies (by 28.2%), dotations (26.8%), and subventions (13.3%). Only 'other interbudgetary transfers' are expected to grow in real terms by 84.2%. The most impressive decline will happen with regard to the volume of subsidies. The consolidation and decline of the share of subsidies in the total volume of interbudgetary transfers from the federal budget alongside a simultaneous increase of the share and volume of equalizing dotations could result in an improved structure of interbudgetary transfers, greater independence of the regions in pursuing their own budgetary policies, and thus in more efficient interbudgetary relations. But the decline in the volume of targeted interbudgetary transfers is not compensated for by an increasing volume of non-targeted transfers.

If we look more carefully at the adjusted parameters in the latest law on the federal budget,[1] it can be noticed specifically with regard to the year 2015 that the planned shrinkage of the total volume of interbudgetary transfers to subjects of the Russian Federation will amount to Rb 145bn, which corresponds to 9.2% of the total amount initially allocated to the budget for 2015, and that the net growth of budget loans to regional budgets will amount to Rb 212bn, being produced by the reduced target for budget loan repayment by the regions (by Rb 52bn) and the increased volume of budget loans issued to the regions (by 160bn). As far as the reduction of the total volume of interbudgetary transfers is concerned (by Rb 145bn), dotations will account for Rb 58.7bn, subsidies – for Rb 49.75bn, subventions – for Rb 22.7bn, and other IBT – for Rb 13.86bn. As a result, the total volume of interbudgetary transfers to the regions will amount to 1.95% of GDP, which is a record low for the past 10–15 years. It is also noteworthy that the federal government has fundamentally altered some of the principles of its budgetary policy aimed at providing support to the regions during times of crisis: if back in 2009 the total volume of interbudgetary transfers to the regions increased on the previous year by 1.1% of GDP to 3.8% of GDP, in 2015, on the contrary, it can be expected that the volume of gratis financial aid provided to the regions will decline by 0.3% of GDP on the previous year. In fact, this points to a change in the general vector of the Federation's budgetary policy towards the regions, the countercyclical approach giving way to the procyclical one.

2.3.3. An Analysis of the Situation with Government and Municipal Debt

The data on the movement of the amount of government debt held by subjects of the Russian Federation and that of municipal debt over the period 2011–2014 are presented in *Table 21.* As can be seen from these data, the aggregate volume of debt in regional and munici-

[1] In accordance with the draft of Federal Law No 744090-6 'On Introducing Alterations to the Federal Law "On the Federal Budget for 2015 and Planning Period 2016 and 2017"'.

pal budgets increased significantly over the course of the year 2014. Thus, the growth of government debt held by subjects of the Russian Federation amounted to 20.2%, having increased from 2.6% to 2.9% of GDP. Similarly to the pattern observed over the past few years, the bulk of borrowing occurred only in the course of a single month (December), when the amount of debt increased by Rb 226.9bn to Rb 2,089bn (growth of 12.8% on the previous month). The amount of municipal debt over the same period increased by 10.9% (from Rb 282.4bn to Rb 313.2bn). On the whole over the course of that year, the volume of municipal debt increased by 8.4%.

Table 21

Government and Municipal Debt in the Subnational Budgets in 2011–2014.

	2011	2012		2013		2014	
	volume	volume	change	volume	change	volume	change
Total debt in regional budgets, bn Rb	1, 171.8	1, 355.0	183.2	1, 737.5	382.5	2, 089.0	351.5
Rate of growth on previous year, %	-	*15.6*		*28.2*		*20.2*	
Total debt in regional budgets, % of GDP	2.1	2.2	0.1	2.6	0.4	2.9	0.3
Total debt in municipal budgets, bn Rb	215.5	245.3	29.8	288.9	43.6	313.2	24.3
Rate of growth on previous year, %	-	*13.8*		*17.8*		*8.4*	
Total debt in municipal budgets, % of GDP	0.39	0.39	0.00	0.44	0.05	0.44	0.00

Source: RF Ministry of Finance; Rosstat; authors' calculations.

It should be noted that while previously the bulk of regional debt had been held by only 2 regions – the city of Moscow and Moscow Oblast (as of 1 January 2011 – 40.7%, and as of 1 January 2012 – 29% of aggregate regional debt), as of 1 January 2015 these two regions already accounted for only 12.7% of the aggregate debt volume (which is 2.5 pp. below the index recorded as of 1 January 2014). At the same time, over the year 2014 within this group of regions, Moscow Oblast increased the amount of its debt by 22.5% (or by Rb 19bn). However, debt growth occurred in the main due to the build-up of indebtedness against commercial loans (from Rb 38bn in 2013 to Rb 64bn in 2014). The city of Moscow, on the contrary, over the year 2014 reduced its debt volume by 57.6%.

As of the end of 2014, the leaders in borrowing (assessed by the accumulated debt volume in excess of Rb 100bn) were Moscow Oblast (Rb 161.7bn), Krasnodar Krai (Rb 136.3bn), and the city of Moscow (Rb 103.1bn).

On the whole, the fact of an increasing debt burden on many subjects of the Russian Federation is also confirmed by the data broken up by group of regions (*Table 22*).

Over the course of the year 2014, in 74 out of 82 subjects of the Russian Federation (less the Crimean Federal District) the volume of government debt increased, and significant growth in the debt volume (by more than 15%) was observed in 56 regions. In 12 subjects of the Russian Federation the volume of debt rose by more than 50%, including Perm Krai (2,184.6%), Irkutsk Oblast (273.8%), Magadan Oblast (153.6%), Rostov Oblast (79.2%) and Kamchatka Krai (65.8%).

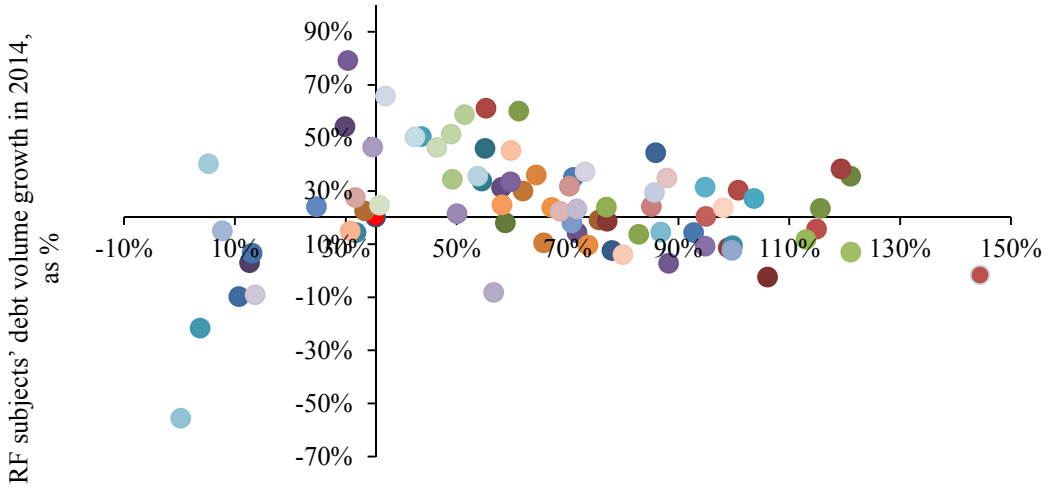
Table 22

The Movement of the Volume of Government Debt in the Budgets of Subjects of the Russian Federation in 2008–2014

Number of regions in	Movement of government debt volume held by subjects of Russian Federation over given period (in nominal terms), number of subjects of Russian Federation						
	growth by more than 50%	growth by between 15% and 50%	growth by less than 15%	no change	decline by less than 15%	decline by between 15% and 50%	decline by more than 50%
2008	21	20	10	3	5	13	10
2009	37	18	11	4	6	4	2
2010	30	24	9	1	11	7	0
2011	21	27	13	1	14	6	0
2012	18	31	14	0	8	10	1
2013	31	36	8	0	6	1	0
2014	12	44	18	0	5	1	2

Note. 1. No calculations were done for the Crimean Federal District's regions. 2. Arkhangelsk Oblast and Nenets Autonomous Okrug are treated for the purpose of our calculations as one and the same subject of the Russian Federation.
Source: RF Ministry of Finance; authors' calculations.

Especially alarming is the situation in those regions where, in 2014, not only the volume of debt surged, but the debt burden also significantly increased; the latter represents the ratio of government debt volume to the level of tax-generated and non-tax revenues of a given subject of the Russian Federation (*Fig. 19*).



Ratio of debt held by RF subjects to sum of tax-generated and non-tax revenues in 2014, as %

Note. 1. The intersection of the axes is the point where the values of debt burden and RF subjects' debt volume growth over 2014 become equal to Russia's average (38.4 and 20.2% respectively). 2. This graph does not show Perm Krai (16.7%, 2,184.6%), Irkutsk Oblast (14.4%, 273.8%), Magadan Oblast (52.2%, 153.6%). 3. No calculations were done for the Crimean Federal District's regions.
Source: RF Federal Treasury; Federal Law of 1 December 2014, No 384-FZ 'On the Federal Budget for 2015 and Planning Period 2016 and 2017'; authors' calculations.

Fig. 19. The Debt Burden and the Movement of Government Debta Held by Subjects of the Russian Federation in 2014

From data presented in *Fig. 19* it follows that in 2014, in 40 out of 82 subjects of the Russian Federation the rates of growth displayed by the government debt and the debt burden were above Russia's national average. It should be noted that in 10 subjects of the Russian Federation the debt burden rate was found to be higher than the volume of tax-generated and non-tax revenues: in Belgorodя Oblast (106.1%); in Kostroma Oblast (121.1%); in Smolensk Oblast (115.6%); in the Republic of Karelia (119.3%); in Astrakhan Oblast (100.8%); in the Republic of North Ossetia – Alania (114.9%); in the Republic of Ingushetia (113%); in the Republic of Karachay-Cherkessia (103.6%); in the Republic of Mordovia (121.1%); and in Chukotka Autonomous Okrug (144.4%). In 2013, there were seven such regions. In spite of the overall trend towards increasing the amount of debt, in some regions with the highest debt burden it was successfully reduced, however slightly, which means the onset of the process of budget consolidation. Thus, for example, in 2014, in the Republic of Mordovia the debt burden index was brought down from 172.1 to 121.1%, in Belgorod Oblast – from 110.3 to 106.1%. At the same time, among those 7 regions where the year-end results of 2013 demonstrated the debt burden index to be above 100%, in 2014 it was further increased in 3 regions: Chukotka Autonomous Okrug (from 123% to 144.4%), the Republic of Ingushetia (from 103.2 to 113%) and the Republic of North Ossetia – Alania (from 103.2 to 114.9%). Saratov Oblast and Vologda Oblast, as demonstrated by their year-end results of 2014, no longer belong to the group of regions with the highest volume of debt liabilities; however, the level of debt burden in these RF subjects is still rather high: 99.7 and 99.8% respectively.

On the whole, in spite of the slight slowdown in the rate of growth displayed by government and municipal debt, the situation in this sphere continues to deteriorate. The overall amount of debt in subnational budgets has nearly hit the mark of 3% of GDP. In the majority of region, the volume of borrowing is on the rise, and in some RF subjects the level of debt burden continues to be excessively high. Some of the regions that had already been shouldering an impressive debt burden failed to revise their regional budgetary policies and bring down their debt levels. The recent changes in the structure of regional debt have also given some grounds for concern (*Fig. 20*).

From 2011 onwards, within the overall debt structure, a stable growth of the share of commercial (bank) loans has become visible. One serious drawback of commercial loans is the higher cost of their servicing by comparison with budget loans. However, in view of the limited supply of budget loan on the part of the federal center, this instrument has been actively resorted to by many Russian regions. Thus, as shown by the year-end results of 2014, in 11 RF subjects the share of commercial loans in the total debt volume at a level above 75%.

In order to reduce the risks associated with the increasing debt burden shouldered by the regions, the higher amount of funding earmarked in the federal budget for covering the cost of budget loans in 2014 was intended, among other things, to ensure the refinancing of commercial debt, and thus to curb the growth of expenditures allocated to debt servicing.

In 2015, this practice will be continued. For the year 2015, the following conditions for the allocation of budget loans earmarked for commercial debt refinancing are established[1]:

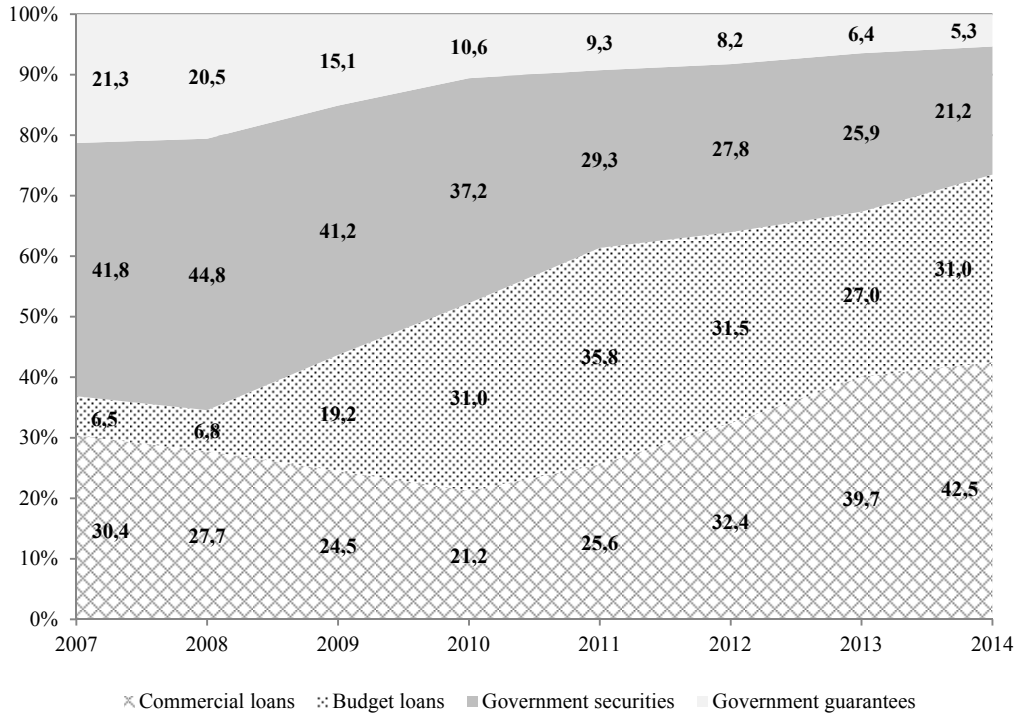
– if a loan received in 2015 by a subject of the Russian Federation from a credit institution is issued to that subject of the Russian Federation for a period longer that 1 year at a variable

[1] Order of the RF Ministry of Finance No 41 of 24 February 2015 'On Granting, to the Budgets of Subjects of the Russian Federation, of Budget Loans from the Federal Budget to Cover Part of Their Deficit, for the Purpose of Redemption of the Debt Liabilities of Subject of the Russian Federation Held in the Form of Liabilities against Loans Received by Subjects of the Russian Federation from Credit Institutions'.

rate pegged to the Bank of Russia's key rate and increased by more than 1.5 pp., with a mandatory requirement that the interest rate on the loan should be correspondingly altered no later than within 10 calendar days after the Bank of Russia has changed its key rate;

– if the consolidated budget of a subject of the Russian Federation is expected to be drawn up with a deficit for reasons that cannot be controlled by that subject of the Russian Federation, and the budget deficit will result (or may result) in that subject of the Russian Federation's inability to effectuate, in due time in the course of a current quarter (or a current financial year), the necessary payments against the loan received from a credit institution on certain specially determined terms;

– if the volume of payments made over the course of a current financial year against the loan received from a credit institution by a subject of the Russian Federation does not exceed the ceiling set for the current financial year.



Source: RF Ministry of Finance; authors' calculations

Fig. 20. The Structure of Regional Debt in 2007–2014, as %

Considering the general rise in the debt burden shouldered by the regions from 15.2% as of 1 January 2009 to 35.4% as of 1 January 2015, the planned reduction in the total volume of interbudgetary transfers in 2015 will have a negative effect on the financial status of the regions, even if the volume of issued budget loans should be increased. So, it will become necessary not only to make further cuts to regional investment in infrastructure projects, but also to downsize the existing network of state and municipal institutions. The dwindling flow of gratis financial aid to the regions will also impose serious constraints on their ability to implement anti-recession measures. According to our estimations, in 2015, the resulting decline on 2014 in the total volume of budget expenditure in the consolidated budgets of subjects Russian Federation may amount to 1% of GDP.

Section 3. Money Markets and Financial Institutions

3.1. Market recovery from the crisis

3.1.1. Comparing the two crises' parameters in Russia

In 2014, Russia was hit by a new round of financial crisis manifesting itself in the national currency devaluation, capital flight and sagging stock market. The RTS (Russian Trading System) Index has been moving along a W-shaped pathway since 2008, which is most typical of countries whose financial crises are associated with deep disproportions in economy, for example, in South Korea since 1989 or in the U.S. innovation marketplace since 1999. As of 31 January 2015, the RTS Index was 30.0% below the pre-crisis peak level of May 2008 and, kept searching for new lows. In January 2009, the Index dropped to 21.8% below the 2008 peak level.

It took the RTS Index much longer to rebound from its lowest value than it did during the crisis in 1997–1998 (see *Table 1*). It took the RTS Index 58 months to recover from the crisis in the late 1990s. The Index, instead of recovering, has been searching for new lows for 72 months since May 2008.

Table 1

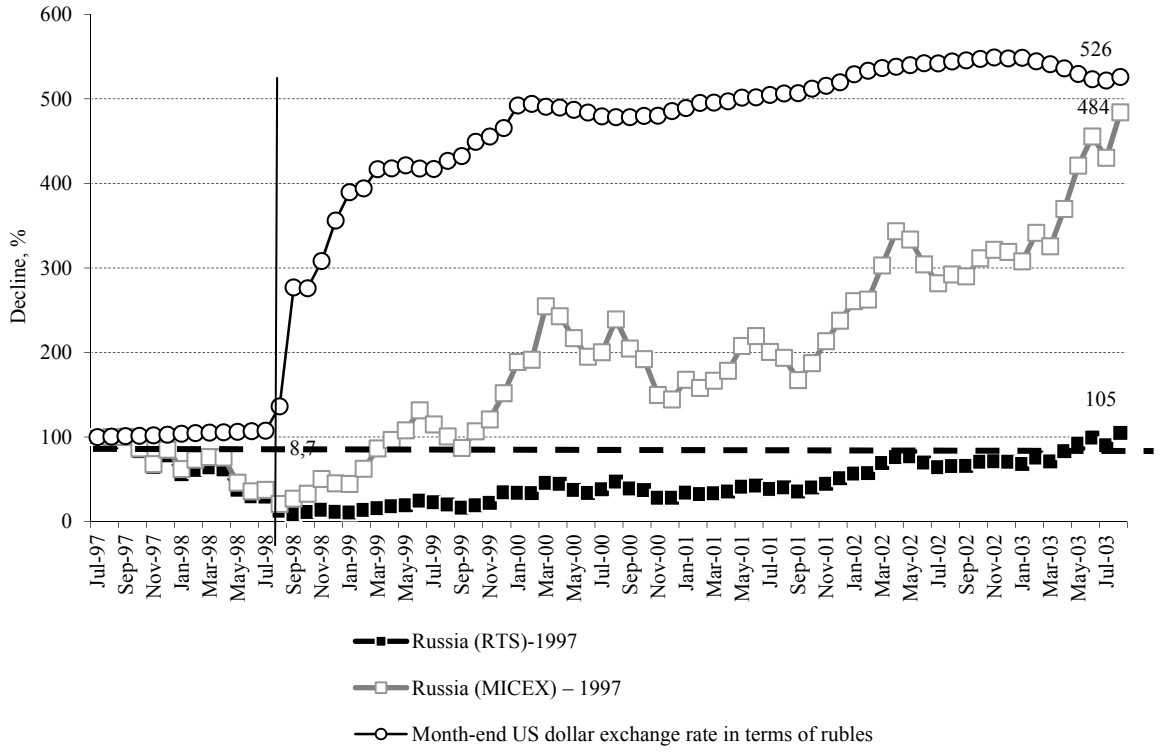
Financial crises in Russia in 1997–1998 and 2008–2009 and subsequent market rebound (as of 31 January 2015)

	Crisis 1997–1998	Crisis 2008–2009
1. Fall from a peak level		
1.1. Depth, %		
RTS Index	–91.3	–78.2
MICEX Index	–73.0	–68.2
1.2. Duration, months		
RTS Index	14	8
MICEX Index	13	6
2. Rebound, months		
RTS Index	58	72
MICEX Index	8	74

Source: based on the data obtained from the Moscow Exchange.

The differences in depth between the ruble devaluation during the crises of 1997–1998 and 2008–2009 are responsible for different rebound dynamics of the RTS Index and the MICEX Index. The MICEX Index rebounded at a faster rate than the RTS Index after the over 5-fold

depreciation of the ruble[1] in 1998, because the equity shares in the MICEX Index portfolio are denominated in rubles, whereas the equity shares in the RTS Index portfolio are denominated in US dollars (see *Fig. 1*). The MICEX Index returned to the pre-crisis level as early as May 1999, i.e., within just eight months after it hit the "bottom" of the crisis. It took the RTS Index 58 months to recover from the lowest value during the crisis.

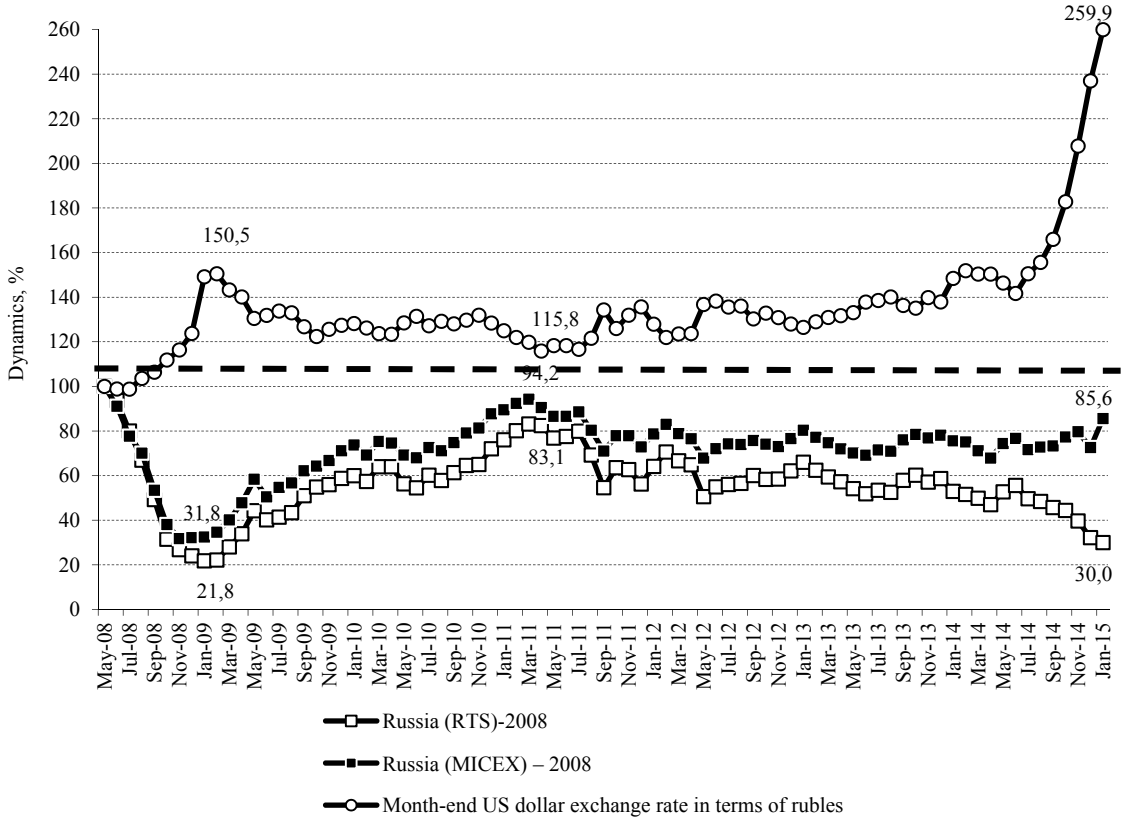


Source: based on the data obtained from the Moscow Exchange and the Bank of Russia.

Fig. 1. Changes in the US dollar exchange rate, RTS Index and MICEX Index during the crisis of 1997–1998 (July 1997 = 100%)

In the period between 2008 and 2009, the ruble devaluated 50% (see *Fig. 2*). However, by April 2011, the ruble exchange rate strengthened again so that it dropped only 15.8% of the pre-crisis level. The ruble's depreciation has resumed since May 2011. In January 2015, the US dollar exchange rate reached 61.70 rubles per US$, up 159.9% compared with that seen in May 2008. The accelerated since August 2014 devaluation of the ruble again determined various recovery rates for the MICEX and RTS indices. As of January 2015, the MICEX Index reached 85.6% of the peak level seen in 2008, while the RTS Index managed to reach as little as 30.0%.

[1] Within 1998 and 2003.



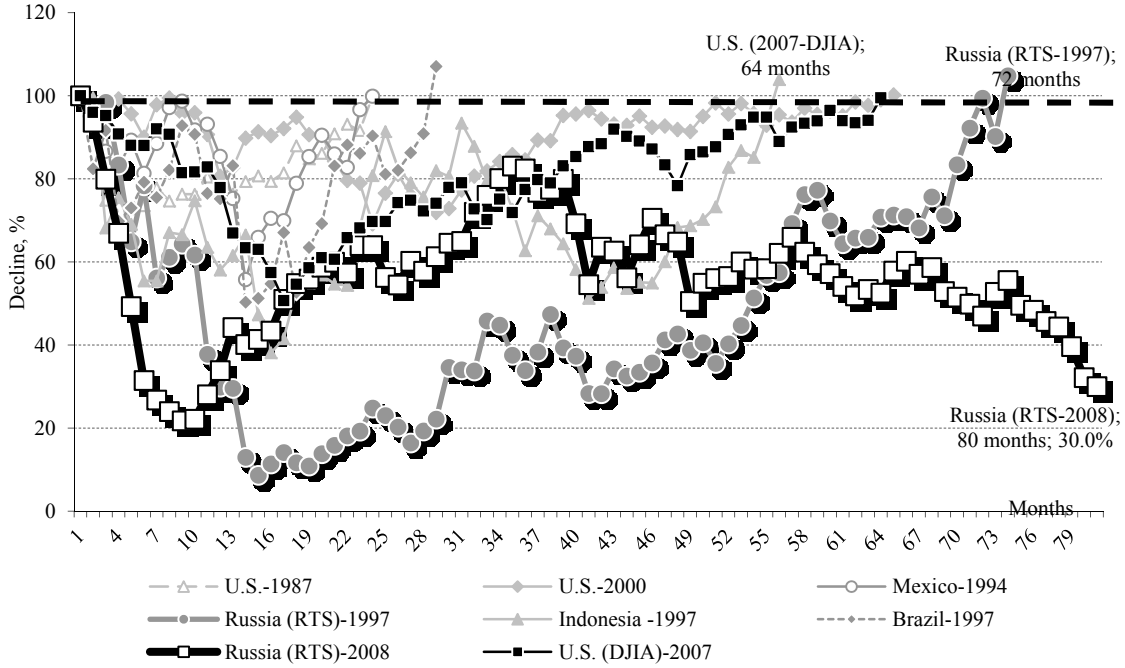
Source: the calculations are based on the data provided by the Bank of Russia and the Moscow Exchange.

Fig. 2. Changes in the US dollar exchange rate, RTS Index and MICEX Index in the period between May 2008 and January 2015 (May 2008 = 100%)

3.1.2. Long-term and short-term financial crises

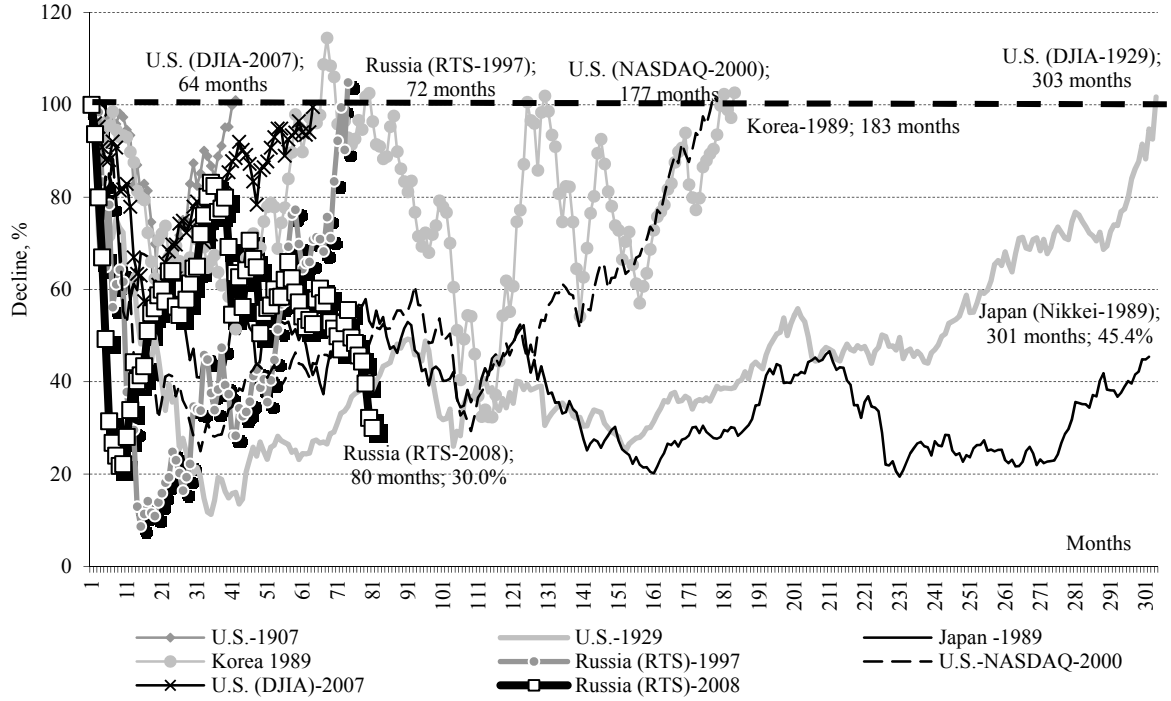
The lingering downtrend in the RTS Index has already hit a record of 6.7 years against the backdrop of worldwide major short-term financial crises (the United States in 1987, 2000 and 2007, Mexico in 1994, Indonesia and Brazil in 1997) with a recovery period of 5 to 6 years (see *Fig. 3*). This allows the recovery process which has been lingering since 2008 in the Russian stock market to be classified as downtrend with a relatively long-term recovery period.

The current crisis in Russia is still insignificant in terms of duration against the backdrop of worldwide major long-term financial crises (see *Fig. 4*). The duration of two most prominent W-shaped crises – the equity shares of companies in South Korea and the equity shares of NASDAQ in the United States – was 183 and 177 months, respectively. At the same time, the NASDAQ didn't see full recovery until 2014. It took the Dow Jones Industrial Average (DJIA) 303 months to recover from the Great Depression 1929. The Japanese NIKKEI-225 is most likely to break this record in May 2015, as in January 2015 the index failed after 301 months to reach the peak level of 1989. The unexpectedly long period of recovery in the Russian stock market is largely determined by a more structural than cyclical nature of the current economic crisis in Russia.



Source: author's calculations based on the data from the Moscow Exchange and www.finance.yahoo.com.

Fig. 3. Depth and duration of short-term financial crises worldwide as of 31 January 2015 (peak level = 100%)



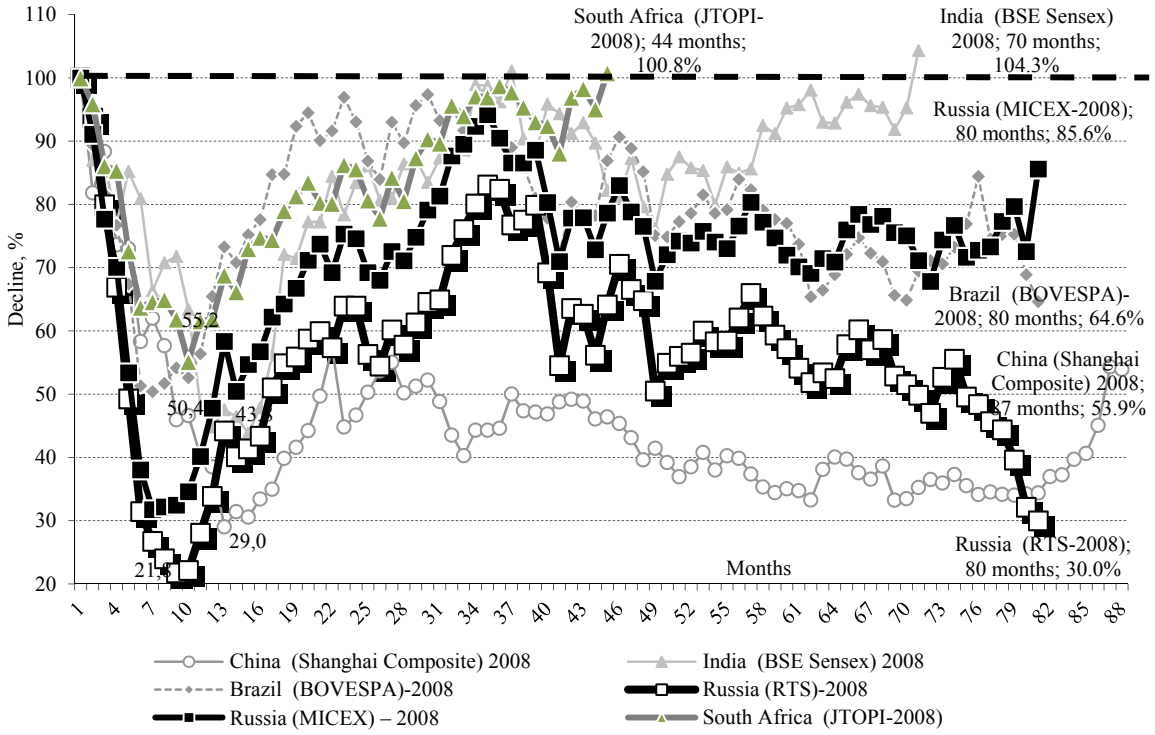
Source: author's calculations based on the data from the Moscow Exchange and www.finance.yahoo.com.

Fig. 4. Depth and duration of long-term financial crises worldwide as of 31 December 2014 (peak level = 100%)

3.1.3. Specific recovery features in the markets of BRICS countries

The crisis 2008 triggered drastic changes worldwide, resulting in that the factor of global saving glut[1], which previously led to redistribution of foreign investment in favor of BRICS countries, has now created a reverse trend. For example, the UNCTAD expects investment flows to move in reverse in the years to come, i.e., from developing and emerging economies towards developed countries[2].

As of January 2015, however, Russian stock indices showed a lowest performance figures even against the backdrop of BRICS countries (see *Fig. 5*). After the crisis in 2008, the JTOPI (Johannesburg Stock Exchange) and the BSE (Sensex Bombay Stock Exchange) managed to catch up with the pre-recession peak levels within 44 and 70 months, respectively. It took the Brazilian Bovespa 80 months to reach 64.6% of the pre-crisis lowest value; it took the Shanghai Stock Exchange Index (China) 87 months to reach 53.9% of the pre-crisis lowest value. Over a period of 80 months, the Russian FX RTS Index plunged deep to reach the lowest values, 30.0% of the pre-crisis peak level, among the BRICS markets. The Ruble MICEX Index managed to stay at 85.6% because the ruble depreciated 71.9% against the US dollar in 2014.



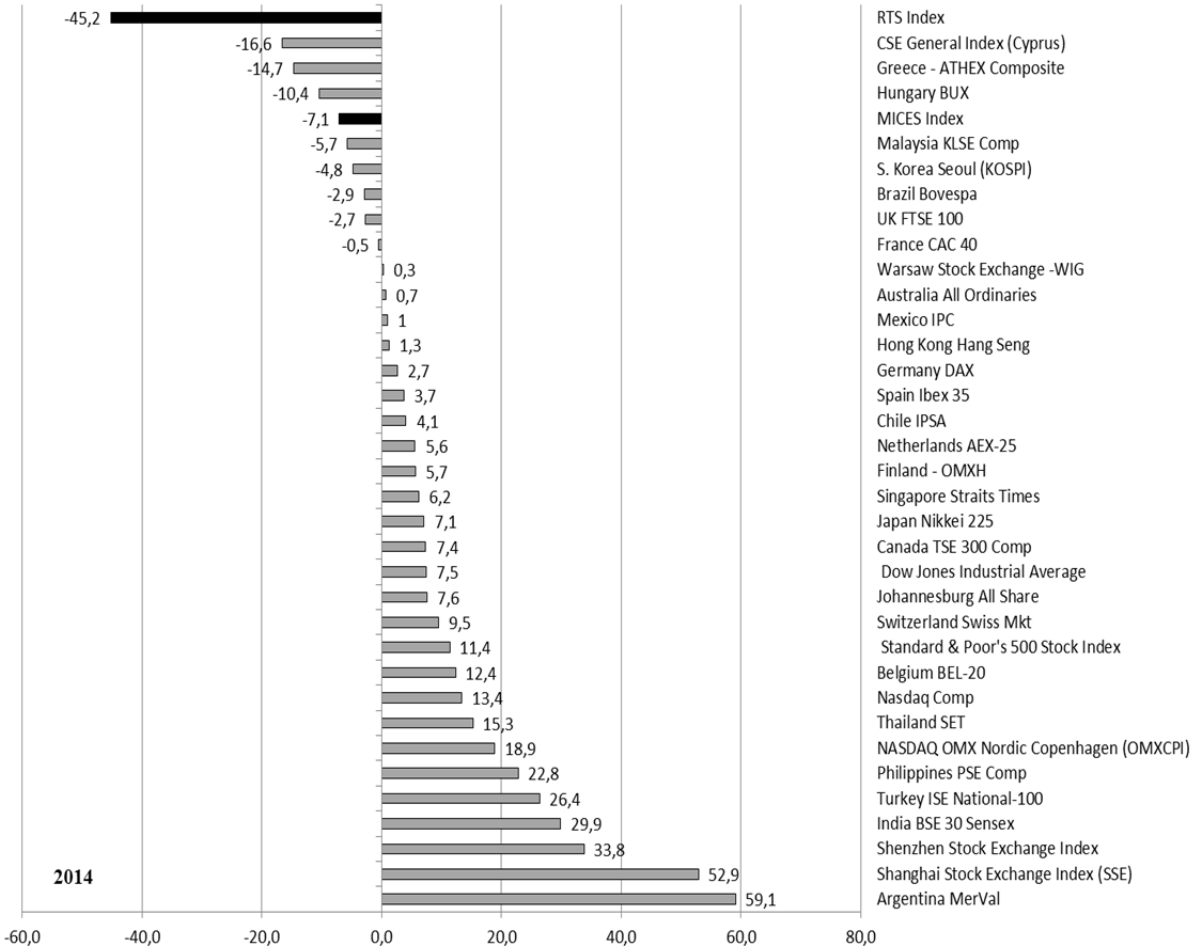
Source: the calculations are based on the data from The Wall Street Journal and Thomson Reuters Eikon.

Fig. 5. Depth and duration of the current financial crisis in BRICS countries as of 31 January 2015 (peak level = 100%)

[1] The Global Saving Glut and the U.S. Current Account Deficit. Remarks by Governor Ben S. Bernanke At the Homer Jones Lecture, St. Louis, Missouri. April 14, 2005: http://www.federalreserve.gov/boarddocs/ speeches/2005/20050414/default.htm

[2] World Investment Report 2014: Investing in the SDGs: An Action Plan UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD), 2014.

In 2014, the Russian stock market turned out to be a record holder, show the deepest plunge (see *Fig. 6*). The RTS Index plunged by 45.2% compared with 14.7% for the Athens Stock Exchange Index and 16.6% for the Cyprus Stock Exchange Index. The MICEX Index dropped by 7.1% during the same period.

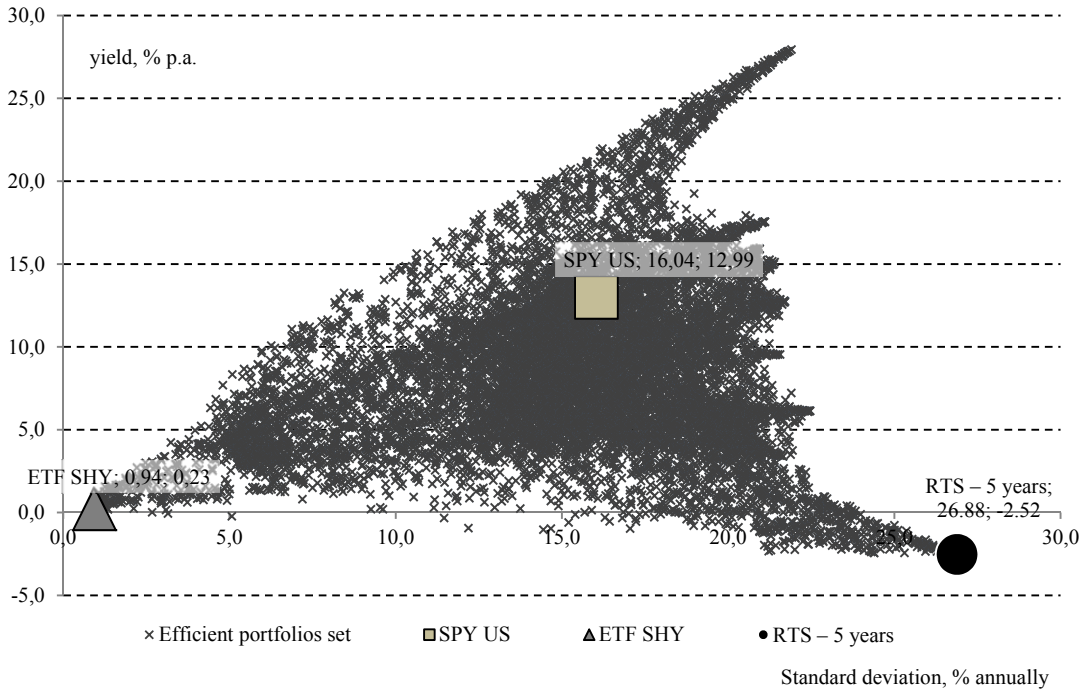


Source: the calculations are based on the data from The Wall Street Journal and Thomson Reuters Eikon.

Fig. 6. Global indices yield in 2014, % p.a.

The RTS Index portfolio has shown the lowest performance result on the yield-risk criterion over the past 5-year period compared with other world popular investment strategies (see *Fig. 7*). Nineteen various investment strategies over the 5-year period ending on 20 October 2014 were used for this purpose. The following instruments were included into the list of investment strategies: SPY US Equity (fund's name – SPDR S & P 500 ETF) – S&P500 Index; ILF US Equity (iShares Latin America 40 ETF) – Latin-Amecian companies' equity shares; SHY US Equity (iShares 1–3 Year Treasury Bond ETF) – U.S. government bonds with a duration of 1–3 years; VB US Equity (Vanguard Small-Cap ETF) – small capitalization companies' equity shares; IGE US Equity (iShares North American Natural Resources ETF) – global resources; SLYV US Equity (SPDR S&P 600 Small Cap Value ETF) – small capitalizationи/value companies' equity shares; LQD US Equity (iShares iBoxx $ Investment Grade Corporate Bond ETF) – corporate bonds of U.S. issuers with a high investment rating; IEF

US Equity **(**iShares 7–10 Year Treasury Bond ETF) –U.S. government bonds with a duration of 7–10 years; IWN US Equity **(**iShares Russell 2000 Value ETF) – value shares; IVW US Equity (iShares S&P 500 Growth ETF) – growth shares; EFA US Equity (iShares MSCI EAFE ETF) – emerging market companies' equity shares; GLD US Equity (SPDR Gold Trust) – gold; IYT US Equity **(**iShares Transportation Average ETF) – transport companies' equity shares; IBB US Equity (iShares Nasdaq Biotechnology ETF) – biotech companies' equity shares; CAC Index – French shares index; FT-100 Index – an index including UK companies' equity shares; NKY Index – index NIkkei225 (Japan); DAX Index – an index including German companies' equity shares; RTSI Index – the RTS Index (Russia), FX[1]. A point of Index RTS describing yields and risk of Russian major issuers' equity shares denominated in US dollars on a set of 5-year portfolios corresponds to the values of minimal yield and maximum risk, i.e., 2.5% p.a. and 26.9%, respectively, of all (!) possible combinations of 19 index funds.



Source: author's calculations based on the data from Bloomberg.

Fig. 7. Yields and risks of a set of portfolios based on made up of 19 index funds (ETFs), over a 5-year period, as of 20 October 2014

3.2. Russian stock market competitive power

3.2.1. Stock markets' liquidity

The 2008 crisis also resulted in the repositioning of stock market liquidity centers. The recovery of major global markets to the pre-recession values of stock indices was not accompanied by the recovery in trading volumes in stock exchanges for the first time over many decades (see *Table 2*). In 2014, volumes of trading in equity shares in U.S. stock exchanges ac-

[1] The values of respective indices were used for the calculations for the stock markets in France, Germany, Japan, the United Kingdom and Russia, because historical data on the respective ETFs was limited.

counted for as little as 65.5% of the volumes seen in 2007, while volumes of trading in equity shares in the London Stock Exchange, Euronext (Europe), and the German stock exchange accounted for 66.4%, 43.1% and 43.7%, respectively.

The foregoing global trend was triggered by the drastic changes that took place in stock exchanges in the mid 2000s, which produced mixed effects. Massive commercialization of exchanges turned them from entities, where market players by themselves set trading and settlement rules, into business entities seeking profits by introducing some technologies and innovations, including the high frequency trading (HFT). This spurred growth in the number of exchanges and stock market fragmentation. In 2008, 13 exchanges and alternative trading systems were operating instead of the two traditional exchanges in the United States[1].

In 2005, the U.S. Securities and Exchange Commission (SEC) adopted the so-called Regulation National Market System, or Reg NMS pursuant to Section 11A of the Securities Exchange Act of 1934. The document entered into force in 2007 and introduced a "best bid" requirement for investor bids as part of the National Best Bid and Offer (NBBO). According to some experts, the Reg NMS allowed high frequency brokers to obtain insider information about common market players' bids for the front running purpose, allowing extra profits to be generated from having information about common customers' bids[2]. Under the circumstances, it has become profit-making for major market players to establish the so-called dark pools, i.e. alternative trading systems for accumulating securities buy/sell bids of, above all, common investors.

In 2014, according to the data from World Federation of Exchanges, in United States, the share of transactions with equity shares in the BATS Global Markets, an alternative trading system, reached 46.8% of the trading volumes in the NYSE and NASDAQ. In Europe, the trading volume in the alternative trading system BATS Chi-x Europe accounted for 90.8% the turnover in the London Stock Exchange in the same year. At the same time, the share of HFT in total volume of transactions with securities saw a fast growth. In the United States, for example, the share of HFT in the volume of transactions with equity shares increased to 55% in 2012[3] from 35% in 2007[4]. According to the ESMA estimates, in European trading systems, the share of transactions qualified as HFT stood at 43%[5] on average per 100 issues of companies' equity shares in nine EU member-countries in May 2013.

According to the U.S. Investment Company Institute (ICI), the high frequency trading practice can make the mutual fund industry be exposed to severe risks[6], because it involves confidential information about large trading orders and applies the market manipulation practice through front running.

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[1] Lewis M. Flash Boys: A Wall Street Revolt / Michael Lewis; Translated from English – M.: Alpina Publisher, 2015, p. 51.

[2] Lewis M. Flash Boys: A Wall Street Revolt / Michael Lewis; Translated from English – M.: Alpina Publisher, 2015, pp. 127– 133.

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

[4] Gerig Austin. High frequency Trading Synchronizes Prices in Money markets. SEC. DERA Working Paper Series. Jan. 21, 2015; the publication is available at http://www.sec.gov/dera/staff-papers/working-papers/dera-wp-hft-synchronizes.pdf

[5] ESMA Economic Report. High frequencytrading activity in EU equity markets. Number 1, 2014, p.4. The publication is available at http://www.esma.europa.eu/system/files/esma20141_-_hft_activity_in_eu_equity_ markets.pdf

[6] Investment Company Institute's (ICI) Letter of 10 April 2010 to the SEC, containing proposals on the securities market structure. The Letter is published at the ICI's official website at: http://www.ici.org/pdf/24266.pdf

Since 2013, the HFT practice has been under the focus of regulators in many countries. The high frequency trading and sophisticated trading algorithms give rise to numerous questions and concerns[1], said Mary White, a new head of the U.S. Securities and Exchange Commission (SEC, U.S.), at Senate hearings.

Table 2

Dynamics of the value of on-exchange transactions with equity shares in major stock exchanges in 2007–2014 (2007 = 100%)[2]

	2007	2008	2009	2010	2011	2012	2013	2014
U.S. (NYSE and NASDAQ)	100	120.1	72.6	71.0	71.7	54.2	54.3	65.5
China (two stock exchanges)	100	63.0	128.9	132.8	106.9	81.8	124.9	198.0
Japan (Tokyo Stock Exchange and Osaka Stock Exchange)	100	87.3	61.2	63.2	66.3	57.5	103.9	86.8
United Kingdom	100	89.0	62.9	63.5	65.7	50.8	51.7	66.4
Euronext	100	84.7	42.7	44.5	47.1	34.8	36.7	43.1
Germany	100	95.5	45.1	48.4	52.3	37.9	39.7	43.7
Hong Kong	100	77.3	70.1	74.1	71.5	54.7	65.5	75.3
Canada	100	105.3	75.5	83.0	93.5	82.3	83.2	85.4
Australia	100	77.5	57.9	77.1	86.8	67.9	63.9	58.6
Russia (MICEX – on-exchange transactions)	100	89.0	77.3	75.5	95.2	55.8	44.0	46.0
Russia (MICEX – all trading modes)*	100	116.5	74.7	92.4	142.5	127.5	123.6	119.2
NASDAQ OMX Nordic Exchange	100	84.5	48.8	52.6	58.0	41.1	43.8	50.6
Total as per member of the World Federation of Exchanges (WFE)	100	100.8	69.5	70.7	70.7	54.8	61.3	87.4

* Market and negotiated repo transactions, repo, Classica and Standard market sectors.
Source: author's calculations based on the data from World Federation of Exchanges, the London Stock Exchange and the Moscow Exchange.

Regardless the 2011 consolidation of the Russian exchanges, the volume of on-exchange transactions with equity shares in the Moscow Exchange failed to reach the pre-crisis levels. In 2014, the volume accounted for as little as 46.0% of the level seen in 2007. With all trading modes being considered, the volume of transactions with equity shares in 2014 reached 119.2% of the pre-crisis level. Additionally, total volume of transactions is nothing but indicative of a faster than normal growth in fundraising for the purpose of transactions with equity shares in the Exchange, rather than reflects real capital flows. However, the reasons for slow growth in volumes of on-exchange transactions in the Moscow Exchange differ from the reasons in its foreign counterparts. The former are associated with the ongoing after 2008 stagnation of prices of Russian equity shares, low trading activity of domestic investors and non-residents.

The volume of HFT transactions in the Moscow Exchange was approximately similar to that recorded in major European exchanges. According to Bank of Russia's money market review, in 2011, HTS transactions accounted for about a half of the Forts (futures & options) market the trading volume. According to the data from *Expert* journal, trading robots concluded about 40% of the total transactions in the stock market in 2012, and robots accounted for 97% of the total orders[3]. The issues of adverse bearing of on-exchange HFT trading haven't yet been noticeable in Russia. This can be explained not only by a poor development of domestic conservative investors, but also low liquidity in the market itself. There is a series of restrictions on those involved in HFT imposed in the Exchange, such as a maximum limit

[1] Strasburg J., Patterson S. Trading Clamps Spur Lobby Effort. WSJ, March 24, 2013.
[2] Including transactions with securities of foreign issuers on the trading floor of the respective exchanges.
[3] Obukhova E. A robot exchange wins. Expert, No. 37, 17– 23 September 2012.

on traders' transactions in the derivatives market and above normal tariffs on too active market players. It is telling that traders using no robots for trading[1] have been awarded as winners for the second consecutive year in the regular *Best Private Investor* (BPI) contest held in the Moscow Exchange.

However, with possible growth of the share of domestic long-term investors in on-exchange trading volumes, given the negative experience of global stock exchanges, a special emphasis should be given to how HFT strategies may impact the investment costs of this category of investors. As we showed in the money market review 2013, the results of 2011 BPI contest[2] showed that high frequency traders with more than 3,000 transactions daily had a distinct advantage over other market players in terms of profits. The distribution of revenue of high frequency traders was shifted to the right, i.e., to above average-level results, the bias was 3.6. Regulatory and oversight bodies and self-regulated organizations shouldn't ignore the nature of such advantages, because studies of the phenomenon in foreign markets show that it may result from the practice qualified as insider trading and front running[3].

3.2.2. Stock market's capitalization

Unlike the majority of global financial centers experiencing growth in capitalization in 2012–2014 (see *Table 3*), the value of Russian companies decreased to 34.4% in 2014 compared with 2007. This was the second after 2008 lowest decline in capitalization, when the fall was as deep as 26.4% of the 2007 level.

Such a substantial decline in the capitalization of Russian companies in 2014 was triggered by the ruble devaluation, foreign capital outflow driven by the ruble's devaluation and Western sanctions, the deficit of domestic investment resources because of, among other things, the pension assets "freeze" in 2013–2014.

Table 3

Domestic market capitalization dynamics in 2007–2014 (2007 = 100%)

	2007	2008	2009	2010	2011	2012	2013	2014
U.S. (NYSE and NASDAQ)	100	58.3	76.7	87.9	79.5	94.9	122.2	133.9
China (Shanghai SE)	100	38.6	73.2	73.5	63.8	68.9	67.6	106.4
Japan (Tokyo Stock Exchange)	100	71.9	76.3	88.4	76.8	80.3	104.9	101.1
United Kingdom	100	48.0	72.5	80.5	75.2	78.3	86.3	91.7
Euronext	100	49.8	68.0	69.4	57.9	67.1	84.9	78.6
Germany	100	52.8	61.4	67.9	56.3	70.6	92.0	82.6
Hong Kong	100	50.1	86.8	102.1	85.1	106.7	116.8	121.8
Canada (TMX Group)	100	47.3	76.7	99.3	87.4	94.2	96.7	95.8
Australia (Australian SE)	100	52.7	97.2	112.0	92.3	106.8	105.2	99.3
Russia *	100	26.4	57.3	91.7	72.9	71.8	69.3	34.4
NASDAQ OMX Nordic Exchange	100	45.3	65.8	83.9	67.8	80.1	102.1	96.3

* The calculations are based on the data on 2007–2013 from S&P.

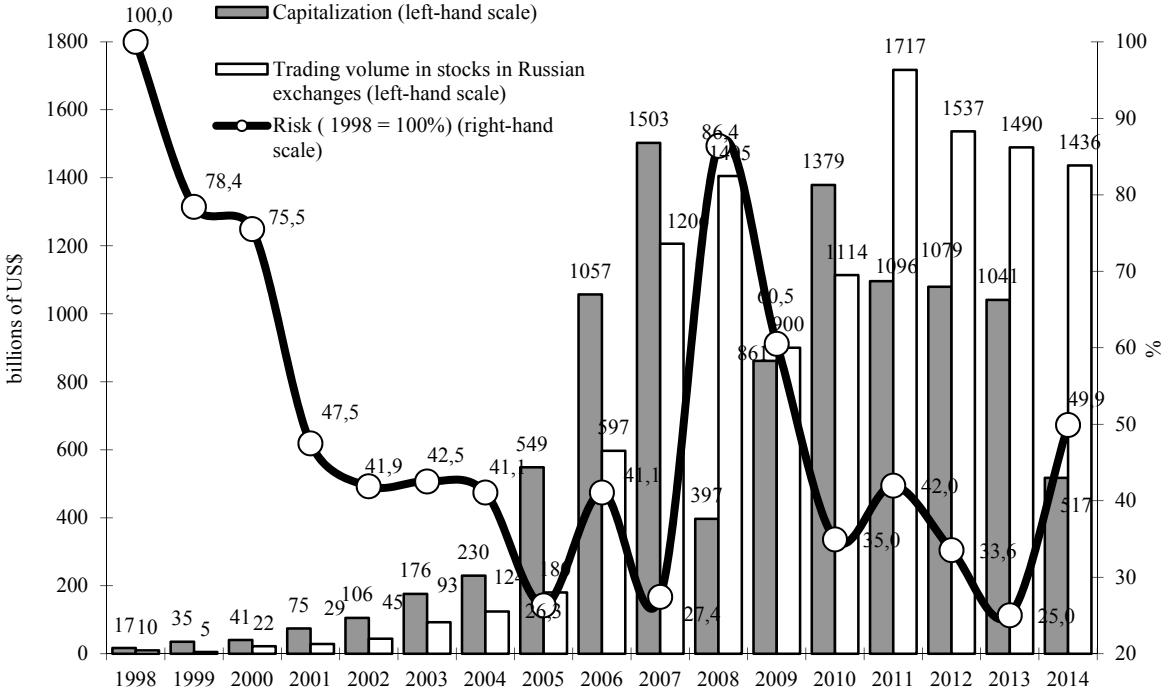
Source: the calculations are based on the data from World Federation of Exchanges and Finam company.

[1] http://investor.moex.com/ru/winners.aspx

[2] Russia's economy in 2013. Trends and Outlooks. (Issue 35) – M.: Gaidar Institute, 2014, pp. 106 – 109.

[3] For more details on HFT adverse impact on investors refer to the papers of the following authors: Arnuk Sal, Saluzzi Joseph. Broken Markets: How High Frequency Trading and Predatory Practices on Wall Street Are Destroying Investor Confidence and Your Portfolio. New Jersey, FT Press, 2012; Patterson Scott. Dark Pools: The Rise of the Machine Traders and the Rigging of the U.S. Stock Market. New York, Crown Publication Group, 2012; Lewis M. Flash Boys: A Wall Street Revolt / Michael Lewis; Translated from English – M.: Alpina Publisher, 2015.

Capitalization of Russian joint-stock companies amounted to $517bn in 2014 compared with $1041bn in 2013 (see *Fig. 8*). Capitalization of equity shares accounted for 27.7% of GDP in 2014 compared with that of 49.7% in the preceding year, 2.8 times less than the 76% projected by the Ministry of Finance for 2014 in a State Program called the Regulation of Money markets, Insurance and Banking which was drawn up late in 2012. The total capitalization of Russian issuers appeared to be less than that of a world's largest Apple Inc. alone, which amounted to $647.4bn at 2014 year-end.



Source: the calculations are based on the data from the Moscow Exchange and S&P with regard to capitalization.

Fig. 8. Russian stock market capitalization, liquidity, and volatility in 1998–2014

At the same time, unlike the trend prevailing in 2011–2012, no major Russian issuers changed their jurisdiction in favor of other counties in 2013–2014. On the contrary, a few Russian companies incorporated in other countries (e.g., RUSAL) announced that they might change their jurisdiction in favor of Russia[1] in response to executive authorities' tightened countermeasures against offshore taxation schemes in 2013. A reverse trend might be seen in the years to come, i.e. companies operating in Russia would probably return back under the national jurisdiction in response to the amendments adopted in 2014 to the Tax Code for Russia, concerning the taxation of controlled foreign companies (CFC) and revenue of foreign organizations.

Facing financial problems, Russian issuers were forced in 2014 to delist from foreign exchanges. In 2014, Russian developers such as HALS Development and Rose Group were delisted from the London Stock Exchange[2]. Representatives of Russian TCS bank stated that the

[1] Elkova O., Ermakova A., Loginov V. Business sets course for de-offshorization. Izvestia, 19 December 2013
[2] Geraschenko E..Public developers fall out of love with London, 21 November 2014.

receipts of TCS Group Holding might be delisted from the London Stock Exchange[1]. Russian major issuers such as VTB and Rosneft[2] have confronted with difficulties in the London Stock Exchange, as a result of the Western sanctions restricting additional issuance of depository receipts by converting them into equity shares.

The total volumes of on-exchange trading under all trading modes in the Moscow Exchange decreased to $1436bn in 2014 from $1490bn. in 2013, or by 3.62%. The turnover in exchange's stock market had been declining for three consecutive years. In 2014, the volatility of equity shares, measured by the standard deviation of RTS Index daily movements, increased noticeably compared with the preceding year, accounting for 49.9% of the 1998 level. This implies that in 2014 the volatility of Russian companies' equity shares was even a bit higher than that in 2001 when the ratings, including the sovereign one, for all Russian issuers were set below the investment-grade level.

3.2.3. Competition with foreign stock exchanges

Judging by the total volume of trading in equity shares under all trading modes in 2014, the Moscow Exchange managed to maintain its position as the key authority on trading in equity instruments (shares of stock and depositary receipts) of Russian issuers (see *Fig. 9* and *Table 4*). The share of Moscow Exchange in trading in the foregoing shares of stock and depository receipts increased to 82.6% in 2013 from 71.1% in 2013. The share of the London Stock Exchange, the German Stock Exchange, and two largest U.S. stock exchanges increased insignificantly. However, these relatively good figures for the Moscow Exchange include repo transactions with shares of stock which formerly fall into the money market category. Net of repo transactions, the share of Moscow Exchange in the total volume of trading in equity instruments of Russian issuers increased to 45.4% in 2014 from 43.6% in 2013. Therefore, the conclusion for on-exchange transactions is other ways – the share of Russian exchange isn't prevailing.

Source: author's calculations based on the data from Russian and foreign stock exchanges.

Fig. 9. The share of stock exchanges in trading volumes of Russian JSC's equity shares

[1] Zhelobanov D., Petrova O. Tinkoff is leaving undervalued. Vedomosti, 1 December 2014.
[2] Eremina A., Papchenkova M., Serov M., Starinskaya G. Lost in transfer. Vedomosti, 11 November 2014.

Table 4

The share of stock exchanges in trading volumes of Russian JSC's equity shares, %

	2000	2005	2010	2011	2012	2013	2014	Jan.2015
Moscow Exchange core market	36.0	38.1	69.9	72.1	70.3	70.5	82.6	70.1
Moscow Exchange Classical and conventional markets (the former RTS)	11.9	2.0	7.9	5.2	1.9	0.6	0.0	0.0
Others	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Russian exchanges – total	**47.9**	**48.2**	**77.8**	**77.3**	**72.2**	**71.1**	**82.6**	**70.1**
London Stock Exchange	30.1	43.1	19.0	21.1	26.2	27.0	14.3	27.0
German stock exchanges	22.0	2.6	0.6	0.3	0.0	0.0	0.2	0.5
New York Stock Exchange and NASDAQ (U.S.)		6.2	2.6	1.4	1.5	1.9	2.8	2.3
Hong Kong Stock Exchange			0.0	0.0	0.0	0.0	0.0	0.0
Equity shares and depositary receipts – total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: author's calculations based on the data from Russian and foreign stock exchanges.

The devaluation of the national currency, sanctions against Russia in the European and U.S. money markets, the downgraded sovereign and corporate rankings by international credit rating agencies, the deficit of domestic investment resources resulted in that IPO-SPO transactions with equity shares involving Russian companies were actually frozen in global markets in 2014, while this type of transactions saw a growth in activity. Only three noticeable IPO-SPO transactions involving companies operating in Russia were closed during the reporting year: Lenta Ltd., Russia's second-biggest hypermarket chain registered in the Virgin Islands, went public through an IPO at $952.4m in the London Stock Exchange, Qiwi Plc, a Cyprus company, SPO at $319.0m in the NASDAQ, and OJSC Moscow Exchange SPO, which raised $469m through the sale of a block of shares, 11.7% of the charter capital, held by the Bank of Russia. Therefore, in 2014, the total volume of IPO-SPO of Russian companies amounted to $1.7bn, of which transactions in the Moscow Exchange accounted for merely $0.5bn, or 29.4%.

In 2013, companies operating in Russia raised $9,0bn through IPO-SPO. Furthermore, the principal part of national issuers' public sale of equity shares took place in the Moscow Exchange. It was projected in the State Program that in 2014 volume of transactions through IPO of equity shares will amount ot Rb 1.2 trillion, equaling $30bn at the average US dollar exchange rate during the same year.

However, in 2014, the Moscow Exchange failed to cope with a trend towards reduction in the number of national issuers of listed equity shares, as well as the number of issues of equity shares of stock traded in the regulated security market. According to the reports from CJSC SE MICEX[1], the number of issuers of equity shares in the Exchange decreased to 255 in 2014 from 272 in 2013, or by 6.3%; the number of issues declined to 315 from 336, respectively, or by 6.3%. The number of issuers of corporate bonds decreased to 260 in 2014 from 269 in 2013, or by 3.3%; the number of issues increased to 581 from 555, respectively, or by 4.7%; the number of issuers of exchange-traded bonds increased to 139 in 2014 from 135 in 2013, or by 3.0%; the number of issues increased to 395 from 356, respectively, or by 11.0%. The number of issuers of regional bonds increased to 47 in 2014 from 46 in 2013, or by 2.2%; the number of issues to 112 from 105, respectively, or by 6.7%. For the period under review, the number of bonds and Eurobonds issued on behalf of the Russian Federation contracted to 45 from 52, or by 13.5%. According to the data from the World Federation of Exchanges

[1] http://moex.com/a137

(WFE), the number of companies listed in the Moscow Exchange in 2014 was 254 compared with 262 in 2013, down by 3.1%.

Substantial changes in the legal status of joint-stock companies were introduced by the amendments (effective 1 September 2014) to the Civil Code of the Russian Federation. The division into open-end and close-end JSCs was replaced by public and non-public requirements for joint-stock companies. Under the amendments, the entitlement to raise capital in the stock market is to be granted exclusively to corporations which will go public. This regulation may stimulate joint-stock companies, which haven't yet decided to go public, to change their opinion with a fundraising perspective in the future.

The process of permitting the issue of foreign securities in the Moscow Exchange was more successful amid the reduction in the number of issuers and issues of Russian equity shares. The number of issues of securities of foreign issuers in the Exchange increased to 65 in 2014 from 28 in 2013, while the number of issuers raised to 36 from 9, respectively.

Hence, the Moscow Exchange has more potential to attract the capital of a bigger number of Russian companies to the open market. This indeed is hard to be achieved while facing the falling market and international sanctions, however, the unfavorable external factors which may persist for several years require that a stronger emphasis be placed on domestic investment resources which should be used to design a more efficient mechanism of attracting capital to the domestic market from, above all, medium-sized businesses, innovation firms and organizations, in the field of import substitution.

3.2.4. Moscow Exchange performance results

The transaction on consolidation of the MICEX Exchange and the RTS Exchange was closed in 2011. In June 2012, the exchange annual shareholders meeting approved a new name for the consolidated exchange: OJSC Moscow Exchange MICEX-RTS, or OJSC Moscow Exchange. The consolidation of the RTS and MICEX made it quite simple for market participants to close transactions in the stock market and derivatives market, thereby allowing the entire liquidity to be concentrated on trading participants' accounts which (the liquidity) is intended to carry out transactions in the government securities market and corporate securities market, as well as the derivatives market and FX market within unified settlement and trading systems. Diversification of the new stock exchange in servicing transactions with different monetary and investment assets enhanced its financial sustainability amid falling trading volumes in stock markets globally and investors fleeing risk-bearing assets.

The consolidation of the two exchanges allowed NDC's settlement depositories and DCC Central Depository to be established on the basis of MICEX Clearing House. This status was granted to the National Settlement Depository (NSD), a non-bank credit institution, closed-end joint-stock company, pursuant to the Executive Order of Russia's Federal Money markets Service (FFMS) of 6 November 2012 No. 12-2761/PZ-I. The Federal Law of 07 December 2011 No. 414-FZ *On the Central Depository* entered into full force on 1 January 2013. The law provides for opening central depository accounts with a special status for registrars of joint-stock companies. The assignment of central depository functions to the NSD implies that it has to take on such a demanding challenge as opening nominee accounts of actually all open-end joint-stock companies in Russia. Regretfully, the NSD doesn't publish regular statistics on the performance of its functions. The depository's report in 2013 shows that it opened nominee accounts in the registers of more than 1200 issuers as of 12.31.2013. According to the data from the Russian National Association of Securities Market Participants

(NAUFOR), a total of 31,400 incorporated companies (JSCs) were operating in Russia in 2013. This is indicative of that there is still a lot of work to do to place Russian equity shares within the scope of central depository. Additionally, this area of Central Depository's activity should, in our opinion, be more transparent for the general public.

The emergence of central depository has raised substantially the level of credibility of global investors and international settlement systems in the custody of assets invested in Russian securities and settlements for respective transactions therewith. According to the U.S. Securities and Exchange Commission Rule No. 17f7 under the Investment Company Act 1940, the NSD was granted the official status of "eligible securities depository" for maintaining assets of major U.S. institutional investors. In the central depository, inter-custodial nominee accounts of major global settlement systems, Euroclear Bank S.A./N.V. (Euroclear) and Clearstream Banking S.A. (Clearstream), as well as central depositories of Armenia, Belarus, Kazakhstan and Ukraine were opened. The opening in February 2013 of accounts of Euroclear and Clearstream with the central depository and the commencement of respective operations with public securities raised a great deal of non-resident funds in the OFZ market (more details can be found in section 3.4.1. herein). Euroclear and Clearstream accounts have since February 2014 been available for non-residents' transactions with corporate and regional bonds held in the NSD. Non-residents' resources have become available since 7 July 2014 for the equity shares of Russian joint-stock companies via the foregoing Clearstream accounts[1]. Hence, the strategic alliance of Euroclear and Clearstream has made it much simpler for foreign investors to have a technological access to Russian issuers' securities traded in the Moscow Exchange. At the same time, however, this has increased risks of the domestic market dependence on the behavior of this group of investors.

In 2014, a reform of the corporate information system was launched in the Russian stock market following the amendments to the Federal Law *On the Securities Market* made by Federal Law of 21.07.2014 No. 218-FZ *On Amendments to Certain Legal Acts of the Russian Federation*. The NSD was largely involved in the development of the amendments. The reform is intended to make it possible for shareholders to attend the general meeting of shareholders by forwarding an electronic document to the central depository, without having to obtain a depository proxy in the form of paper document. The introduction of modern standards of electronic document management and the involvement of accounting institutions in undertaking corporate actions will help improve the protection of rights of all categories of shareholders on the part of issuers. According to NSD Chairman of the Board Astanin E., this measure will provide investors with equal rights irrespective of the place of residence, which should create a new incentive for foreign investors to come to the Russian stock market [2].

Amendments regarding the procedure for announcement and payout of dividends came into force on 1 January 2014 under a new version of Article 42, Federal Law of 12.26.1995. No. 208-FZ *On Joint-Stock Companies*. The amendments provide that the registry of companies whose equity shares are listed in the Exchange shall be closed not sooner than 10 days and not later than within 20 days after the date of general meeting of shareholders passing the final resolution on dividend payout. This solution harmonizes the practice of dividend payment regulation with the currently applicable standards in international markets, providing for

[1] Euroclear has postponed until an indefinite date the introduction of a service providing foreign customers with direct access to the internal stock market (Tsareva L. A market of direct speculations. 8 July 2014).
[2] Tsareva L. Voting at par value. Kommersant, 16 June 2014.

transparent terms of influencing the price of equity shares by resolutions regarding dividend distribution and changes in the price of equity shares on the ex-dividend date.

In 2014, the NSD offered its customers the possibility to undertake repo transactions with the Bank of Russia against a basket of securities. It is interesting to note that such transactions are closed through an OTC (Bloomberg) rather than on-exchange system[1]. In this scheme, the NSD performs the functions of clearing and collateral management. In other words, it was for first time that market participants have received the opportunity to access an alternative OTC system through the exchange infrastructure. This measure is important in terms of viability of creating a competitive environment in organizing trading in money markets and simultaneously centralizing the settlement and clearing infrastructure.

Since 6 February 2013, the NSD has been performing the functions of repository, registering OTC transactions with different off-exchange financial instruments. At present, these instruments are represented mostly by swap and repo transactions. The establishment of these entities was provided for the decisions of G-20 in Pittsburg in 2009 as a measure designed to counteract systemic risks. In September 2014, the Bank of Russia recognized the NSD as systemically important repository. This implies that it keeps more than a half of the market data on transactions subject to registration in the repository[2].

In 2014, the NSD's equity reached Rb 9.5bn compared with Rb 3bn in 2013, i.e. up 30.1%. The value of securities held in the NSD increased to Rb 28.0 trillion in 2014 from Rb 21.8 trillion in 2013, i.e. up 14.7%.

The Moscow Exchange has another subsidiary CJSC JSCB National Clearing Centre (NCC). The NCC has been carrying out clearing operations in the stock market since November 2011 and in the derivatives market since December 2012. In October 2013, the Bank of Russia recognized CJSC JSCB National Clearing Center as sole qualified central counterparty. The NCC has a strategic goal of providing participants in different segments of the money market with an integrated clearing service allowing for the use of a unified collateral and introduction of unified positions of the participants while servicing them in all stock markets of the Moscow Exchange and over-the-counter markets. The Moscow Exchange Group has recently been focusing on the capitalization of NCC. The clearing center's equity tripled within two years to Rb 39.6bn in 2014 from Rb 13.2bn in 2012.

The NCC had the key objective in 2013–2014 to provide guarantees for trading participants in all segments of the Moscow Exchange's money market while migrating to a new settlement cycle without having to pre-deposit securities for on-exchange transactions, i.e. to T+2 settlement cycle. According to the data from the Moscow Exchange, T+2 transactions with equity shares and units of unit investment funds increased to Rb 10.0 trillion, or 97.2% in 2014 from Rb 3.3 trillion, or 38.0% of the total volume of on-exchange transactions with equity shares in 2013. CCP repo transactions, i.e. transactions with the participation of central counterparty (CCP), have been available in the Exchange since February 2013. According to the data from the Moscow Exchange, CCP repo transactions in the bond market increased in volume to Rb 25.0 trillion, or 13.7% in 2014 from Rb 3.8 trillion, or 1.8% of the total volume of repo bond transactions in 2013. Hence, in 2014, the meaningful interaction between all infrastructural entitites of the Moscow Exchange Group resulted in the migration to an up-to-date settlement system in the stock market, with NCC guaranteed settlement, as well as NCC guaranteed transactions increased noticeably in the bond repo segment of the money market.

[1] Tsareva L. CBR streamlines the trading. Kommersant, 25 June 2014.
[2] Moiseev S. Repository transformation. Depositarium, No. 5 (135) 2014, p. 12.

At the same time, the construction of a system of guaranteed settlements in such a risk-bearing market segment as bond repos is yet far from being completed.

The following key developments took place in the Moscow Exchange Group in 2014:

- in January, a new version of Trading in Securities Rules in the Moscow Exchange's stock market entered into force;
- in February, ETF trading based on the index of equity shares of Chinese companies MSCI China and publishing of indicative quotations for swap transactions were introduced;
- in March, a memorandum of money market cooperation with the Korea Exchange was signed;
- in April, the interdealer repo instruments were expanded by virtue of depository receipts and foreign companies' equity shares; publishing of the calculation of a new Russian market volatility indicator, RVI Index was introduced.
- in May, the product line of standardized derivatives was expanded by virtue of introducing new underlying assets such as the euro and the yuan;
- in June and July, CCP repo instruments were expanded; new exchange listing rules entered into force, under which the number of quotation lists was reduced to three from six, resulting in a substantially expanded list of equity shares included into the top quotation list, i.e., available for investment NGPFs and margin trading[1]; trading participants were provided with the possibility to close interdealer repo transactions with 97 issues of Russian Eurobonds; the trading and clearing platform was upgraded whereby market participants can maintain a single trading position in transactions in the derivatives and FX markets and withdraw funds prior to daily settlements from the exchange through intermediate clearing[2];
- in August, the range of instruments in the derivatives market was broadened again – trading in settlement futures on the US$/Ruble exchange rate started;
- in September, futures trading in the equity shares of OJSC Magnit and OJSC Moscow Exchange, in RVI volatility, as well as in Russia's Eurobonds started in the derivatives market; a new version of the listing rules entered into force, enabling the exchange to initiate the inclusion of outstanding foreign securities into the third level of listing;
- in October, trading in corporate Eurobonds started in the stock market, while the number of bond issues reached 25; the exchange entered into a cooperation agreement with the Bank of China, which is intended to facilitate mutual settlements in the national currencies of the two countries;
- in November, trading in the British Pound (GBP) and the Hong Kong dollar (HKD) commenced in the FX market; the exchange chose the DataSpace as principal provider of data center (DC) services;
- in December, a system of indicative quotations, MOEX Board, was launched; FX market participants were provided with the possibility to obtain a new status of "general clearing member", thereby making a division between the trading participant status and the clearing member status.

According to Deputy Chairman of the Board, the Moscow Exchange, Andrey Shemetov[3], the exchange had no such large-scale plane in 2014 as it did in 2013, when the infrastructural breakthrough took place in the Exchange, namely the migration to T+2 settlements, the estab-

[1] Orlova Y.. Moscow Exchange shuffles the shares. Vedomosti, 3 June 2014.
[2] Tsareva L. Moscow Exchange upgrades its platform. Kommersant, 27 May 2014.
[3] Shemetov A., Deputy Chairman of OJSC Moscow Exchange: "We dislike a dead calm". Cbonds Review, April 2014.

lishment of central depository, the commenced migration to settlements with centralized clearing in the repo segment, the launching of trading in physical gold and derivatives. This however is quite reasonable in terms of the need to provide conditions for robust performance of new technologies and products. The exchange saw a noticeable increase, to 7 in 2015 from 3 in 2013, in the number of technical glitches. The exchange experienced a serious failure on 30 July 2014, halting for two hours trading in equity shares[1]. To prevent such issues, "an optimal blend of innovative swiftness and costs we pay for operational continuity of the exchange" should be found, said Bank of Russia Fist Deputy Chairman Sergey Shvetsov.[2].

In 2014, the Moscow Exchange's ownership structure (see *Table 5*) underwent further serious changes. Until July 2014, organizations controlled by the Russian Federation held more than 50% of the total MOEX voting shares. This means that the exchange was a state-controlled company[3]. However, pursuant to Part 14, Article 49 of the Federal Law of 07.23.2013 No. 251-FZ *On Introducing Amendments to the Russian Legislation in Connection with the Transfer of Powers to Regulate and Oversee the Securities Markets to the Central Bank,* the Bank of Russia is obliged to dispose until 1 January 2016 of its shareholding in the Moscow Exchange and the St. Petersburg Currency Exchange.

For the purpose of the foregoing requirement, as initiated by the Bank of Russia, the general meeting of shareholders of 26 June 2014 elected former Russia's Prime Minister Aleksey Kudrin the Chairman of MOEX Supervisory Board (Board of Directors). Kudrin replaced Bank of Russia First Deputy Chairman Shvetsov S.A.[4]

The Moscow Exchange held SPO of its equity shares on 2 July 2014, following the Central Bank of Russia's sale of 11.7% of its stake in MOEX through international market placement. More than 267 million common shares were sold to the exchange at Rb 60 per share, a total of Rb 16.04bn[5]. The transactions resulted in that MOEX's free float increased to more than 50%, one of the highest on the Russian market[6].

According to mass media, the Russian Direct Investment Fund (RDIF) and large foreign investment funds[7] were the key buyers of MOEX's equity shares during the SPO. As a result, a new ownership structure developed in the Moscow Exchange by the end of 2014. It is seen in *Table 5* that government entities (including the subsidiary of the exchange itself) accounted for near 41.8% of the voting shares (39.6% + 2.2%). Using the data on 12.31.2014 from Factiva, we managed to calculate that foreign institutional investors, including the Chinese investment company, the EBRD and U.S. mutual funds, accounted for at least 29.5% of the MOEX voting shares. This is the second largest, not consolidated though, group of sharehold-

[1] Orlova Y. The Exchange makes a siesta for brokers. Vedomosti, 31 July 2014.
[2] Tsareva L. The commodities market faces a "nuclear glitch". Kommersant, 15 October 2014.
[3] The same was also reported in the Consolidated Intermediate Condensed Financial Statement of the Non-bank Credit Institution, CJSC National Settlement Depository as of 30 June 2014 and six months of 2014, p. 20. https://www.nsd.ru/common/img/uploaded/files/disclosure/hyear/NSD_IFRS_cons_1HY_2014.pdf
[4] RBC, 26.06.2014 Kudrin is elected as Chairman of the Moscow Exchange Supervisory Board.
[5] Pursuant to the provisions set forth in Article 2 of the Federal Law of 10.07.2002 No. 86-FZ On the Central Bank of the Russian Federation (Bank of Russia), under which the property of the Bank of Russia is federal property, a question arises as to whether this transaction can be regarded as privatization deal.
[6] The Moscow Exchange official statement of 2.07.2014. The Moscow Exchange shares are more than 50% free float.
[7] RBC. 1 July 2014, Russian Direct Investment Fund (RDIF) may buy half of the central bank's stake in the Moscow Exchange: http://top.rbc.ru/economics/01/07/2014/933930.shtml

ers. Hence, Russian private banks and investment companies accounted for 28.7% of the MOEX voting shares.

Table 5

The Russian exchanges' shareholding structure prior to and after the consolidation

	Prior to the reorganization of the two stock exchanges		After the consolidation: OJSC MICEX-RTS as of 01.02.2012 [1]	After IPO: Moscow Stock Exchange as of 15.02.2013 – evaluation[2]	As of 12.05.2014[3]	Evaluation as of 31.12.2014
	OJSC RTS	CJSC MICEX				
Bank of Russia		28.6	24.3	22.5	23.7	12.1
Sberbank of Russia		7.5	10.4	9.6	10.0	10.0
VTB		7.1	6.1	5.6	3.8	3.8
VEB		10.5	8.7	8.0	8.4	8.4
Gazprombank		6.2	5.4			
Russian Direct Investment Fund (RDIF)		1.3	1.3	4.6	4.4[4]	5.3
The share of government entities	**0**	**61.1**	**56.1**	**50.3**	**50.3**	**39.6**
MICEX-Finance		2.8	2.8	5.5	2.3	2.2
Chinese investment company (Chengdong Investment Corporation)				5.4	5.6	5.6
EBRD				5.8	6.1	6.1
Other shareholders	89.0	27.9	32.9	33.0	35.7	46.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: based on the data obtained from the Bank of Russia, publications in Vedomosti and Kommersant newspapers.

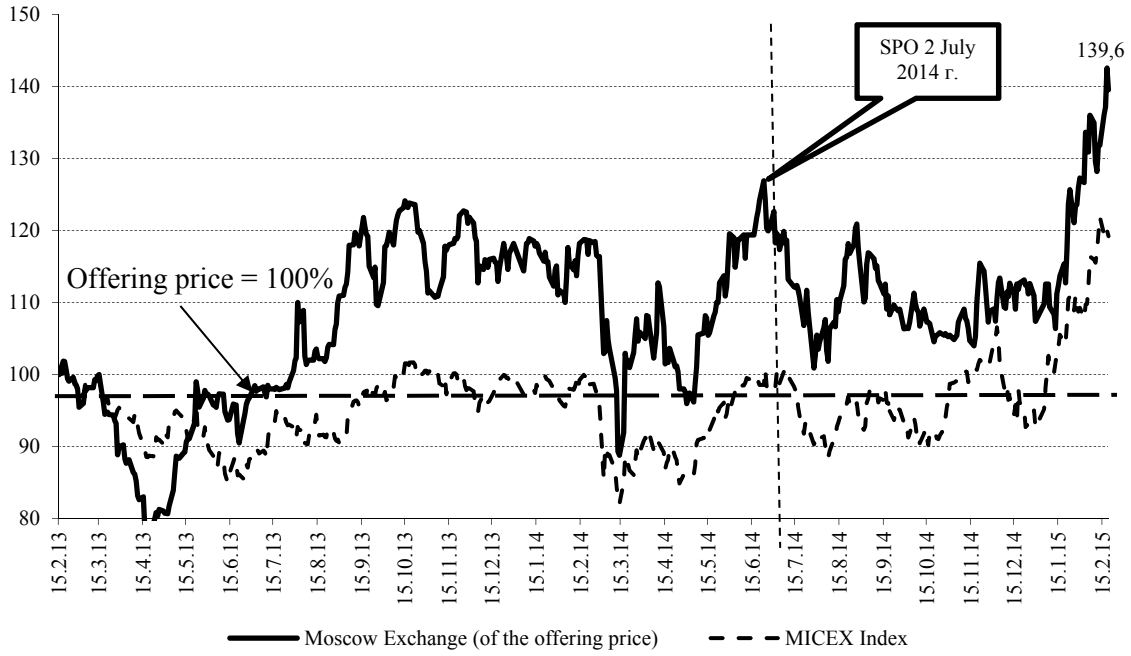
Such changes in the MOEX shareholding structure are exposed to certain risks for the Russian stock market's sustainability and competitive power, especially amid a possibly long-term effect of Western sanctions against Russia. This isn't even the case of the state having ceased to hold a controlling stake. The state is still the major shareholder amid the dispersed MOEX capital structure. Furthermore, amendments to the law on securities imposing a limit on a stake (5%) in the MOEX for private entities are very likely to be adopted in 2015. The main risk concerns the weakening of domestic private financial institutions' role as MOEX shareholders. The above normal imbalance towards exchange projects focused primarily on non-residents may have an adverse bearing on the advancement of domestic financial institutions and institutional investors. At present, despite the fact that private Russian financial institutions hold as little as some 28.7% of stake in the Exchange, they accounted in January 2015 for near 61.5% and 44.3% of on-exchange trading volume in the stock market and corporate bond market, respectively, based on our calculations.

An illustration of this is the ETF segment being a top priority development project for many exchanges. In the Russian Federation, such funds can be established following the adoption of Federal Law of 28.07.2012 No. 145-FZ *On Amendments to Certain Legal Acts of the Russian Federation*. To date, however, no such unit investment funds established under the Russian jurisdiction have emerged in the Moscow Exchange. Instead, the exchange has accepted and undertaking intensive public marketing of ETFs established by a foreign company and under a foreign jurisdiction.

[1] Mazunin A., Rudenko P., Khvostik E. Exchange capital has flown off westbound. Kommersant, 13 March 2012
[2] According to the data from the Moscow Exchange as of 16.01.2013, as well as the information of MOEX major shareholders published in the Kommersant statistics column on 18 February 2013.
[3] OJSC Moscow Exchange MICEX-RTS Quarterly Report for Q4 2014.
[4] RDIF nearly doubles its stake in the Moscow Exchange. Vedomosti, 9 July 2014.

Changes in the capitalization of any public company is a criterion of its successful development. The MOEX total capitalization at the moment of SPO transactions on 2 July 2014 was $4.0bn compared with $4.2bn at the moment of IPO, 4 February thru 15 February 2013, and $4.6bn of total capitalization of the OJSC RTS and CJSC MICEX exchanges early in 2011 until the consolidation. Early in 2012, according to the estimates of the Bank of Russia and the Exchange Board of Directors, the MOEX was assumed to reach a capitalization of $6bn by the end of the year.[1]

In the period between 4 and 15 February 2013, the Moscow Exchange held an IPO which raised Rb 15bn, or $500m. Although the price was announced within a range of Rb 55–63 per share, the actual price was set at the bottom of price range, i.e. Rb 55. (see *Fig. 10*). On the initial trading day of 15 February 2013, the MOEX equity shares were undervalued 0% against the offering price. A small undervaluation on the initial trading day of Russian JSC's IPO is often indicative of the overvaluation of equity shares during IPO. Later this may often result in a many-year negative surplus return on equity shares against the base index[2]. However, the long-term yield of MOEX equity shares was steadily higher than the yield of the MICEX Index two years after the IPO.



Source: the author's calculations based on the data from the Moscow Exchange and Finam Investment Company.

Fig. 10. Dymamics of quotations in the Moscow Exchange and MICEX Index in the period between 15 February 2013 and 19 February 2015 (15.02.2013=100%)

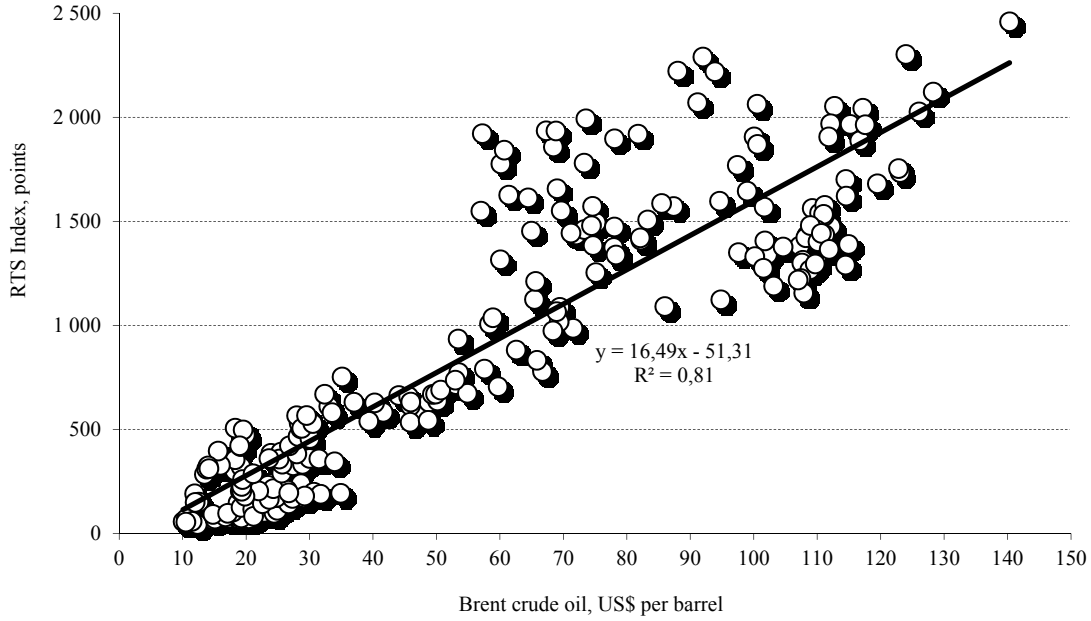
[1] Interfax-AFI. Stock exchange's pre-IPO self-evaluation. Kommersant, 26 March 2012

[2] Abramov A. E. Russian companies' IPO-SPO problems. Economic and political situation in Russia. Gaidar Institute for Economic Policy, No. 10, 2012, pp.58-54.4.

3.3. Stock market of Russian equity shares

3.3.1. Stock market reliance on global price trends

It is a well-known fact that the stock market of Russian equity shares depends largely on crude oil prices. The determination coefficient (R^2) between absolute monthly values of the RTS Index and Brent crude oil prices in the period between September 1995 and January 2015, as shown in *Fig. 11*, is 0.81, being indicative of very close relationship between these indicators.



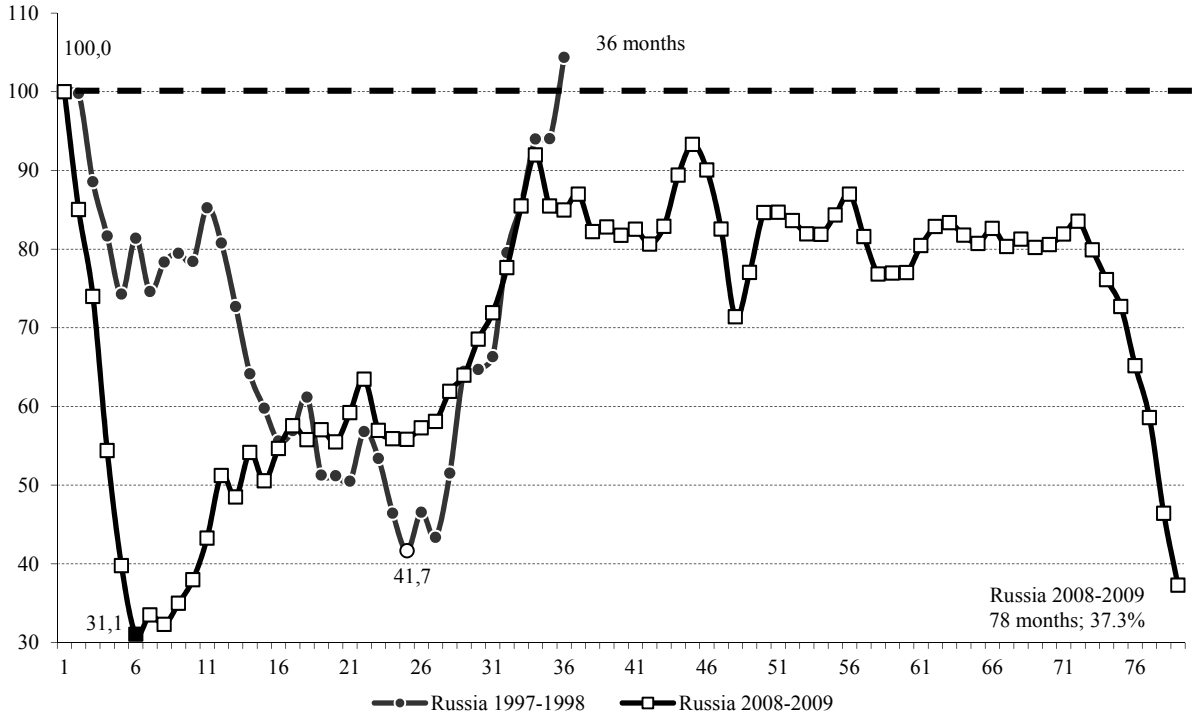
Source: the calculations are based on the data supplied by the IMF International Financial Statistics (IFS) and the Moscow Exchange.

Fig. 11. The relationship between RTS Index and Brent crude oil prices in the period between September 1995 and January 2015

International financial institutions and the Ministry of Economic Development of Russia anticipate the world to enter into a period of relatively low crude oil prices in the years to come. The anticipation is determined by slower growth rates in the global economy compared with those seen early in the 2000s, as well as the introduction of new power saving technologies and shale oil and gas production. The latter facilitated the reconstruction of the market principles of investment in oil and gas production, which were largely undermined by the above normal expansion of public capitalism in countries exporting energy resources.

Having reached a monthly average peak value of $133.90 per barrel in July 2008, the crude oil prices have to date been moving along the W-shape pathway. Within a 5-month period since July 2008, the prices hit a bottom of 31.1% of the pre-crisis peak level (see *Fig. 12*). Then it took the prices 28 months to rebound to 92.0% of the peak level; during the rest 38 months, they fell slowly to 83.5% of the peak level; within just seven months between July 2014 to January 2015, crude oil prices saw a new collapse to 37.3% of the peak level seen in July 2008.

All in all, compared with 1997–1998 when the crisis in Russia was caused by an imbalanced fiscal and monetary policy rather than low crude oil prices, a longer and deeper slump of crude oil prices was seen in July 2008 to January 2015 compared with the pre-crisis level. In the period between 1997 and 1998, crude oil prices fell to 41.7% of the pre-crisis peak level and it took them 36 months to rebound. In the period between July 2008 and January 2015, crude oil prices dropped twice to 31.1% and 37.3%, and haven't yet recovered within 78 months from then, and the recovery period is most likely to keep lingering for another few years. This is indicative of the current crisis in Russia having a structural rather than cyclical nature, which implies that the money market will not resume a steady growth unless deep structural reforms in the Russian economy are undertaken.

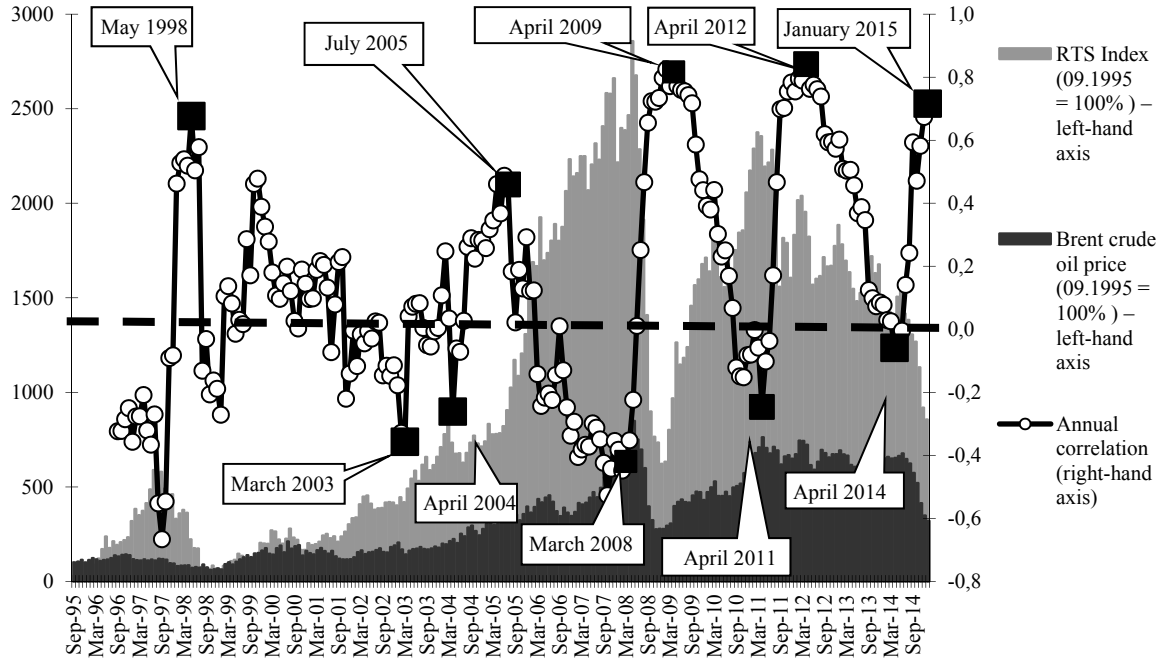


Source: based on the data obtained from the IMF IFS.

Fig. 12. Fall and rebound of Brent crude oil prices in times of financial crises in Russia (price peak level =100%) as of January 2015

The relationship between stock indices and crude oil prices is better described by analysis of relative changes to the same. *Fig. 13* shows the results of changes in the correlation coefficient between monthly relative changes in the RTS Index and Brent crude oil prices within 12-month period. The moving correlation curve has a peculiarity reflecting the strengthening or weakening of relationship between the two indicators with a 1-year lag. The correlation curve of changes in the RTS Index and crude oil prices is cyclic. The correlation coefficient declines and becomes negative as the index moves towards its pre-crisis peak level. This means that crude oil prices and the index unexpectedly began to change in opposite directions. Positive correlation between changes in the index and crude oil prices recovers during the stock market collapse. The correlation again tends to move to minus one (-1) upon the completion of acute phase of the crisis.

It is interesting to note that the trend reversal, when crude oil prices and foreign portfolio investment begin to move in opposite directions, fell often on April and March in various years. We cannot give a single explanation of this paradox. As may be supposed, it is in these months that the IMF releases its world economic outlooks (WEO) which many countries consider a most reliable source for 2-year projections of GDP growth. It is in these months that the professional community provides its opinion on changes in forecasts for economic growth and oil demand, which then transform into portfolio investors' annual strategies focused on emerging markets, including Russia.



Source: the calculations are based on the data from the IMF IFS and MICEX-RTS.

Fig. 13. Correlation between changes in the RTS Index and Brent crude oil prices in the period between September 1995 and January 2015

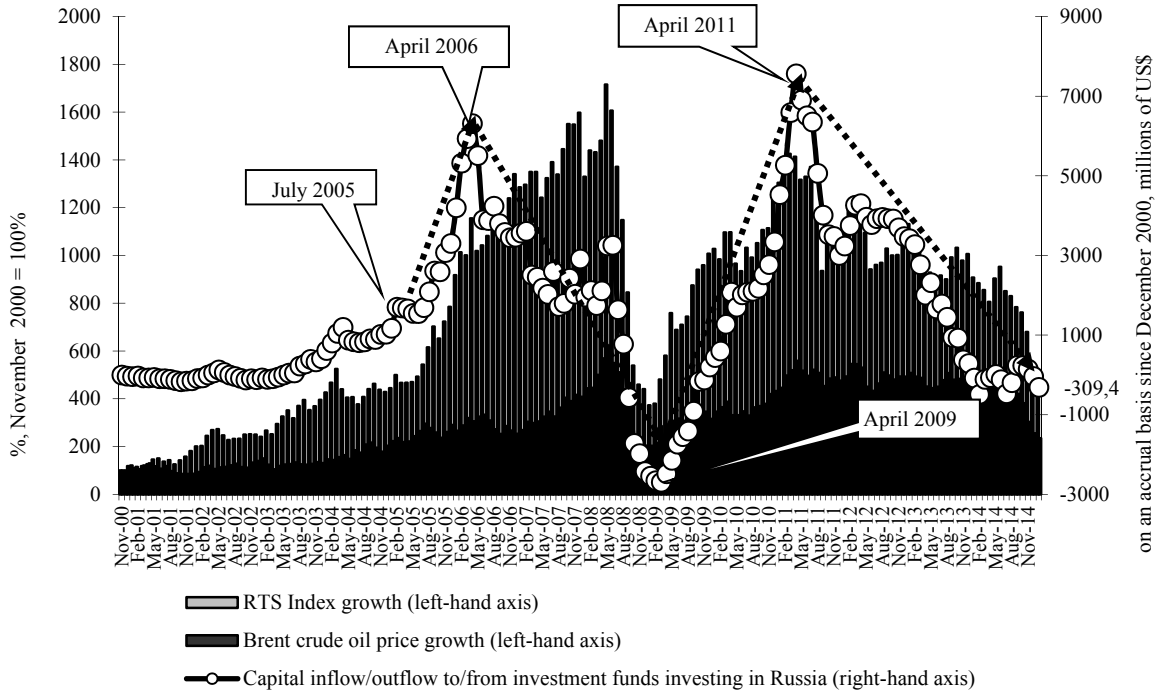
The dynamics of correlation curve has over the recent decade been distinguished by six periods:

- between the early 2000s and July 2005, when the correlation coefficient advanced from –0.2 to 0.5, while crude oil prices and the RTS Index were growing in the same direction;
- between July 2005 and April 2008, when the correlation coefficient declined from 0.5 to –0.5, while crude oil prices and the RTS Index advanced as a whole, however oil quotations declined in H2 2006 and H1 2007;
- between April 2008 and April 2009, when the correlation coefficient advanced from –0.5 to 0.8, it was a period of collapsing prices of crude oil and JSC's equity shares;
- between April 2009 and April 2011, when the correlation coefficient fell from 0.8 to –0.2, whereas crude oil prices increased moderately, and the RTS Index saw a drastic recovery growth;
- between May 2011 and April 2012, when the correlation coefficient increased to 0.8 as prices of crude oil and Russian JSC's equity shares went down in general;

- between May 2012 and April 2014, when the correlation index saw a new decline to –0.1: the RTS Index was falling predominantly, while the crude oil price remained relatively stable;
- between May 2012 and January 2015, when the correlation index increased to 0.7: the RTS Index and crude oil prices dropped simultaneously.

3.3.2. Stock market dependence on foreign portfolio investors

The cyclical nature of correlation of changes in prices of crude oil and Russian companies' equity shares can be explained by a strong impact of outflow/inflow of foreign portfolio investments on the dynamics of prices of stock of shares, as recorded by the Emerging Portfolio Fund Research (EPFR). This factor is highly competitive with the dynamics of crude oil prices in terms of having impact on prices of Russian equity shares, as evidenced by the data presented in *Fig. 14*.



Source: the calculations are based on the data from IFS IMF, the Moscow Exchange and EPFR.

Fig. 14. Growth in the RTS Index and Brent crude oil prices, money inflow/outflow to/from funds investing in Russia, as calculated on a cumulative total in the period between November 2000 and January 2015

Getting back to the aforementioned six periods during which the nature of relationship between changes to the RTS Index and dynamics of crude oil prices, cumulative investment analysis of foreign investment funds specializing in investment in Russia allows this phenomenon to be explained.

Growth in the correlation coefficient index and crude oil prices early in the 2000s – July 2005 was associated with the fact that within that period both factors effecting the dynamics of the stock market – crude oil prices and cash inflow to foreign investment funds investing in Russia – moved in opposite directions. Crude oil prices increased, portfolio investment saw cash inflow, the RTS Index grew steadily. It is shown in *Table 6* that special-purpose

funds received $1,5bn of investment funds in the period between November 2000 and June 2005.

Table 6

Capital inflow/outflow to/from foreign investment funds investing in Russian equity shares, according to the EPFR data

	Inflow (+)/ outflow (–) of money from investment funds, millions of US$
November 2000 – June 2005	1538
July 2005 – April 2006	4769
May 2006 – March 2009	–9005
April 2009 – April 2011	10255
May 2011 – January 2015	–7871

Source: the calculations are based on the data from the EPFR resource.

The correlation coefficient declined to –0.5 in the period between July 2005 and April 2008 in response to opposite dynamics of crude oil prices and foreign portfolio investments. In the period between July 2005 and April 2006, investment funds investing in Russia received $4.8bn of new investments despite growth in volatility of crude oil prices (see *Table 6* and *Fig. 14*). Upsurge of short-term investment inflow can be explained by investment rankings international agencies awarded for Russia. FITCH published its ranking on 17 November 2004 and S&P on 31 January 2005. However, a sharp reversal in preferences of those who invested through foreign investment funds was recorded in the period between April 2006 and April 2008, when investment funds investing in Russia saw an intensive cash outflow despite steady growth in crude oil prices. The growth of RTS Index slowed down significantly as a result of portfolio investment outflow, whilst crude oil prices kept growing.

In the period between April 2008 and April 2009, the correlation coefficient increased up to 0.8 in the period of stock market meltdown. At that time collapse in crude oil prices was accompanied by accelerated withdrawal of money from foreign investment funds investing in Russia. Therefore the RTS Index dropped at the same period.

The correlation coefficient of RTS Index and crude oil prices dropped again to –0.2 in the period between April 2009 and April 2011 in response to that the outgrowth in the RTS Index was based mostly on active cash inflow in foreign investment funds against a moderate growth in crude oil prices.

Foreign investment funds received $10,2bn of new investment at the same period.

The correlation coefficient of index and crude oil prices recovered in the period between May 2011 and April 2012, because the factors of crude oil prices and foreign investment resumed to move in the same direction. Crude oil prices declined and investors withdrew their investments from investment funds. The correlation disappeared in the period between May 2012 and January 2014, because crude oil prices remained stable while investment funds kept seeing cash outflow. In the period between May 2011 and January 2014, the RTS Index itself saw a downtrend following cash outflows from funds investing in Russia.

In the period between April 2014 and January 2015, the correlation of crude oil prices and the index began to grow again. Crude oil price went down at that time, collapsing since July, followed by mostly portfolio investment outflow. It wasn't until September to November that cash inflow to funds investing in Russia was noticed, followed by another outflow seen in December 2014 and January 2015.

The graph of variance in accumulated cash flows at foreign investment funds specializing in investment in Russia *Fig. 14* shows that principal changes to the behavior of foreign investors took place in May 2006 and in May 2011. According to the data presented in *Table 6,*

special-purpose foreign investment funds saw an outflow of funds of $9,0bn in May 2006 – March 2009 and a $7.9bn in May 2011 – January 2015. Even though these assessments were doubled given a possible similar behavior of asset managers of regional and global investment funds which reduced their investment in Russia, it appears that shock changes to prices of equity shares in the Russian market can result in gradual withdrawal of sums equal to a 1–2-day stock trading volume in the Moscow Exchange.

The factors that predetermine adverse changes in the behavior of global portfolio investors in emerging markets were explained by IMF experts in the Global Financial Stability Report, September 2011[1]. They used the EPFR data regarding the flows in special-purpose equity investment funds worldwide, in Asia, Latin America, Europe, Middle East and developed economies in the period between January 2005 and May 2011. The survey shows that the inflows/outflows were basically influenced by the following key factors:

- official forecasts of real GDP growth rates[2] (with a plus "+");
- volatility of GDP growth rate forecasts (with a minus "–");
- volatility of the exchange rate of foreign currencies (with a minus "–");
- stock market volatility indicator – Volatility Index (VIX) (with a minus "–").

Indicators of interest rates and currency regulations appeared to be less important factor.

The foregoing factors can be regarded as forward-looking indicators of financial crises which are used by managers of portfolio investment funds specializing in investment in specific markets. The results of the IMF's study shows that the hardest shock in terms of maximum cash outflow ($4.4bn) from investment funds investing in countries located in Europe, Middle East, and Africa, occurred exactly in June 2006. It is in this month, as shown in *Fig. 14*, that saw a reverse trend in the behavior of investors in funds investing in Russian JSCs' equity shares. Under the circumstances, the downgrade trend of the forecast for GDP growth in the second half of the year in most significant developed and developing economies[3] which was noted in the IMF World Economic Outlook (WEO) in April 2006, as well as VIX index[4] turbulences beginning with Q2 2005, could serve as signals for withdrawal from portfolio investment. Upsurges in volatility of forecasts of GDP growth rate and prices of equity shares reflected experts' and market's concern about disproportions in countries' trade balance, mounting crisis in the U.S. mortgage securities market, and other factors which eventually resulted in the recession of 2008.

These studies help understand a relatively simple model of behavior of those who invest in foreign investment funds specializing in investment in the Russian stock market. By investing in Russia, they are aiming to entering the market when the price of local companies' equity shares is low and timely leave the market at first signs of falling crude oil prices and devaluation of the ruble. They receive signals from, for example, the Consensus Economics information system which makes consensus projections of certain key macroeconomic and financial indicators of various countries with a 24-month depth (two years) based on the forecasts of analysts at major investment banks. The GDP growth forecast is most significant one. The

[1] IMF. Financial Stability Report. September 2011, pp. 11– 18. Available on www.imf.org.
[2] GDP growth and volatility projections were calculated on the basis of the data available at the Consensus Economics database
[3] World Economic Outlook (WEO), April 2006, Fig. 1.8. Available at www.imf.org.
[4] R. Rajan. Lines of Fracture (M., Delo Publishing House, 2011, p. 272) that between Q2 2005 and Q2 2007 the two-year implied volatility of S&P500 option price – market expectations of volatility in prices of shares for two years – was 30-40% higher than short-term one-month volatility

moment of significant changes to the forecast for the current year or the year to come is a signal of a new trend in the behavior of investors. For example, if forecasts show a substantial decline, investors begin to withdraw their funds from investment funds investing in Russia. Investors' behavior will change as soon as they receive a signal of potential increase in economic growth in Russia and the major developed countries. This creates the cyclic nature of the behavior of unit-holders of foreign investment funds investing in Russia, as clearly seen in *Fig. 14*.

3.3.3. Money market segments in the Moscow Exchange

Low return on Russian equity shares after 2008 coupled with higher volatility of the exchange rate and Bank of Russia's support to the national banking system through the mechanism of repo transactions and FX swaps had a substantial effect on the changes in the Moscow Exchange's market structure. Over the past four years the share of stock market in the total volume of on-exchange transactions has decreased from 13.2% to 4.1%, including that of transactions with equity shares, depository receipts and units – from 8.0% to 2.0%. (see *Table 7*). Likewise, the share of derivatives market declined from 14.8% to 11.9%. In contrast, the share of FX and money market increased to 84.0% in 2014 from 72.0% in 2010, including that of repo trading to 35.6% from 31.5% and FX swaps to 29.3% from 20.1%. These changes reflect a trend towards the weakening role of capital market versus the monetary market and refocusing the internal financial system on shorter-term sources of financing of banks and the real sector of economy.

Table 7

The Moscow Exchange structure, %

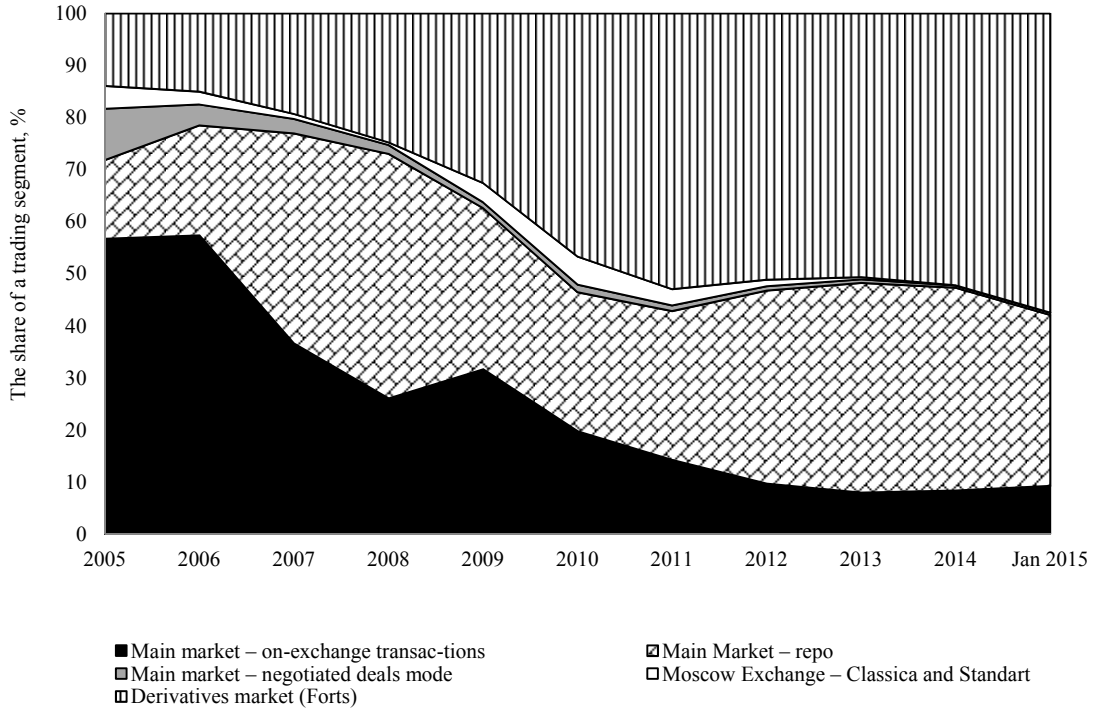
	2010	2011	2012	2013	2014
Stock (equity) market	**13.2**	**10.3**	**6.5**	**5.3**	**4.1**
Including:					
Stocks, depository receipts and fund units	8.0	6.6	3.1	1.9	2.0
Bonds	5.2	3.7	3.4	3.4	2.1
Secondary trading	3.4	2.9	2.8	2.8	1.7
Securities market	1.8	0.8	0.6	0.6	0.4
FX and money market	**72.0**	**70.6**	**80.0**	**83.8**	**84.0**
including:					
Money market	33.9	41.3	48.3	49.1	39.7
REPOs	31.5	38.3	45.8	46.2	35.6
Lending market	2.4	3.1	2.5	2.9	4.1
FX market	38.1	29.3	31.6	34.7	44.4
Spot transactions	18.0	15.8	16.6	12.8	15.1
Swap transactions	20.1	13.4	15.0	22.0	29.3
Derivatives market	14.8	19.1	13.5	10.8	11.9
Commodity market	0.0	0.0	0.0	0.0	0.0
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Moscow Exchange, the Q4 2014 quarterly report.

Fig. 15 and в *Table 8* show changes to the structure of various trading modes in the Russian exchange, including transactions in the derivatives market. In 2014, the share of market segments of on-exchange trading such as the main stock market and the derivatives market increased to 8.4% and 52.2%, respectively, from 8.0% and 50.7% in 2013. It is the derivatives market that was growing most noticeably during the three final months of 2014, because of market participants' efforts to hedge against plummeting equity shares. However, neither the main nor the derivatives market segments managed in 2014 to reach the share in the total

volume of on-exchange trading which they had in 2011, prior to the consolidation stock exchanges RTS and MICEX.

The four key trends were markedly prevailing during a longer period of time, from 2005 to 2014: the share of on-exchange transactions with equity shares declined to 8.4% from 56.7%; the share of derivatives market increased to 52.2% from 13.9%; and the share of repo transactions with equity shares raised to 39.0% from 15.1%; the stock market's "Classica" and Standard segments gradually ceased to exist in the Exchange, their share shrinking to 0.0% from 4.4%. The foregoing leads to the conclusion that, on the one hand, the stock market became less fragmented and hence more efficient following the consolidation of exchanges. On the other hand, the shrinkage of the underlying asset market segment to 8.4% is exposed to risks of distorted collateral value in repo transactions and in the derivatives market.



Source: author's calculations based on the data from Russian exchanges.

Fig. 15. The structure of Moscow Exchange's stock market and forts market in the period between January 2005 and January 2015

Table 8

The structure of stock market and derivatives market in the Moscow Exchange in the period between January 2005 and January 2015

	2005	2010	2011	2012	2013	2014	Jan 2015
Main market – on-exchange transactions	56.7	19.8	14.3	9.7	8.0	8.4	9.3
Main market – repo transactions	15.1	26.7	28.6	37.1	40.3	39.0	32.8
Main market – negotiated deals mode	9.8	1.5	1.1	0.8	0.7	0.4	0.5
Moscow Exchange – Classica and Standart segments	4.4	5.4	3.1	1.3	0.4	0.0	0.0
Derivatives market (Forts)	13.9	46.7	53.0	51.1	50.7	52.2	57.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

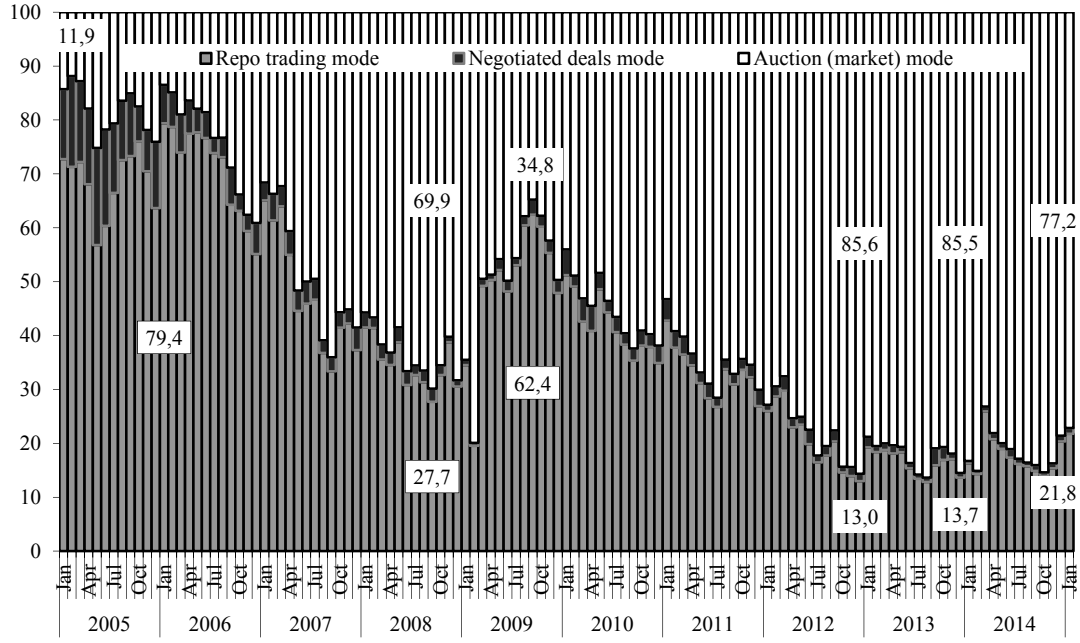
Source: author's calculations based on the data from Russian exchanges.

The long-term growth in the segment of repo transactions with equity shares raises a special concern, whereby brokers implement risk-bearing strategies of raising cash resources to maintain liquidity and marginal lending for their customers. According to the estimates published in mass media, arbitrage in the repo stock market was a reason behind the problems faced in 2012 by Renascence Bank, a Russian large investment bank, which led to the change of controlling shareholder[1]. A small share of on-exchange transactions creates risks of manipulations with the value of equity shares used for calculating stock indices and other underlying assets for the derivatives market. In an attempt to prevent manipulations with prices of underlying assets while calculating the futures expiration price, the Bank of Russia had to issue an order on 15 December 2014, under which the Moscow Exchange was instructed to suspend trading of some of trading participants' customers found to be geared towards affecting the price of underlying assets while estimating the price of futures contracts expiration in 2013–2014[2].

The share of on-exchange transactions with equity shares in the Moscow Exchange reached 21.8% in January 2015 compared with 13.7% in 2013. A certain decline in the volumes of repo transactions in 2014 – early in 2015 is attributed to the fact that market participants needed less fundraising through the repo market as the value of equity shares was slumping. Market transactions also were supported by a program designed to maintain liquidity in the stock market, under which the Exchange provides material incentives to market makers represented by both brokers and their customers. In 2013, according to experts' estimates, market makers' turnover was 15–20% T+2 transactions with equity shares[3], while the support program charged about a quarter of the Exchange fee charged from brokers[4]. In 2014, the Exchange took a series of measures aimed at narrowing the scope of persons entitled to the reward and tightened the market support requirements. As a result, according to the Exchange's estimates, market-makers' budget in 2014 was less than that in the preceding year[5].

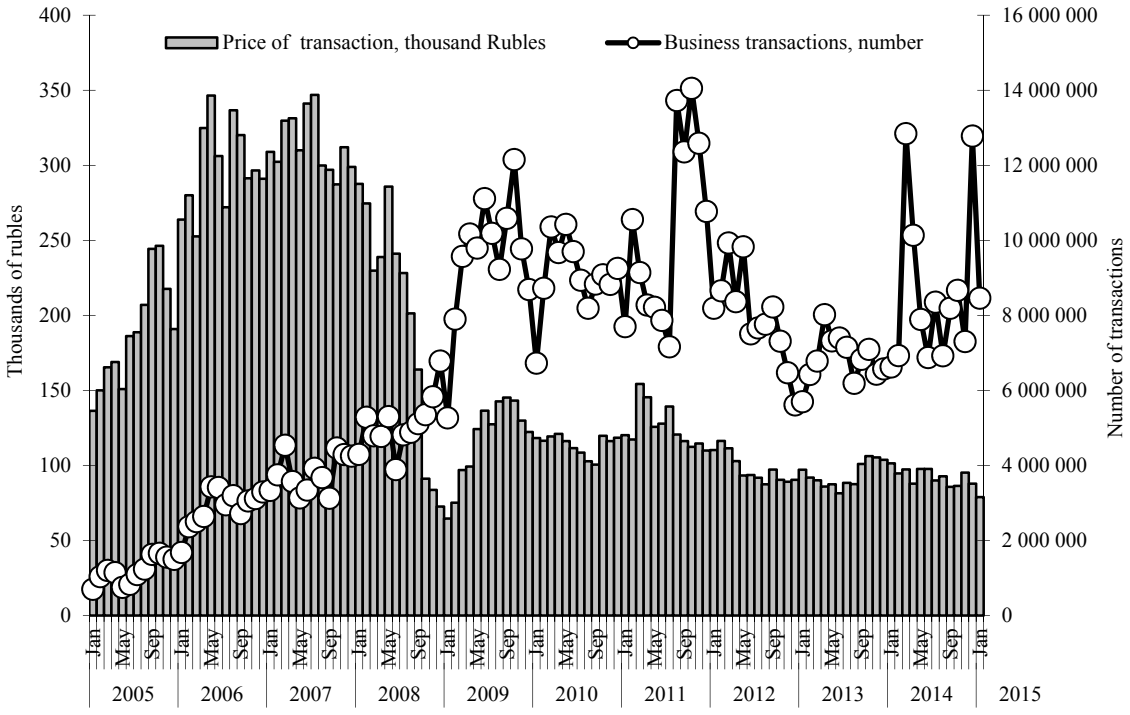
It is seen from *Fig. 17* that in 2014, with a stable average volume per transaction compared with the preceding year, there was a pronounced uptrend as to the number of transactions. On-exchange transactions with equity shares grew up most in number in March and December 2014, i.e. when geopolitical risks were as high as possible and the ruble's devaluation was in the acute phase. In March and December 2014, the RTS Index lost 18.3% and 40.1%, respectively, the highest monthly values during 2014. At the same time, the stable average value of transactions with equity shares is implicitly indicative of that the spot market in 2014 saw no increase in trading on the part of high frequency traders and their customers.

[1] Tofanyuk E. Walking in Africa. Forbes, No. 1 (106), 2013, pp. 100 – 101
[2] Kuznetsov I., Tsareva L., Gaidayev V. Losing in trading. Kommersant, 16 December 2014
[3] Orlova Y., Kazmin D. Moscow pulls trading from London. Vedomosti, 10 December 2013
[4] Kuznetsov I., Gaidayev V. A quarterless fee. Kommersant, 25 August 2013
[5] Orlova Y. The exchange is saving. Vedomosti, 23 July 2014



Source: author's calculations based on the data from the Moscow Exchange.

Fig. 16. The structure of trading in stocks in the MOEX main market, %



Source: author's calculations based on the data from the Moscow Exchange.

Fig. 17. Trading in stocks in the MOEX main market

3.3.4. Competition between market participants in the domestic stock market

In 2013, government entities kept strengthening their position in the stock market, being manifested by growth in the share of state-run financial organizations in stock trading volumes, increasing their role in managing the Moscow Exchange, expanding the powers vested with the Bank of Russia and the Ministry of Finance of Russia in the field of regulation and compliance monitoring.

Fig. 18 presents the results of stock transactions of the Bank of Russia, state-run banks and related entities in the MOEX main market[1]. This market segment saw a visible growth in the activity of public players during the acute phase of the crisis, September 2008 – July 2009. In December 2008, the share of government entities in the volume of stock on-exchange transactions increased to 50.9%, which was mostly determined by the fact that a few major participants (KIT Finance, Svyazbank) were facing financial problems and fell under control of state-run banks, as well as Vnesheconombank implemented a stock market support program financed with Rb 175bn received on a repayable basis from the National Welfare Fund. When the market was recovering, the share of state-run banks and their subsidiaries and affiliates in the volume of stock on-exchange transactions declined, but resumed growth in February 2011, reaching 36.1% in December 2011, which can be explained by Sberbank of Russia acquiring Troika Dialog (Sberbank CIB), an investment company). In 2012, the share of state-run financial institutions increased, however, the Bank of Russia entered the MOEX stock market in May 2012 and accounted for 7.1% of the value of transactions in December 2012. In December 2013, the share of state-run financial institutions increased to 35.8%, while that of the Bank of Russia stood at 7.5%. In January 2015, the share of government entities shrank to 29.7%, while that of the Bank of Russia decreased to 4.3%, amid the sale of securities by private investors.

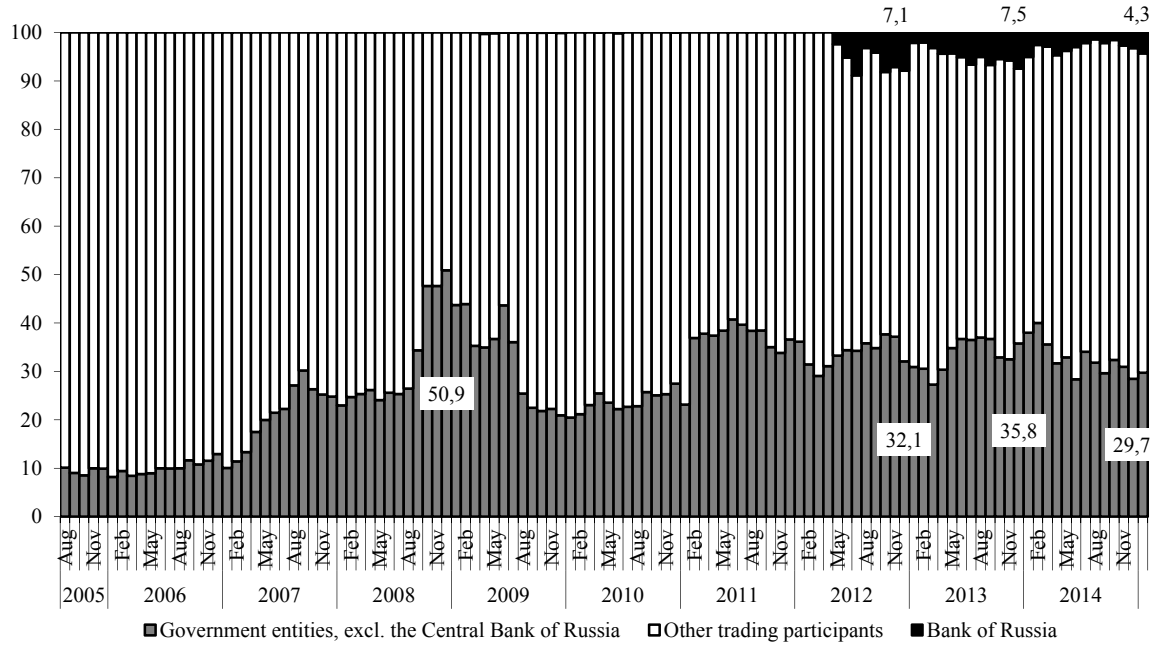
Fig. 19 shows the data on Herfindahl-Hirschman Index (HHI)[2] for each of the MOEX market segments in the period between January 2005 and January 2015. According to the estimates of the Federal Antimonopoly Service (FAS), the market is low concentrated if HHI being less than 800, moderately concentrated if 800 < HHI < 1800, and highly concentrated if HHI is more than 1800[3]. In 2014, the HHI on transactions in the MOEX main stock market was stable at about 500, i.e. this market segment was low concentrated. At the same time, HHI measures for transactions with various categories of bonds remained within the range of a moderately concentrated market. Only occasionally did the HHI for regional bonds move to the range of highly concentrated market. A trend of noticeably worsening HHI measures for a series of financial instruments is being observed in a relatively long-term horizon of 10 years. In 2010, regional bonds left the range of low concentrated market, and corporate bonds did

[1] Vnesheconombank, VTB, VTB Capital, VTB24, Gazprombank, Sberbank, KIT Finance, Svyazbank, Bank of Moscow, Transcreditbank, and Sberbank CIB since 2011.

[2] The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration. The HHI is calculated by squaring the interest rate in terms of trading volume of each participant and totaling the obtained results: $HHI = (D1)^2 + (D2)^2 + ... + (Dm)^2$, where Di is *i*-participant's market share expressed in percent; $i = 1, 2, ..., m$.

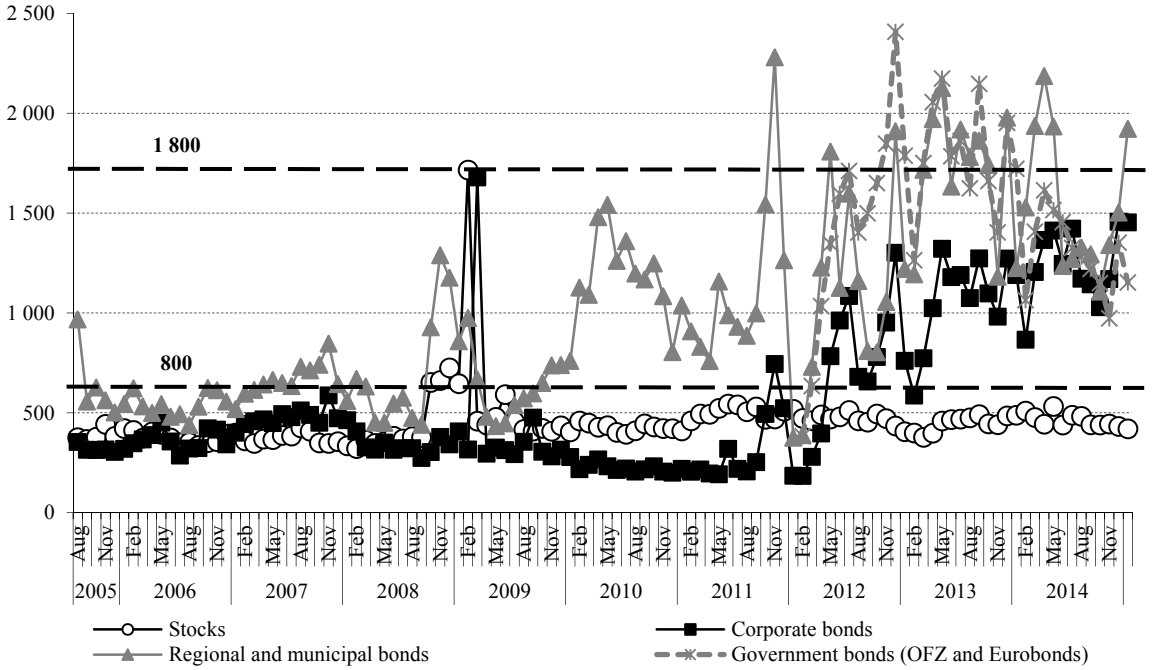
[3] See section 2.6.4. of the guidelines on the procedure for analyzing and evaluating the competitive environment in the financial service market approved by the Order of 31.03.2003, No 86 of the Russian Federation Ministry for Antimonopoly Policy and Support of Entrepreneurship.

the same in 2012. This implies that market participants have been reducing in number, and large participants have been accounting for an increasingly bigger part of trading volumes.



Source: author's calculations based on the data from the Moscow Exchange.

Fig. 18. The share of private and public brokers in stock trading volumes in the Moscow Exchange in the period between August 2005 and January 2015, %



Source: author's calculations based on the data from the Moscow Exchange.

Fig. 19. The Herfindahl-Hirschman Index: by volume of secondary trading in the MOEX main market (all trading modes)

The decline in active on-exchange trading of private investors and the growth in the role of government entities in the money market, which enjoy privileges from monetary authorities in fundraising, raises the question of staying in business for many private companies, such as brokers and asset managers. In this respect, the Bank of Russia's initiative to relax equity requirements to securities market professional participants has an important positive impact on the development of industry. Pursuant to the Bank of Russia Regulation of 21.07.2014 No. 3329-U *On Equity Requirements to Professional Securities Market Participants and Asset Managers of Investment Funds, Unit Investment Funds and Non-Government Pension Funds,* in force since 1 September 2014, reduced to Rb 3m from Rb 35 the minimum capital requirements for dealers and brokers which don't use customer assets, to Rb 15m from Rb 60m for depositories. The minimum capital requirements for brokers using customer assets were reduced to Rb 15m from Rb 35m, for securities managers to Rb 5m from Rb 35m, provided that they are members of a CPO which approved and agreed business practice standards with the Bank of Russia. For non-member prime brokers and securities managers, the minimum equity capital requirements were retained at Rb 35m and Rb 60m, respectively. On 18 February 2015, the Board of Directors of National Association of Securities Market Participants (NAUFOR) approved the final version of basic professional practice standards in the securities market and sent them to the Bank of Russia for consideration. This is indicative of the existing CPOs' endeavors to switch as soon as possible to a new business practice to be able to meet the requirements of the Bank of Russia.

It, however, is insufficient to simply release the above normal administrative pressure on financial institutions other than banks. Professional participants in the securities market have been reducing in number for six consecutive years since 2009 (see *Table 9*). As of 27 February 2015, the number of brokers declined to 787 from 885 in 2013, or by 11.1%, dealers to 798 from 888, or by 10.1%.

Table 9

The number of professional market participants in the stock market

	2007	2008	2009	2010	2011	2012	2013	2014
The number of organizations licensed for:								
1. Brokerage	1445	1475	1335	1213	1090	983	885	787*
Changes, as a percentage of the previous period	0.8	2.1	–9.5	–9.1	–10.1	–9.8	–10.0	–11.1
2. Acting as dealer	1422	1470	1337	1198	1088	994	888	798*
Changes, as a percentage of the previous period	2.0	3.4	–9.0	–10.4	–9.2	–8.6	–10.7	–10.1

* as of 27.02.2015

Source: based on the data obtained from the RFMS Russia and the Bank of Russia.

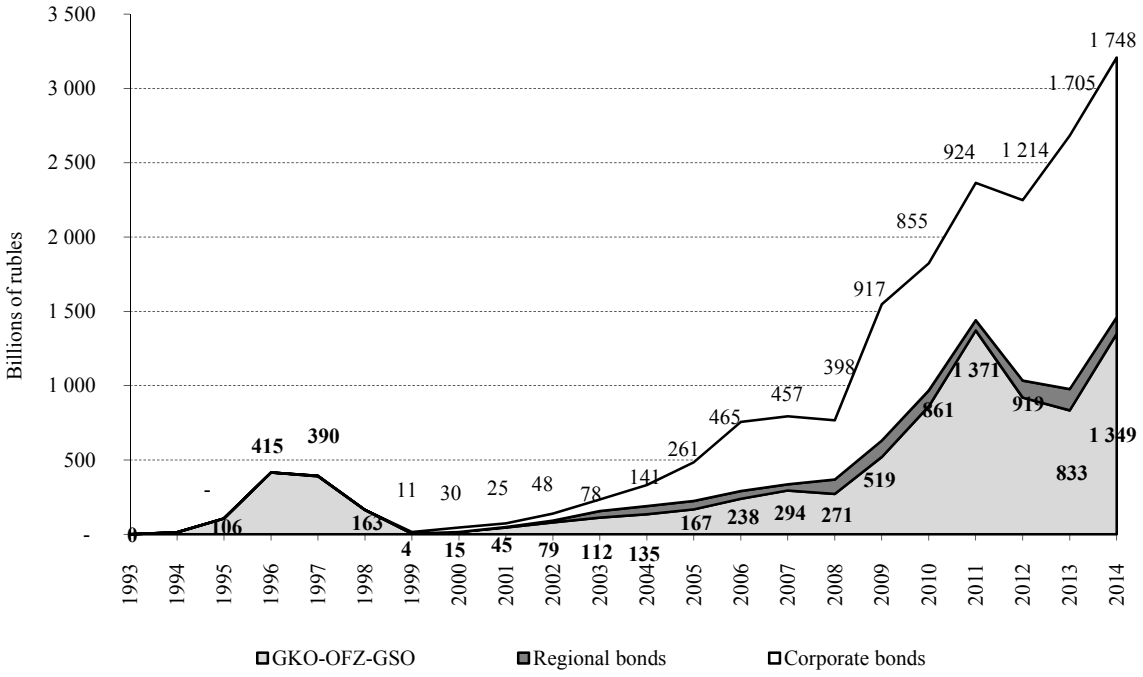
3.4. Ruble-denominated bond market

3.4.1. Government securities market

The year of 2014 was tough for the federal securities market. The introduction of international sanctions limited the opportunities for new external fundraising, while the volatile domestic money market weakened the demand for ruble-denominated OFZs and resulted in higher interest rates on loans. New assets such as pension assets ceased to inflow to the domestic public debt market, because the funded component of retirement benefits was frozen in 2014–2015. Not only did the liberalization in February 2013, making the OFZ market availa-

ble for non-residents by opening Euroclear and Clearstream accounts with the NSD amid the restricted access to Russian government securities for European and U.S. investors, fail to attract non-resident assets, but it rather increased the risks of unexpected outflow of non-resident assets from OFZ.

In 2014, the size of OFZ-GSO issuance increased to Rb 1349bn from Rb 833bn in 2013 (see *Fig. 20*), or by 61.9%. However, the size of OFZ on-market issuance was as little as Rb 157.9bn compared with Rb 398.5bn provided for by the Public Debt Management Policy of the Russian Federation for 2013–2015[1]. The major part of OFZ issuance accounted for by OTC issues used for strengthening the capital of large banks through the Deposit Insurance Agency (DIA)[2]. In an effort to make government securities more attractive for investors, Russia's Finance Ministry decided in 2014 to issue OFZs with a variable coupon, allowing government securities to be offered in a volatile market with a higher yield subsequently declining in the mid run.



Source: based on the data obtained from the Moscow Exchange and cBonds.

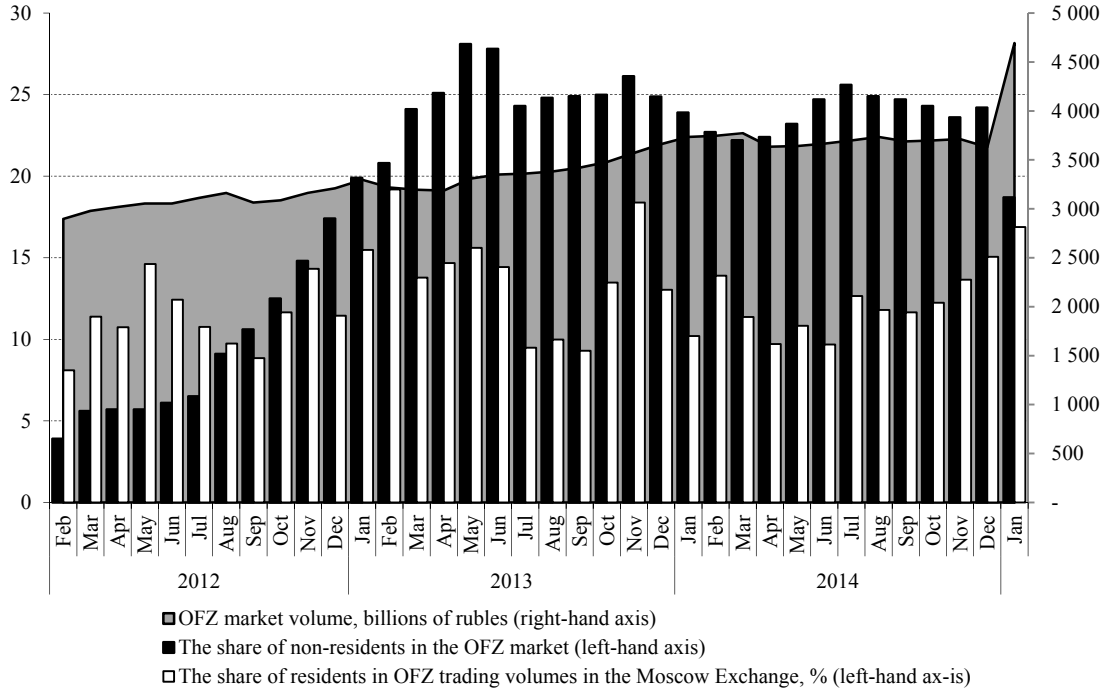
Fig. 20. Placement volumes of ruble-denominated bonds in 1993–2014

According to the Bank of Russia, the opening, early in 2013, of nominee accounts for foreign settlement and clearing organizations with the Russian central depository spurred a substantial inflow of foreign investment to the domestic public debt market. The foreign investment base is diversified enough and includes participants with a big variety of investment strategies[3]. In 2013, the share of non-residents in the OFZ bondholder structure reached 24.9%. Such a rapid growth in the share of non-residents in the OFZ market was unexpected even for the Ministry of Finance. According to the Public Debt Management Policy of the

[1] Published on: http://www.minfin.ru/ru/perfomance/public_debt/policy/
[2] Biyanova N., Voronova T. Who is going to receive a trillion. Vedomosti, 15 January 2015
[3] The Central Bank of the Russian Federation. Money Market Review, Quarter 4, 2014, p.22.

Russian Federation for 2013–2015 (p. 25), the foregoing value was expected to increase to as little as 10% in the mid run and to 25% in the long run.

Risks of non-resident assets outflow from OFZ increased considerably late in 2014, amid sanctions and in expectation of the three world leading rating agencies to lower below the investment-grade level the sovereign rating for the Russian Federation. On 26 January 2015, S&P lowered the sovereign credit rating below the investment-grade level for the Russian Federation, to BB+/negative, whereas Moody's and Fitch in January decided not to change the investment ranting for Russia, with a negative outlook though. Those developments resulted in no mass sales of OFZs. Despite that the share of non-residents in the OFZ bondholding structure contracted to 18.7% in January 2015 from 24.2% in December 2014, it resulted in higher volumes of OFZ, including OTC issues, rather than the sales of government securities by foreign investors.

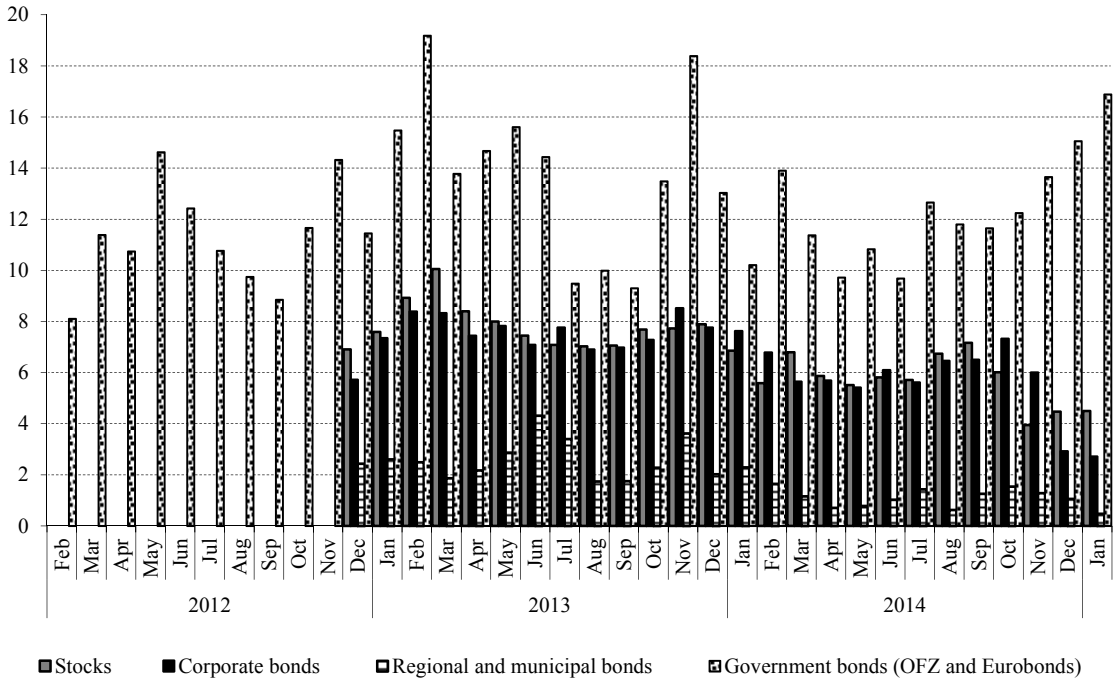


Source: The Bank of Russia and author's calculations based on the data from the Moscow Exchange.

Fig. 21. The share of non-residents in the OFZ market in the period between February 2012 and January 2015

In 2014, the share of the same 12 non-resident banks in the volume of secondary government bond market was noticeably higher than that of the same financial organizations calculated for the secondary stock market, corporate bond market and regional bond market in the Moscow Exchange (see *Fig. 22*). This is indicative of that many non-residents still pay more interest in the government bond segment of the Exchange. At the same time, corporate, regional bonds and equity shares saw the opposite trend. The share of non-residents trading in the secondary corporate bond market contracted to 2.7% in January 2015 from 7.8% in 2013, while the share of non-residents trading in regional bonds and equity shares declined to 0.5% from 2.0% and to 4.5% from 7.9%, respectively. This implies that non-residents paid less interest in 2014 in transactions with Russian non-government securities, despite the fact that such transactions were technically simplified for foreign investors by infrastructural organiza-

tions as part of inter-custodial interaction with Euroclear and Clearstream, as well as through the amendments to the Russian legislation regarding the participation of non-residents in corporate events of Russian issuers. In our opinion, a more stable domestic market is supposed to provide for a heavier reliance on the resources of domestic investors in the stock market.



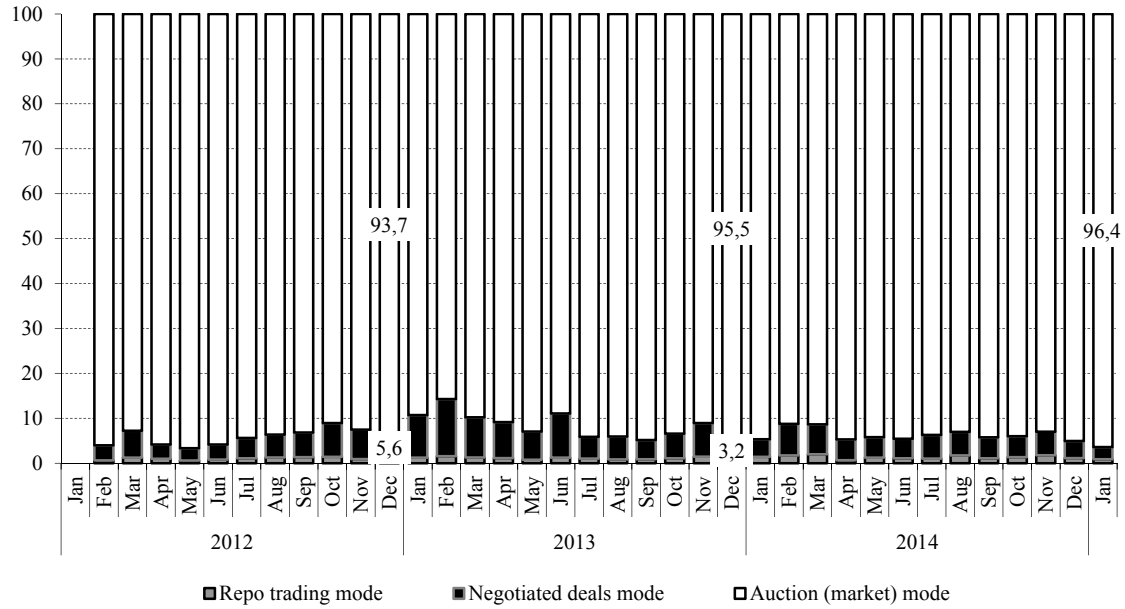
Source: author's calculations based on the data from the Moscow Exchange.

Fig. 22. The share of non-residents in securities trading volumes in the Moscow Exchange in the period between February 2012 and January 2015, %

The data on different modes of transactions employed in the government bond market in the period between 2012 and 2014 was made available through MOEX statistics. In its previous money market reviews the Bank of Russia only disclosed information of the size of market (auction) transactions and operations as part of the negotiated OFZ trading mode. It is seen from the data presented in *Fig. 23* that the share of repo transactions in the government bond market was 96.4% in January 2015. Market transactions accounted for as little as 0.9% of the trading turnover. In this situation, it is unclear what market transactions' function is as such, whether the information about them is sufficient to provide an objective market information about OFZ and Eurobond market parameters.

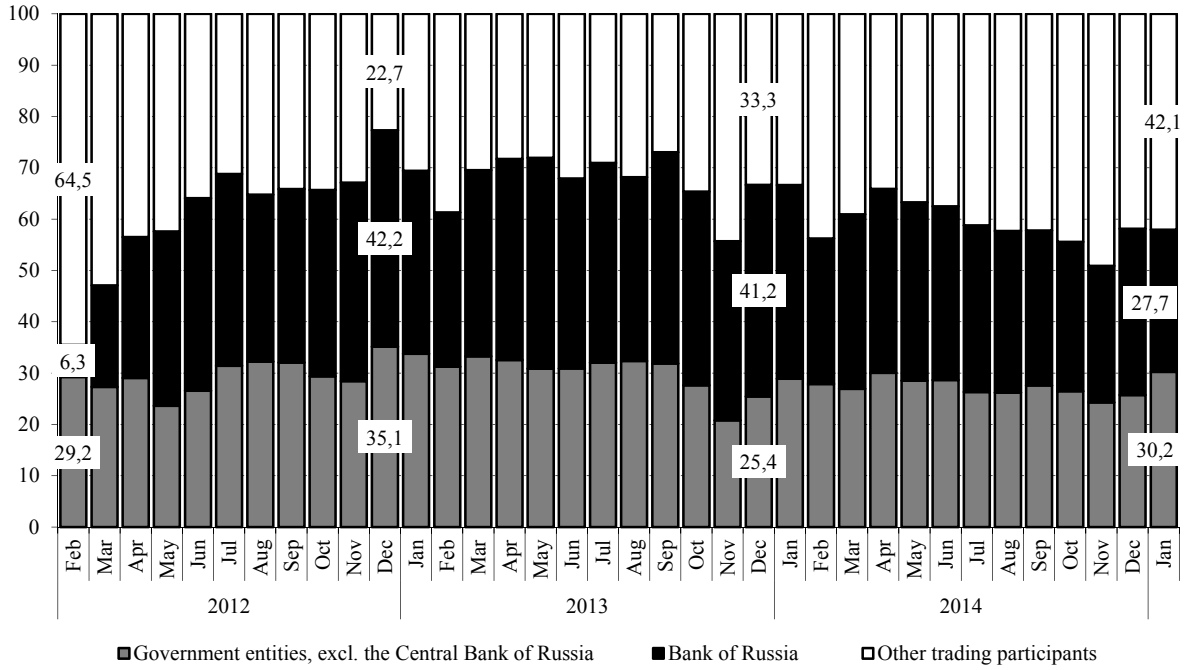
Fig. 24 shows data on the share of government entities and the Bank of Russia in the on-exchange federal bond market, which the Moscow Exchange has been disclosing since February 2012. Here, in January 2015, government entities and the Bank of Russia accounted for 27.7% and 30.2%, respectively, of the on-exchange transactions with government securities, as part of all trading modes. The share of private financial entities increased to 42.1% in January 2015 from 33.3% in December 2013. This can be explained by the fact that amid high volatility in the market in 2014, the Bank of Russia's refinancing through repo transactions was distributed more ratably among banks of various categories. At the same time, the largest state-run banks were a little bit less active in this market segment, as they could use alterna-

tive channels of refinancing in the Bank of Russia as lending against non-marketable assets and recapitalization through OFZ contributions to the equity.



Source: author's calculations based on the data from the Moscow Exchange.

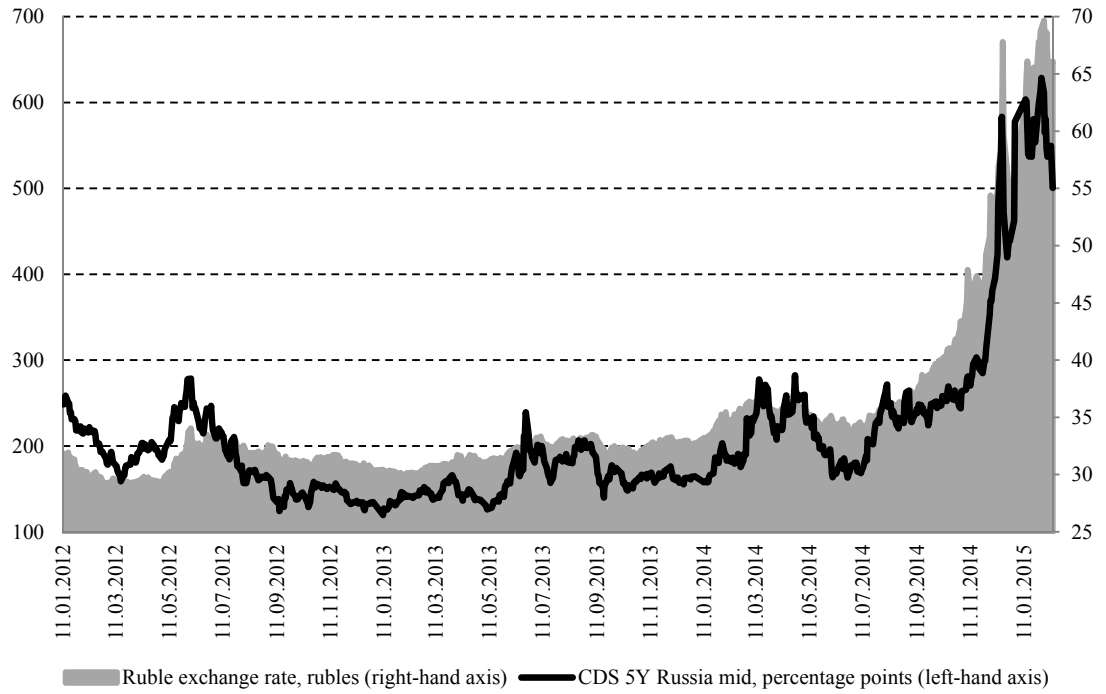
Fig. 23. The structure of trading in federal bonds in the Moscow Exchange in the period between February 2012 and January 2015, %



Source: author's calculations based on the data from the Moscow Exchange.

Fig. 24. The share of private and public brokers in volumes of trading in federal bonds (OFZs) and Russia's Eurobonds in the Moscow Exchange, %

The diagram in *Fig. 25* shows that fundraising conditions for Russia deteriorated seriously in 2014, the dynamics of ruble's exchange rate is compared with the growth in price of credit default swaps (CDS)[1] for Russia sovereign bonds maturing in five years. The geopolitical risks relating to the events in Ukraine in H1 2014 had no strong impact on the sovereign debt market. In the period between 12.31.2013 and 07.11.2014, the US dollar's exchange rate increased to Rb 33,84 from Rb 32,73 per US$, or by 3.4%; the CDS price increased to 173.3 from 164.6 basis points, or by 5.3%. However, the ruble exchange rate plummeted, followed by the growth in price of CDS on Russia's debt, after the introduction of sanctions limiting the refinancing of FX-denominated liabilities of Russian issuers and hence boosting the capital outflow from Russia, and the start of falling crude oil prices in July 2014, leading to their collapse in the fourth quarter. In the period between 07.11.2014 and 01.31.2015, the US dollar's exchange rate increased to Rb 68,73 from Rb 33,84 per US$, or doubled, while the Russia 5Y CDS price jumped up to 613.4 b.p. from 173.3 b.p., or by 3.5 times. In February 2015, the monetary authorities managed to slightly stabilize the ruble, thereby reducing slightly the CDS price.



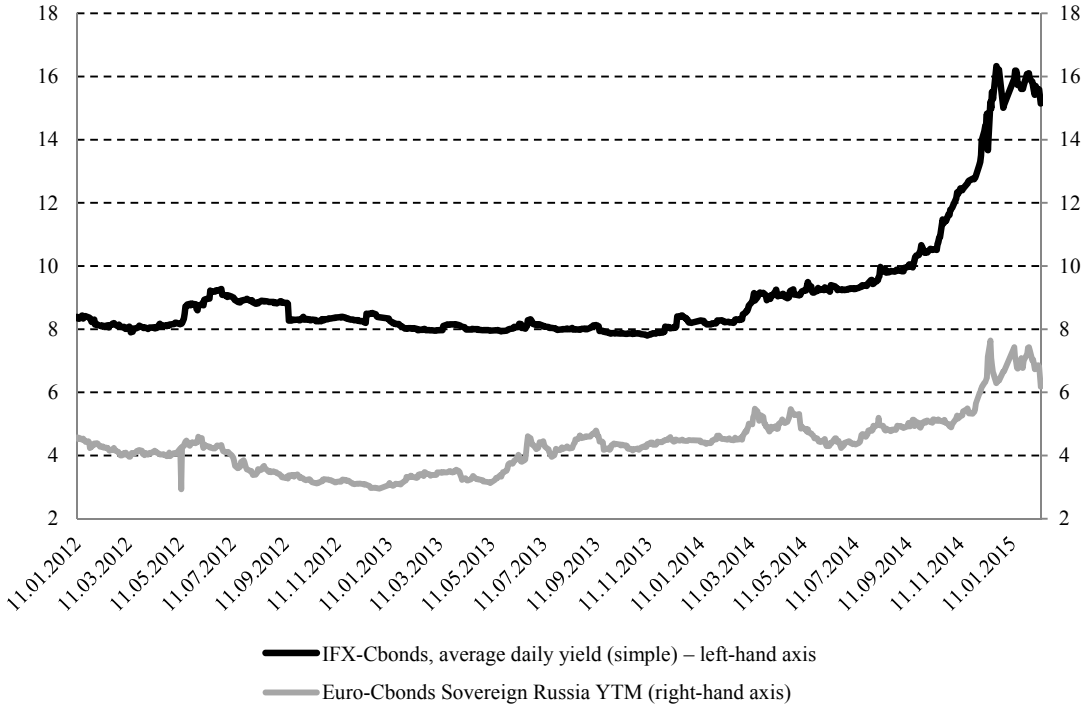
Source: author's calculations based on the data from CBonds.

Fig. 25. The value of CDS Russia 5Y and the US dollar exchange rate in 2012 – February 2015

The depreciation of the national currency and the growth in credit risks of Russian issuers resulted in the eyes of foreign investors in the growth in value of fundraising in the debt market (see *Fig. 26*). The yield on Russia's 5-year sovereign Eurobonds increased to 7.34% p.a. as of 01.31.2015 from 4.48% p.a. as of 31.12.2013, or by 1.6 times; the yield of most liquid

[1] Credit default swap is an insurance premium against a given issuer's default. CDS is the issuer's credit risk indicator.

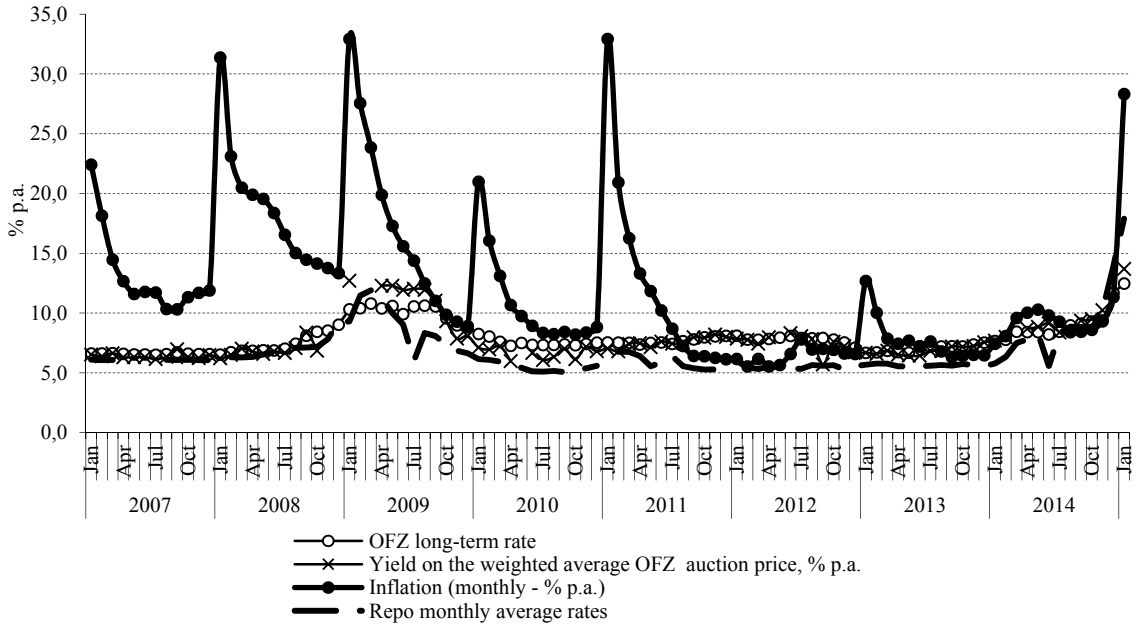
ruble-denominated corporate bonds, which is measured by the IFX-bond Index calculated by Interfax and CBonds, increased to 15.92% p.a. from 8.24%, or by 1.9 times, during the same period. Furthermore, the value of ruble-denominated yield in the domestic debt market relies largely upon the Bank of Russia key rate which was 17.0% p.a. in the period between 15 December 2014 and 2 February 2015, and has been 15.0% p.a. since 2 February 2015 to date.



Source: author's calculations based on the data from CBonds.

Fig. 26. Average (simple) yield of Russia's Eurobonds and ruble-denominated bonds of Russian companies in the period between 2012 and January 2015, % p.a.

It was expected in the Public Debt Management Policy of the Russian Federation for 2013–2015 (p. 25) that an increase in the share of foreign investors in OFZs will inevitably reduce their yield by a percentage point. This was the case in 2012, when the share of non-residents in the OFZ market increased most. Inflation increased in 2012, reaching 6.6% compared with 6.1% in 2011, whereas the average monthly long-term OFZ rate declined in December 2012 to 7.10% p.a. instead of 8.10% in the preceding year (see *Fig. 27*). A different trend was seen in 2013. Despite the ongoing but subdued growth in the share of non-residents in the OFZ market, lower inflation to 6.5%, the OFZ long-term rate increased to 7.53% p.a. in December 2013 from 7.10% p.a. in December 2012. In 2014, with an annual inflation of 11.4%, the OFZ long-term rate increased to 12.48% p.a. in January 2015 from 7.53% p.a. in December 2013. In 2015, successful implementation of the national debt management policy in terms of generating more budget revenue through OFZ bonds will hinge largely on whether or not the monetary authorities can cope with the never-before-seen inflation upsurge in January–February 2015 and end up with the 12.4% year-end target inflation, as planned by Russia's Ministry of Economic Development.



Source: author's calculations based on the data from the Bank of Russia, the Ministry of Finance and the Rosstat.

Fig. 27. Average monthly rates in the OFZ market and inflation, % p.a.

3.4.2. Corporate bond market

Since the 2000s, ruble-denominated corporate bonds have been a most dynamically developing segment of the Russian stock market. In the period between 2000 and 2014, such outstanding bonds increased in value to Rb 6.623bn from Rb 46bn, or to 9.3% from 0.6% of GDP.

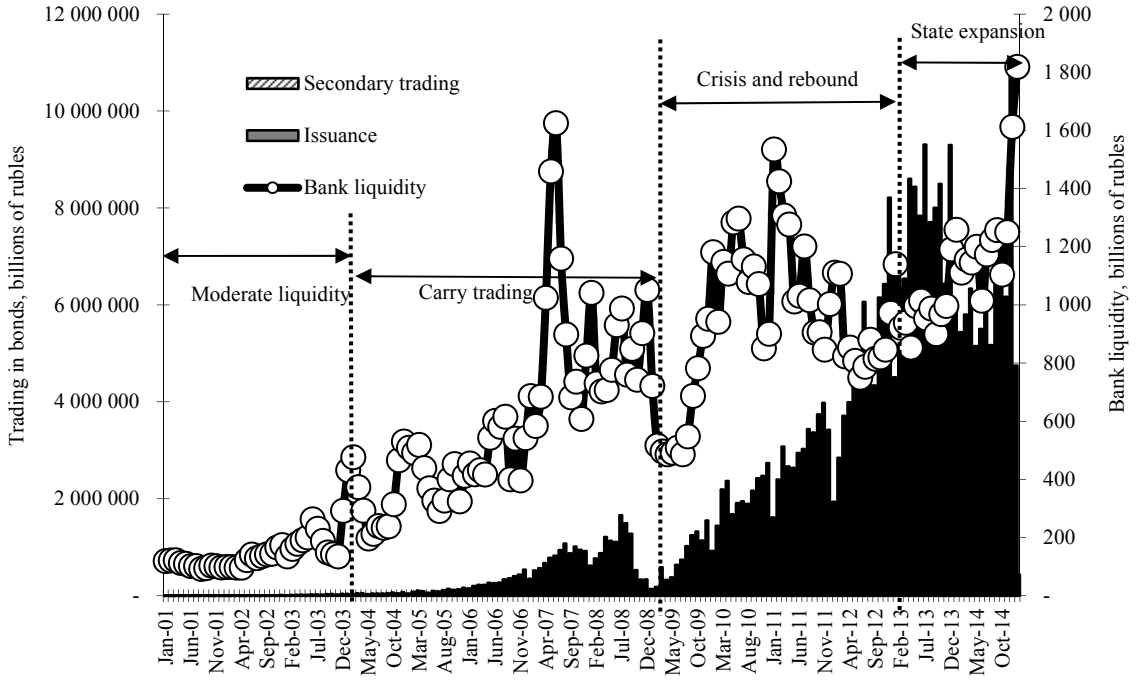
The size of corporate bond market depends largely on the liquidity of banking system which in turn was driven by different factors in different times. In that context, several stages can be distinguished in the development of corporate bond market: moderate liquidity (January 2001 – July 2004); carry trade (August 2004 – March 2009); recovery from the crisis (April 2009 – December 2012); state expansion (since 2013 to date)[1]. In the period of moderate inflation, the Russian money market just started its recovery from the shocks induced by the crisis 1997–1998; Russia's sovereign ratings were below the investment-grade level; the source of liquidity in the bond market was non-residents' assets formally frozen on C-type accounts[2] and domestic corporate investors. The period of "carry trade" began after Moody's, Fitch and S&P awarded an investment-grade sovereign rating for Russia in 2004–2005. This allowed Russian banks and foreign investment funds to actively borrow short-term assets denominated in foreign currencies in global markets at a relatively low interest rate, and then invest these assets in high-yield ruble-denominated assets, above all, bonds. Later, the carry trade strategy became a cause of the banking crisis whose acute phase occurred late in 2008 –

[1] Chronologically, more emphasis is put on the point at which a given new model of financing began to have an effect on the bond market, rather than on that at which it began to be employed.

[2] Non-residents' money was held on these accounts, which they received in the process of GKO-OFZ novation. The money transfer outside the Russian Federation was limited for within a certain period. By way of exception, the money was allowed to be used to acquire corporate bonds of certain bond issuers.

early in 2009[1]. In the period of recovery from the crisis 2008–2009 till the end of 2012, the banking system had a limited access to "cheap money" in global markets and a moderate level of its refinancing from the Bank of Russia. During the "state expansion", the Bank of Russia increased drastically refinancing of the banking system, thereby boosting the internal corporate bond market. However, the corporate bond market experienced a serious slowdown manifesting itself in drastic reduction in the size of market issuances amid the ruble's devaluation triggered predominantly by external factors late in 2014 – January 2015, regular growth in 2014 of the CBR key rate, ending up with 15% p.a..

In 2014, the size of ruble-denominated corporate bond issuances totaled Rb 1747.6bn compared with Rb 1705.2bn in 2013, i.e. the growth in the value of respective transactions was equal to as little as 2.5%. However, Rb 625bn was accounted for by OTC bond issuance of OJSC Rosneft on 11 December 2014, whose bonds were purchased by a group of large banks presumably through refinancing by the Bank of Russia. Net of these issuances, the size of corporate bond issuances in 2014 would be as little as Rb 1122.6bn, i.e., it would be 34.2% less than that of similar transactions in 2013. The volume of trading in the MOEX secondary corporate bond market in 2014 increased to Rb 6623.0bn compared with Rb 5189.3bn in 2013, or by 27.6%. The growth was determined mostly by repo transactions enabling banks to be refinanced by the Bank of Russia.



Source: author's calculations based on the data from the Bank of Russia and the Moscow Exchange.

Fig. 28. Trading in corporate bonds and banking liquidity in the period between January 2001 and January 2015

[1] This strategy created disproportions in the value of ruble-denominated assets and banks' liabilities denominated in foreign currencies. With crude oil prices falling and the ruble devaluing, banks' assets depreciated while the liabilities denominated in foreign currencies remained intact. This tends to lead to the so-called liquidity crisis of the banking system, which nevertheless was avoided in 2008– 2009 though aggressive involvement of the Bank of Russia as lender of last resort.

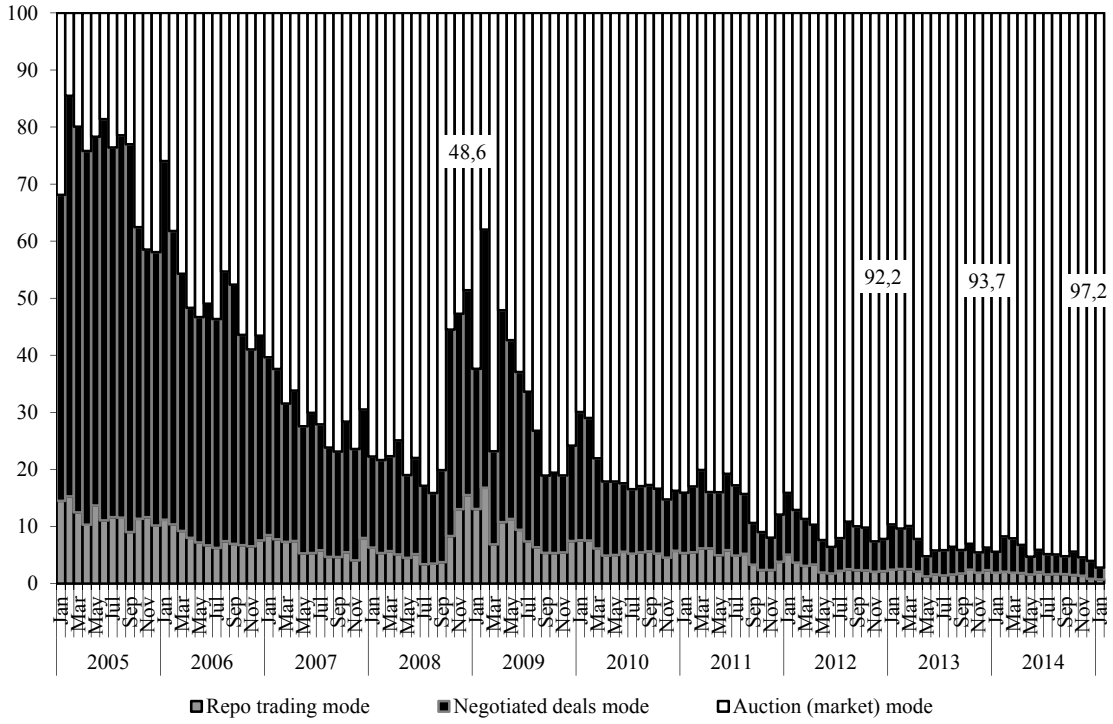
Therefore, the primary segment of debt market will not be able to recover in the mid run, unless the FX market is stabilized and, indeed, a visible progress in coping with inflation is achieved. This will allow the Bank of Russia to gradually lower its key rate, thereby enabling real sector companies to issue corporate bonds. However, the corporate debt market participants has a longer-term objective of making the market less dependent on the scope of banking system refinancing by the Bank of Russia and refocusing it on the assets of foreign investors and domestic market participants. The latter suggests that corporate bonds should be made more appealing for domestic institutional and retail investors, including individual investment account holders.

The problem of fundraising from domestic investors has increasingly becoming more relevant for the ruble-denominated bond market while Russian bond issuers are facing unstable international market. Banks have so far been the prevailing source of fundraising in this bond market, but the share of banks has been shrinking. The share of banks in the corporate bondholding structure declined to 21.2% in 2013 from 30.9% in 2012. The share of pension assets in the value of corporate bonds held by asset managers, including VEB, increased to 11.7% in 2013 from 7.6% in 2012. In 2013 Unit investment funds accounted for 1.2% of the corporate bondholding structure, while pension assets and reserves in non-government pension funds (NGPF) accounted for 7.7% and 3.8%,espectively, insurance reserves for as little as 0.8%. Therefore, banks and domestic institutional investors accounted for as little as 46.4% of sources of ruble-denominated corporate bonds.

Ruble-denominated corporate bonds have since February 2014 been available for non-residents through Euroclear and Cleanstream accounts with the NSD. At present, the share of operations of banks providing services to non-residents in the MOEX secondary corporate bond market is 3% or less. Given currently prevailing expectations of the ruble's devaluation, the opening a technological gateway for non-residents' operations with internal corporate bonds in 2014 resulted in no growth of their share in this stock market segment, which instead dropped substantially. Regretfully, the amendments which were adopted in 2014 to the Federal Law *On the Securities Market* and intended to ease the access of corporate Eurobonds to the domestic market, in particular, by replacing the obligation to translate Eurobonds issue prospectuses into Russian with a simple description of the terms of offering, heightened seriously the uncertainty in the MOEX corporate bond market segments. Furthermore, the uncertainty was caused by the lack of an adequate mechanism of disclosure of traditional corporate bond issue prospectuses in the Exchange. Therefore, after the sanctions were imposed and the ratings for many corporate bond issuers were lowered below the market grade, domestic private investors had insufficient possibilities to evaluate the risks of covenants embedded into the terms of corporate bond offering in the event of adverse conditions for ratings and other developments concerning the practice of Russian issuers.

The fact that the corporate bond market has been turning into a money market instrument as opposed to the long-term nature of corporate bonds themselves shows that the structure of corporate bond transactions in the Moscow Exchange (see *Fig. 28*). In January 2015, the share of repo transactions in the value of on-exchange corporate bond transactions reached a absolute record of 97.2%, increasing the values seen in 2013 and 2014. At the same time, only 0.7% corporate bond transactions were market transactions. Such a drastic decline in the percentage of on-exchange transactions raises substantially the risks of soundness of corporate bond pricing while closing transactions in the Exchange. Our studies of the factors influencing yield spreads of ruble- denominated corporate bonds which were carried out in 2013 for

The National Securities Market Association (NSMA) show that fundamental factors such as issuer's credibility, issuer financial performance indicators and liquidity of bond issues have no significant effect on the size of spreads on corporate bonds. The lack of on-exchange corporate bond transactions casts doubts on the soundness of decreasing coefficients used by the Bank of Russia for determining the collateral value of these securities when banks are refinanced through repo transactions. With such a ratio of on-exchange transactions and corporate bond repo transactions, Bank of Russia's refinancing of banks turns into a tool designed to encourage banks to increase illiquid assets, given a relatively short-term base of their funding through deposits and fundraising. This creates liquidity risks for the banking system when, for example, the central bank will have to substantially curtail its refinancing volumes due to foreign exchange rate or inflation problems.

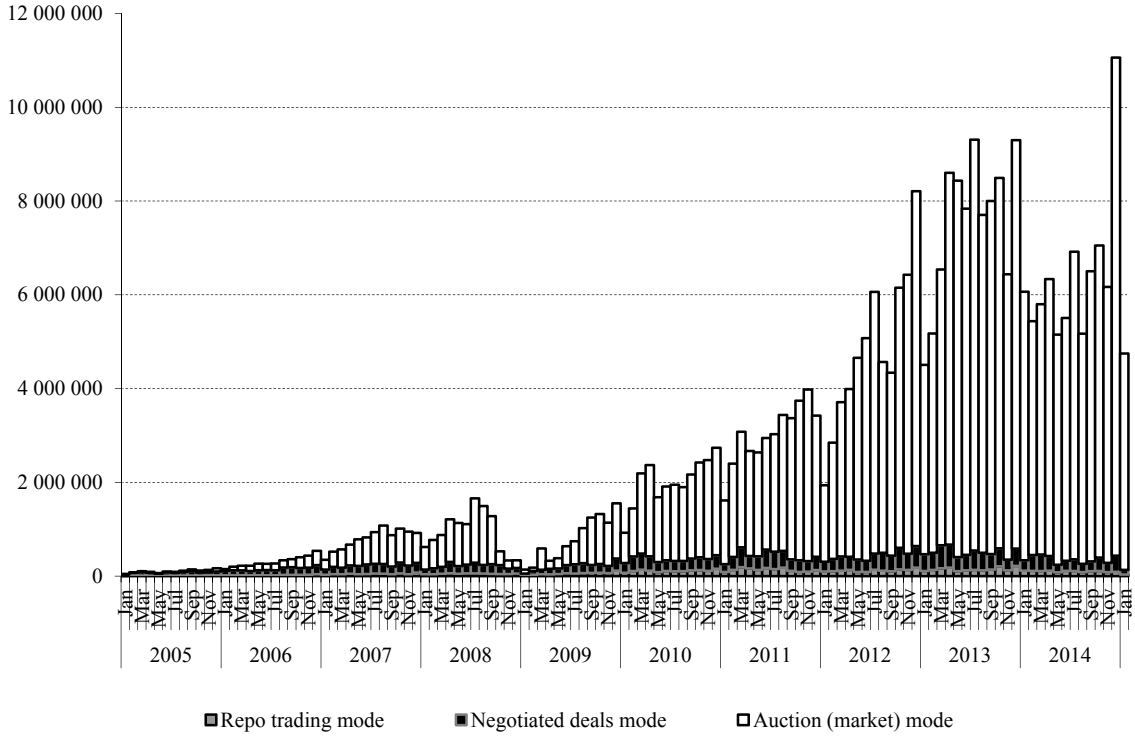


Source: author's calculations based on the data from the Moscow Exchange.

Fig. 29. Corporate bond trading structure in the Moscow Exchange,%

In 2014, the share of corporate bond repos increased as the total size of corporate bond secondary market declined in the Exchange. The volume of these transactions dropped to Rb 77.1 trillion in 2014 compared with Rb 90.3 trillion in 2013, or by 14.6%. Repo transactions were responsible for most of the decline. In 2014, repo transaction total volume contracted to Rb 72.9 trillion compared with Rb 84.1 trillion in 2013, or by 13.3% (see *Fig. 30*). The abnormally big size of repo transactions in the Exchange in December 2014 resulted from a chain of non-transparent OJSC Rosneft bond offering transactions in the Exchange. Large banks, which purchased Rb 625bn of OTC bonds of the state-run oil company, received the respective amount of refinancing from the Bank of Russia on the date of bond offering through the MOEX trading system. Overall, however, one can say that the decline in volume of the corporate bond market offerings in 2014 was triggered by the decline in volume of

banking system refinancing against corporate bonds. Under the circumstances, the Bank of Russia had to broaden the range of securities against which loans were issued through repo transactions, as well as more intensively use the mechanism of lending to banks against non-marketable assets[1].



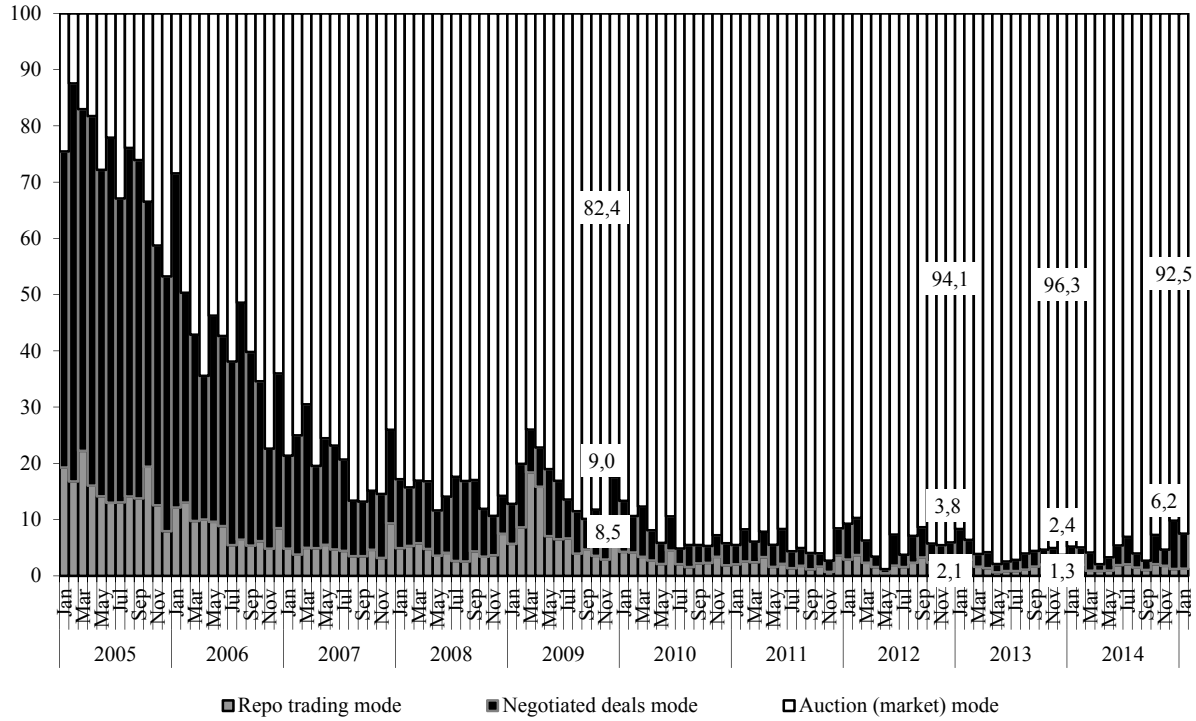
Source: author's calculations based on the data from the Moscow Exchange.

Fig. 30. The value of trading in corporate bonds in the Moscow Exchange, millions of rubles.

The MOEX regional bond market faced similar problems of contraction of the share of on-exchange transactions (see *Fig. 31*). In January 2015, the share of on-exchange transactions in this market segment was as little as 1.3%, while the share of repo transactions reached 92.5% and that of OTC transactions as part of the negotiated deals mode stood at 6.2%. Such a combination of market and OTC transactions also raises the question of soundness of the market evaluation of regional bonds against which the Bank of Russia issues loans through repo transactions.

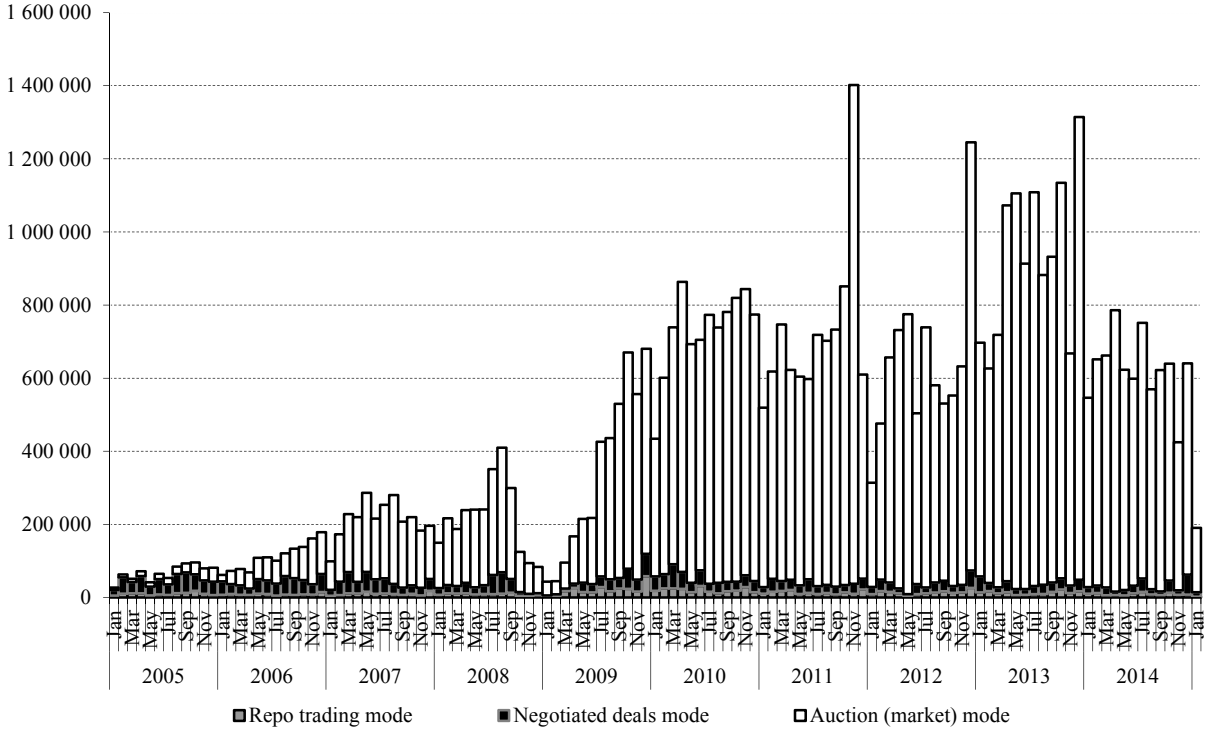
The role of repo transactions with regional bonds in 2014 increased as the MOEX secondary regional bond market saw the decline in size. The volume of such transactions decreased to Rb 7.5 trillion in 2014 compared with Rb 11.2 trillion in 2013, or by 33.0%. Repo transactions were responsible for most of the decline, with their total value declining in 2014 to Rb 7.1 trillion compared with Rb 10.7 trillion in 2013, or by 33.6% (see *Fig. 32*).

[1] It is noteworthy that the very term "collateral" is conventionalized with regard to repo transactions and lending against non-marketable assets, because such transactions provide the Bank of Russia with no advantage in recovering its loans if borrowing banks go bust.



Source: author's calculations based on the data from the Moscow Exchange.

Fig. 31. The structure of trading in regional bonds in the Moscow Exchange, %

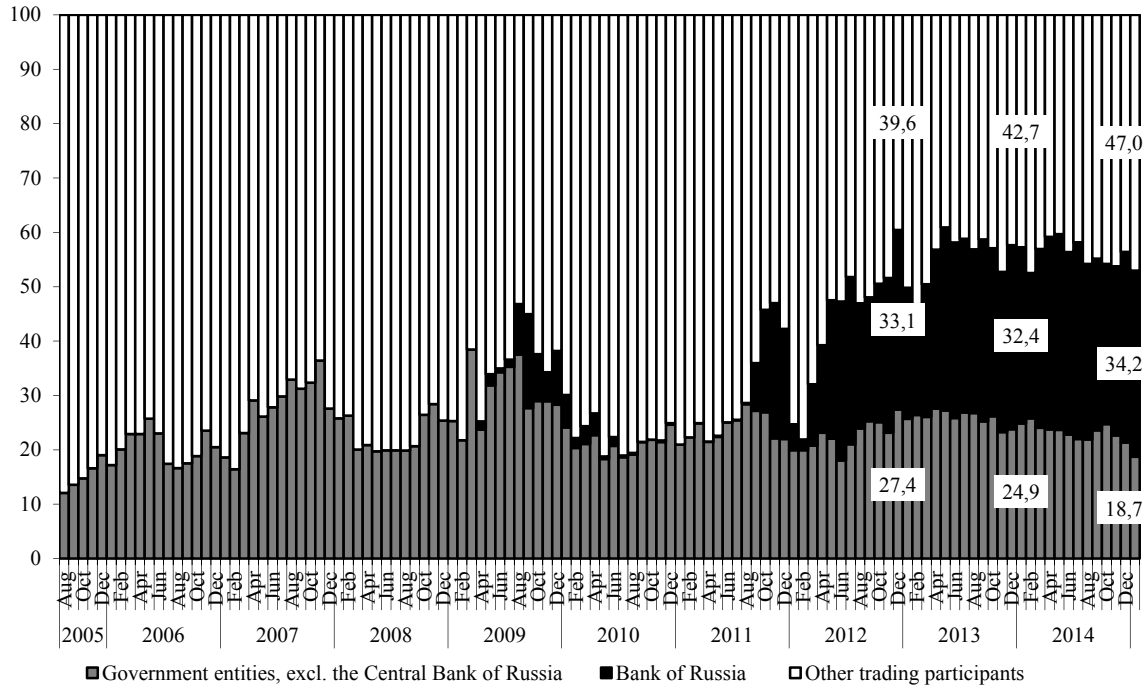


Source: author's calculations based on the data from the Moscow Exchange.

Fig. 32. The value of trading in regional bonds in the Moscow Exchange, millions of rubles.

3.4.3. Competition in the corporate and regional bond markets

Fig. 33 provides analysis of various groups of trading participants' (private and state-run financial institutions[1], the Bank of Russia) contribution to the size of on-exchange trading in corporate bonds in the Moscow Exchange under all trading modes, including market, negotiated and repo transactions. In January 2015, government entities and the Bank of Russia accounted for 18.7% and 34.2%, respectively, of the size of on-exchange trading in corporate bonds, compared with 24.9% and 32.4% in December 2013. The scope of the Bank involvement in transactions in the corporate bond market exceeded largely its activity volumes during the crisis of 2008–2009. A certain decline in the share of government entities compared with 2013 is attributed to the fact that Bank of Russia's lending to the banking system through repo transactions was distributed more evenly between various trading participants. Additionally, large state-run banks had the opportunity to obtain Bank of Russia loans against non-marketable assets amid the repo market contraction caused by limits on their security.



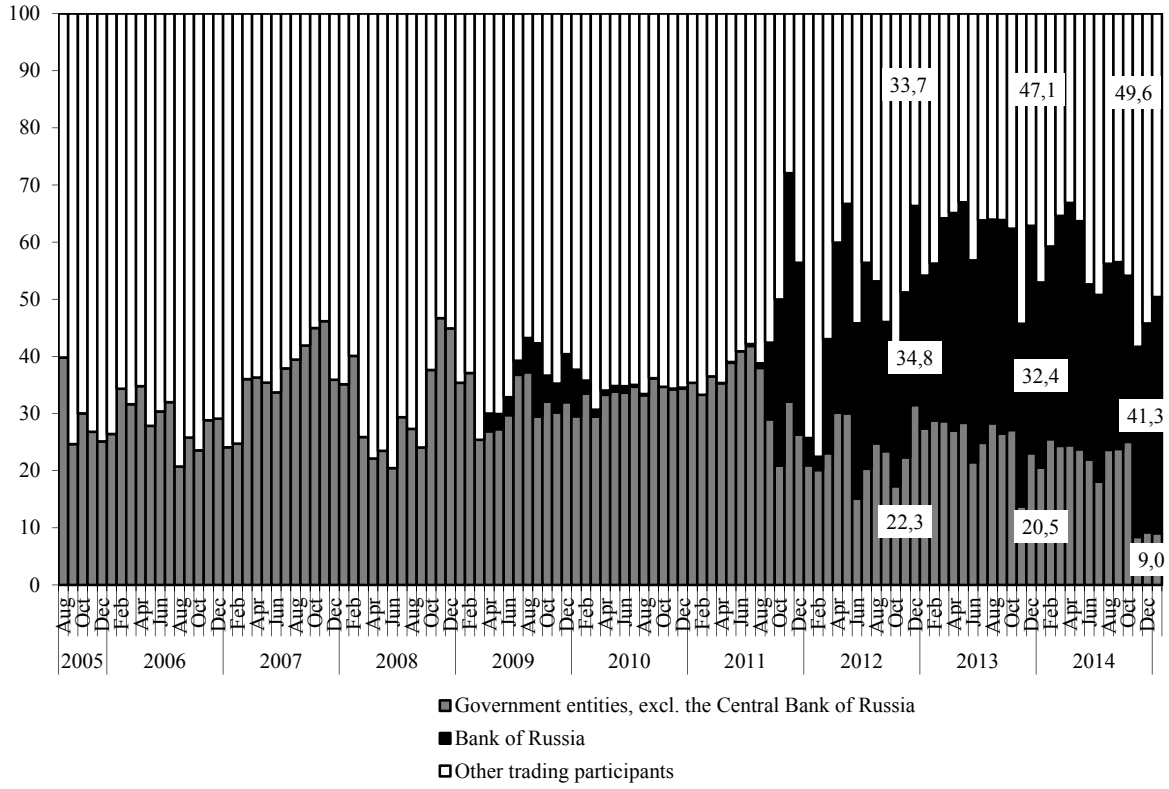
Source: author's calculations based on the data from the Moscow Exchange.

Fig. 33. The share of private and public brokers in volumes of trading in corporate bonds in the Moscow Exchange, %

Fig. 34 reflects the share of state-run financial institutions and the Bank of Russia in the volume of on-exchange trading in regional bonds. In 2012, it was even bigger than in the Exchange corporate bond market. In December 2013, the share of government entities and the Bank of Russia in regional bond transactions reached 20.5% and 32.4% respectively. In 2014, with a considerable decline of the share of government entities, above all, Sberbank of Russia, to 9.0%, or by 2.3 times, the share of Bank of Russia increased to 41.3%. As a result, the market share of private financial institutions in 2014 increased slightly to 49.6% compared with 47.1% in the preceding period. In that case, however, there was no any substantial

[1] The list of state-run entities is available in section 3.3.4.

growth in the share of private business entities compared with government entities. With the contracting regional bond market, these securities became less useful for state-run banks for refinancing through repo transactions, because they had the opportunity to obtain Bank of Russia loans secured by non-marketable assets.



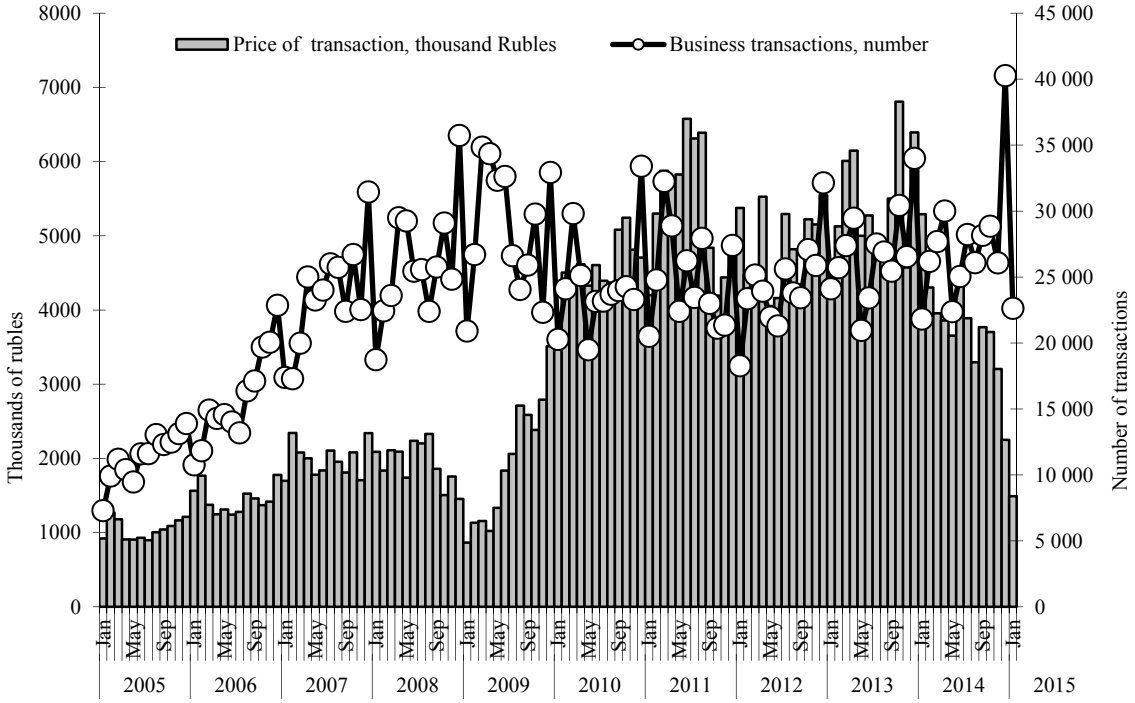
Source: author's calculations based on the data from the Moscow Exchange.

Fig. 34. The share of private and public brokers in volumes of trading in regional bonds in the Moscow Exchange, %

Concentration characteristics of the secondary corporate bond market in the Moscow Exchange saw a severe deterioration in the period between 2012 and 2013 (see *Fig. 19* in section 3.3.4). The Herfindahl-Hirschman Index (HHI) for transactions in the secondary corporate bond market has exceeded 800 points since May 2012. The HHI on corporate bonds has since then been ranging within 800 and 1800 points, which means that this market segment shifted from low concentration to moderate concentration. The regional bond market in the Moscow Exchange is more concentrated compared with the corporate bond market. In 2012, it was within a range of moderate concentration, according to the HHI criteria, the regional bond market was highly concentrated most of the time in 2013, with HHI showing over 1800 points. In 2014, it returned to the moderate concentration level.

Fig. 35 presents data on the number of transactions and the value of a corporate bond transaction in anonymous trading in the Moscow Exchange. Similar to the market segment of trading in equity shares (see *Fig. 17* in section 3.3.3), the period of 2013–2014 saw a trend towards stabilizing the number of on-exchange corporate bond transactions and the average volume of a transactions. In 2014, however, on-exchange corporate bond transactions saw a

considerable reduction in size to Rb 1.4m in January 2015 from Rb 6.3m in December 2013, i.e., they reduced to the size seen during the acute phase of crisis in 2008. Such an odd trend in the market segment of corporate bond transactions can be attributed to the contraction in trading by non-residents whose transactions were predominantly of large size, to 4.6% in December 2014 from 5.6% in December 2013[1]. Physical persons began to play a more important role in this market segment. These exchanges allow for inaccurate assessment of the role in this market segment, however, it is known that with a total reduction of the size of on-exchange corporate bond transactions to Rb 1.4 trillion in 2014 from Rb 1.9 trillion in 2013, or by 26.3%, the volume of physical persons' buy/sell transactions with such bonds remained basically unchanged, Rb 0.5 trillion annually, in 2013–2014. These facts suggest that the role of non-residents increased considerably in the volume of on-exchange corporate bond transactions in 2014.

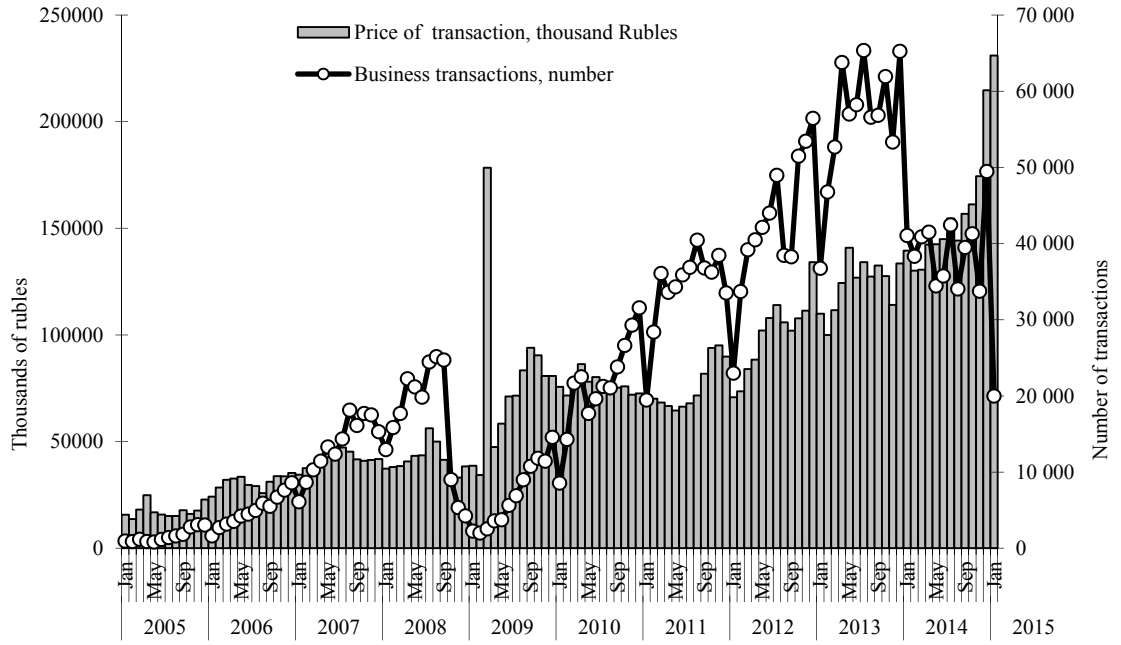


Source: author's calculations based on the data from the Moscow Exchange.

Fig. 35. On-exchange trading in corporate bonds in the Moscow Exchange

In 2014, the MOEX segment of corporate bond repo transactions saw an opposite trend compared with market transactions. The number of transactions reduced considerably to 49,500 in December 2014 from 65,200 in December 2013, while the average value of transactions increased to Rb 134.5m from Rb 94.4m, respectively, or by 42.5% (see *Fig. 36*). This suggests that the number of repo transactions reduced amid the decline in market offerings of corporate bonds, however, large state-run and private banks had advantages in this market segment.

[1] Author's calculations based on the data from the Moscow Exchange.



Source: author's calculations based on the data from the Moscow Exchange.

Fig. 36. Corporate bond repos in the Moscow Exchange

In post-crisis period, large state-run companies began to play the key role in the primary corporate bond market. In 2013, 24 issuers with most sizable corporate bond issues accounted for 59.4% of the total issuance of corporate bonds, and state-run companies accounted for 47.7% of the total issuance of corporate bonds among these issuers (see *Table 10*). In 2014, the dominance of government entities in the primary corporate bond market became even stronger: 24 issuers with most sizable bond issuances accounted for 76.7% the value of bond issuances, and among these issuers, state-run companies accounted for 59.7%.

According to various indicators of concentration of corporate bond issues, as shown in in *Table 10*, two trends were observed in 2013–2014: higher concentration of major bond issuers including state-run companies' bond issues. For example, the share of 10 issuers with the largest corporate bond issues was 60.4% in 2013 compared with 40.5% % in 2013, of which the share of state-run companies in total corporate bond issuance volumes increased from 27.9% in 2012 to 36.8% in 2013. This implies that corporate bond market has increasingly been strengthening the financial positions of state capitalism in competition with the private sector. It is easier for state-controlled companies to bargain with potential investors, most of which are state-run banks and other entities. Such transactions are closed through state-controlled organizers of issues and underwriters. The more state-run companies become over credited, the more aggressive they are in the domestic corporate bond market. A case study is OJSC Rosneft ruble-denominated bonds issued in December 2014 and January 2015 with direct participation of the Bank of Russia in the respective transactions.

Table 10

Concentration of ruble-denominated corporate bond issuers in 2009–2014

	Top-5 bond issuers		Top-10 bond issuers		Top-24 issuers		Total in the market
	Total	including government bonds	Total	including government bonds	Total	including government bonds	
2009							
billions of rubles	440	390	610	441	803	513	917
Share, %	48.1	42.5	66.8	48.1	87.8	55.9	100.0
2010							
billions of rubles	177	147	304	200	513	317	855
Share, %	20.6	17.2	35.4	23.4	59.9	37.1	100.0
2011							
billions of rubles	241	191	389	309	642	405	1089
Share, %	22.0	17.5	35.7	28.4	58.9	37.2	100.0
2012							
billions of rubles	265	265	429	334	690	443	1199
Share, %	22.1	22.1	35.7	27.9	57.8	36.9	100.0
2013							
billions of rubles	550	550	705	640	1035	830	1741
Share, %	31.6	31.6	40.5	36.8	59.4	47.7	100.0
2014							
billions of rubles	875	827	1051	934	1334	1038	1739
Share, %	50.3	47.6	60.4	53.7	76.7	59.7	100.0

Source: author's calculations based on the data from www.cBonds.ru , www.rusbonds.ru and the Moscow Exchange.

Year by year the corporate bond market has increasingly been servicing cash flows between government entities. State-run companies borrow from government entities. The secondary market is also maintained mostly by state-run banks in conjunction with the Bank of Russia. Furthermore, state-run investment banks have been mostly acting as underwriters and investment advisors in placing corporate bonds (see *Table 11*). In 2007, state-run banks acted as underwriters for 36.3% of corporate bond issues (in terms of value). In 2013, their share increased to 60.1%, whereas it dropped slightly to 53.1% in 2014. A similar situation was observed with investment and banking services in the regional bond market. In 2007, the share of public lead managers of regional bond issues was 14.2% in terms of value. It increased to 51.9% in 2013 and to 73.2% in 2014.

Table 11

The share of public and private financial institutions in the market of internal bond issue organizers in Russia

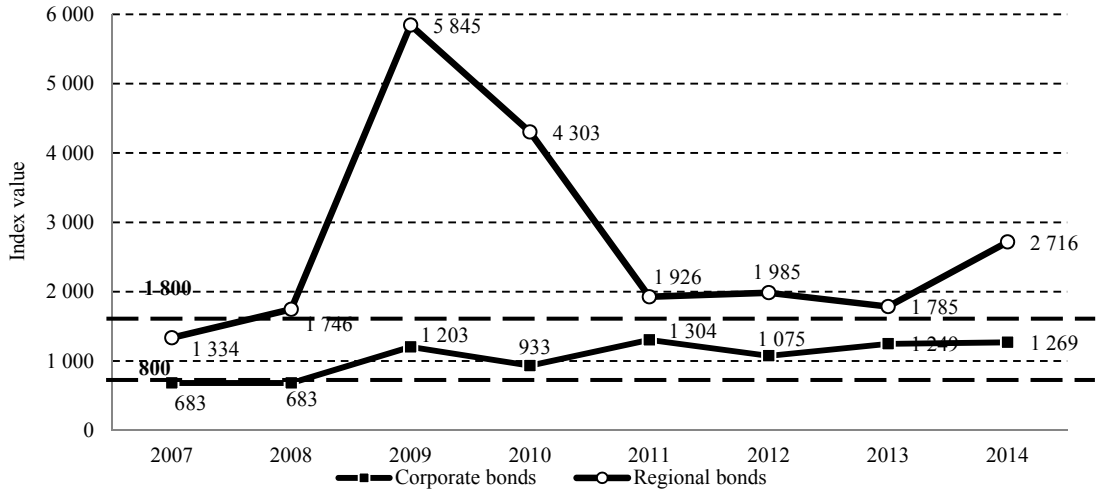
	Bond issue organizers:					
	corporate bonds			regional bonds		
	Public financial institutions	Private financial institutions	Total	Public financial institutions	Private financial institutions	Total
1	2	3	4	5	6	7
2007						
millions of rubles	169 668	298 302	467 970	7 551	45 481	53 032
Share, %	36.3	63.7	100	14.2	85.8	100
2008						
millions of rubles	219 892	249 900	469 792	42 227	29 716	71 943
Share, %	46.8	53.2	100	58.7	41.3	100
2009						
millions of rubles	620 044	373 978	994 022	133 325	22 511	155 836
Share, %	62.4	37.6	100	85.6	14.4	100

Cont'd

1	2	3	4	5	6	7
			2010			
millions of rubles	393 743	461 292	855 035	86 613	28 288	114 901
Share, %	46	54	100	75.4	24.6	100
			2011			
millions of rubles	620 698	374 146	994 844	7 767	46 177	53 944
Share, %	62.4	37.6	100	14.4	85.6	100
			2012			
millions of rubles	734 697	502 831	1 237 528	61 925	57 637	119 562
Share, %	59.4	40.6	100	51.8	48.2	100
			2013			
millions of rubles	1 033 849	686 894	1 720 743	79 980	74 259	154 239
Share, %	60.1	39.9	100	51.9	48.1	100
			2014			
millions of rubles	621 007	548 729	1 169 736	81 283	29 705	110 988
Share, %	53.1	46.9	100	73.2	26.8	100

Source: based on the data obtained from the rankings of bond issue organizers www.cBonds.ru in 2007–2014

The Herfindahl-Hirschman Index (see *Fig. 37*) shows a inadequate level of competition in the markets of underwriting and advisory services in terms of placing corporate and regional bonds. Since 2009, the market of investment and banking services within the corporate bond market has turned from a highly concentrated into a moderately concentrated, when monthly HHI measures fall within a range of 800 to 1800. In 2014, HHI was 1269 in the segment of corporate bond services.



Source: based on the data obtained from the rankings for bond issue organizers published at www.cBonds.ru in 2007–2014.

Fig. 37. The Herfindahl-Hirschman Index: issuance services for ruble-denominated corporate and regional bonds in 2007–2014

Since 2011, exclusive of 2013, the market of regional bond services has been steadily concentrated with the HHI above 1800. In 2013, it fell into the category of moderately concentrated market, with the HHI measuring 1785, and HHI increased sharply to 2713 in 2014. The

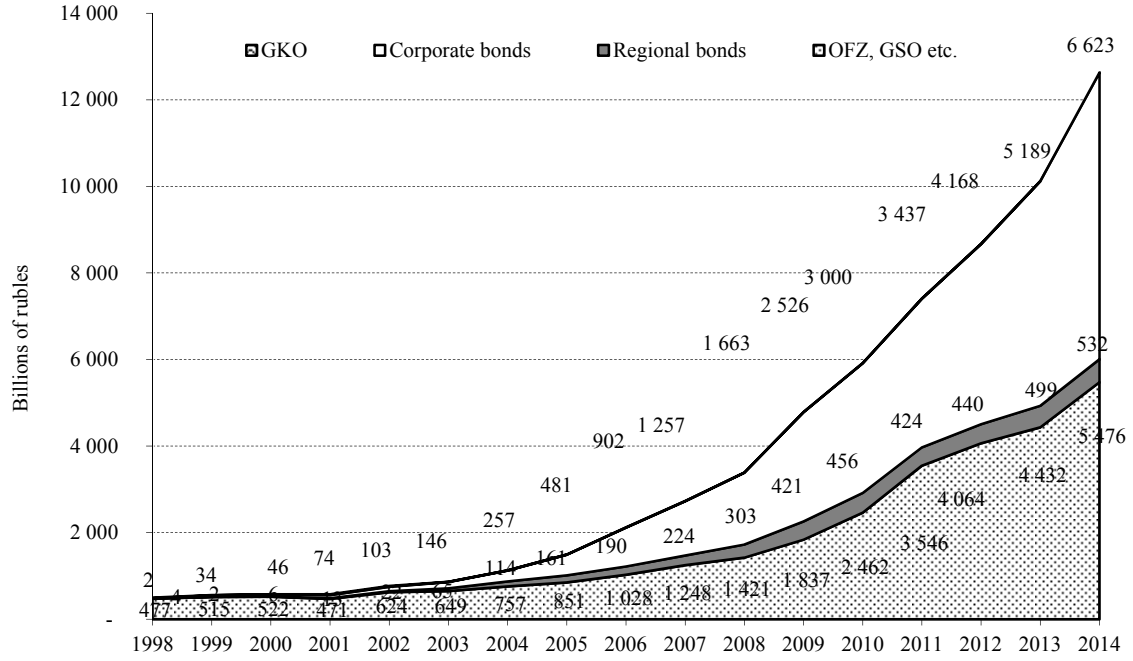
market of regional bond underwriting services again moved back to the high concentration area. The foregoing raises the question of the need to enhance the role of anti-monopoly regulation in the securities market.

3.5. Stock market contribution to economic growth

3.5.1. Corporate bonds and economic growth

The Bank of Russia is developing two different mechanism of refinancing of banks. Repo transactions help develop mostly the bond market; a bank can raise capital against weekly bonds it purchases at a rate below the interest rate on loans issued by the bank. Lending secured by non-marketable assets allows banks to obtain longer-term resources for an average of one month against the conventional pledge of previously issued loans. At the same time, in 2014, mechanisms of refinancing banks against investment loans, as well as infrastructural and concession bonds and mortgage loans were worked out. These processes represent efforts to find most efficient ways of refinancing of the banking system with a view to promoting investment supply and hence an economic growth.

The long-term experience in the corporate bond market allows their effect on investment and economic growth to be assessed more correctly. The capitalization of ruble-denominated bond market increased to Rb 12.5 trillion in 2014 from Rb 0.6 trillion in 2000, or by 20.8 times. The corporate bond market was growing faster than other ruble-denominated bonds. Their total capitalization increased to Rb 6.6 trillion in 2014 from Rb 46bn in 2000, or by 143.5 times.



Source: based on the data obtained from the Ministry of Finance and Cbonds.ru.

Fig. 38. Volumes of outstanding ruble-denominated bonds, billions of rubles

It is not obvious, however, that the corporate bond market has a positive effect on economic growth and hence on the repo mechanism. This, in particular, can be seen in Rosstat's offi-

cial statistics of the role of capital raised by companies through corporate bond issuances as source of investment. *Table 12* shows parameters of the ruble-denominated corporate bond market in 2000-2014, expressed in dollars.

In 2012, fixed investment, according to Rosstat's official statistics, accounted for as little as Rb 4.2bn of the total corporate bond issuance of Rb 1214.2bn, or 0.35% of the capital that companies raised through bond issuance. In 2013, fixed investment accounted for as little as Rb 1.9bn of the annual total corporate bond issuance of Rb 1705.2bn, or 0.11% of the capital that companies raised through bond issuance during that year. Within the first nine months of 2014, fixed investment accounted for Rb 5.3bn of the annual total bond issuance of Rb 1747.6bn, or 0.30% of the bonds placed. These statistics lead to the conclusion that the corporate bond market supported by the Bank of Russia through repo transactions has no noticeable effect on fixed investment and economic growth. Perhaps, corporate bonds which are supported through funding from the money market are *de facto* too short-term sources of financing of companies, therefore the latter prefer to use corporate bonds to finance their working capital and refinance old debts. The foregoing raises the question of seeking alternative ways of refinancing the banking system by the Bank of Russia so that banks become really interested in this mechanism for financing long-term projects of real sector companies, which have a positive effect on economic growth.

Table 12

Parameters of the ruble-denominated corporate bond market (billions of US$)

	Capitalization	Secondary market including repo	Bond placements	Bond placement contribution to the equity		
				billions of US$	the same, as a percentage of capitalization	the same, as a percentage of bond 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	31	0.014	0.01	0.05
2012	134	1866	39	0.14	0.1	0.4
2013	163	2839	54	0.05	0.03	0.1
2014	174	2032	46	0.1*	0.1	0.2

* January–September 2014

Source: author's calculations based on the data from the Moscow Exchange, cBonds, the Bank of Russia and the Rosstat.

3.5.2. The share offer IPO effect on the economy

Compared to corporate bonds, the sale of equity shares through IPO and SPO is a more efficient instrument of obtaining working capital loans. The reason for this is that the capital raised through IPO is of longer-term. *Table 13* shows the parameters of Russian companies' equity market, which show that share offer IPOs were held more frequently in 2006 and 2007,

when companies raised $17.0bn and $33.0bn, respectively. Companies spent on fixed assets 18.8% of the capital raised through IPOs/SPOs in 2006 and 10.9% of the capital raised in 2007. In certain years, for example, in 2008, companies spent 110.5% of IPO-raised capital, and 117.6% in 2009. This is because a part of the fixed investment was raised by companies through closed subscription rather than IPO/SPO.

In 2013, $3.1bn, or 34.4%, of $9.0bn total public offerings of were spent on fixed capital financing. Within the first nine months of 2014, $1.4bn[1], or 82.7%, of $1.7bn total public offerings were spent on fixed capital financing, according to our estimates. A part of the capital raised in the stock market was spent on repurchasing the business from its former owners, refinance debts and service acquisition & merger (A&M) transactions, including major shareholding acquisition. Yet, the size of IPO and real capital investment through equity share issuance is much smaller than that of A&M transactions. In the period between 2000 and 2014, the value of IPOs/SPOs of Russian companies totaled $102.2bn, whilst that of A&M transactions was $1005.0bn., or by 9.8 times.

Table 13

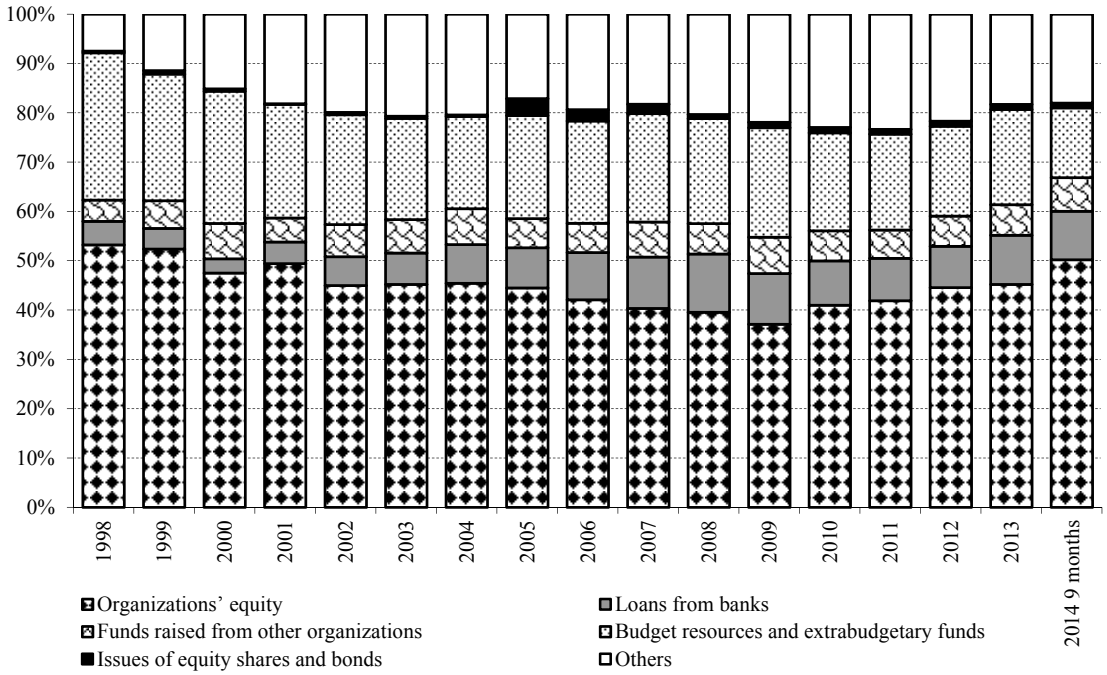
Parameters of the stock market of Russian companies' equity shares (billions of US$)

	Capitalization	Secondary market including foreign exchanges	IPO of equity shares	IPO contribution to the equity			A&M transactions volume
				billions of US$	the same as a percentage of capitalization	the same as a percentage of IPO volume	
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
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	1931	9.5	3.1	0.3	32.6	135
2013	1041	1801	9.0	3.1	0.3	34.4	163
2014	517	1739	1.7	1.4**	0.3	82.7	64

* the value is more than 100%, because a part of fixed capital investment might be through private subscription of equity shares;
** January-September 2014
Source: author's calculations based on the data from the Moscow Exchange, cBonds, the Bank of Russia and the Rosstat.

The capital raised by companies through public offering of equity shares and corporate bonds and subsequently spent on fixed assets accounts for a small part of the sources of fixed investment financing. This is supported by the data of the sources of fixed investment financing presented in *Fig. 39*.

[1] This Rosstat's figure is somewhat arguable, because transactions involving sales of equity shares to their former shareholders prevailed in all of the three largest IPO/SPO ($1.7bn) of Russian companies in 2014, except Qiwi Plc SPO, of which $80bn were raised by the company, which could theoretically be spent on fixed investment.



Source: the calculations are based on the data from the Rosstat.

Fig. 39. The structure of sources of fixed investment

In the period between 2000 and 2014, the share of capital raised through public sales of bonds and equity shares in the sources of fixed capital financing varied within a range of 0.1% in 2001 and 3.4% in 2005. It was 1.0% in 2013 and within the first nine months of 2014.

3.6. Investors in the Russian stock market

3.6.1. Domestic institutional investors

Sustainable and solvent institutional investors are needed to increase the personal savings rate and raise long-term resources, as in the case of state reserves. A relatively poor development level of institutional investors in Russia (see *Table 14*) is the key issue for the Russian money market. The initial stage of the pension reform resulted in slower growth in pension assets by virtue of allowing the insured persons to chose between a zero rate and 6% contributions to the funded component of retirement benefit, as well as a temporal suspension of pension asset formation in 2014–2015.

In 2014, the going-public process for non-government pension funds (NGPFs) managing mandatory pension assets was launched, and these funds joined the pension asset safety guarantee system, and comprehensive audits of their financial sustainability was performed. According to the data from the National Association of Non-Government Pension Funds (NAPF), as of 25 February 2015, 61 of 90 NGPFs specializing in compulsory pension insurance went public, they account for 93.7% of insured persons and 94.0% of pension assets. Twenty four of these NGPFs, accounting for 72.2% of insured persons and 71.1% of pension assets, joined the deposit guarantee insurance system. Even though the decision was made to temporally suspend accruing pension assets within two years, in 2013, 5.8 million persons in 2013 and 2.3 million in 2014 applied for the migration to NGPFs from the Pension Fund of Russia. The accumulated by these persons' pension assets may not be transferred from

NGPFs until NGPFs complete their accession to the pension asset safety guarantee system. If such transfers are made, then, as estimated by the NAPF, in 2015 the amount of pension assets in NGPFs will exceed that in the Pension Fund of Russia. Our studies show that most countries, except Argentina and Hungary, have to date managed to overcome the negative attitude towards the prospects of pension assets and keep heading this way in successful development of their pension schemes. In 2015, Russia will have to decide the fate of the funded pension scheme and the role of non-government pension funds in this scheme.

Compared to other countries, including large emerging economies, all of the three types of institutional investors (pension and mutual funds, insurance companies) are poorly developed in Russia. Russia's banking system is ranked average on the value of commercial banks' assets as a percentage of GDP (see *Table 14*). Russia is ranked 64th of 67 countries covered by the statistics on mutual funds' assets; 53rd of 67 countries on the size of self-supporting pension funds; 47th of 50 countries on insurance companies' assets. In 2013, the value of assets of open-end and interval unit investment funds in Russia accounted for 0.2% of GDP; pension assets and reserves for 5.8% of GDP; insurance companies' reserves for about 1.2% of GDP, commercial banks' assets for 85.8% of GDP. Furthermore, Russia is ranked 100th of 168 countries for which the World Bank discloses data on the percentage of commercial banks' assets of GDP, i.e., Russia is a strong average performer among emerging markets.

Table 14

Institutional investors and banks in Russia (based on the average values in 2001–2013)

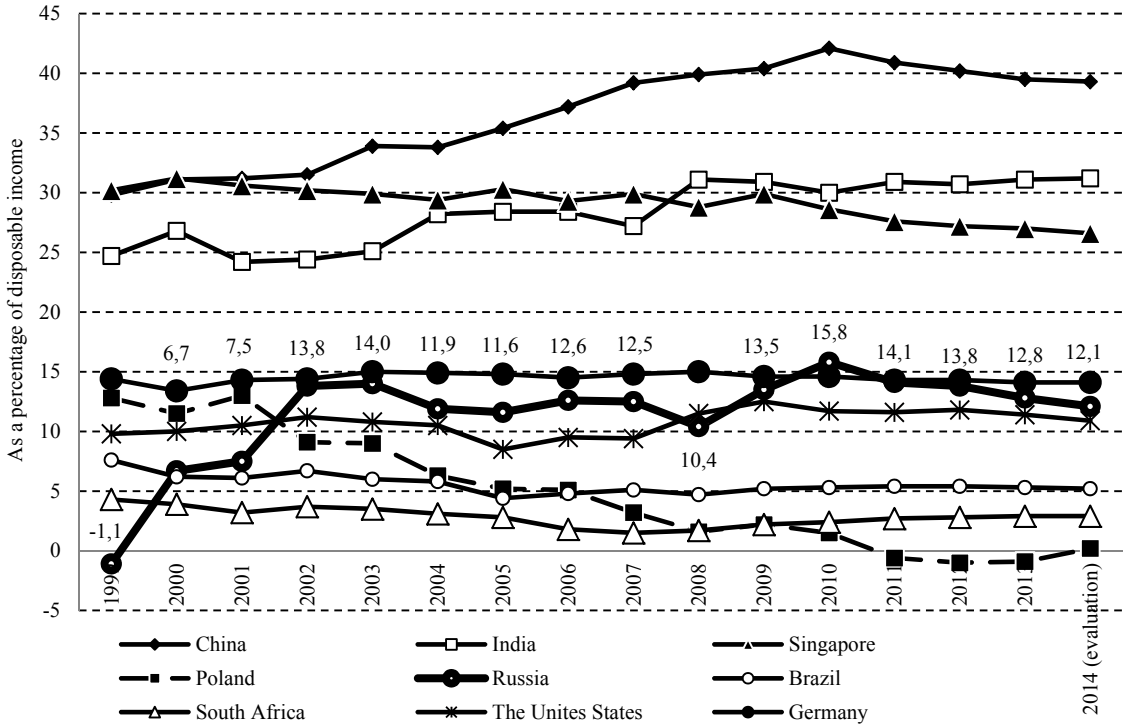
	Number of countries in samples of the Investment Company Institute, OECD and World Banks on average in 2001–2012	Russia's place in samples on average in 2001–2012	As a percentage of GDP	
			The average over the past decade (2004–2013)	2013
Open-end investment funds' assets *	**67**	64	0.3	0.20
Autonomous pension funds' accumulations and reserves **	**67**	53	2.9	5.8
Insurance companies' reserves ***	**50**	47	0.9	1.2
Commercial banks' assets ****	**168**	100	67.2	85.8

* Russia – open-end and interval unit investment funds (UIFs);
** Russia – pension accumulations and reserves;
*** Russia – insurance reserves;
**** Net of development banks.
Source: author's calculations based on the data from Investment Company Institute, resources www.stat.org OECD, www.econ.worldbank.org World Bank and IFS IMF.

In order to keep investment at an active level, Russia should catch up with the backlog of development of institutional investors. This implies that reliability and strengthening of the banking system should be in the focus of attention in banking, while the development policy aimed at enhancing the efficiency of companies being trustworthy to individuals should be carried out regarding pension funds, insurance companies, open-end and interval unit investment funds. Therefore, competition should be encouraged in the market of financial services and investors should be protected, i.e., this is what is normally attributed to the regulatory rather than supervisory function of the state.

3.6.2. Domestic individual investors

In order to take economy on growth path, Russia should maintain high domestic savings rates. There is a potential for growth in saving through enhancing the household savings rate. The official statistics show that Russian households save about 10–12% of their income (see *Fig. 40*). The ratio of household savings rate to disposable incomes is much higher in the countries leading in economic growth and modernization (China, India, Singapore, Hong Kong). Indeed, these countries differ from Russia in social and demographic situation, but it has to be admitted that any major modernization project is intended to rely upon domestic financial resources. This has become even more relevant in 2014 amid sanctions that have closed down Russian companies and banks from foreign capital markets.



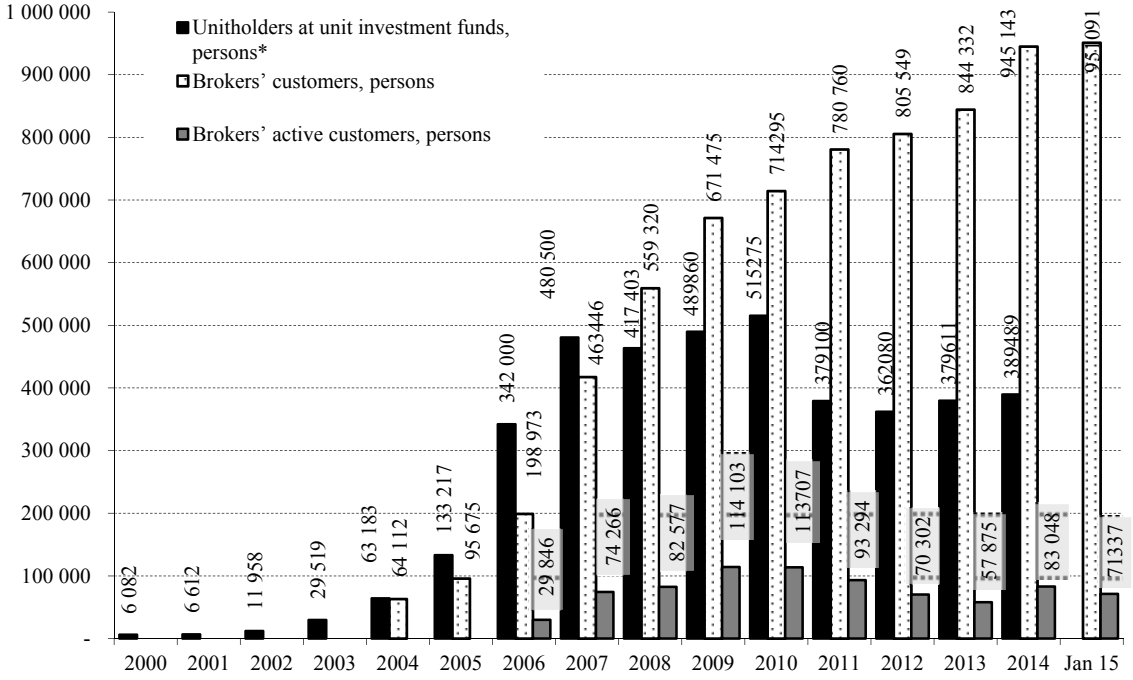
* according to Rosstat's data, net of savings in deposits denominated in foreign currencies and savings in foreign exchange.
Source: the calculations are based on the data from Euromonitor International.

Fig. 40. Households saving rate, as a percentage of disposable income

Fig. 41 presents data on the number of individual investor accounts opened with brokers and the number of personal accounts in the register of unit holders of unit investment funds (UIFs). A total of about one million brokers' private customers were registered with the Exchange in 2014, of which only 83,000 were active customers, i.e., they closed at least a single transaction monthly through the Moscow Exchange. In 2014, the developed over the past few years downtrend in the absolute number of brokers' active customers and slower growth in the total number of brokers' customers registered with the Exchange was overcome. Annual growth in the number of registered customers was 112,200 persons in 2009, only 42,800 in 2010, 66,500 in 2011, 24,800 in 2012, 38,800 in 2013, and 100,800 in 2014. The number of brokers' active customers dropped from 114,100 persons in 2009 to 54,600 in January 2014.

However, the number increased to 71,300 as of January 2015. The prevailing for the past few years downtrend in the number of brokers' active customers testified that the current model of customer acquisition in the Russian stock market had run its course. The model provided for the acquisition of customers seeking short-term profits, whereas in all developed countries, large brokers' key customers are predominantly long-term private investors. The outflow of brokers' customers was largely determined by the Russian stock market's slow recovery from the crisis.

The inflow of new 100,000 brokers' customers in 2014, including more than 25,000 active ones might be triggered by a new inflow of speculative investment focusing on carry trade and playing with growth recovery of Russian equity shares.



* Expert Rating Agency's data for 2013 still remains to be published.
Source: author's calculations based on the data from the Moscow Exchange, the National League of Asset Managers (NLMC) and Expert RA.

Fig. 41. The number of market retail customers covered by asset managers and brokers

The adoption of revolutionary amendments to the applicable legislation, introducing (effective 1 January 2013) substantial personal income tax allowances in taxation of returns on securities held for a period of at least three years, as well as allowances (effective 1 January 2015) on individuals' contributions to the so-called individual investment accounts (IIA) became the most remarkable event in the realm of private savings in 2013[1].

Under the Federal Law of December 28, 2013, No. 420-FZ On Making Amendments to Article 27.5-3 of the Federal Law On the Securities Market and Parts 1 and 2 of the Tax Code

[1] Judging by the status, these accounts resemble two investment arrangements which are popular in many countries, namely individual retirement accounts (IRAs) which are used extensively in the United States, Poland, the Republic of Korea, Canada, etc., as well as individual savings accounts (ISAs) which are widely used in the United Kingdom.

of the Russian Federation, returns from investment in newly purchased securities will be exempted from taxation to the extent that a physical body holds such securities for a period of three years and beyond. At present, all returns which individuals generate from investment in securities – through unit investment funds (UIFs), trust management, or direct holding through broker's accounts – are subject to personal income tax at a 13% rate. The maximum amount to be deducted from the tax base is Rb 3m per each year of shareholding (unitholding). The personal income tax allowance is not applied to income as dividends on equity shares and coupon payments on bonds, except in cases where a person is holding securities indirectly through an open-end unit investment fund. For this reason it is unitholders at open-end unit investment funds specializing in long-term investment who will benefit most from this tax allowance.

Furthermore, a concept of individual investment accounts which private investors will be able to open with brokers and asset managers from 2015 was introduced into the Federal Law *On the Securities Market* and the Tax Code of the Russian Federation. Russia's nationals may have only one agreement to maintain a IIA. This account can be credited up to Rb 400,000 on an annual basis. The IIA holder may choose one of the two available options of investment deduction. The first option suggests that when a IIA is closed not earlier than after three years from the opening date, the investor is entitled to a tax exemption of 13% of total contributions made. The second option makes no provision for tax deduction from contributions, however, when the IIA is balanced, the entire amount paid to the PIA holder is exempted from personal income tax.

In our opinion, both tax allowances provide strong incentives for private investors investing in securities for a period of at least three years. According to the data from the Moscow Exchange, as of the end of February 2015, brokers opened 10,200 individual investor accounts (IIA) within less than two months, and, according to our estimates, about 1,500 accounts were opened with asset managers. The initial success of a new product despite high volatility in the money market was determined by a fortuitous combination of circumstances concerning its introduction in addition to the effectiveness of fiscal incentives. Early in 2015, the stock market of Russian issuers hit the bottom, after which the RTS Index began to show a steady growth. Another reason for the new product being highly appealing for investors is no regulation of the composition and structure of private investor portfolios formed on IIA basis. In particular, these accounts were allowed to be used for acquiring foreign securities, with IIAs as trust management accounts investors were entitled to invest in bank deposits under softer terms than those of banks' regular customers. Finally, active marketing by financial institutions and the Moscow Exchange, which are running short of new products and servies for their customers, played an important role in promoting the new product early in 2015.

3.6.3. Foreign conservative investors

Major foreign institutional investors' behavior towards the Russian stock market still remains conservative. This conclusion is supported by the data on investment in Russian JSCs equity shares by California Public Employees' Retirement System (Calpers), U.S. largest public pension fund whose assets increased unexpectedly to $956m in the 2014 fiscal year from $528m in 2013 (see *Table 15*)[1].

[1] Calpers' voluminous investment reports provide no region-specific data on investment in equity shares. Therefore, while analyzing its investment in the equity shares of Russian issuers, analysts have to manually go through the list of all global investment in equity shares, which is published in the pdf format.

Table 15

Calpers investment in depositary receipts and equity shares (equity securities) of Russian companies, millions of US$.

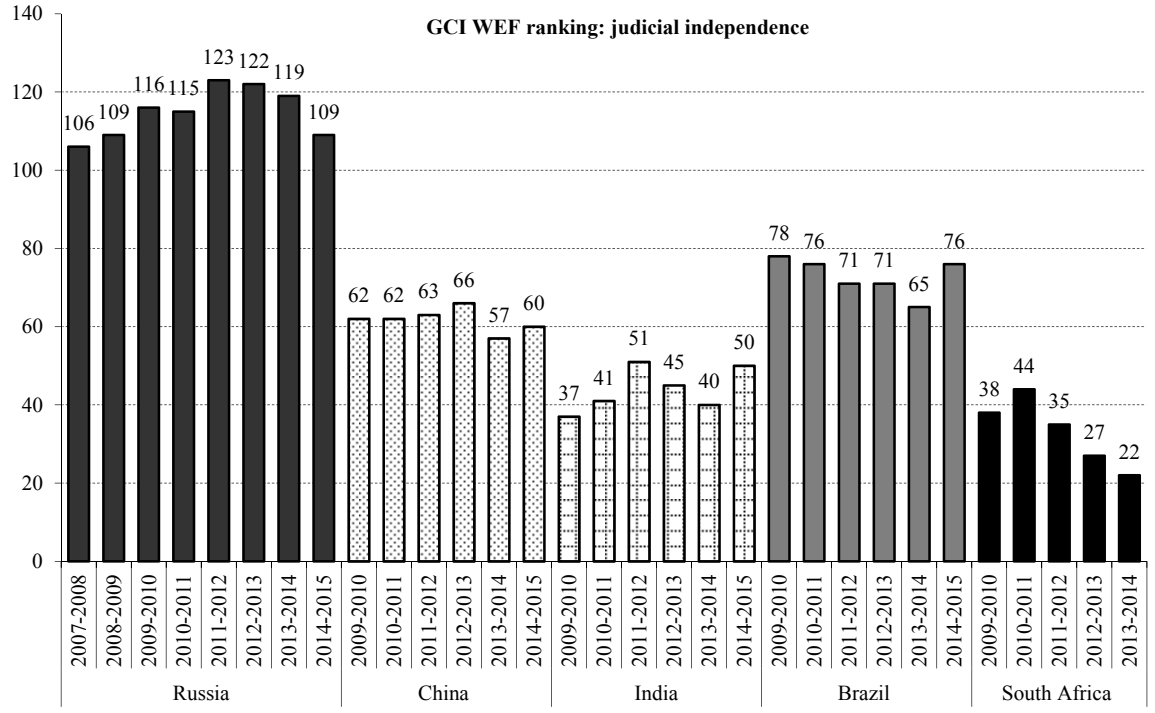
	2009*	2010*	2011*	2012*	2013*	2014*
Gazprom	144.7	46	55.1	154.4	56.4	264.6
Lukoil	189.1	93.5	80.6	78.7	68.2	86.1
Mechel	9.1	1	1.8	9.8	0.6	2.9
Norilsk Nickel	4.6	1.4	14.3	12.1	0.0	31.5
OAO Novatek		20.6	10.4	45.4	36.2	67.3
JSC Novorossiysk Commercial Sea Port	10.3	8.4	7.7	6.3	4.4	0.1
Rosneft	11.4	31.4	15.7	59.7	26.4	39.1
		5.5	2.3	5.8	0.0	5.6
Rostelecom		3.4	1	16.4	14.0	6.4
Sberbank of Russia	5.5	30.8	9.3	53.7	114.3	157.7
Severstal	7	4.7	7	9.4	6.5	4.4
Sistema JSFC	9.7	3.8	62	71.9	50.3	59.3
Surgutneftegaz	4.5	20.5	18.9	23.5	21.7	16.1
Wimm-Bill-Dann		20.2	2.2	0	0.0	0.0
Magnit		7.3	15.5	37.5	38.7	80.5
Magnitogorsk Iron and Steel Works		6.1	2	2.8	1.8	1.1
VTB	31.6	6.9	14.3	22.8	12.5	12.8
LSR Group		2.9	4.4	4.5	4.1	6.5
Other OJSCs			12.9	60.1	72.0	114.7
Russian companies' equity shares – total	**427.4**	**314.4**	**337.4**	**674.8**	**528.0**	**956.6**
Equity securities purchased in domestic and external markets – total	**122 281.2**	**80 728.6**	**91 776.3**	**117 640.8**	**112 299.4**	**153 947.7**
The share of Russian companies' equity shares in the Calpers portfolio	0.35	0.39	0.37	0.57	0.47	0.62
The share of Russian companies' equity shares in global capitalization	1.23	1.80	2.51	2.31	1.97	1.62

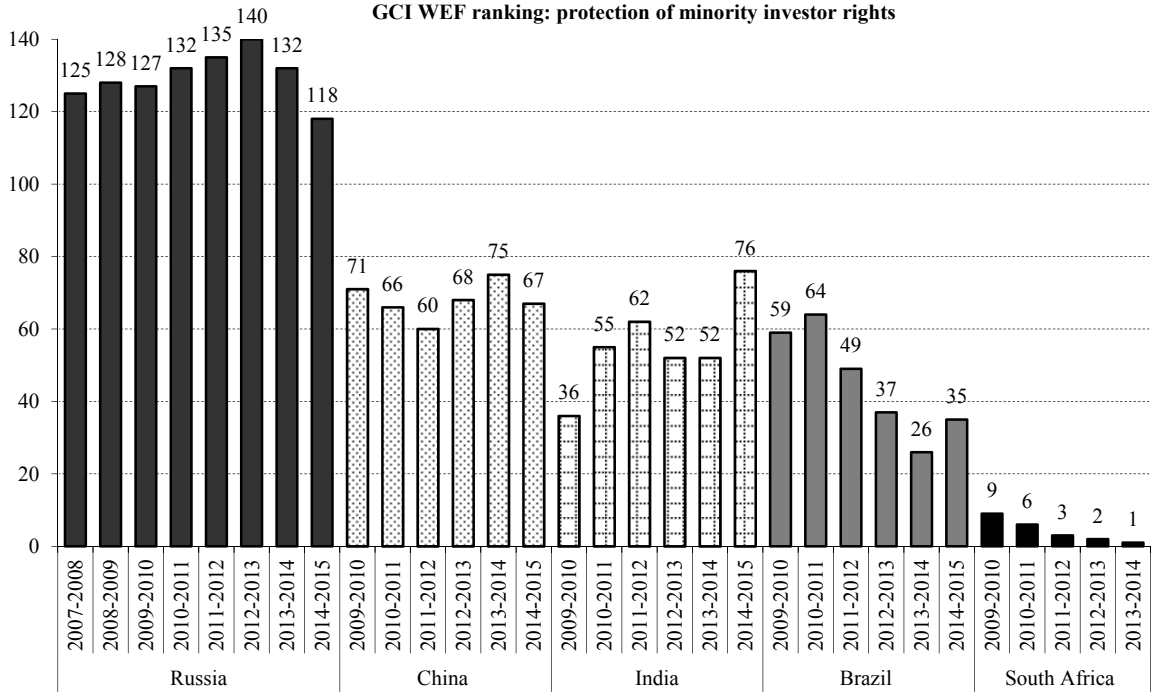
* fiscal year ending in June; detailed information on the Calpers portfolio composition and structure which is available on the Calpers official website is posted with about a year's lag, most probably with a view to preventing copying the portfolio strategy of the pension fund.
Source: based on the data obtained from Calpers investment reports for a few years.

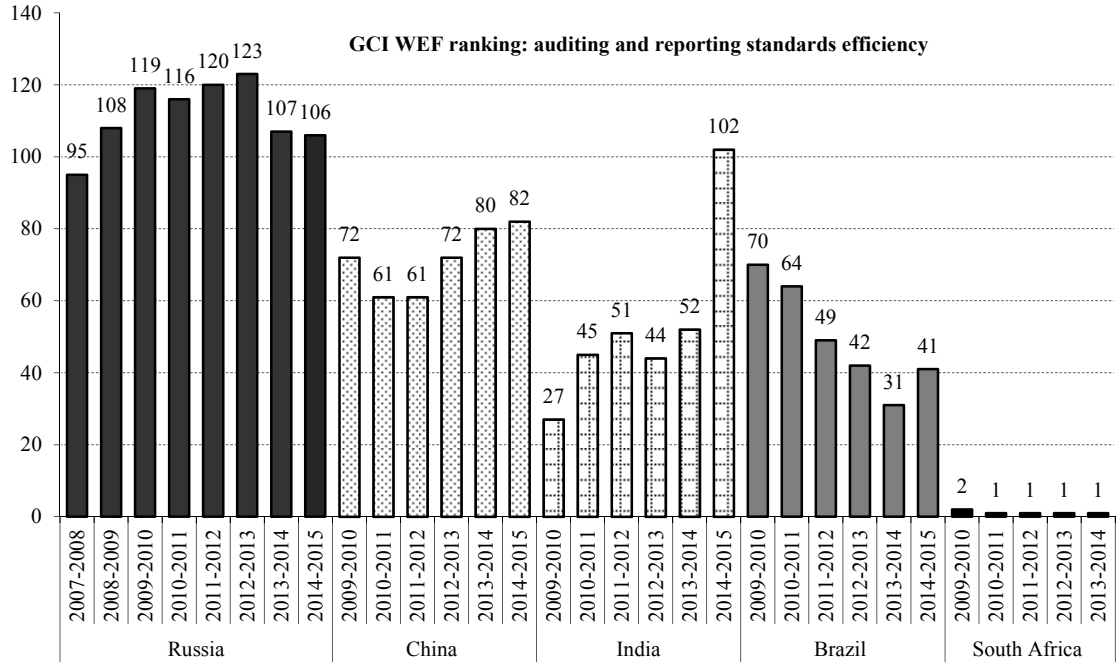
Calpers investment in Russian companies' equity shares is subject to limits. The investment increased from $427m, or 0.35% of the pension fund's portfolio of stocks, in 2008 to $956m, 0.62% of the pension fund's portfolio, in 2014. To compare, Russian companies' equity shares accounted for 1.23% of global capitalization in 2008, and 1.62% in 2014. In spite of the fact that the weight of Calpers Russian equity securities portfolio is undervalued, the 2013 investment report dated 07.01.2014 shows a noticeable growth in investment in Russian equity shares. Perhaps, this could be explained by upgraded competitiveness indices for Russia, as noticed at the World Economic Forum (WEF), and the fact that the effect of international sanctions against Russia and Russia's major companies, as well as risks of the ruble's devaluation didn't manifest themselves until the second half of the year.

It was not until 2008 that Calpers began to invest in depositary receipts and equity shares of Russian JSCs. Within many years prior to 2008 Calpers employed a method of investment rankings for emerging markets to see whether such markets are eligible for investment. Russia has long been ranked as an emerging market, but such markets were not eligible for investment by the Californian pension fund. In 2007, Calpers decided not to follow strictly to this method, allowing portfolio managers in emerging markets to decide whether or not to invest in equity shares of some of other issuers. However, analysis of the previous method allowed us to highlight the key factors which for many years prevented Calpers from investing in Rus-

sia. These factors and their assessment using the method of global competitiveness ranking of the World Economic Forum are shown in *Fig. 43*.






GCI WEF ranking: auditing and reporting standards efficiency
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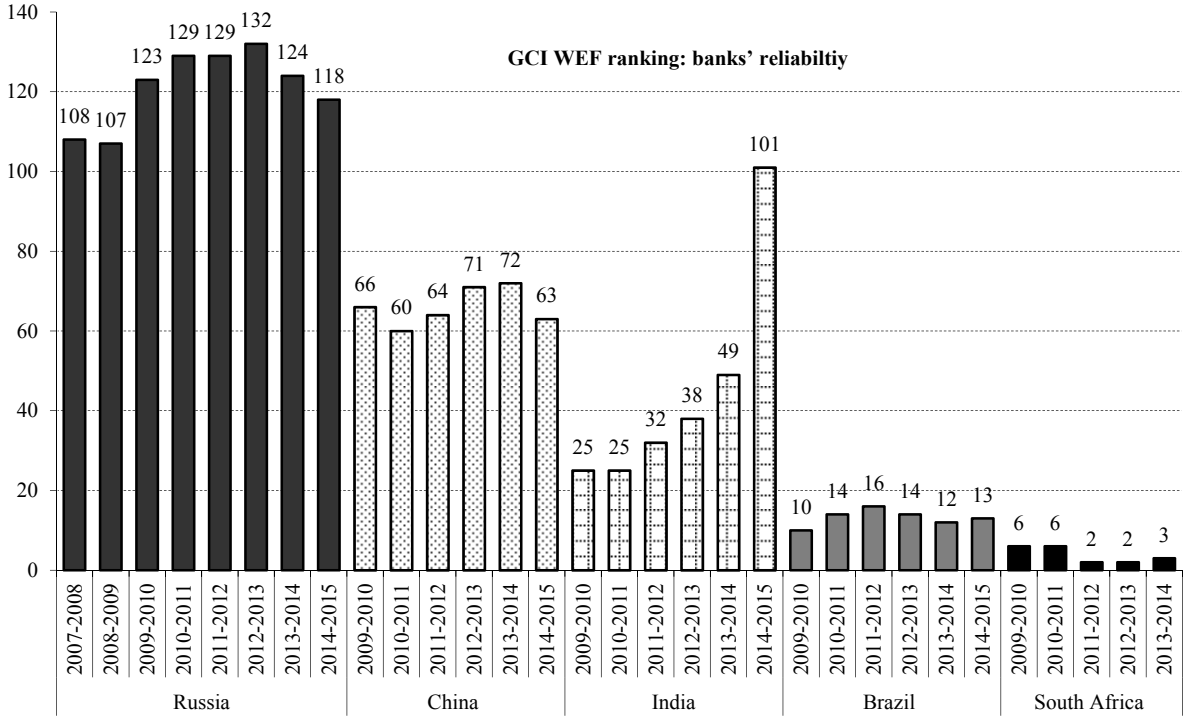
South Africa


GCI WEF ranking: banks' reliabiltiy
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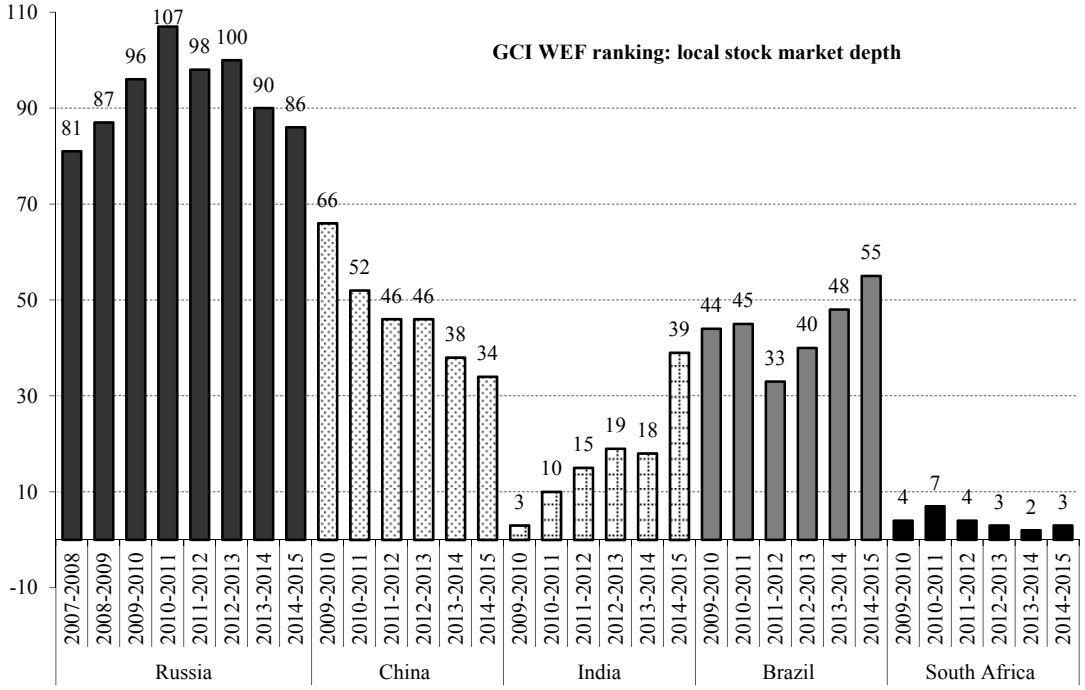
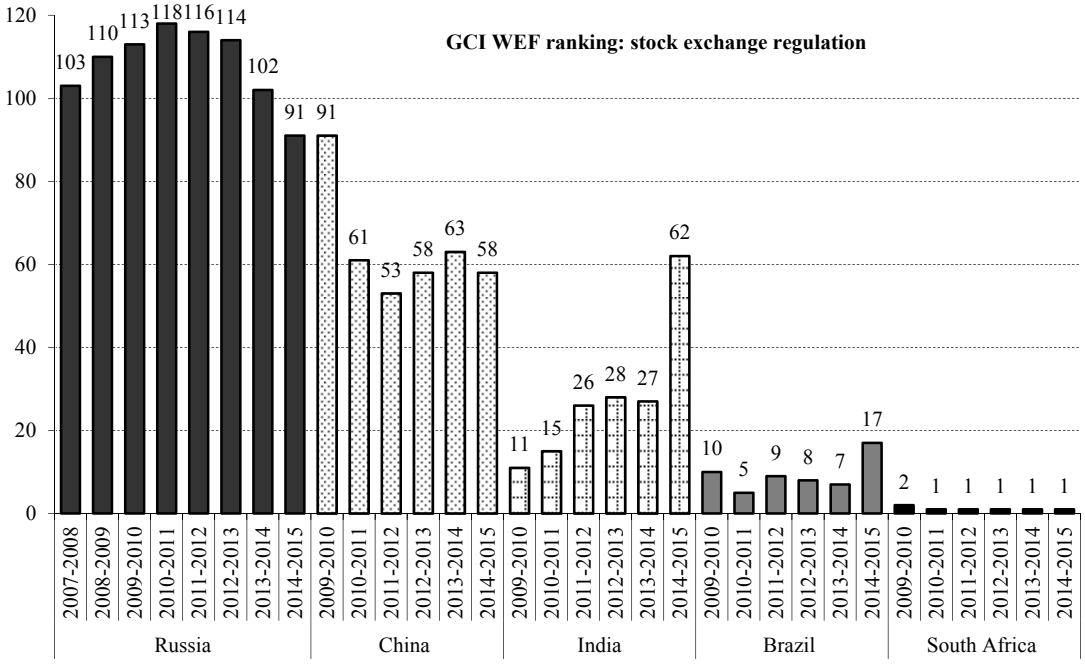




Source: World Economic Forum's Global Competitiveness Ranking for several years.

Fig. 42. BRICS countries in the World Economic Forum's Global Competitiveness Ranking on a series of criteria eligible for making decisions by conservative portfolio investors

Russia has been lagging behind the markets of other BRICS's countries in addressing the most challenging issues such as judiciary independence, protection of minority investors, auditing and reporting standards, stock market depth, effectiveness of stock exchange regulation, and reliability of banks. However, according to the ranking for 2014–2015 published in September 2014, Russia has advanced noticeably in catching up with other BRICS, improving its rankings on all of the six criteria. For example, Russia moved up to 109th from 119th on judiciary independence in the ranking 2014–2015. Within a year Russia improved its ranking on the following criteria: to 106th from 107th on the application of international auditing and reporting standards; to 118th from 132rd on protection of minority investors; to 86th from 90th on the availability of financing in the local stock market; to 118th from 124th on reliability of banks; to 91st from 102nd on the effectiveness of stock exchange regulation. Quite unexpectedly the 2014–2015 rankings on the foregoing criteria were downgraded considerably for Brazil and India, while the rankings for the latter were lowered most.

We also analyzed the investment in Russian securities by the Norwegian Government Pension Fund Global, or NGPF-G, a largest foreign investor. Unlike U.S. Calpers, NGPF-G falls under the category of sovereign pension funds which have no commitments to specific participants of the pension system. The NGPF-G is known as a largest portfolio investor in Russian securities.

It is shown in *Table 16* than NGPF-G's investment in the equity shares of Russian companies ($2.3bn) as of 1.10.2014 is much bigger than that of Calpers. However, the 0.5% share of Russian companies' equity shares in the total value of NGPF-G portfolio is much smaller than their share of capitalization of all companies worldwide. Additionally, beginning with 2010, the value of NGPF-G investment in Russian companies' equity shares dropped markedly to $2.3bn in October 2014 from $5.5bn. By contrast, NGPF-G investment in Russian bonds, most of which are OFZs, increased slightly to $4.0bn in 2013 and $3.1bn in October 2014 from $1.8bn in 2010. Perhaps, this, among other reasons, was associated with the building of the inter-custodial relations between Russian NDRs with largest European clearing and settlement systems.

Table 16

Investment in Russian securities by the Norwegian Government Pension Fund Global (NGPFG), a major foreign investor

	2009	2010	2011	2012	2013	2014 (9 months)
Russian companies' equity shares						
billions of US$	2.5	5.2	2.9	4.6	3.6	2.3
as a percentage of the NGPFG stocks portfolio value	0.9	1.6	1.3	1.1	0.7	0.5
Russian issuers' bonds						
billions of US$	0.2	1.8	0.2	2.6	4.0	3.1
as a percentage of the NGPFG bonds portfolio value	0.1	0.9	0.1	1.0	1.3	1.1

Source: composed by the author on the basis of the NGPF-G reports published on http://www.nbim.no/en/transparency/

3.7. Risks in the money market

3.7.1. Financial risks in 2014

Some of the risks we analyzed in our previous review materialized in Russia at 2014 year-end. The collapsed crude oil prices triggered the devaluation of the ruble and a new down-

trend in stock indices. The situation was worsened by the record foreign capital flight. International sanctions against Russia limited the possibilities of foreign debt refinancing first of all for banks and non-financial companies. This forced corporate borrowers to redeem their foreign debts with foreign exchange revenue and other domestic resources, thus creating an extra burden on the FX market and the ruble exchange rate. The state had to spend the national gold and foreign exchange reserves in order to stabilize the ruble and help companies repay their foreign debts.

The change in the specified terms of priorities of the Bank of Russia monetary policy and the decided transition to a policy of inflation targeting and exchange rate liberalization caused numerous discussions in the society. In our opinion, the transition was quite reasonable both strategically and tactically under the adverse situation in money markets. In the long run, it will help design serious mechanisms to deal with inflation and inflation expectations, achieve macroeconomic sustainability required for investment inflow. In terms of anti-crisis regulation, this policy facilitated the saving of gold and foreign exchange reserves and the setting of a ruble's market exchange rate that meets the new economic reality.

In conducting this policy, the Bank of Russia had to be somewhat inconsistent, because the monetary authority delayed till the last moment letting the ruble devaluate, which was unavoidable. Despite the announced exchange rate liberalization, the Bank of Russia had to occasionally intervene into the foreign exchange market in 2014, thereby offsetting the withdrawn liquidity from the banking system by increasing refinancing through repo transactions and lending against non-marketable assets. Those measures prevented the ruble from devaluing, however, banks could take advantage of increased refinancing for currency speculations weakening the national currency. However, the foregoing was not the key driver of the ruble's depreciation.

The banking system obtained extra Rb 2.4 trillion through refinancing in 2014, which along with other sources helped make up for the absorption of ruble liquidity caused by Bank of Russia's foreign exchange interventions worth Rb 3.4 trillion and the growth in cash in circulation, Rb 0.3 trillion. At the same time, amid the ruble's depreciation, which was caused first by such factors as falling crude oil prices and limited access for Russian companies and banks to external capital markets, certain conflicts emerged in the policy of the central bank which had to conduct inflation targeting policies while bolstering the ruble exchange rate. Aiming at the two targets at a time, the Bank of Russia had to undertake foreign exchange interventions entailing the absorption of ruble liquidity in banks. By compensating for liquidity through refinancing at a rate less than the return rate on operations in the foreign exchange market, the Bank of Russia interfered to a certain extent with its own efforts in dealing with the ruble's depreciation through interventions in the foreign exchange market.

In 2015, the Bank of Russia finally abandoned its interventions in the foreign exchange market, allowing the volumes of ruble refinancing of the banking system to be reduced to Rb 1.5–2.0 trillion. This policy coupled with the measures of maintaining the CBR key rate at 15% and the recent ruble devaluation allowed the ruble exchange rate to be stabilized at a new level of Rb 60–62 per US$. As inflation is lowered by the "subdued" effect of the ruble's devaluation on inflation growth, the Bank of Russia will be able to lower the CBR key rate, which is required for the recovery of growth in lending to businesses and households.

In 2015, the money market's key risks will be related to the following factors: a capital outflow if leading rating agencies downgrade below the market level the sovereign and corporate ratings for Russian companies; stock market stagnation due to slowly recovering crude oil

prices and foreign investment outflow; a moderate ruble's depreciation in response to slowly recovering crude oil prices and repayment of foreign debts amid the ban on debt refinancing in foreign markets.

3.7.2. Risks of domestic money market's heavy reliance on foreign investors' behavior

The MOEX stock market differs from global exchanges in its dependence on foreign portfolio investors. According to Sberbank CIB's analytic estimates, about 70% of Russian free-float equity shares are currently being held by non-residents. Furthermore, 14 largest investment funds accounted for 28% of all investment of foreign portfolio investors[1]. The list of these funds, according to the data from Sberbank CIB, includes the Norwegian Government Pension Fund Global, Vanguard Emerging Markets Stock Index Fund, Oppenheimer Developing Markets Fund, ISHARES MSCI Emerging Markets ETF Group BlackRock, Lazard Emerging Market Equity Portfolio. The recently considerably simplified procedures for the acquisition and custody of Russian securities in the domestic market for foreign investors made, on the one hand, the domestic market more attractive to foreign investors and, on the other hand, may increase volatility in the domestic market by boosted foreign capital outflow in case of shocks.

This is especially relevant when the sovereign rating for Russia is facing the risk of being lowered below the investment-grade level by the three major international rating agencies. On 26 January 2015, S&P lowered the sovereign rating for the Russian Federation below the investment-grade level, BB+/negative. On 20 February 2015, Moody's Investors Service downgraded the sovereign rating for Russia to Ba1/Not Prime from Baa3/Prime-3, i.e., below the investment-grade level, with a negative outlook as well. Only Fitch, the sole rating agency, keeps the rating for Russia at the investment-grade level, with a negative outlook though. This implies that the three agencies are most likely to shortly lower the rating for Russia below the investment-grade level.

This raises the question of theoretical probability of massive outflow of substantial portfolio investment from Russia. According to the data from the Bank of Russia as of 1 February 2015, the value of OFZs held by non-residents was Rb 891bn, or $12.9bn. The value of Russia's outstanding Eurobonds as of 01.31.2015 was $47.8bn, as estimated by Cbonds. The value of Russian companies' equity shares held by non-residents is, according to our estimates, $75–80bn[2] of total capitalization of Russian joint-stock companies at 2014 year-end, $520bn[3], including free float $130bn[4]. The value of Russian companies' outstanding Eurobonds as of 01.31.2015 was $163.8bn, as estimated by Cbonds. The value of Russian outstanding ruble-denominated corporate bonds as of 01.31.2015 was Rb 7077.6bn, as estimated by Cbonds. Furthermore, the best-time share of market-grade issuers in this segment was 33% or less. The Bank of Russia Money Market Review shows that the share of non-residents in this market segment in mid 2014 was 4–5% or less, or Rb 200–250bn, or $3.6bn, and saw a downtrend.

Thus, foreign portfolio investment in Russian securities may total some $300bn. A short-term outflow of even a part of the investment may trigger a collapse regarding the price of

[1] Gaidayev V. A free-float foreign control. Kommersant, 17 January 2014
[2] Some 60% of free-float, as estimated by Sberbank CIB (Kommersant, 01.17.2014).
[3] According to the data from S&P.
[4] 25% of capitalization, as estimated by Sberbank CIB.

financial instruments and solvency of many money market participants. In our opinion, such a scenario can hardly be seen in the Russian money market even in the mid run.

Even most conservative investors tend to sell or purchase given securities of sovereign issuers on the basis of intelligent investing rules set by the authorized body of their investment fund(s).

Explaining its investment strategy, the Norwegian Government Pension Fund Global (NGPF-G) notes that it tends to buy investment-grade bonds[1]. However, while analyzing the current portfolio structure, the NGPF-G is guided not only by issuer's investment grade, but also the in-house model of risk assessment of such investment. It is shown in *Table 17* that in various years the share of non-investment-grade bonds accounted for 0.6% to 2.5% of the value of NGPF-G bond portfolio. In 2012, investment in Russian bonds (mostly in OFZs) reached 1.0% of the NGPF-G bond portfolio value, 1.3% in 2013, and 1.1% within the first nine months of 2014, totaling $2.6bn, $4.0bn, and $3.1bn, respectively. Given that investment in Russian securities is beyond the current levels for non-investment-grade securities, one can suggest that NGPF-G is most likely to moderately, not abruptly, sell Russian bonds.

Table 17

The share of non-investment-grade bonds in the bond portfolio of the Norwegian Government Pension Fund Global in 2009–2014, %

	2009	2012	2013	9 months in 2014
Government bonds, including public agencies	0.2	0.2	0.3	0.3
Corporate bonds	0.7	0.2	0.3	0.3
Securitized bodns	1.5	0.3	0.1	0.0
Total – bonds	2.5	0.7	0.6	0.6

http://www.nbim.no/en/transparency/

The mutual funds' (PIMCO, BlackRock, Market Vector, Vanguard Group, etc.) issue prospectuses contain no description of the risks of selling Russian assets if Russia's ratings go below the investment-level grade. EMPF's analysis of cash flows in foreign investment funds investing in Russia shows that investment outflows from such funds have been slowed down. Furthermore, an inflow of investment of their unitholders was recorded in September and October 2014, $275m and $437m, respectively. Based on the years long practice, one can infer that foreign portfolio investors will develop their ultimate investment strategy for the Russian stock market in April–May 2015, and with a favorable scenario of slowly rebounding crude oil prices and maintained macroeconomic stability in Russia, a steady inflow of the portfolio investors covered by the EPFR analysis may well recover in the Russian stock market .

Hence, in the short-term horizon of two years, one may suggest that a sovereign rating downgrade for Russia and then for major Russian companies by all three international rating agencies would slightly boost the outflow of foreign portfolio investment in the segments in question, but it wouldn't result in a collapse in the market and massive sales of Russian assets by large foreign institutional investors. Many foreign investors would refrain from selling in the hope that Russia's current economic problems will be solved in the short run (raw material price will grow, the sanctions regime will be softer).

However, in the longer run (2–3 years), with the ratings being below the investment-grade level, the financial system and businesses would see their losses grow. The government and companies would be closed down from new foreign capital, even with a relatively "soft sce-

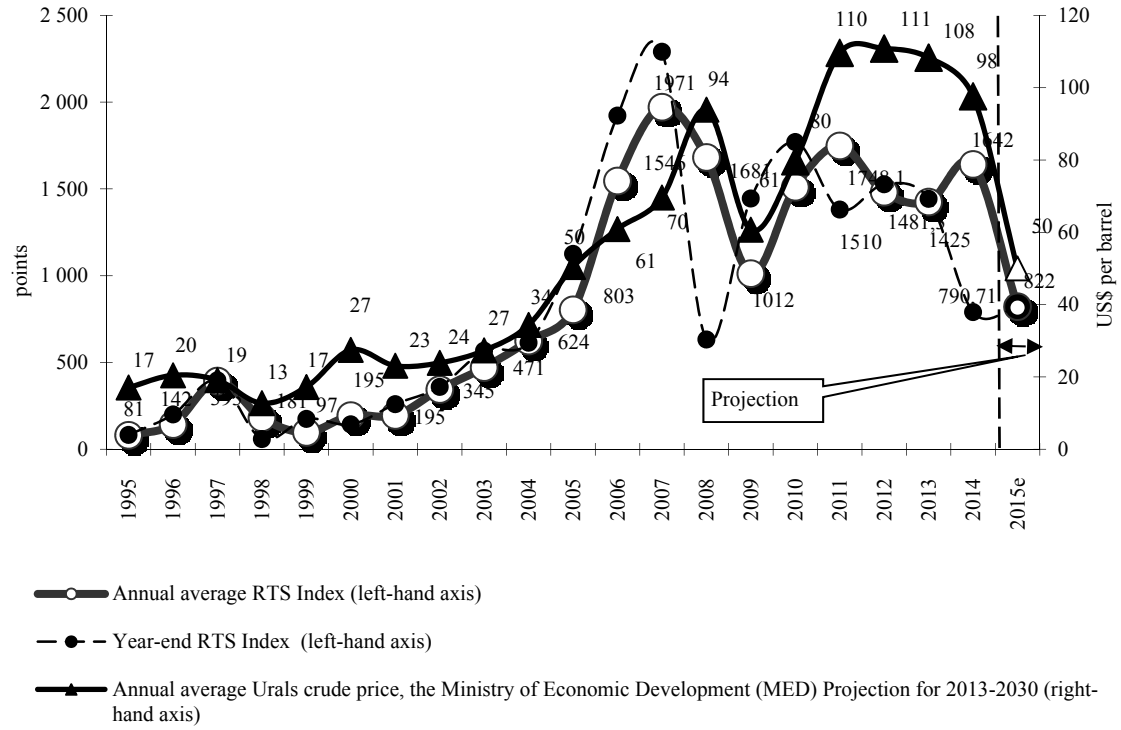
[1] A bond is regarded as investment-grade bond as long as it is ranked as such by at least one of the acknowledged international rating agencies.

nario" under which ratings would stop falling after crossing the investment-grade level, while a major part of foreign institutional investors would be patient with Russian assets. It would be difficult to maintain investment activity, the national business would be less competitive versus its global rivals. A long-term stagnation of financial assets' price will pose a threat for the sustainability of the banking system.

3.7.3. Equity stock value and dynamics of crude oil prices

As shown in section 3.3.1, Russian stock market depends on crude oil prices which show the state of global economy, the sustainability of financial system and the level of cash liquidity therein. The recent projections of Russia's Ministry of Economic Development are similar to those of international financial institutions in that crude oil prices are not expected to increase in the mid run because of the development of new oil and gas production technologies allowing many countries to migrate to oil and gas self-support. Furthermore, speaking of the public space, the Ministry of Economic Development has shortened the planning horizon to one year, and the Projection for 2015 draws on a crude oil price of $50 per barrel.

If the equation of relationship between crude oil price and the RTS Index (see *Fig. 11)* is applied to the Ministry of Economic Development's crude forecast for 2015, then the average annual RTS Index would drop to 822 in 2015 from 1642 in 2014; by contrast, the RTS Index would slightly increase to 816.0 points from 790.7 in 2014, or by 3.2%, as of 2015 year-end (see *Fig. 43*).



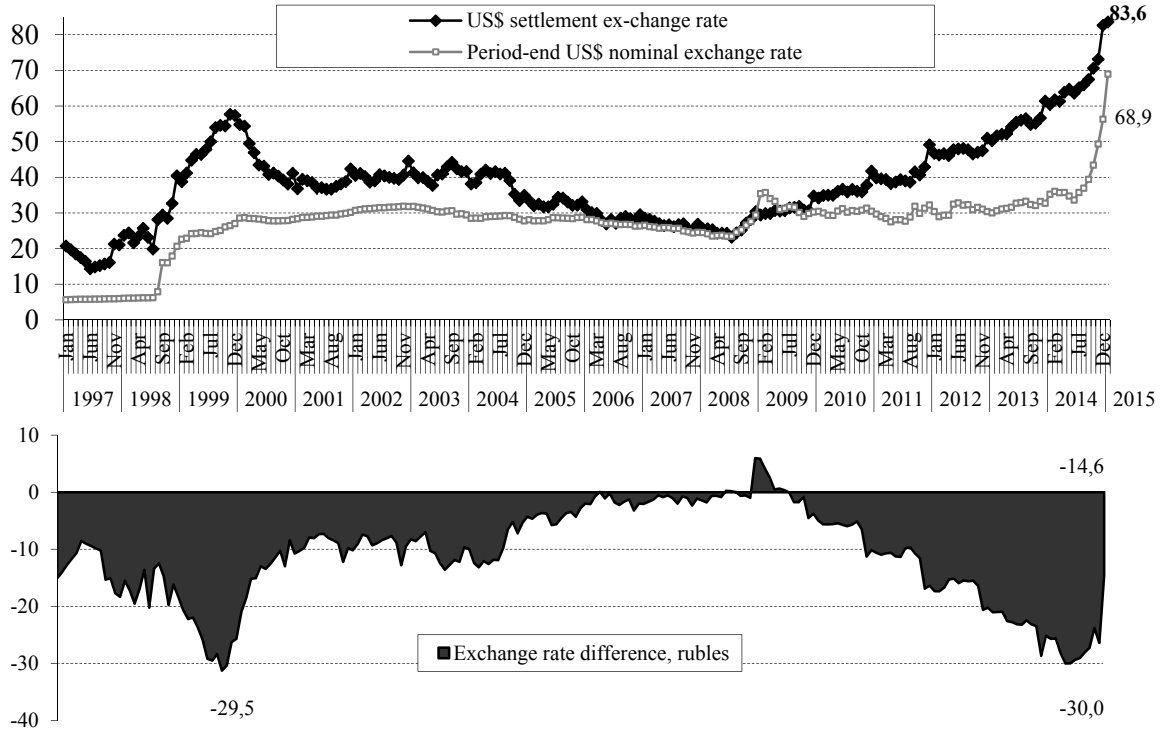
Source: the author's calculations based on the data from the Ministry of Economic Development (MED) and the Moscow Exchange.

Fig. 43. An RTS Index projection in 2015 based on the MED crude price forecast

The presented method for forecasting the stock index average annual growth falls short of the ideal, like any other methods for forecasting stock market indices. The forecast based on the previously seen ratio of crude oil prices and the RTS Index is inaccurate because the foreign investment outflow from Russia has now a stronger than ever downturn impact on the Index.

3.7.4. Risks of ruble depreciation in the mid run

The experience of recent crises in Russia shows the need to maintain a certain ratio of the ruble monetary aggregate (M2) and the gold and foreign exchange reserves (see *Fig. 44*).



Source: the calculations are based on the data provided by the Bank of Russia and the Ministry of Finance.

Fig. 44. The relationship between the US$ nominal exchange rate in terms of rubles and the settlement exchange rate in January 1997 – January 2015

The diagrams show the ratio of the official US dollar exchange rate expressed in rubles at month end and the US dollar's settlement exchange rate measured by dividing the M2 value by the value of gold and foreign exchange reserves[1]. The outstripping growth of the settlement exchange rate, reflecting how the ruble monetary aggregate is backed by the gold and foreign exchange reserves back, over the official exchange rate is normally indicative of a softer monetary policy and mounting risks of the ruble's devaluation. During the crisis of 1998–1999, the gap between the settlement and official exchange rates was caused by the de-

[1] Although this indicator is not universally meaningful for various countries, especially those with diversified economy, the ruble exchange rate' heavy reliance on export revenue makes the indicator's analytical value significant for the Russian financial system.

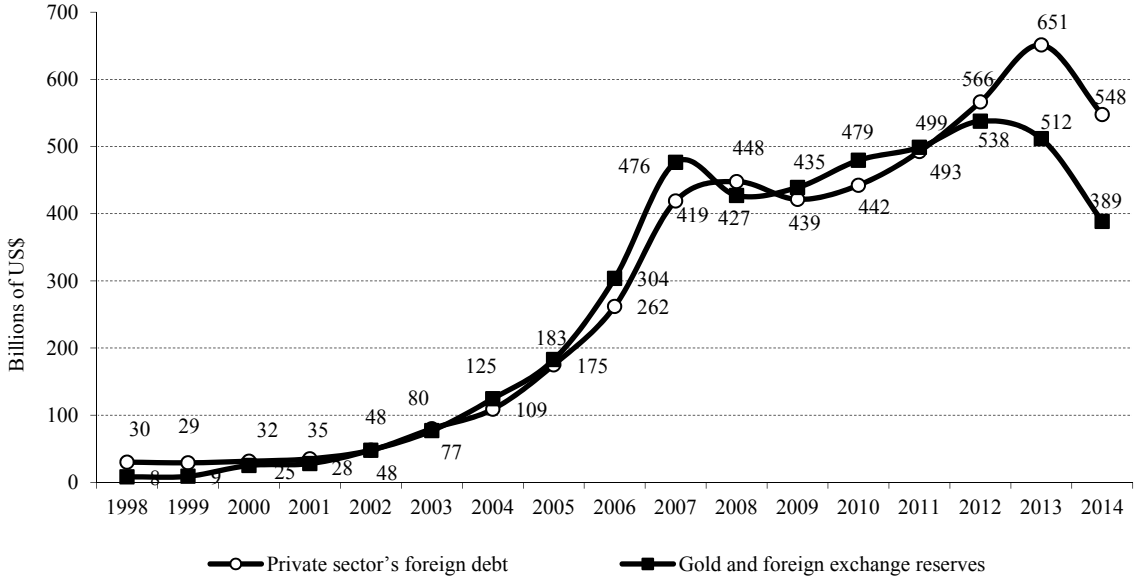
valuation of the latter. In the period between 1999 till mid 2008, the difference between the exchange rates narrowed because of the replenished gold and foreign exchange reserves. After the crisis 2008, the gold and foreign exchange reserves stopped growing, the monetary authority began to stimulate economic growth by increasing the money supply. The gap between the settlement and official exchange rates widened again. It is interesting that at any point when the gap reached Rb 30 (in both cases, the settlement exchange rate was double the official exchange rate), the monetary authority began to take unusual measures aimed at narrowing the gap between these exchange rates. Since 1999, the government has begun to actively accumulate the gold and foreign exchange reserves, and the government let the ruble depreciate by 67.3% after the exchange rate liberalization in mid 2014.

In our opinion, in the mid run, late in January 2015, the ruble hit the bottom. In January, the gap between the settlement exchange rate and the actual exchange rate narrowed to Rb 14,6 from Rb 30,0, i.e. in 2 times. This suggests that without external shocks such as, for example, sweeping outflow of foreign portfolio investment, collapsing crude oil prices, to $30–40 per barrel or the migration to a supersoft monetary policy, the ruble may be maintained at Rb 60 per US dollar.

3.7.5. Risks of banks and non-financial companies servicing their foreign debt

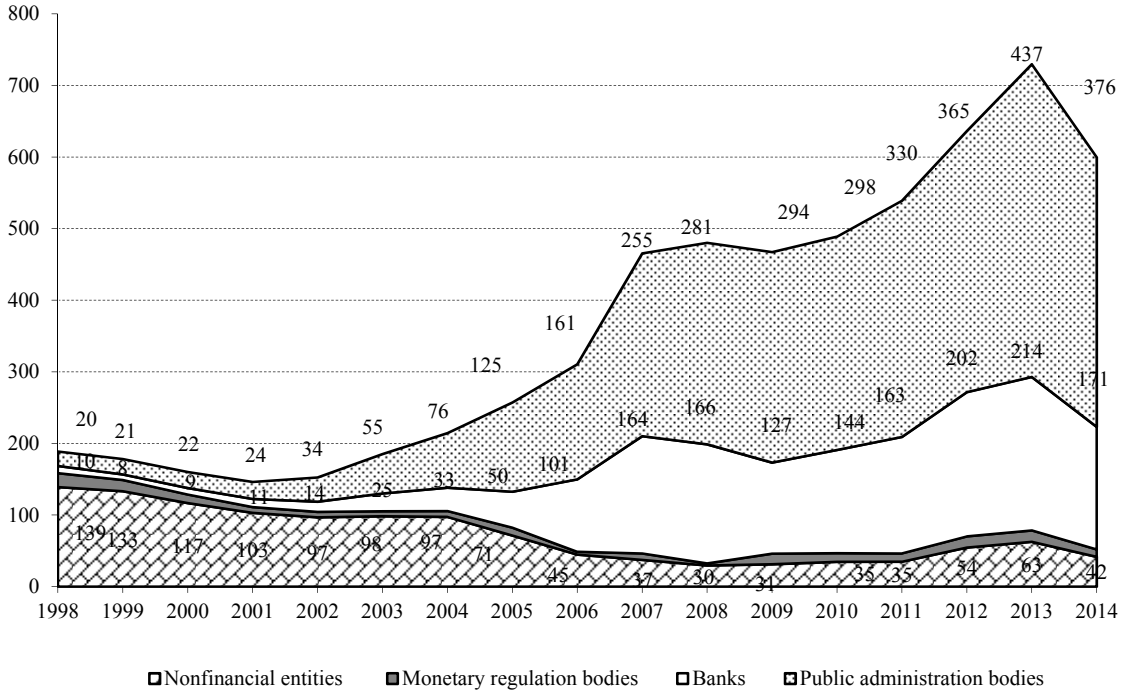
The sanctions didn't allow Russian companies and banks to refinance their external liabilities in the global markets, and they had to purchase more foreign exchange in the internal market to be able to repay their debt. In 2011–2013, the annual average growth in the private sector's external liabilities amounted to $69,6bn. The sanctions made the amount of the foregoing liabilities reduce from $651bn in 2013 to $614bn as of 10.01.2014, or by $36,7bn (see *Fig. 45*). In other words, the sanctions are assumed to not allow Russian companies and banks to borrow about $110bn in the global market in 2014. At the same time, in 2014, the foreign-currency and gold reserves shrank to $389bn from $512bn, or by $123bn. This amount was spent to support the ruble's exchange rate in the foreign exchange market and replenish indirectly the foreign exchange reserves of Russian organizations which are required for the repayment of their foreign debt. To compare, in the period of guided devaluation of the ruble, between August 2008 and February 2009, the foreign-currency and gold reserves shrank by $212bn, reaching a minimum of $384bn.

It is banks and non-financial companies that saw most of the decline in foreign debt in 2014. Banks' debts to non-residents decreased to $171bn in 2014 from $214bn in 2013, or by 20.1%. Non-financial companies' foreign debt decreased to $376bn from $437bn, or by 14.0% during the same period of time. The difficulties encountered by Russia in 2014 while repaying businesses' foreign debts amid international sanctions make it necessary to have a strict regulation of foreign debt burden on Russian companies. In 2014, Russian companies could hardly manage to service their debts denominated in foreign currencies without taking swift measures aimed at supporting such companies through foreign exchange interventions, Bank of Russia's foreign exchange loans to banks in the form of FX swaps and FX repos, measures of financing support to businesses by using the gold and foreign exchange reserves.



Source: author's calculations based on the data on the balance of payments for a few years.

Fig. 45. Growth in private sector's debt and state cash surplus



Source: based on the data obtained from the balance of payments for a few years.

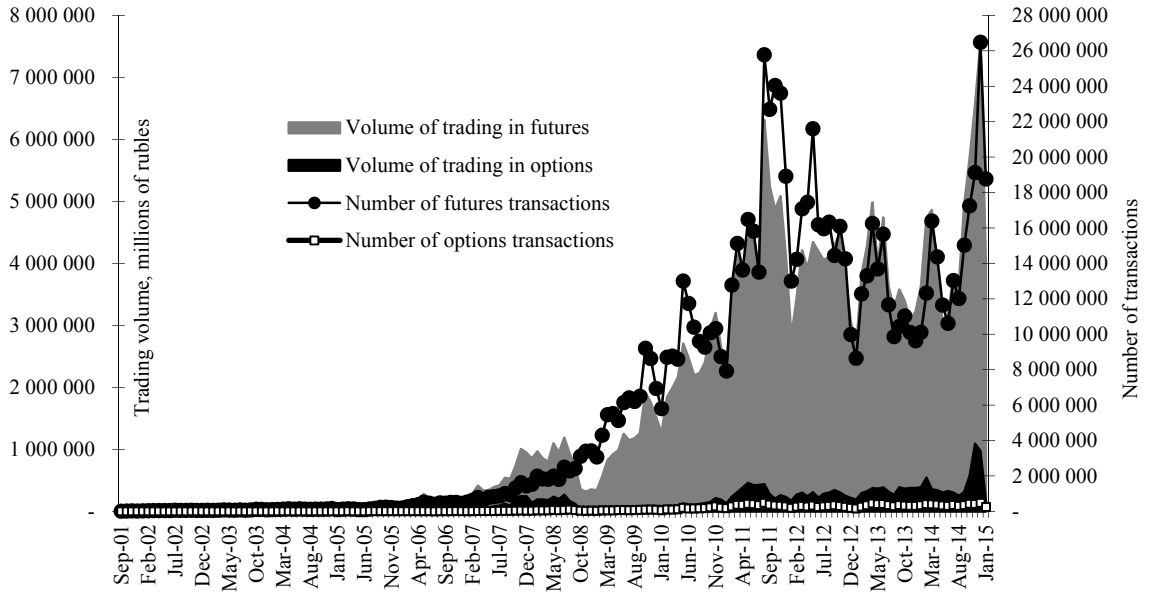
Fig. 46. Russian Federation's foreign debt in 1998–2014, billions of US$

3.7.6. Transaction risks in the stock market and derivatives market

Outstripping growth in trading volumes vs. assets of market participants and their customers has been the stock market's specific feature over the recent years. High-frequency trading has been gaining ground. The data on customers' transactions which is published from time to time by mass media allows one to assume that major brokers' private customers' portfolios are renewed completely within 2 to 3 days on average[1].

Not only does intensive trading activity often than not interferes with investment results of most private investors, but it also creates higher transaction risks for trading systems. Every year the stock exchange has increasingly been engaged in a battle for processing ever growing flow of applications, being challenged by about 600 participants having all the resources required for intensifying the transaction activity. Furthermore, there is no knowing whether or not such a competition has an impact on growth in issuers' capitalization, new fundraising, better investment performance. Therefore, infrastructural organizations are expected to face more operational problems in the years to come, which might bring up a question of taking further measures aimed at regulating high-frequency trading.

The same concerns raise about the FORTS derivatives market. The number of transactions and trading volumes have been growing fast (see *Fig. 47*), customers' assets have been increasing at slower rates, information on the number of participants in the market and their trading activity is nontransparent.



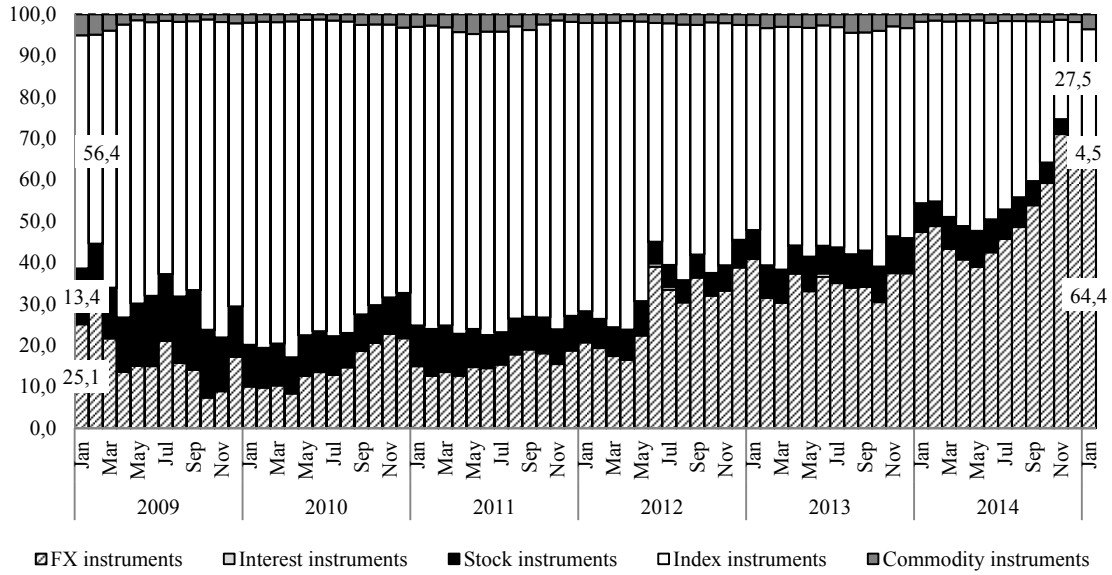
Source: author's calculations based on the data from the Moscow Exchange.

Fig. 47. Trading volumes and number of transactions in the derivatives market of the Moscow Exchange in the period between 09.01.2001 and 01.31.2015

The derivatives market has increasingly been moving towards FX transactions while the share of index instruments has been substantially decreasing in the futures market (see *Fig. 48*). In the futures market, the share of transactions with FX instruments increased to 64.4% in January 2015 from 25.1% in January 2009, whereas the share of transactions with

[1] BCS making plans. Vedomosti, 22 June 2010.

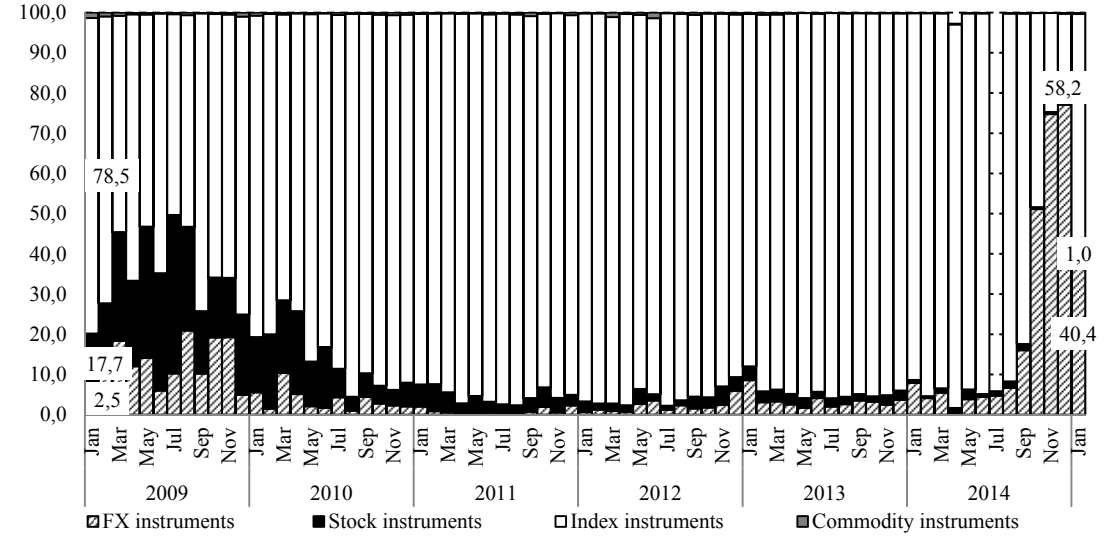
index instruments declined to 27.5% from 56.4% during the same period of time. This shows that during the acute phase of the current crisis market participants used mostly FX futures rather than securities and index futures for hedging purposes. Yet, interest-bearing instruments play an insignificant role in the derivatives market play still plays.



Source: authors' calculations based on the data from the Moscow Exchange.

Fig. 48. The structure of futures market in the Moscow Exchange in 2009 – January 2015, as a percentage of transactions value

In the options market, the share of transactions with FX instruments increased to 40.4% in January 2015 from 2.5% in January 2009, whereas the share of transactions with index instruments shrank to 58.2% from 78.5% during the same period of time.



Source: authors' calculations based on the data from the Moscow Exchange.

Fig. 49. The structure of options market in the Moscow Exchange in 2009 – January 2015, as a percentage of transactions value

3.8. The Market for Municipal and Subfederal Borrowings

3.8.1. The dynamics of market development

Based on the results of 2014 the consolidated regional budget and the budgets of the territorial state non-budgetary funds were executed with a deficit of Rb 485.6bn (or 0.68% of GDP). Compared with 2013 the amount of deficit of the consolidated regional budget, as a proportion of GDP, decreased 1.4 times, while the deficit of the territorial budgets in 2013 was Rb 625.5bn (or 0.94% of GDP).

In 2014 the budgets of the constituent entities of the Russian Federation were executed with a deficit of Rb 393.2bn, the budgets of the city districts – with a deficit of Rb 38.4bn, those of the intra-city municipal formations of Moscow and St. Petersburg – with a surplus of Rb 1.2bn, the budgets of the municipal districts – with a deficit of Rb 20.1bn, the budgets of urban and rural settlements – with a surplus of Rb 2.6bn, and the budgets of territorial state non-budgetary funds – with a deficit of Rb 37.8bn.

In 2013, the budgets of the constituent entities of the Russian Federation were executed with a deficit of Rb 599.8bn; the budgets of the city districts – with a deficit of Rb 43.4bn; the budgets of the intra-city municipal formations of Moscow and St. Petersburg – with a deficit of Rb 0.7bn; the budgets of the municipal districts – with a deficit of Rb 5.7bn; those of urban and rural settlements – with a surplus of Rb 7.7bn; and the budgets of territorial state non-budgetary funds – with a surplus of Rb 16.5bn.

Table 18

Territorial budget surplus to budgetary expenditure ratio (as %)

Year	Consolidated regional budget*	Regional budgets
2014	-4.6	-4.9
2013	-6.4	-8.1
2012	-3.0	-3.5
2011	-0.2	-0.3
2010	-1.4	-1.6
2009	-5.3	-5.3
2008	-0.7	-0.7
2007	0.8	0.6

* Including state non-budgetary funds.

Source: IEP calculations based on data released by the Federal Treasury.

Table 19

Territorial budget surplus to budgetary expenditure ratio in 2007-2014 (as %)

Year	Budgets of the intra-city municipal formations of Moscow and St Petersburg	Budgets of city districts	Budgets of municipal districts	Budgets of urban and rural settlements
2014	6.0	-2.2	-1.4	0.7
2013	-3.47	-2.61	-5.59	2.24
2012	2.26	-2.01	-0.08	1.34
2011	6.15	-2.10	1.13	0.64
2010	-1.12	-1.16	-0.11	1.72
2009	-0.63	-3.32	-1.88	2.63
2008	-1.47	1.09	-0.26	2.72
2007	5.34	1.23	-0.04	2.34

Source: IEP calculations based on data released by the Federal Treasury.

As of 1 January 2015 the consolidated budget was executed with a deficit (including territorial state non-budgetary funds) for 75 constituent entities of the Russian Federation (in

2013 – in 77 regions). The total amount of the deficit was at the level of Rb 559.5bn, or 6.3% of the amount of their budgetary revenues (in 2013 – Rb 655.0bn, or 8.1%).

The average level of the budget deficit was 7.9% of the revenues of the corresponding budgets. The highest budget deficit to revenue ratio was observed in the Amur Oblast – 19.2%, the Udmurt Republic – 16.6%, the Jewish AO – 15.9%, and the Murmansk Oblast – 15.3%. Moscow accounted for more than 9.9% of the total consolidated budget deficit (*Table 22*).

In 2014 the consolidated budget was executed with a surplus for 10 constituent entities of the Russian Federation (as compared to 6 in 2013). The total budget surplus amount for these regions was Rb 73.9bn, or 6.1% of the amount of their budget revenue (in 2013 – Rb 29.5bn, or 2.6% of the budget revenue). The average budget surplus index was 3.2% of the budget revenue.

The highest consolidated budget surplus to revenue ratio was achieved in Sevastopol – 14.4% and in the Sakhalin Oblast – 14.0%.

The major share (74.4%) of the total surplus of the consolidated regional budget was achieved due to the budget results displayed by just three of the constituent entities of the Russian Federation: the Sakhalin Oblast Rb 22.8bn, or 30.9% of the total surplus, the Republic of Crimea – Rb 17.3bn, or 23.4%, and the Leningrad Oblast – Rb 13.5bn, or 18.2%.

3.8.2. The cumulative debt structure

According to data released by the Ministry of Finance of the Russian Federation, the amount of accumulated debt of the constituent entities of the Russian Federation in 2014 increased by Rb 351.5bn, amounting to Rb 2,089.0bn, and the amount of accumulated debt of the municipal formations increased by Rb 24.3bn, amounting to Rb 313.2bn. The ruble equivalent of the volume of accumulated external borrowings of the regional consolidated budgets has increased by Rb 9.5bn, amounting to Rb 27.8bn.

Table 20

New borrowing of regional and local budgets (as % of GDP)

Year	2007	2008	2009	2010	2011	2012	2013	2014
Net borrowing by subfederal and local authorities Including::	0.17	0.29	0.74	0.51	0.21	0.33	0.61	0.53
Refundable loans received from budgets of other levels	-0.01	0.03	0.33	0.37	0.15	0.01	0.06	0.24
Subfederal (municipal) bonds	0.08	0.17	0.24	0.07	-0.11	0.06	0.12	-0.01
Other borrowings	0.10	0.09	0.17	0.07	0.17	0.26	0.43	0.30

Source: IEP calculations based on data released by the Federal Treasury.

3.8.3. Structure of borrowing

The total volume of borrowing by the regions and municipalities came to Rb 2,106.2bn, with the largest borrowers being the Nizhny Novgorod Oblast – Rb 169.6bn, and the Omsk Oblast – Rb 132.5bn. Compared with 2013, the volume of borrowing in nominal terms increased by Rb 910.8bn, or by 76.2%.

In the overall volume of borrowing of the consolidated regional budget, the issuance of securities accounted for 5.3%, loans from upper-level budgets (budgetary loans) – for 36.5%, other borrowings ((borrowing from commercial banks and international credit organizations) – 58.2%.

The overall volume of net borrowings of the consolidated regional budgets amounted to Rb 376.2bn. The highest net borrowing to budget revenue ratios were demonstrated by the Ko-

stroma Oblast – 15.0%, the Komi Republic – 14.0%, the Magadan Oblast – 13.8%, the Republic of Karelia – 13.3%, and the Udmurt Republic – 13.1% (*Table 21*).

The largest net borrowers were: the Krasnoyarsk Krai – Rb 22.5bn, the Krasnodar Krai – Rb 19.6bn, the Moscow Oblast – Rb 19.2bn, the Sverdlovsk Oblast – Rb 17.4bn, and the Samara Oblast – Rb 14.9bn.

Due to the higher amount of previously received and redeemed loans vs. the amount of new loans, the amount of accumulated debt decreased in 8 constituent entities of the Russian Federation: Moscow – by Rb 17.4bn, the Sakhalin Oblast – by Rb 4.4bn, St. Petersburg – by Rb 4.0bn, the Belgorod Oblast – by Rb 1.0bn, the Primorsky Krai – by Rb 0.8bn, the Tyumen Oblast – by Rb 0.4bn, the Chukotka AO – by Rb 0.2bn, and the Tyva Republic – by Rb 0.2bn.

Table 21

Execution of the consolidated budgets of the constituent entities of the Russian Federation in 2014

	Budget revenue (Rb m)	Budget deficit (surplus) (Rb m)	Deficit (surplus) to revenue ratio, %	Borrowed funds to revenue ratio, %	Net borrowing to revenue ratio, %	Repaid debt to revenue ratio, %	Net borrowing to deficit (surplus) ratio, %
1	2	3	4	5	6	7	8
Central Federal District							
Belgorod Oblast	88,313.6	2,135.9	2.4	10.5	3.1	7.4	129.6
Bryansk Oblast	55,635.0	919.67	1.7	20.9	3.6	17.3	215.9
Vladimir Oblast	63,595.4	2,027.3	3.2	2.5	1.0	1.4	31.5
Voronezh Oblast	110,006.9	13,835.5	12.6	27.0	10.7	16.3	84.9
Ivanovo Oblast	44,828.7	3,838.7	8.6	83.6	4.7	78.9	54.5
Tver Oblast	68,283.0	2,691.5	3.9	71.1	3.2	67.9	81.4
Kaluga Oblast	59,466.3	6,286.8	10.6	20.2	7.8	12.4	73.8
Kostroma Oblast	29,812.4	4,287.7	14.4	60.1	15.0	45.1	104.1
Kursk Oblast	54,737.6	5,231.5	9.6	44.3	7.1	37.2	74.0
Lipetsk Oblast	62,500.6	-169.3	-0.3	15.0	7.4	7.5	-2,748.3
Moscow Oblast	557,996.9	5,921.9	1.1	11.9	3.4	8.4	324.7
Orel Oblast	37,336.6	2,604.9	7.0	17.5	6.8	10.7	97.8
Ryazan Oblast	56,401.3	1,930.4	3.4	29.6	4.1	25.5	119.1
Smolensk Oblast	44,372.4	3,880.1	8.7	41.2	12.2	29.0	139.4
Tambov Oblast	54,702.5	2,701.4	4.9	46.3	5.0	41.3	101.0
Tula Oblast	86,192.6	3,646.8	4.2	21.5	2.6	18.9	62.0
Yaroslavl Oblast	75,684.6	8,325.9	11.0	36.5	9.1	27.4	82.9
Moscow	1,684,423.5	55,607.0	3.3	1.2	-1.5	2.7	-46.7
Baikonur	3,850.7	-12.8	-0.3	0.0	0.0	0.0	0.0
Total	**3,238,140.7**	**125,691.0**	**3.9**	**12.4**	**1.7**	**10.7**	**43.3**
North Western Federal District							
Republic of Karelia	41,762.7	4,119.0	9.9	63.5	13.3	50.2	134.8
Komi Republic	77,517.9	11,528.5	14.9	27.0	14.0	13.0	94.4
Arkhangelsk Oblast	90,026.7	8,380.9	9.3	103.8	5.4	98.4	58.0
Vologda Oblast	65,870.1	4,667.7	7.1	50.5	7.6	42.9	107.2
Kaliningrad Oblast	69,345.7	-815.9	-1.2	12.5	3.3	9.3	-277.9
Leningrad Oblast	133,853.0	-13,459.1	-10.1	5.0	0.0	4.9	-0.3
Murmansk Oblast	68,573.2	10,502.4	15.3	37.6	11.6	26.0	75.5
Novgorod Oblast	32,610.5	4,631.5	14.2	30.4	6.9	23.5	48.6
Pskov Oblast	34,846.2	2,806.8	8.1	9.8	0.9	8.9	11.3
St. Petersburg	477,510.3	14,647.4	3.1	0.0	-0.8	0.9	-27.6
Nenets AO	19,815.2	655.5	3.3	0.0	0.0	0.0	0.0
Total	**1,111,731.6**	**47,664.8**	**4.3**	**20.6**	**3.2**	**17.4**	**73.5**
Southern Federal District							
Republic of Kalmykia	12,833.9	629.3	4.9	7.0	4.3	2.8	86.7
Krasnodar Krai	269,526.0	27,172.5	10.1	14.4	7.3	7.1	72.0
Astrakhan Oblast	46,598.3	5,879.7	12.6	53.9	12.1	41.8	95.8
Volgograd Oblast	113,594.3	9,159.7	8.1	26.5	7.9	18.6	98.1
Rostov Oblast	192,887.5	13,276.3	6.9	7.8	6.4	1.4	92.9
Republic of Adygea (Adygea)	19,102.8	1,038.5	5.4	12.6	5.4	7.2	100.0
Total	**654,543.0**	**57,156.0**	**8.7**	**17.2**	**7.3**	**9.8**	**84.2**

Cont'd

1	2	3	4	5	6	7	8
North Caucasus Federal District							
Republic of Dagestan	109,011.5	3,312.0	3.0	7.3	0.8	6.4	27.5
Republic of Kabardino-Balkaria	33,521.8	1,937.0	5.8	61.8	5.1	56.7	87.9
Republic of North Ossetia – Alania	29,846.4	2,076.8	7.0	34.8	4.6	30.2	65.8
Republic of Ingushetia	27,451.5	23.1	0.1	2.8	1.5	1.3	1,728.0
Stavropol Krai	113,529.5	5,869.8	5.2	24.4	6.3	18.1	121.7
Republic of Karachay-Cherkessia	21,500.1	2,342.6	10.9	14.2	5.0	9.2	46.1
Chechen Republic	78,248.6	2,395.3	3.1	4.7	1.5	3.2	49.8
Total	**413,109.4**	**17,956.7**	**4.3**	**18.0**	**3.3**	**14.6**	**76.8**
Volga Federal District							
Republic of Bashkortostan	196,960.0	14,222.4	7.2	5.6	3.0	2.6	41.1
Republic of Mari El	31,114.3	2,450.9	7.9	25.1	6.6	18.5	84.1
Republic of Mordovia	45,607.4	5,740.1	12.6	122.7	6.3	116.3	50.4
Republic of Tatarstan (Tatarstan)	242,863.6	19,443.9	8.0	29.7	2.1	27.6	25.6
Udmurt Republic	75,897.5	12,588.5	16.6	37.1	13.1	24.0	79.0
Republic of Chuvashia (Chuvashia)	53,357.2	3,363.3	6.3	41.2	5.5	35.7	87.0
Nizhny Novgorod Oblast	172,443.6	11,109.2	6.4	98.3	7.0	91.4	108.3
Kirov Oblast	63,448.4	5,117.7	8.1	57.4	7.6	49.8	94.0
Samara Oblast	182,608.0	15,329.5	8.4	22.4	8.2	14.2	97.3
Orenburg Oblast	105,635.1	4,231.0	4.0	16.1	2.9	13.1	73.3
Penza Oblast	60,713.9	2,548.4	4.2	18.3	5.4	12.9	129.3
Perm Krai	143,111.4	12,873.2	9.0	32.5	8.3	24.2	92.4
Saratov Oblast	100,379.3	7,236.6	7.2	39.2	4.3	35.0	59.2
Ulyanovsk Oblast	52,210.7	4,269.2	8.2	21.4	9.0	12.5	109.5
Total	**1,526,350.6**	**120,524.0**	**7.9**	**37.3**	**5.7**	**31.5**	**72.7**
Urals Federal District							
Kurgan Oblast	40,817.2	3,992.8	9.8	20.9	7.0	13.9	71.7
Sverdlovsk Oblast	245,693.4	22,473.7	9.1	27.9	7.1	20.8	77.5
Tyumen Oblast	172,935.6	-6,324.5	-3.7	0.0	0.0	0.0	0.0
Chelyabinsk Oblast	169,527.3	5,494.7	3.2	7.0	3.9	3.1	120.5
Khanty-Mansyisk AO – Yugra	267,077.5	-7,457.8	-2.8	20.8	0.7	20.1	-25.4
Yamal-Nenets AO	170,035.1	-1,473.4	-0.9	18.9	5.7	13.2	-658.8
Total	**1,066,086.2**	**16,705.5**	**1.6**	**16.6**	**3.6**	**13.0**	**230.5**
Siberian Federal District							
Republic of Buryatia	60,400.5	4,607.4	7.6	15.2	5.1	10.0	67.3
Tyva Republic	26,688.7	1,269.9	4.8	2.5	-0.5	3.0	-9.8
Altai Krai	113,666.7	1,723.5	1.5	1.7	0.7	1.1	44.2
Krasnoyarsk Krai	222,939.2	23,077.7	10.4	21.4	10.1	11.4	97.4
Irkutsk Oblast	150,543.2	14,020.5	9.3	10.5	6.1	4.5	65.0
Kemerovo Oblast	149,466.0	14,024.1	9.4	14.9	7.0	7.9	74.9
Novosibirsk Oblast	153,863.9	15,841.3	10.3	65.4	8.5	56.9	82.2
Omsk Oblast	98,194.1	6,834.5	7.0	135.0	7.5	127.4	108.3
Tomsk Oblast	69,549.0	5,980.2	8.6	75.7	7.8	68.0	90.5
Republic of Altai	22,544.8	-157.0	-0.7	10.0	1.0	8.9	-146.8
Republic of Khakassia	31,842.3	3,291.6	10.3	31.5	9.1	22.4	88.4
Transbaikal Krai	60,761.3	7,547.2	12.4	38.1	8.6	29.5	69.5
Total	**1,160,458.8**	**98,060.9**	**8.5**	**36.1**	**6.9**	**29.2**	**81.6**
Far Eastern Federal District							
Republic of Sakha (Yakutia)	189,770.8	5,032.4	2.7	5.2	2.3	2.9	86.2
Primorsky Krai	121,168.3	4,377.0	3.6	16.2	0.8	15.5	21.5
Khabarovsk Krai	114,606.5	15,714.6	13.7	22.5	7.5	15.0	54.4
Amur Oblast	62,438.7	11,958.6	19.2	56.0	9.3	46.7	48.3

Cont'd

1	2	3	4	5	6	7	8
Kamchatka Krai	68,409.9	1,256.1	1.8	2.6	-0.4	3.0	-23.2
Magadan Oblast	30,024.0	4,460.5	14.9	21.8	13.8	8.0	93.0
Sakhalin Oblast	163,267.3	-22,815.7	-14.0	12.2	-3.5	15.7	25.3
Jewish AO	13,238.1	2,102.0	15.9	35.1	6.9	28.2	43.4
Chukotka AO	22,466.3	1,008.0	4.5	9.3	0.4	8.9	9.9
Total	**785,390.0**	**23,093.3**	**2.9**	**16.0**	**2.4**	**13.6**	**81.0**
Crimea Federal District							
Sevastopol	27,717.0	-3,976.6	-14.3	0.0	0.0	0.0	0.0
Republic of Crimea	131,223.1	-17,291.2	-13.2	0.0	0.0	0.0	0.0
Total	**158,940.0**	**-21,267.8**	**-13.4**	**0.0**	**0.0**	**0.0**	**0.0**
Total for the Russian Federation	**10,114,750.1**	**485,584.2**	**4.8**	**20.8**	**3.7**	**17.1**	**77.5**

Source: IEP calculations based on data released by the Federal Treasury.

Domestic bond loans

In 2014 new issues of bond loans were registered in 31 constituent entities and 5 municipal formations (compared with 28 regions and 1 municipality in 2013). In 2014 the Ministry of Finance registered prospectuses for the offering and listing of bond loan issues placed by: the Volgograd Oblast, the Krasnoyarsk Krai, the Republic of Karelia, the Nizhny Novgorod Oblast, the Tver Oblast, St. Petersburg, the Tomsk Oblast, the Republic of Sakha (Yakutia), the Yaroslavl Oblast, the Udmurt Republic, the Samara Oblast, the Stavropol Krai, the Republic of Bashkortostan, the Belgorod Oblast, the Lipetsk Oblast, the Voronezh Oblast, the Tula Oblast, the Orenburg Oblast, the Novosibirsk Oblast, the Republic of Mordovia, the Smolensk Oblast, the Omsk Oblast, the Sverdlovsk Oblast, the Komi Republic, the Republic of Chuvashia, the Republic of Khakassia, the Republic of Mari El, the Khanty-Mansyisk AO, the Leningrad Oblast, the Magadan Oblast, Novosibirsk, Omsk, Tomsk, Volgograd, and Volzhsky of the Volgograd Oblast.

In 2014 the total volume of placed bonds amounted to Rb 120.3bn, having decreased by 22% compared with 2013. Thus, over that year the total volume of newly issued subfederal and municipal bonds decreased from 0.23% of GDP to 0.16% of GDP (*Table 22*).

Table 22

Issuance of subfederal and municipal securities (as % of GDP)

Year	2007	2008	2009	2010	2011	2012	2013	2014
Issue	0.26	0.43	0.41	0.25	0.10	0.19	0.23	0.16
Redemption	0.18	0.26	0.16	0.18	0.21	0.13	0.12	0.17
Net financing	0.08	0.17	0.24	0.07	-0.11	0.06	0.12	-0.01

Source: IEP calculations based on data released by the Ministry of Finance of the Russian Federation.

The biggest placements of securities were made by: the Krasnoyarsk Krai – Rb 18.3bn, or 16.4% of the total domestic borrowing volume; the Khanty-Mansyisk AO – Rb 14.0bn, or 12.6%, the Samara Oblast – Rb 12.0bn, or 10.8%, and the Komi Republic – Rb 10.1bn, or 9.1%.

Thus, the four biggest bond issuers accounted for 48.9% of the total volume of placed regional and municipal bonds (*Table 23*).

Table 23

Placement of subfederal and municipal securities in 2014

Constituent entity	Issue volume (Rb m)	Issuer's share in the total bond issue volume (%)	Ratio of issue volume to total domestic borrowing (%)
Central Federal District			
Belgorod Oblast	5,000.0	4.5	53.9
Voronezh Oblast	5,813.0	5.2	19.6
Lipetsk Oblast	5,000.0	4.5	53.4
Yaroslavl Oblast	5,000.0	4.5	18.1
North Western Federal District			
Republic of Karelia	2,000.0	1.8	7.5
Komi Republic	10,100.0	9.1	48.2
Leningrad Oblast	275.0	0.2	4.1
St. Petersburg	189.2	0.2	100.0
Southern Federal District			
Volgograd Oblast	6,000.0	5.4	19.9
Volga Federal District			
Republic of Bashkortostan	6,000.0	5.4	54.6
Republic of Mari El	2,000.0	1.8	25.6
Samara Oblast	12,000.0	10.8	29.4
Orenburg Oblast	6,000.0	5.4	35.4
Urals Federal District			
Khanty-Mansyisk AO – Yugra	14,000.0	12.6	25.2
Siberian Federal District			
Krasnoyarsk Krai	18,250.0	16.4	38.2
Novosibirsk Oblast	7,000.0	6.3	7.0
Omsk Oblast	1,900.0	1.7	1.4
Tomsk Oblast	317.2	0.3	0.6
Republic of Khakassia	1,650.0	1.5	16.5
Far Eastern Federal District			
Republic of Sakha (Yakutia)	2,500.0	2.2	25.2
Magadan Oblast	500.0	0.4	7.6
Total for the Russian Federation:	**111,494.4**	**100.0**	**5.3**

Source: IEP calculations based on data released by the Federal Treasury.

The highest securitisation level (100%) was observed for St. Petersburg.

The volume of repaid securities exceeded the volume of placed securities by Rb 9.2bn, while in 2013 the net placement volume was more than Rb 77.6bn (*Table 24*).

Table 24

The volume of net borrowing in the market for domestic subfederal and municipal securities (Rb m)

	Consolidated regional budget	Regional Budgets	Municipal budgets
1	2	3	4
2014			
Net borrowing	-9,235.9	-7,410.5	-1,825.5
Raised funds	111,494.4	110,094.4	1,400.0
Principal repayment	120,730.3	117,504.8	3,225.5
2013			
Net borrowing	77,610.5	75,454.0	2,156.5
Raised funds	154,642.0	149,641.8	5,000.2
Principal repayment	77,031.5	74,187.8	2,843.7
2012			
Net borrowing	38,175.9	36,797.5	1,378.5
Raised funds	119,855.0	115,953.2	3,901.9
Principal repayment	81,679.1	79,155.7	2,523.4

Cont'd

1	2	3	4
2011			
Net borrowing	-58,202.6	-57,113.1	-1,089.5
Raised funds	55,050.7	53,366,.2	1,684.5
Principal repayment	113,253.3	110,479.3	2,774.1
2010			
Net borrowing	29,774.6	28,612.0	1,162.6
Raised funds	111,106.3	105,854.3	5,252.0
Principal repayment	81,331.7	77,242.4	-4,089.3
2009			
Net borrowing	95,457.6	97,916.5	-2,458.9
Raised funds	158,114.0	153,992.6	4,121.5
Principal repayment	62,656.4	56,076.1	6,580.4
2008			
Net borrowing	68,851.3	72,984.9	-4,133.7
Raised funds	178,565.7	177,324.4	1,241.4
Principal repayment	109,714.5	104,339.4	5,375.0
2007			
Net borrowing	25,867.0	23,692.0	2,175.0
Raised funds	84,159.2	79,889.8	4,269.4
Principal repayment	58,292.2	56,197.8	2,094.3

Source: IEP calculations based on data released by the Federal Treasury.

The majority of those regions that had been regularly issuing debt securities, continued to do so in 2014On an annual basis, bond issues have been placed by the Volgograd Oblast, since 1999; the Krasnoyarsk Krai, since 2003; and both the Republic of Karelia and the Nizhny Novgorod Oblast, since 2004. In 2014 the Magadan Oblast, Omsk and Volzhsky of the Volgograd Oblast placed their first issues of debt securities (*Table 25*).

Table 25

Registration of issue prospectuses of subfederal and municipal securities

	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Subjects of the Federation													
Volgograd Oblast	*	*	*	*	*	*	*	*	*	*	*	*	*
Krasnoyarsk Krai		*	*	*	*	*	*	*	*	*	*	*	*
Republic of Karelia			*	*	*	*	*	*	*	*	*	*	*
Nizhny Novgorod Oblast			*	*	*	*	*	*	*	*	*	*	*
Tver Oblast	*	*		*	*	*	*	*	*	*	*	*	*
St. Petersburg	*	*	*	*	*	*	*		*	*	*	*	*
Tomsk Oblast	*	*	*	*	*	*	*		*	*	*	*	*
Republic of Sakha (Yakutia)	*	*	*	*	*	*	*		*	*	*	*	*
Yaroslavl Oblast		*	*	*	*	*	*		*	*	*	*	*
Udmurt Republic				*		*	*		*	*	*	*	*
Samara Oblast		*		*	*	*	*	*		*	*	*	*
Stavropol Krai							*			*	*	*	*
Republic of Bashkortostan	*		*	*	*	*				*	*	*	*
Belgorod Oblast	*	*		*	*		*				*	*	*
Lipetsk Oblast			*	*	*	*	*				*	*	*
Voronezh Oblast			*	*	*	*					*	*	*
Tula Oblast					*						*	*	*
Orenburg Oblast											*	*	*
Novosibirsk Oblast		*	*	*		*						*	*
Republic of Mordovia	*											*	*
Smolensk Oblast												*	*
Omsk Oblast												*	*
Sverdlovsk Oblast									*	*	*		*
Republic of Chuvashia	*	*	*	*	*	*	*	*	*		*	*	*

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Republic of Khakassia										*		*	*
Republic of Mari El												*	*
Komi Republic	*	*	*	*	*	*		*		*	*		*
Khanty-Mansyisk AO		*	*						*				*
Leningrad Oblast	*	*	*	*									*
Magadan Oblast													*
Kostroma Oblast	*	*		*		*				*		*	
Moscow	*	*	*	*	*		*	*	*			*	
Kemerovo Oblast												*	
Kaluga Oblast				*		*	*	*			*	*	
Vologda Oblast											*	*	
Krasnodar Krai				*			*			*		*	
Ryazan Oblast										*		*	
Irkutsk Oblast	*	*	*	*	*	*	*	*	*			*	
Ivanovo Oblast							*				*		
Republic of Buryatia											*		
Murmansk Oblast		*	*							*			
Penza Oblast						*	*	*					
Ulyanovsk Oblast							*	*					
Kurgan Oblast						*		*					
Moscow Oblast		*	*	*	*	*	*	*					
Republic of Kalmykia							*						
Khabarovsk Krai		*	*	*	*								
Republic of Kabardino-Balkaria					*								
Yamal-Ненецкий АО			*	*									
Bryansk Oblast				*									
Sakhalin Oblast		*											
Kursk Oblast		*											
Primorsky Krai													
Issuers – municipalities													
Novosibirsk			*	*	*	*				*	*	*	*
Volgograd	*	*	*		*	*		*	*	*	*	*	*
Tomsk			*	*		*	*	*		*		*	*
Omsk													*
Volzhsky of the Volgograd Oblast													*
Krasnoyarsk			*	*	*		*	*	*	*	*	*	
Kazan					*	*	*		*	*	*		
Krasnodar										*	*		
Ufa		*	*	*						*			
Elektrostal, Moscow Oblast							*		*				
Smolensk									*				
Lipetsk						*	*	*					
Magadan						*	*	*					
Bratsk								*					
Novorossiisk								*					
Yekaterinburg	*	*	*	*	*	*	*						
Klin District, Moscow Oblast					*	*	*						
Noginsk District, Moscow Oblast				*		*	*						
Blagoveshchensk						*	*						
Cheboksary					*		*						
Balashikha, Moscow Oblast							*						
Odintsovo District, Moscow Oblast					*	*							
Astrakhan						*							
Bryansk						*							
Voronezh						*							
Orekhovo-Zuevo, Moscow Oblast						*							
Yaroslavl						*							
Yuzhno-Sakhalinsk			*	*	*								
Novocheboksarsk	*			*	*								
Angarsk					*								
Vurnar District, Republic of Chuvashia					*								

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Shumerlya, Republic of Chuvashia					*								
Barnaul				*									
Perm				*									
Nizhny Novgorod		*											
Kostroma													
Arkhangelsk													
Dzerzhinsky													

Source: Ministry of Finance of the Russian Federation.

3.9. The Russian banking sector in 2014

3.9.1. Key trends

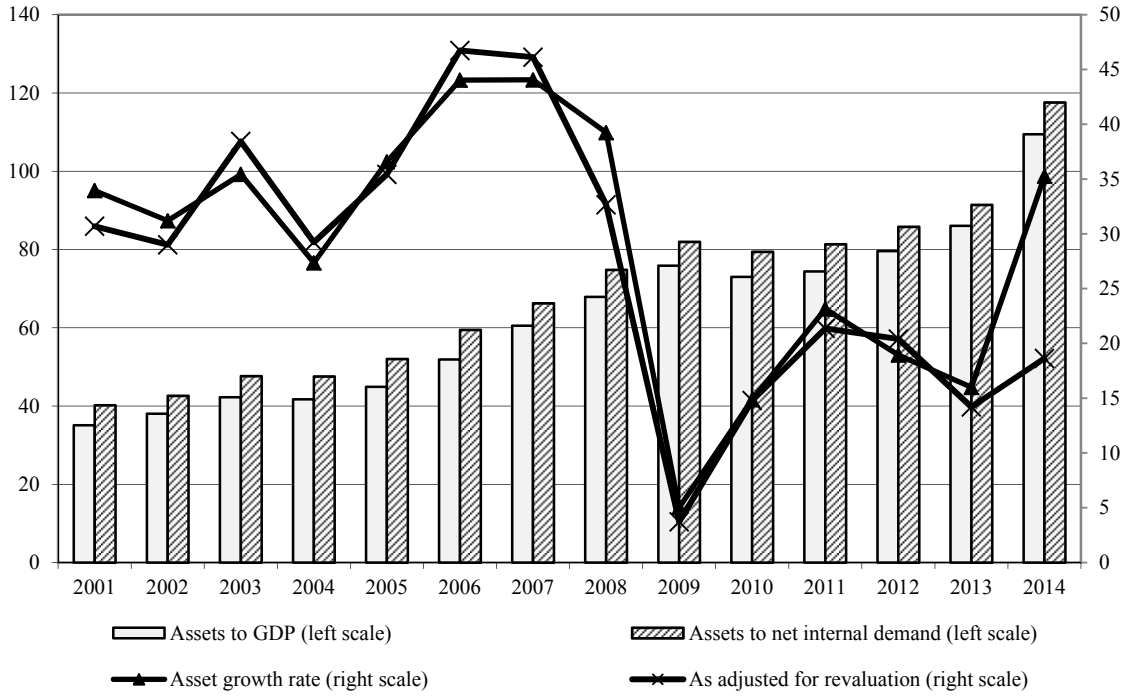
The Russian banking sector approached the beginning of 2015 on the edge of a full-scale systemic crisis. The key negative trends had formed a long time previously and continued to worsen throughout the year. The worsening of the economic dynamics and the decline in income of a wide range of economic agents adversely affected both the resource base of the banking sector and the quality of bank assets. During the last months of 2014, the situation, in monetary terms, deteriorated significantly, and this manifested itself mainly in a sharp decline in the national currency exchange rate, an increase in the demand for foreign currency assets and associated problems with bank liquidity. It is obvious that the toughening of the Bank of Russia's interest-rate policy in December 2014, resulted in a cessation of lending and, possibly, considerably worsened the quality of assets, however, the final reports of the banks for 2014 have not yet fully reflected the increased risks on active transactions.

The nominal growth of the banking sector assets in 2014 had increased considerably compared with that in several previous years, primarily due to the revaluation of foreign currency assets. The nominal value of the banks' total assets for the year increased by almost 30%. Excluding the effect of the revaluation of foreign currencies against the ruble, the rate of growth of bank assets in 2014 remained at the level of the previous year - about 15%.

The high nominal rate of asset growth resulted in a significant increase in the ratio of the overall size of bank assets to that of the Russian economy. For the first time in Russian history the size of the banking sector exceeded the annual GDP in nominal terms, having reached 109% of GDP. However, this was due more to the turn of events than to the banks' own activities. One factor we have already noted is the devaluation of the ruble. The rate of growth of the banking sector was additionally supported by state aid, in the form of refinancing by the Central Bank of the Russian Federation and deposits by the Russian Ministry of Finance. Without that support, the growth of bank assets in 2014 would not have exceeded 9-10%.

In 2014 the revocation of bank licences intensified with the licences of 85 credit institutions being revoked, including 61 banks entitled to attract deposits from individuals. This process, the so called "cleaning" of the banking sector, started from the appointment of E. Nabiullina as the Chairman of the Central Bank, in summer 2013. From July to December 2014, 29 licences were revoked, including those of 25 banks attracting funds from individuals. During 2014, licenses were revoked much more actively (considered as monthly averages) than in the second half of 2013 - over 7 licences per month versus less than 5. The termination of the activities of these organisations obviously did have a certain negative effect on the dynamics of bank assets, but this effect was actually fairly insignificant. The total assets of the banks whose licences were revoked in 2014 were, as of the last reporting date before the termination of their rights to continue activity, Rb 432bn, i.e. less than 1% of the total assets

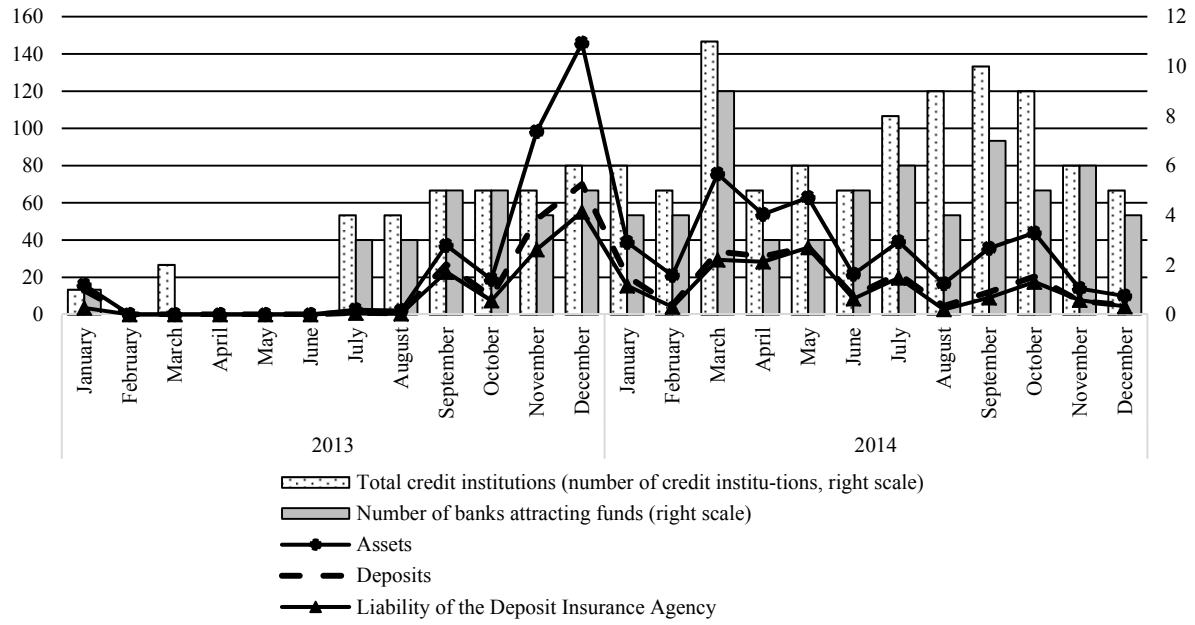
of the banking sector as of the beginning of 2014. Mostly, it was small banks that were closed, with the average value of the assets of the credit institutions whose licences were revoked in 2014 being Rb 5bn, and the maximum value - Rb 40bn.



Note. Net internal demand is calculated as GDP without net exports and constitutes an estimate of internal consumption and accumulation in the economy.
Source: the Bank of Russia, Rosstat, IEP estimates.

Fig. 50. Growth rates of bank assets and the ratio of bank assets to GDP and net internal demand, %

The larger banks were subjected to a regimen of financial rehabilitation. The most notable decisions for the sanation of banks in 2014 were made in respect of Trust, and Mosoblbank, amongst others. But even despite the fact that, in 2014, the largest of the problematic banks avoided licence revocation, the intensive dynamics of removing the smaller ones from the market resulted in the exhaustion of the Mandatory Deposit Insurance Fund. The size of the Fund as of 1 January 2015 was Rb 84bn (Rb 65bn if the reserve for payments on insured events is excluded). In early 2014 the Fund had stood at Rb 140bn while in early 2013 – Rb 203bn. In total, during last year, the banks which were closed paid over Rb 200bn to depositors, while in 2013 the corresponding figure was Rb 104bn, and for all previous years of the Agency's activities - the total of only Rb 73bn. The money remaining in the Mandatory Deposit Insurance Fund is now unable to cover the Agency's liabilities to the depositors of any one of the 20 largest banks.



Source: the Bank of Russia, IEP estimates.

Fig. 51. Key characteristics of the revocations of bank licences in 2013-2014

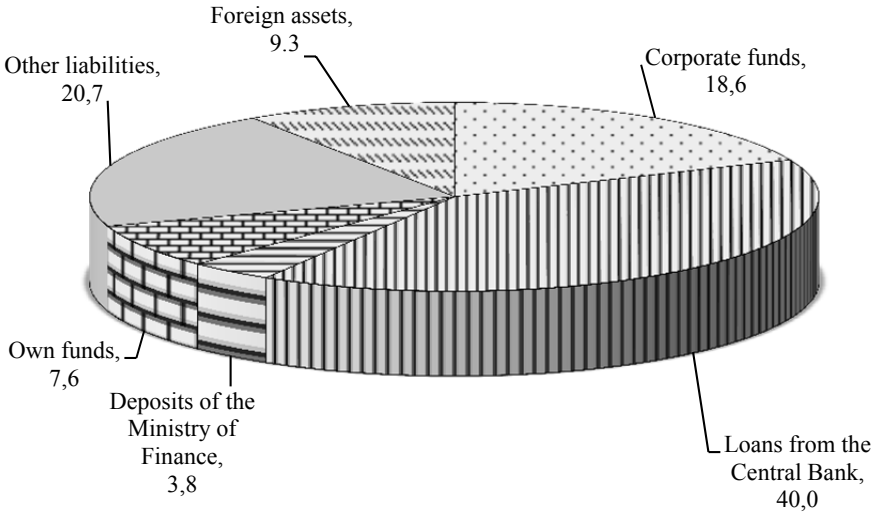
The key risks for the banking sector, the realisation of which have gradually increased throughout 2014, can be divided into the following three groups:

1. the risk of reducing the resource base and the associated liquidity of the banking sector;
2. the risk of deterioration in the quality of assets;
3. the risks associated with a shortage of own funds.

In 2014, a dominant role in the dynamics of the resource base of the banks was played by the funds of the Central Bank and the Ministry of Finance - the regulators of the money market, and these funds accounted for 40% of the increase in the resources of the banking sector. Two out of the three traditional sources of growth in bank resources stopped performing this function in 2014. Deposits by individuals and debts to foreign creditors were decreasing, requiring the diversion of additional resources rather than allowing any replenishment of their resource base by the banks.

An additional resource for banks in 2014 was the reduction in investments in foreign assets. It would be reasonable to argue that the entire repayment of the banks' foreign debts was financed through the reduction in this category of bank assets.

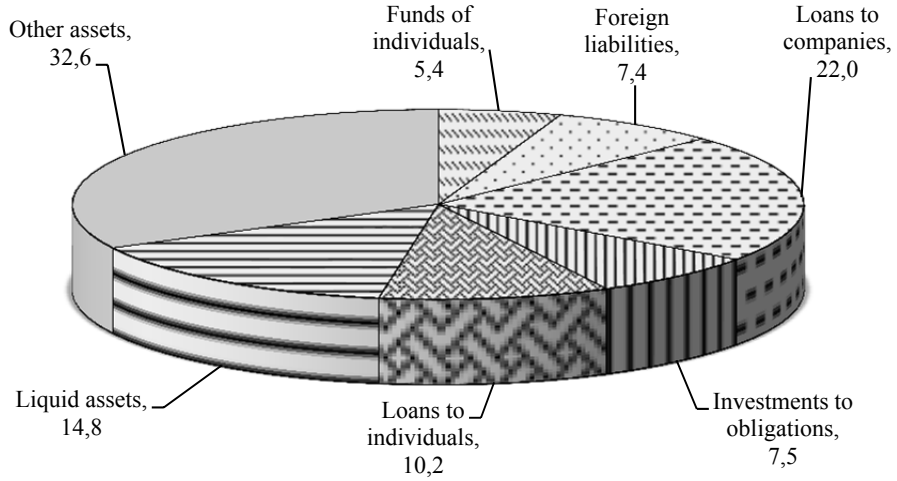
The changes in the distribution of assets within the banking sector evidence the slowdown of the growth in the loan portfolio. Only 30% of financial resources redistributed by the banks were allocated to increase the overall debt of individual and corporate borrowers, versus 60% in 2011–2013, including 10% for loans to individuals (in 2013 - 31%) and 22% for corporate loans (in 2013 - 29%). About 13% of the resources were allocated to repay debts to foreign creditors and to return the deposits of individuals. At the same time, as has already been noted above, the repayment of such foreign debt was effectively financed by the foreign assets themselves.



Source: the Bank of Russia, IEP estimates.

Fig. 52. The structure of the resources of the banking sector (increase in liabilities and decrease in assets) in 2014, as % of the total

The significant proportion of 'other assets' can be explained by a growth in the debt liabilities used in repo transactions and an increased involvement of the banks in transactions with derivative instruments. None of these items of the balance sheet can be attributed to a particular counteragent sector because the banks' reporting does not require their more detailed classification. Furthermore, the liquid assets of the banks were increased considerably through the creation of liquidity reserves under the conditions of high uncertainty in the financial markets in late 2014.



Source: the Bank of Russia, IEP estimates.

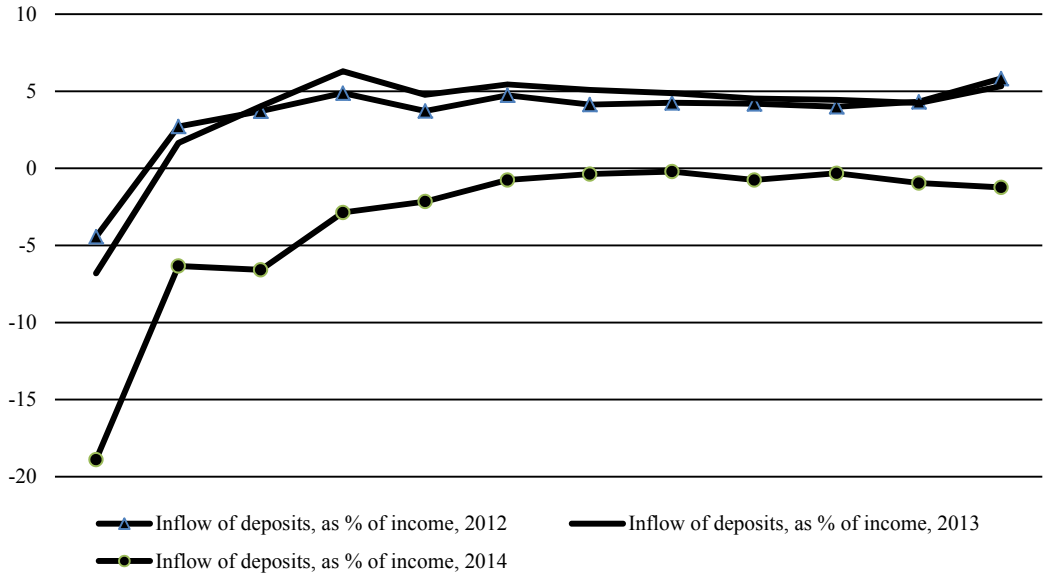
Fig. 53. The structure of allocation of resources within the banking sector (increase in assets and decrease in liabilities) in 2014, as % of the total

Next, let us consider in detail each of the above groups of risks to banking activity that were relevant as of the end of 2014.

3.9.2. The slowdown of the resource base growth

The slowdown of private deposits

The slowdown of private deposits was evident as early as the end of 2013, as the banks' clients responded to the increased rate of revocation of the licences of credit institutions. From early 2014, devaluation also came into play, worsening the negative attitude of individual depositors towards saving in bank accounts and deposits. The inflow of new private deposits to the banks dried up in 2014. Throughout the whole year, the accumulated inflow of deposits failed to climb above zero. Whilst, in previous years individuals had saved about 5% of their income in bank accounts, in 2014, by contrast, the volume of deposits decreased by more than 1% of the population's income in monetary terms (*Fig. 54*).

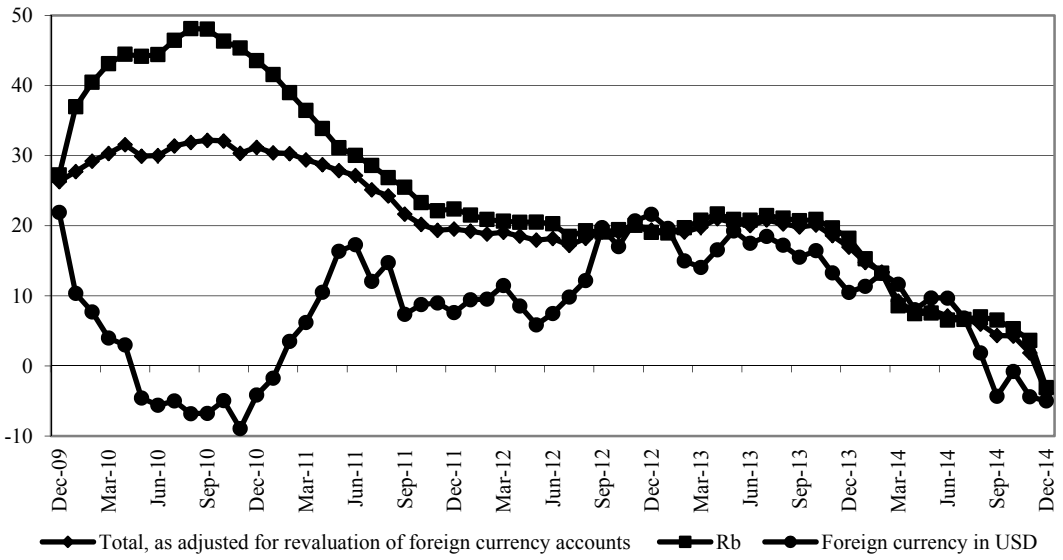


Source: the Bank of Russia, Rosstat, IEP estimates.

Fig. 54. Inflow of deposits of individuals to the banks for the period from the beginning of each year, as % of the population's monetary income, 2012–2014

Judged by the year-end results, the annual growth of deposits was negative: when adjusted for the revaluation of currency deposits, the volume of deposits decreased in 2014 by 4.0% (by Rb 684bn). Taking into account interest payments, which were about 5% per annum (Rb 863bn), individuals withdrew over Rb 1.5 trillion from the banking sector during last year.

Traditionally, the growth in individuals' demand for foreign currency has been an alternative to bank deposit savings. According to preliminary estimates of the Bank of Russia, in 2014 the foreign currency cash reserve in the territory of the Russian Federation increased by $34bn. In ruble equivalent, this corresponds to Rb 1.4 trillion, which is very close to our estimate of the withdrawal of deposits and interest.



Source: the Bank of Russia, IEP estimates.

Fig. 55. Growth rates of individual deposits in 2010-2014
(as % to the corresponding month of the previous year)

Foreign debt

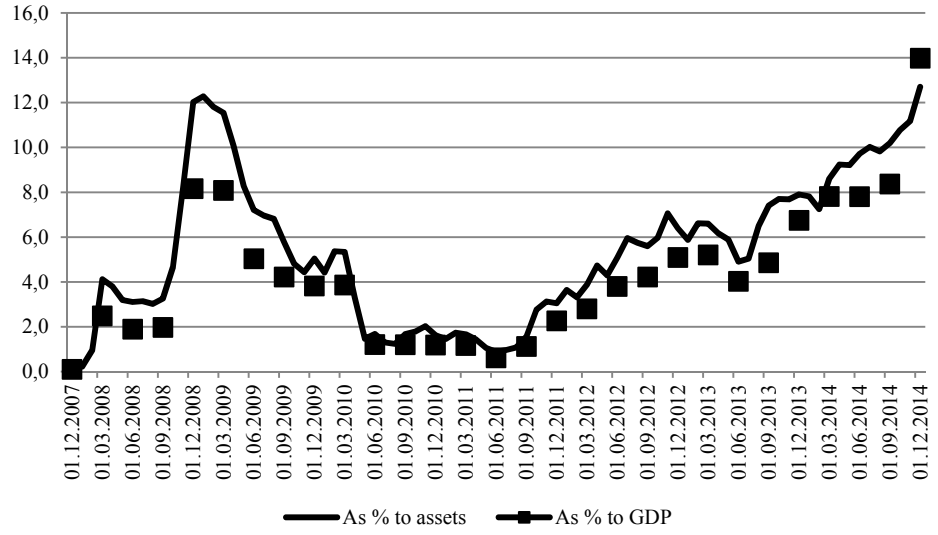
Even before the introduction of limitations on foreign loans for Russian state-owned banks, the dynamics of the total debt of the banks to non-residents had become negative. In the payment balance methodology the reduction of the foreign liabilities of the banks had started from Q2 2014, amounting to $7.5bn, $12.1bn and $18.4bn, respectively, in Q2, Q3 and Q4. According to the balance sheet reports of the credit institutions, the volume of foreign liabilities had also been decreasing from April 2014. From its maximum as of 1 April 2014 ($176bn) until 1 January 2015 the banks' foreign debt has decreased by $36bn, or 20%. Out of this $36bn, $27bn, or 75%, was attributed to Sberbank and other large state-owned banks. This is considerably higher than the share of the state-owned banks in the total debt of the banking sector to non-residents - about 60%. Such a faster reduction in the foreign debt of the banks is, obviously, a consequence of the foreign sanctions aimed directly against the largest Russian banks.

The problem of external funding was softened by the fact that the banking sector used foreign assets to repay foreign debts, which, over the same period (from 1 April 2014 to 1 January 2015), decreased by $50bn, out of which $34bn represents the reduction in the assets of state-owned banks. This means that the total investment in foreign assets decreased even more than did the volume of external debt. The latter can be explained, perhaps, by certain intent on the part of the banks to secure themselves against any possible strengthening of the pressure of sanctions that might forcibly restrict foreign transactions by Russian banks.

Debt to regulators

The negative dynamics of the key segments of the borrowed funds of banks naturally resulted in the dependence of the banking sector on refinancing by the Bank of Russia and the

Ministry of Finance. Such funding compensated the banking sector for the lack of other raised funds, supporting credit growth and avoiding increased problems with bank liquidity. In 2014, the banks' debts to the monetary authorities more than doubled, growing by Rb 5.3 trillion, to reach Rb 9.9 trillion. This represents 12% of the total assets of the banks, having almost reached the maximum observed during the 2009 crisis (12.3%). In relation to the size of the economy, the dependence of the banks on state support has already exceeded 12% of GDP, whilst in 2009 it reached only 8%. This is related to the aforementioned growth of the banking sector relative to the size of the Russian economy.



Source: the Bank of Russia, the Ministry of Finance of Russia, Rosstat and authors' estimates.

Fig. 56. State support of the banking sector relative to bank assets and the size of the Russian economy

In late 2014 the problem of the worsened currency deficit in the internal market, which had resulted in an increased volatility of the ruble exchange rate, made the money market regulators step up their provision of currency to the banks on a return basis. On the one hand, this satisfied the demand for currency on the part of the banks and their clients whilst, on the other hand, not putting any pressure on the exchange rate.

The first auctions for repo transactions in foreign currency were held in November 2014, but the main volume of currency funds was provided to banks in December ($21.6bn versus $0.6bn in November). As of 1 January 2015 the banks' total debt to the Bank of Russia on currency repo transactions was $20.2bn (a portion of the funds provided for periods of 1 and 4 weeks have already been repaid). Moreover, the Ministry of Finance has also started to place foreign currency deposits into the banks. As of 1 January 2015 the foreign exchange debt of the banks to the Ministry of Finance was $3bn.

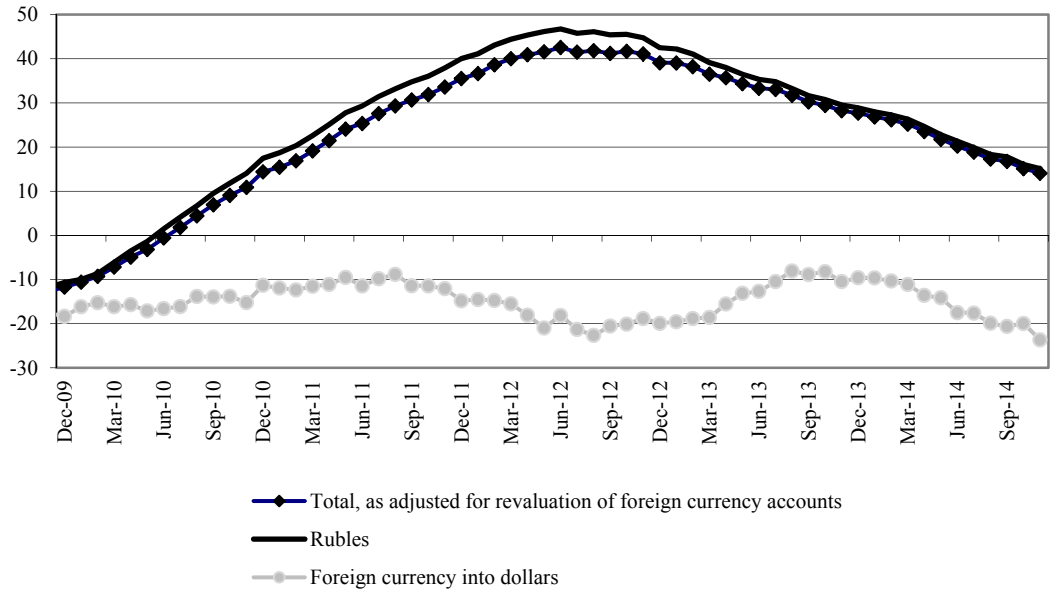
Of the total volume of bank debt to the regulators as of the beginning of 2015, over 13% was in foreign currency ($23bn, or Rb 1.3 trillion).

3.9.3. Deterioration of the quality of assets

2014 was marked by a slowdown in the growth of the aggregated loan portfolio of the banks - an obvious consequence of the problems with the resource base. The annual growth

rate of the total loan debt of individuals and legal entities decreased from 16.6% in 2013 to 12.3% based on the results of November 2014.

The most dramatic slowdown of growth in 2014 was observed in the retail segment of the loan portfolio. Here, the annual growth rate dropped from 27.7% in 2013 to 11.6% in 2014. Although foreign currency loans to individuals in USD had decreased by almost 25% for the year, it is this segment that is the most problematic for the banks because of the almost halved ruble to USD exchange rate.

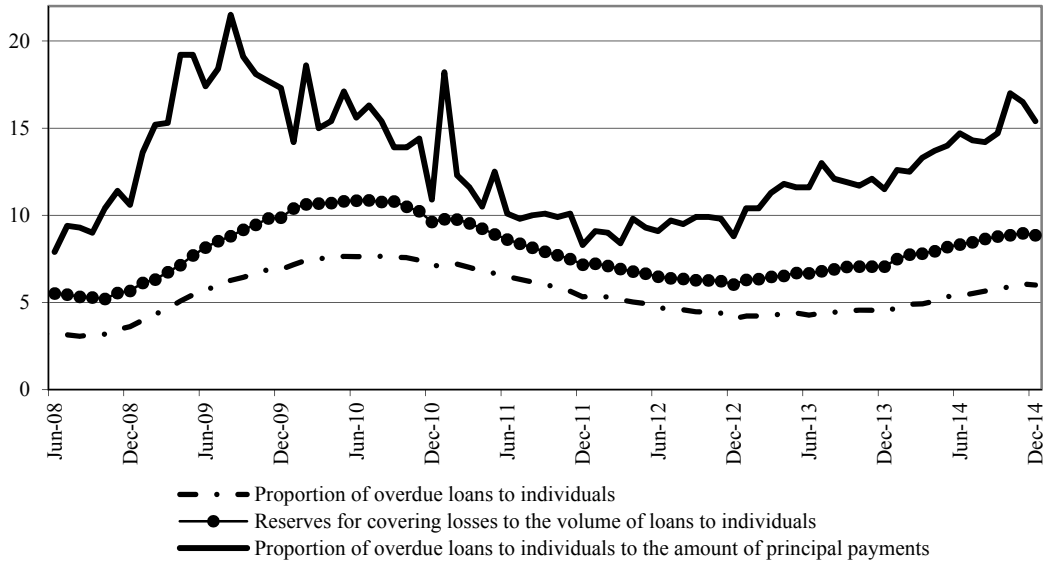


Source: the Bank of Russia, IEP estimates.

Fig. 57. The dynamics of the overall debt of individuals on bank loans in 2010–2014 (as % of that for the corresponding month of the previous year)

The slowdown of growth of the loan portfolio was accompanied by deterioration in its quality. In 2014, reserves for possible loan loss increased by Rb 977bn (42%), with almost 40% of this increase coming from an increase in the provisions for overdue loans (Rb 389bn). Overdue debt increased by Rb 547bn (39%). As a result, the proportion of overdue debt on all loans in the total debt increased from 4.0% to 4.5% during 2014, meaning that the ratio of reserves for possible loan loss to the volume of the loan portfolio changed from 6.8 to 7.7%.

The deteriorating loan portfolio quality affected its retail segment in a most vivid manner. By 1 January 2015, the proportion of overdue loans provided to individuals (relative to the total debt on individual loans) had grown to 6.0%, while the reserves for losses on loans to individuals moved to 8.9% of the total debt of individuals to the banks. Moreover, by late 2014 the volume of payments that had not been made in due time (as required by the loan agreements) had increased sharply - to 15-17% on average for all loans to individuals, including to 17-19% for consumer loans (*Fig. 58*).



Source: the Bank of Russia, IEP estimates.

Fig. 58. Quality indicators of the retail loan portfolio, 2008-2014, %

In late 2014 retail loan quality indicators corresponded fairly closely to those of summer 2009. However, the distinctive feature of the current situation is that, until the end of 2014, the growth of the loan debts of individuals had remained positive, whilst in summer 2009 it had dropped below zero. This means that, at the moment, the growth potential of "bad debt" is even higher in relative terms, let alone in absolute terms.

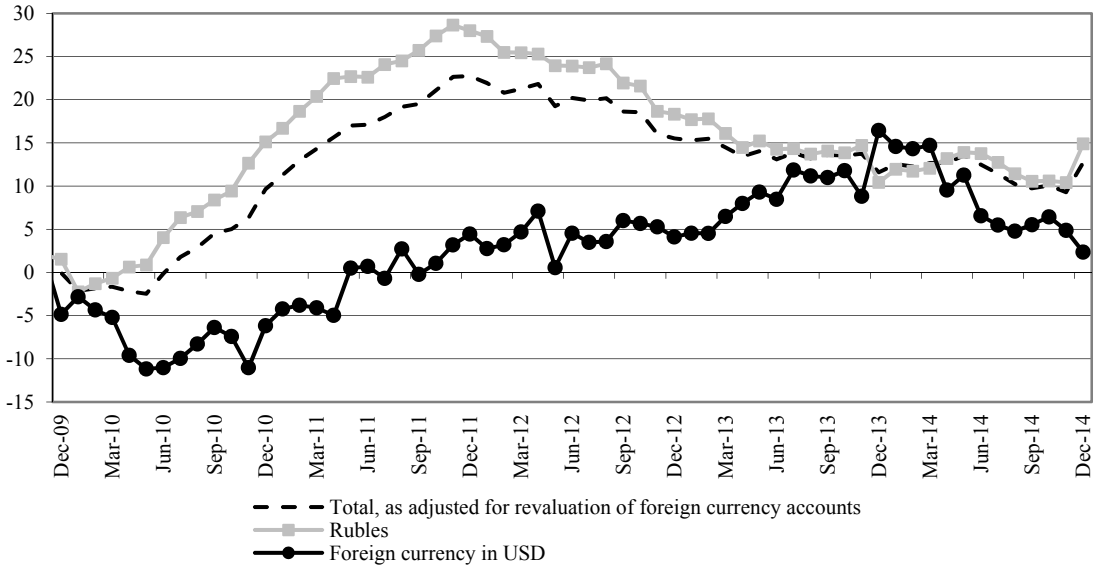
Lending to corporate borrowers in 2014 grew fairly slowly. One should not be misled by the nominal dynamics of the debt of corporate customers to banks that, based on the results of 2014, had increased to 26%, because this increase was largely due to effect of the revaluation of foreign currency loans as a result of ruble devaluation. When adjusted for the revaluation of foreign currency loans the corporate loan portfolio increased by 12.7% in 2014, which is, however, still slightly higher than in 2013 (11.6%).

This small acceleration of the growth in corporate loan debt to banks in 2014 was due to the increasing growth rates of ruble debt from 10.4% in 2013 to 14.9% in 2014. In contrast, the growth rates of foreign currency debt in USD terms have slowed down sharply, from 16.4% in 2013 to 2.4% in 2014. Obviously, this was due to the considerable ruble devaluation in 2014, as a result of which the servicing of foreign currency loans has become too expensive for borrowers, and the growth in demand for such loans has slowed dramatically.

We should note, separately, that during almost the entire year, the growth of both the ruble and foreign currency loan debts of companies were slowing down. Overall, the growth of ruble loans increased as a consequence of the December results, but this is partly related to the base effect - in December 2013 a shrinking of the volume of bank lending in the real sector had been observed.

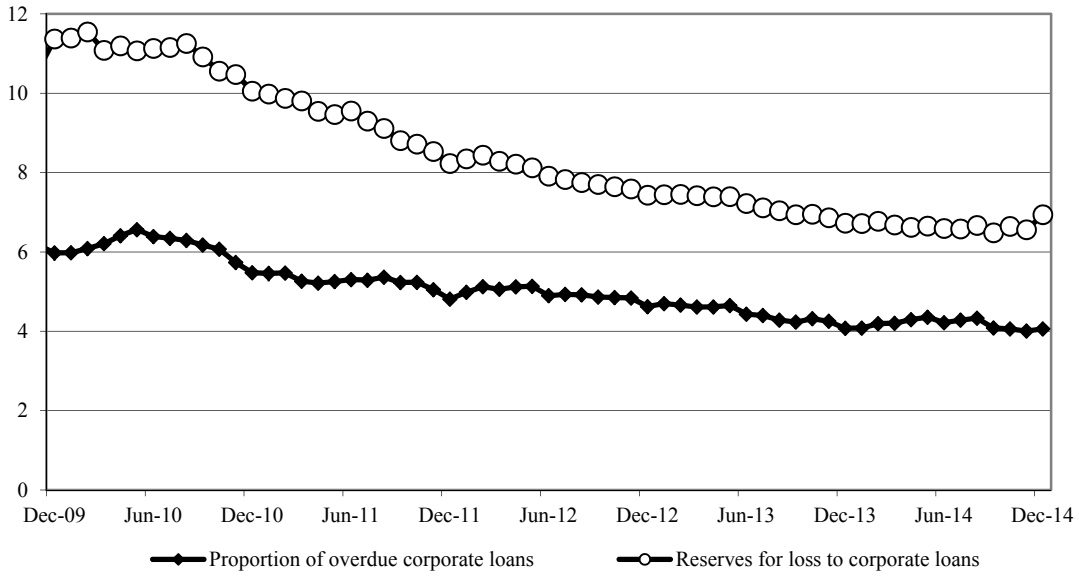
Curiously enough, the slowdown in the growth of the loan portfolio has not yet affected its quality. Normally, a decrease in the growth of loan debt is caused by accumulated problems, resulting in a faster growth of overdue loans and loan-provisioning. Nevertheless, up until November 2014 the proportion of overdue debts of corporate clients (out of the total debt of corporate borrowers) did not increase, and the value of this indicator as of 1 December 2014

(4.0%) was actually the lowest since the crisis of 2008-2009. The ratio of possible loan loss provision to the volume of loan debt of corporate borrowers in 2014 also reached its post-crisis minimum (6.5%), but a little earlier - on 1 October 2014.



Source: the Bank of Russia, IEP estimates.

Fig. 59. The dynamics of debt of corporate clients on bank loans in 2010-2014 as % of the amount on the corresponding month of the previous year)



Source: the Bank of Russia, IEP estimates.

Fig. 60. Quality indicators of the corporate loan portfolio of banks, %, 2010-2014

However, in the last months of the year, and mainly in December, the quality of the corporate loan portfolio also started to demonstrate a tendency to deteriorate. Whilst, for the first

three quarters of 2014, the volume of reserves had increased by Rb 119bn, in Q4 the increase was already Rb 306bn. The growth in overdue debt at the end of the year also accelerated. Its increase in Q4 (Rb 112bn) being comparable to the increase for the first three quarters combined (Rb 109bn).

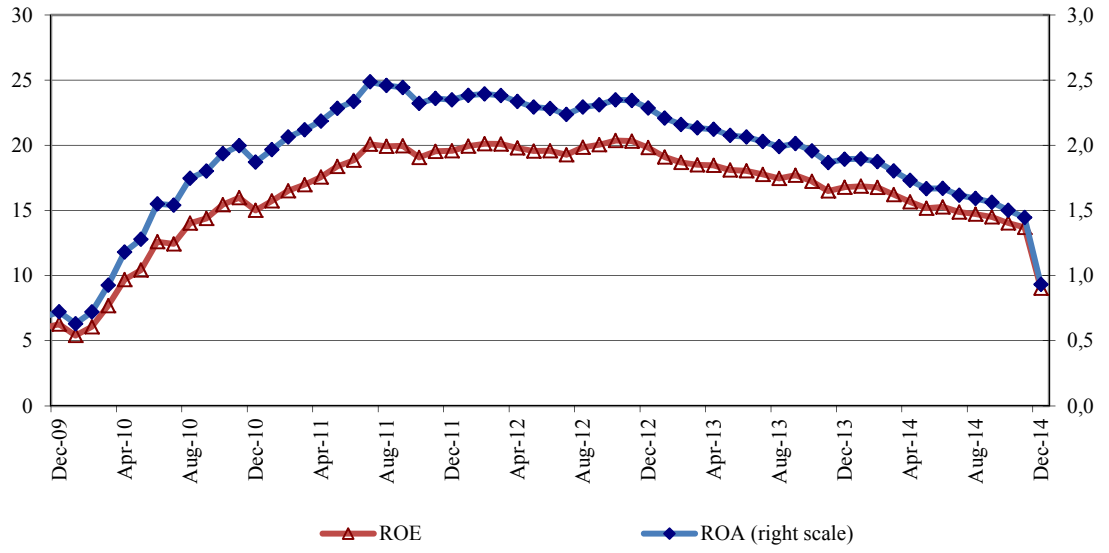
3.9.4. Decrease in profitability of the banks

The profitability of the banking sector has been gradually decreasing for several years now. In the last months of 2014 this process accelerated under the influence of the deterioration of the quality of the loan portfolio, requiring increased allocations for reserves and a rise in the key interest rate of the Bank of Russia. This has led to an increase in the cost of servicing the funds received from the monetary authorities and a corresponding growth in the cost of other borrowed funds. However, up until December 2014 loan interest rates had not fully responded to the increase in the key interest rate.

From January to November 2014 the key interest rate had grown by 4 p.p., while the average interest rate on ruble loans to non-financial organizations grew by less than 3 p.p. In December 2014 the key interest rate was raised to 17% per annum, however, on average, its value was 13.5%, which was 4 p.p. higher than in November. The average weighted rates on ruble corporate loans in December 2014 increased by more than by 6 p.p. however, the growth in the net interest income of the banking sector in 2014 had slowed sharply. Whilst, in Q1 of 2014 it was 25% higher than in the corresponding period of 2013, in Q4 it was only 2% higher.

Furthermore, in late 2014, as has been noted above, the banks increased their provisioning for possible losses, and in December 2014, for the first time in a long while, the banking sector suffered losses.

Based on the results of 2014, the return on assets of the banking sector dropped to 0.9%, and the return on equity to 9%, which was close to the financial results of the banking sector in 2009 (0.7% and 6%, respectively).



Source: the Bank of Russia.

Fig. 61. Return on assets (ROA) and return on equity (ROE) of the banking sector for the 12 months preceding the reporting date, %, 2009-2014

Section 4. Real sector of the economy

4.1. Production macrostructure

4.1.1. Dynamics of the Russian economy in 2014

Analysis of the dynamics of the Russian economy macroeconomic indices for the period 2009–2014 showed that the gradual decline of economic growth was accompanied by increasing disparity in production, a decrease in innovation by manufacturers and increased problems related to the imbalance of the technical and technological characteristics of the basic funds and investments in fixed assets in basic economic activities. Development, based on the extensive use of the main factors, increase in production costs reduced the competitive ability of the Russian economy. Expanding domestic consumer demand was supported by the growth of salaries outstripping labour productivity. The growth of investments in fixed assets did not result in a corresponding increase in return per unit of the resources used.

Table 1

Main macroeconomic indices of social and economic development in 2008–2014, % compared with the previous period

	2008	2009	2010	2011	2012	2013	2014
GDP	105.2	92.2	104.5	104.3	103.4	101.3	100.6
Industrial production index	100.6	90.7	107.3	105	103.4	100.4	101.7
Extraction of commercial minerals	100.4	99.4	103.8	101.8	101	101.1	101.4
Manufacturing industries	100.5	84.8	110.6	108	105.1	100.5	102.1
Agricultural products	110.8	101.4	88.5	123.0	95.2	106.2	103.7
Investments in fixed assets	109.9	84.3	106.0	110.8	106.6	99.7	97.5
Retail trade turnover	113.7	94.9	106.5	107.1	106.3	103.9	1,025
Volume of paid services to the population	104.3	97.5	101,5	103.0	103.7	102.1	101.3
Export	134.6	63.7	132.1	131.3	102.7	98.8	94.9
Import	129.4	63.7	133.6	129.7	105.4	102.6	90.2
Consumer prices index, at the end of the year	113.3	108.8	108.8	106.1	106.6	106.8	111.4
Price index of the industrial goods manufacturers, at the end of the year	93.0	113.9	116.7	112.0	105.1	103.7	105.9
Actual disposable monetary income of population	102.4	103.0	105.9	100.5	104.6	104.0	99.0
Actual acrrued salary	111.5	96.5	105.2	102.8	108.4	104.8	101.3
Level of overall unemployment, %	6.2	8.3	7.3	6.5	5.5	5.5	5.2

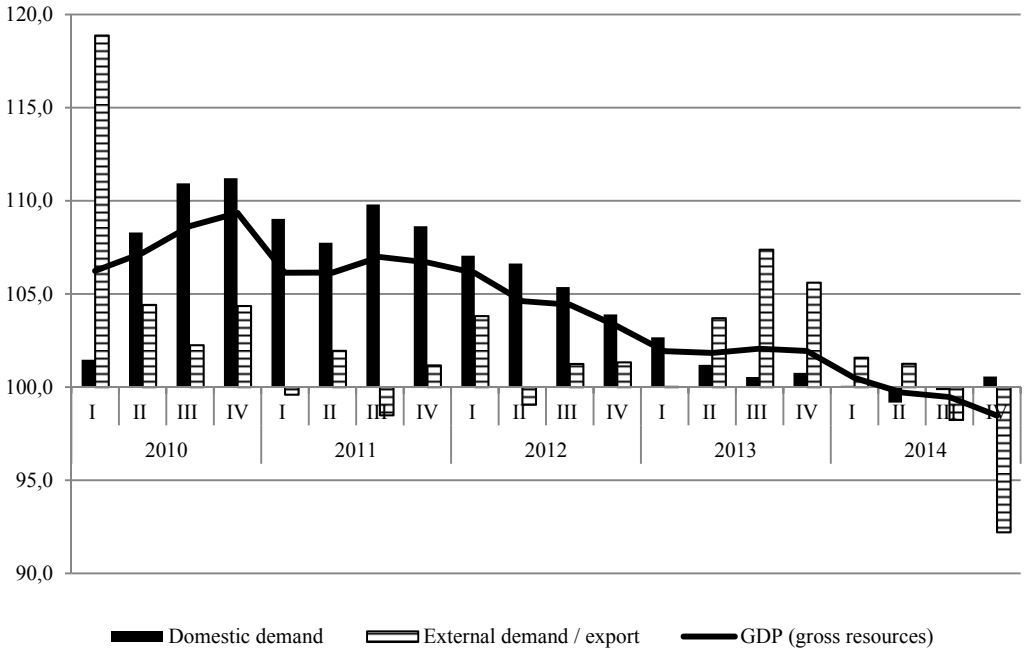
Source: Rosstat (Russian Statistics Service).

On the whole, the macroeconomic situation in 2014 was determined by the trends, which had formed in H2 2012, and was characterised by a gradual weakening of the dynamics of development, as a result of aspects of both external and domestic demand.

The features of the functioning of the economy over the period 2010–2014 were due to differences in the post-crisis recovery of certain components of the aggregate demand. While, in

2010–2012 the rates of growth of domestic demand outstripped growth of the GDP and external demand, since Q2 2013 the dominant factor in the Russian economy has become the sharp deceleration of the growth of consumer and investment demand. In 2013 the increment of GDP fell to 1.3% compared with the 3.4% of the previous year, while, at the same time, the growth rate of external demand increased to 104.6% compared with the previous 101.4%, while growth in domestic demand slowed to 101.3% compared with 105.5%.

In H1 2014 GDP growth remained positive, with average indices matching H1 of 2013. The deceleration of the growth of external demand during H1 of 2014 was changed by decrease in H2 by 4.1% compared with the corresponding period of the previous year. In Q4 2014 the export of Russian goods and services was 92.2% of the corresponding period of 2013, and was one of the factors contributing to the fall of the quarterly GDP indices that then occurred (the first time since 2009). The situation in Q4 2014 improved a little, due to the rapid growth of domestic businesses consumption, supported by an increase in the domestic supply of goods and services. Therefore, overall, the results of 2014 showed a GDP growth of 100.6% with a reduction of external demand by 2.0% and a stabilisation of domestic demand (*Fig. 1*).

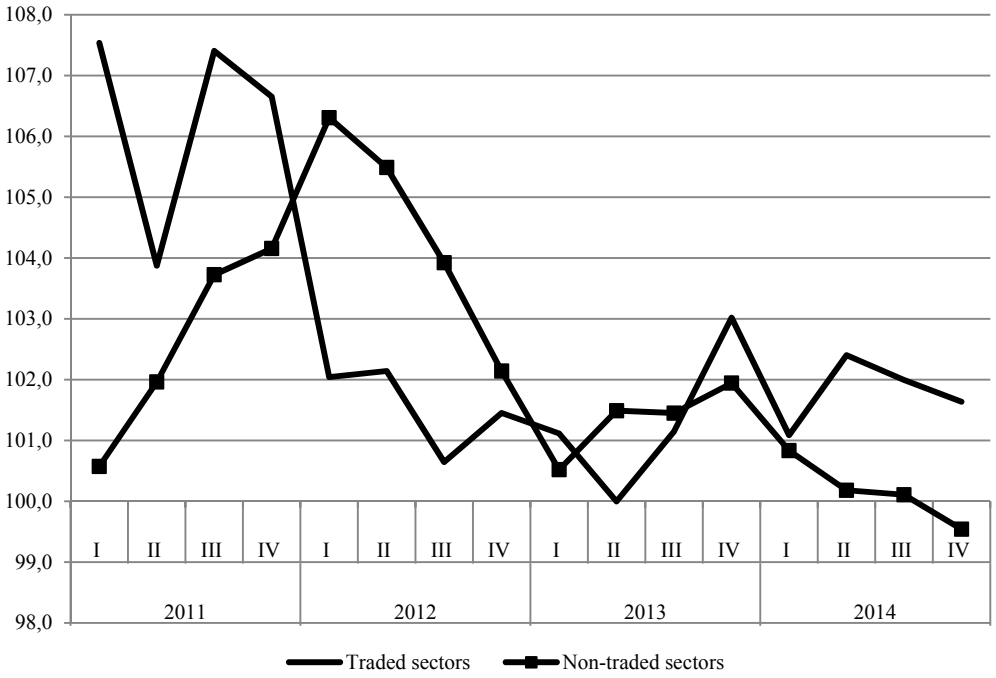


Source: Rosstat.

Fig. 1. Dynamics of GDP by the domestic and external demand components in 2010–2014, % compared with the corresponding quarters of the previous year

The index of the output of goods and services in terms of basic types of economic activity in 2014 was characterised by a continued strengthening of their dynamics in comparison to 2013 and amounted to 100.4%. At the same time, the traded sectors (extractive, manufacturing industries and agriculture) grew faster than the non-traded sectors (trade, construction, transport, market services, etc.). The strengthening of the contribution from the traded sectors of the economy had been evident since H2 2013. In 2014 the increment in this sector was

1.6% and in the non-traded sector – 0.3%. Compare this with the corresponding indices in 2012 which were 1.6 and 4.3% respectively (*Fig. 2*).



Source: Rosstat.

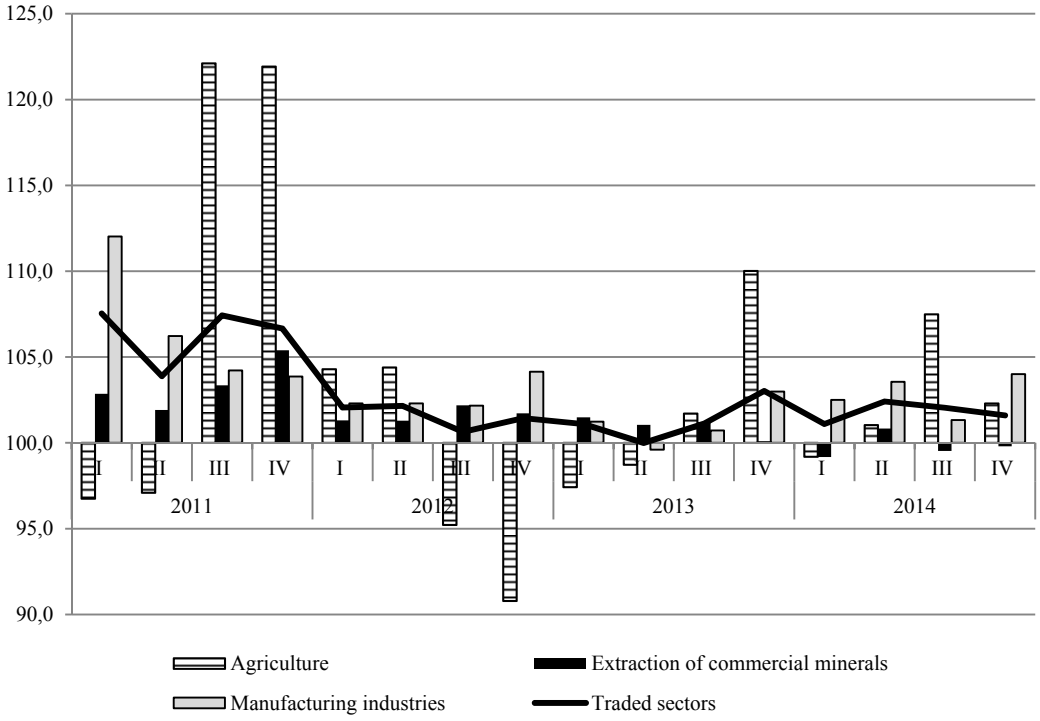
Fig. 2. Dynamics of GDP in the traded and non-traded sectors of the economy in 2011–2014, % compared with the corresponding quarters of the previous year

In 2014, for the traded sector of the economy the annual index of industrial production amounted to 101.7%. At the same time, for manufacturing industry focused mainly on the domestic market, the output in 2014 increased by 2.1% compared with 0.9% in the previous year. The character of industrial dynamics in 2014 was also positively affected by a gradual acceleration of the rates of the extraction of commercial minerals. The index of the physical production volume of extracted commercial minerals in 2014 amounted to 101.4% compared with the previous year. In 2014 the positive contribution of agricultural production to the general economic indices also increased. In the traded sector the devaluation of the Russian ruble contributed to a revival of economic activity and to the development of import substitution (*Fig. 3*).

Capacity utilisation in industry in 2014 returned to the levels of 2012. In 2014 the growth of productivity in the traded sector also exceeded the corresponding indices in the non-traded sector. Furthermore, the use of spare capacity for this did not require additional investment costs.

In 2013–2014 the deceleration of domestic demand affected most strongly the non-traded sector of the economy, which had been the main source of economic growth during the previous three years. The growth rates of retail trade turnover reached their peak in Q4 2011, and then, during 2012–2014 gradually slowed down, but at the same time remained the main drivers supporting the positive dynamics of development. In 2014 the index of retail trade turnover amounted to 102.5% compared with 103.9% in the previous year, while the indices of

wholesale trade turnover were 97.6% and 100.6%, respectively. The dynamics of consumer demand in the field of non-traded market services was determined by a deceleration of personal income growth, increasing inflation and the increasing debt burden of the population, which resulted in a weakening of the dynamics of the retail and wholesale trades.



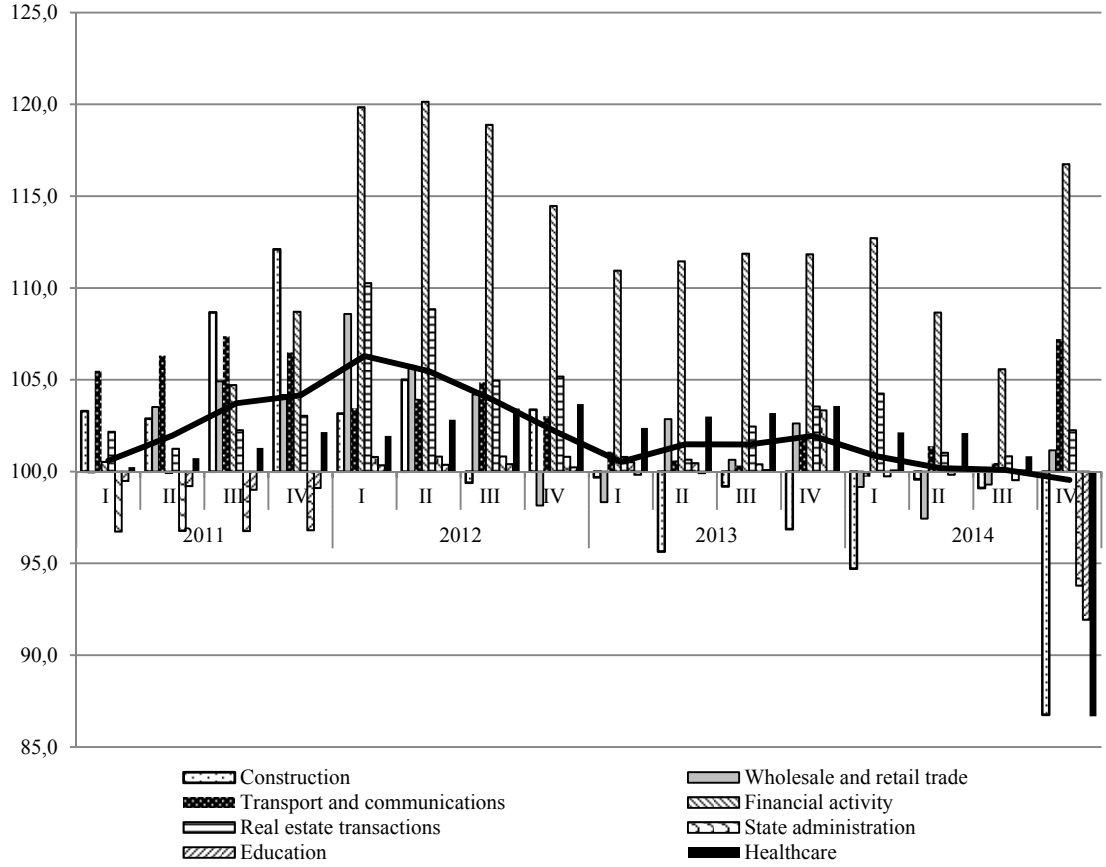
Source: Rosstat.

Fig. 3. Dynamics of GDP in the traded sector of the economy in 2011–2014, % compared with the corresponding quarters of the previous year

The macroeconomic situation in the Russian economy was extremely adversely affected by a deceleration, of business activity in the construction and investment complex which had started in Q4 2011 and, since 2013 had reached the stage of a reduction in the volume of construction works. In 2014 the reduction of investment in fixed assets had reached 2.5%, with the reduction of the volumes of construction works being 4.5% in annual terms. The general economic dynamics were adversely affected by the stagnation of demand for transport services and a deceleration of the growth rates of communication service provision to 100.5% in 2014 compared with 104.5% in the previous year. In the segment of non-traded goods, only the financial services sector and real estate operations were characterised by stable positive dynamics (*Fig. 4*). In Q4 2014, the slowdown of the dynamics of social service provision during the three previous quarters changed to a sharp fall in the rates of healthcare and education services.

The key indicators of the domestic market were defined by the ratio of the growth of domestic production for domestic consumption and for the external market on the one hand, and of the dynamics and structure of imports on the other. The deceleration in domestic production was due both to the low competitiveness of domestic goods and services compared with

their imported equivalents, and to low production efficiency in the non-traded goods and services segment compared with the export-oriented sector of the economy.



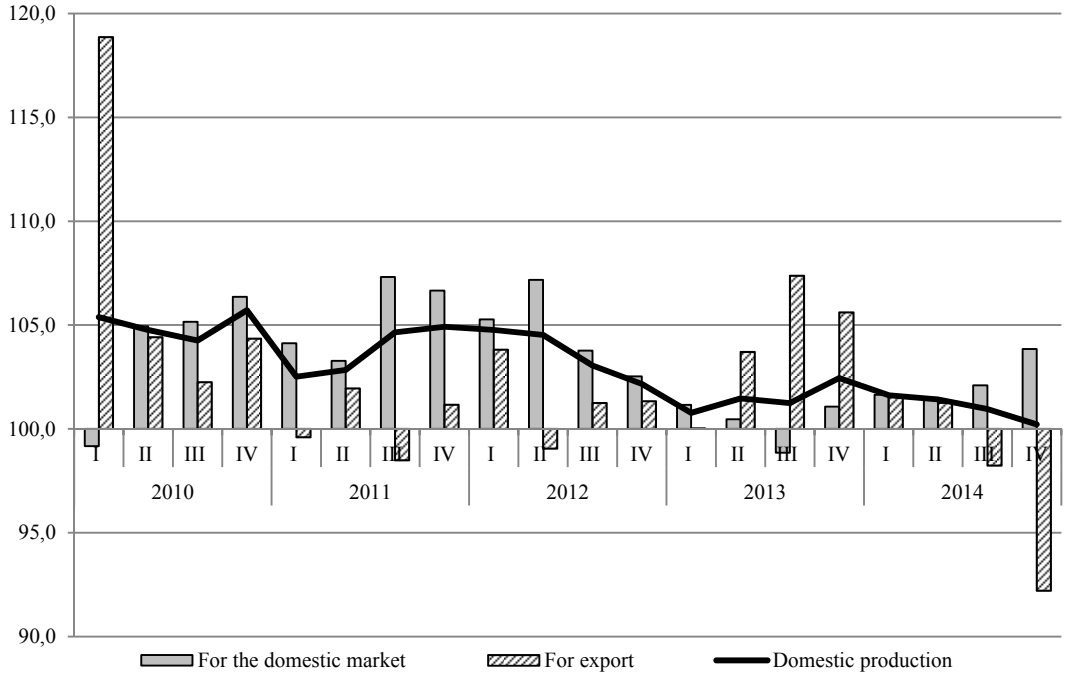
Source: Rosstat.

Fig. 4. Dynamics of GDP in the non-traded sector of the economy in 2011–2014, % compared with the corresponding quarters of the previous year

The increased concentration of income in the export-oriented sector of industry with the undeveloped structure of inter-sectoral resource redistribution placed pressure on the domestic market. In 2010–2011 the development of the export sector of the economy meant that the intensity of the exit from the crisis in domestic production for the domestic market matched the pre-crisis level of 2008. In 2012–2013 the situation was complicated by the instability of the dynamics of domestic goods production for both the internal and external markets. A decrease in demand on the part of the export-oriented industries from Q2 2012 to Q1 2013 resulted in a substantial weakening of the growth of domestic production. Since Q3 2012 a decrease in investment demand and weakening of consumer demand resulted in a slowing of the growth rates of goods and services output for the internal market that remained until Q1 2014.

Changes in foreign trade market conditions in H2 2014 led to acceleration in the dynamics of the domestic goods and services production for the internal market due to increasing growth in the manufacturing industries, including the development of import substitution in the sectors producing goods affected by the embargos. At the same time, production for the domestic market weakened the impact of the declining trends in exports through a reorienta-

tion of the flow of commodities towards the domestic market, and of imports – due to the increased substitution of Russian products. As a result, according to the figures for 2014, the dynamics of domestic production remained positive (100.9% compared with 2013) with an increase in the production of goods for the domestic market by 2.3% and a reduction of imports by 6.8% (*Fig. 5*).

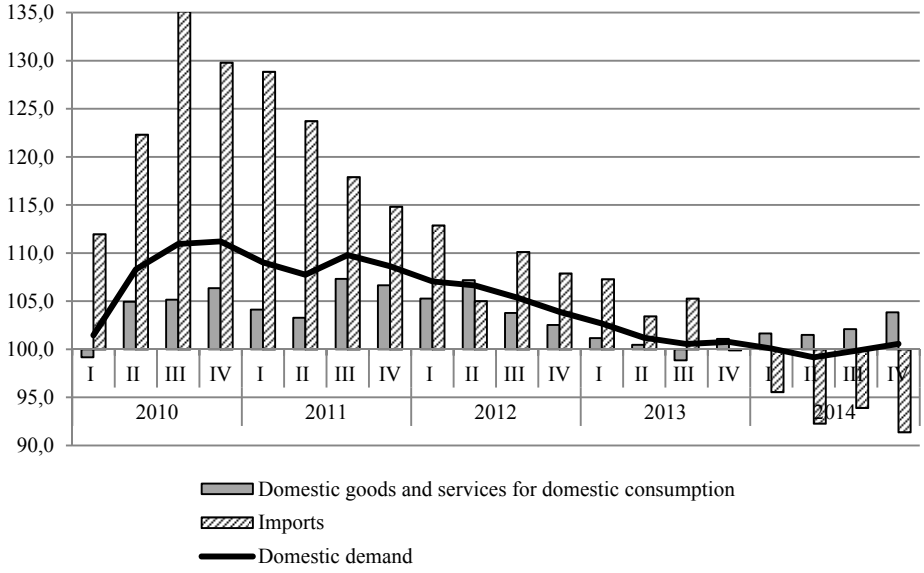


Source: Rosstat.

Fig. 5. Dynamics of the components of domestic production of goods and services in 2010–2014, % compared with the corresponding quarters of the previous year

While noting the significance of the domestic market dynamics as the dominant factor in the development of the Russian economy during recent years, it is worth mentioning the peculiarities of the formation of the domestic market resources. A large scale decline of imports in both 2014, and in 2009, determined the structural changes in the domestic market. With the weakening of consumer demand, income of population and the ruble exchange rate there was an increase in the share of domestically produced goods.

However, weak growth in the production of goods and services for the domestic market meant that it remained clearly insufficient to halt the trend of declining domestic demand on both the consumer and the investment markets. In 2014 the share of imports in the domestic market resources was 24.5%, and in retail trade commodity resources it was 41.0% (*Fig. 6*). Despite certain positive shifts, related to the strengthening of the positions of the domestic manufacturers it is quite obvious that a stable change of the domestic market resource structure to benefit domestic production requires significant time and efforts.



Source: Rosstat.

Fig. 6. Dynamics of the components of domestic demand in 2010–2014, % compared with the corresponding quarters of the previous year

With the established structure of competitive capacity, import substitution in 2010–2014 was concentrated in those industries biased towards industrial assembly. This determined the change in the proportions of the imports of investment and intermediate goods (*Table 2*). In particular, the increased share in imports of intermediate consumption goods reflected the inadequate localisation of the main production and components.

Table 2

Import structure by functional pattern of use (according to the balance of payments methodology), % compared with the results, 2010–2014

	Goods		
	consumer goods	**investment goods**	**intermediate goods**
2010	40.7	19.5	39.8
2011	36.6	21.4	42.0
2012	38.1	24.9	37.0
2013	37.6	24.3	38.0
2014	36.1	24.5	39.4
Q1	38.0	23.2	38.8
Q2	34.7	26.1	39.2
Q3	35.6	23.4	41.0
Q4	36.5	25.2	38.3

Source: Rosstat.

In 2013–2014, the increased proportion of investment and intermediate goods in the import structure together with the reduction of that of consumer goods was a qualitatively new process for the Russian economy. All other things being equal, the dynamic growth of imports should have contributed to a change in the competitive environment, and the development of the real sector under this situation should have depend on the intensity of the domestic investments oriented towards the modernisation and diversification of production. At the same time, the high share of imports in the retail trade turnover, and in the volume of investments in fixed assets, strengthened the dependence of the gross resource balance of the economy on

changes in the conditions on the foreign economic market. In 2014, the fall of investments in fixed assets resulted in a simultaneous reduction in demand for domestic and imported capital goods and strengthened the development of negative trends on the domestic market. Additional difficulties appeared in 2014 due to the limitations imposed on the supplies of certain types of technological equipment necessary for realising the investment plans of the extractive and manufacturing industries and of infrastructure projects.

4.1.2. The Use of GDP in 2010–2014

Household consumption remained the main factor driving the positive trend of the Russian economy in 2010–2014, however, the contribution of personal consumption and the state administration sector in the GDP dynamics during this period had been substantially weakening. The dynamics of consumer demand was significantly affected by the deceleration of the growth of actual income, the increased burden on households to repay debts on loans, and rising inflation, while there was also a continued high proportion of income conversion into foreign currency.

The economic model of 2010–2014 was focused on the priority implementation of state social guarantees and obligations. In order to maintain living standards and preserve social stability, spending on state administration increased from 18.78% of GDP in 2010 to 19.9% of GDP in 2014, and, on the whole during this period, remained above the pre-crisis level (*Table 3*).

Table 3

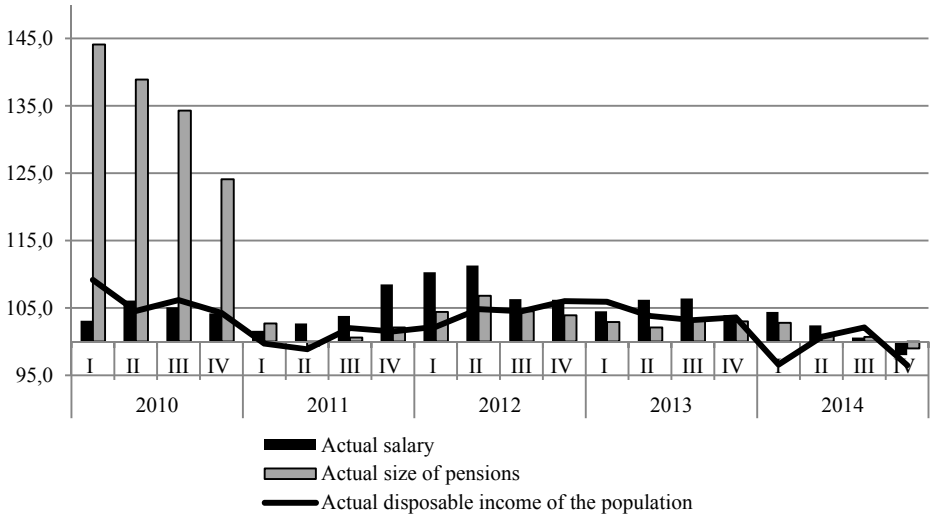
Structure of GDP used in 2010–2014, % of total, at current prices

	2010	2011	2012	2013	2014
Gross domestic product	100	100	100	100	100
Including:					
Final consumption expenditure	70.2	67.1	69.1	72.5	73.9
of households	51.0	48.6	49.9	52.4	53.7
of state administration, including individual goods and services and collective services	18.7	18.1	18.8	19.7	19.9
of non-profit organisations, servicing households	0.5	0.4	0.4	0.4	0.4
Gross accumulation	22.6	25.0	24.9	22.9	20.9
Net export	8.1	8.5	7.3	5.9	6.9
Statistical discrepancy	–0.9	–1.2	–1.5	–0.4	–1.7

Source: Rosstat.

In 2013 real household income exceeded the pre-crisis level, so, by 2014 the potential for increases in wages and social benefits was notably exhausted. The population's actual disposable income in 2014 amounted to 99.0% of that in 2013, while actual salary, which represents the dominant component of income for the population was 101.3% and the actual size of pensions amounted to 100.9% respectively.

In terms of the population's monetary income, the remuneration of labour in 2014 amounted to 66.7% (+1.4 percentage points in relation to the corresponding index of 2013), social benefits to 18.2% (–0.4 percentage points) with a further reduction of the contribution of income received from property and entrepreneurial activity. Taking into account that wages have the greatest influence on the level of income for the population, the downward trend of actual wages seen by the end of the year, is the main determinant of the social factors affecting the living standards of the population in 2015 (*Table 4*).



Source: Rosstat.

Fig. 7. Dynamics of the actual income of the population in 2010–2014, % compared with the corresponding periods of the previous year

Table 4

Structure of monetary income of the population in 2010–2014, % of the total

	2010	2011	2012	2013	2014
Total monetary income	100	100	100	100	100
Remuneration of labour, including hidden wages	65.2	65.6	66.0	65.3	66.7
Income from entrepreneurial activity	8.9	8.9	8.6	8.6	7.8
Social benefits	17.7	18.3	18.3	18.6	18.2
Income from property	6.2	5.2	5.1	5.5	5.3
Other income	2.0	2.0	2.0	2.0	2.0

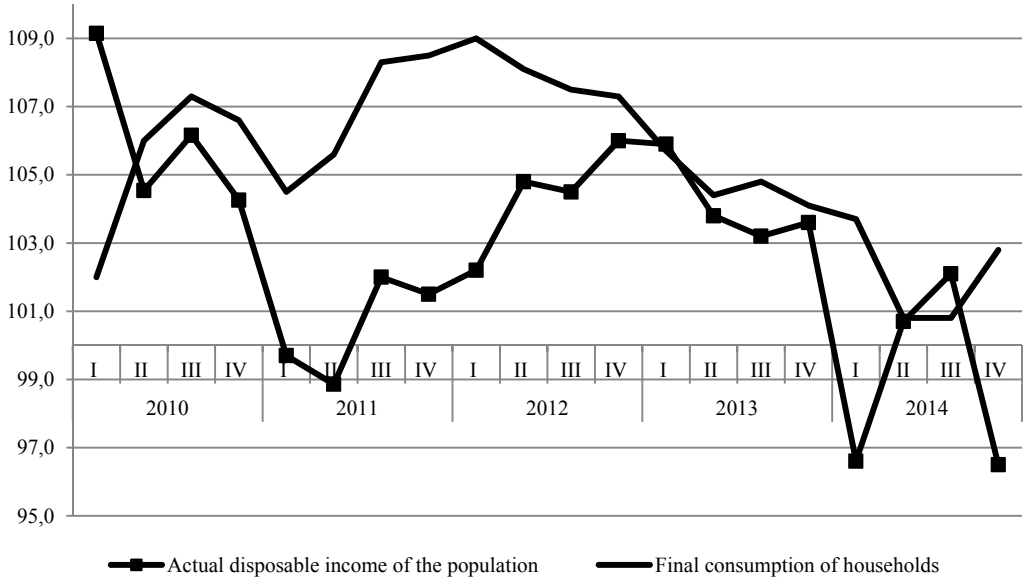
Source: Rosstat.

In 2014 the growth rates of final consumption expenditure of households began slowing down noticeably. In Q2 and Q3 2014 the growth rate of such final consumption expenditure was 0.8% (in the previous year this index was 4.6%), due to the stabilisation of the actual income of the population at the level of January – September of 2013. The growth rates of actual salary in January – September amounted to 102.4% compared with 105.8% in the previous year, while the actual size of granted pensions grew respectively, by 101.5% compared with 102.7%.

In Q4 2014, with a reduction of the actual income of the population by 3.5% and of actual salaries by 2.0% in relation to the corresponding period of the previous year, there were sharply increased inflationary expectations, along with a drop in the ruble exchange rate and the appreciation of imported goods. These had a significant impact on consumer behaviour, resulting in an increased expenditure by households by 2.8% compared with Q4 2013 and by 7.0% compared with the previous quarter. So, the results of 2014 showed a growth in household final consumption expenditure amounting to 1.9% (in the previous year this index was 5.0%).

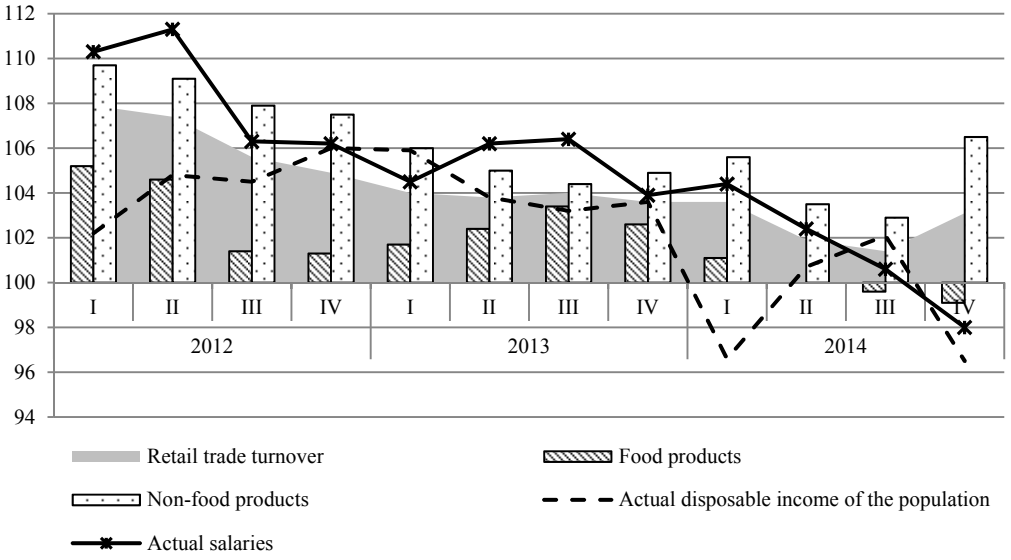
With the decelerating trend in the growth of the final consumption expenditure of the population, in 2014, the growth in retail trade turnover was only 2.5%, and in services for the population was 1.3% compared with those in the corresponding period of the previous year. A sustained slowdown of retail trade turnover took place in 2014, simultaneous with that in the

food product sector (99.9% compared with the same index for 2013) and in non-food products (104.7%). The retail trade turnover dynamics in 2014 was significantly influenced by price dynamics. The consumer inflation index in 2014 was 111.4%. In 2014, the increase of prices for food products by 15.4% (in the previous year this index was 7.3%) was the dominant influenced on inflation. The price indices for non-food products and for paid services for the population during 2014 increased by 8.1 and 10.5%, respectively.



Source: Rosstat.

Fig. 8. Dynamics of actual disposable income of the population and final consumption of households, % compared with the corresponding quarters of the previous year



Source: Rosstat.

Fig. 9. Indices of the actual income of the population and of retail trade turnover in 2012–2014, % compared with the corresponding periods of the previous year

The uncertainty of the economic situation and growing inflation risks changed the structure of the population's expenditure fairly significantly. In 2014 the main feature of the change in consumer behaviour was an enhancement of the process of converting savings into foreign currency (*Table 5*).

Table 5

Structure of the monetary expenditure of the population in 2013–2014, % of the total

	Monetary income	Purchase of goods and payment for services	Including		Payment of compulsory payments	Savings	Among them	Purchase of foreign currency	Growth (+), decrease (-) of money in population's hands
			purchase of goods	payment for services			in deposits and securities		
2013	100	73.6	55.9	15.5	11.7	9.8	6.3	4.2	0.7
Q 1	100	78.3	58.7	17.3	11.2	9.8	5.2	3.7	-3
Q 2	100	72.8	55.1	15.6	11.8	9.7	7.9	3.9	1.8
Q 3	100	76.7	58.1	16.1	11.8	6.9	2.9	5.2	-0.6
Q 4	100	68.3	52.7	13.7	11.8	12.3	8.5	4	3.6
2014	100	75.1	57.5	15.3	11.9	6.9	0.7	5.9	0.2
Q 1	100	82.3	61.8	17.6	12.1	0.3	-6.9	7	-1.7
Q 2	100	73	55.5	15.2	11.5	10	5.1	4.6	0.9
Q 3	100	75.4	57.6	15.3	11.9	7.2	2.6	4.6	0.9
Q 4	100	71.6	56	13.6	12	8.7	0.7	7.3	0.4
October	100	75.5	58.1	15.1	11	6.5	0.6	8.6	-1.6
November	100	76.7	59.3	15.3	11	6.7	0.6	5.8	-0.2
December	100	65.4	52.2	11.5	13.4	11.7	0.9	7.3	2.2

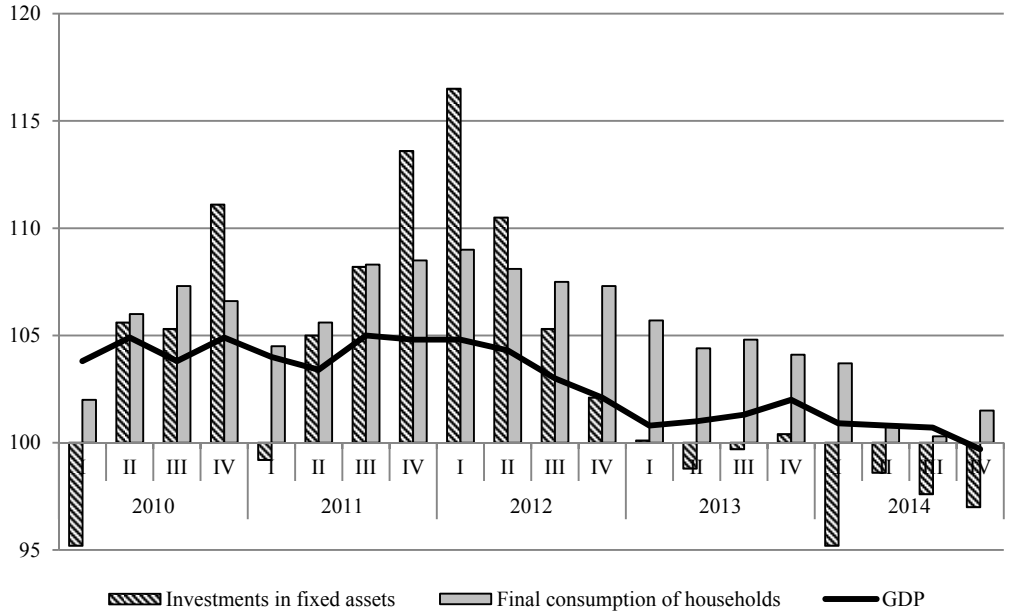
Source: Rosstat.

Among the components of domestic demand during 2013–2014, the largest reduction was observed in respect of investment demand. In 2014 investments in fixed assets reached only 97.5% of their index of the previous year, strengthening their negative impact on the dynamics of GDP, especially if we take into consideration the reduction in investment and construction activity which began in 2013.While the decrease in investments in fixed assets in Q1 2014 can be explained by delays in financing state capital investments, the situation in Q2, Q3 and Q4 started to be dominated by the growth in the cost of credit resources, restrictions on the access of Russian companies to borrow on international financial markets, and sizeable geopolitical risks.

The situation was exacerbated by the increased scale of capital outflows. During January–September 2014 the export of capital amounted to $78.6bn, however in just Q4, alone, it then amounted to $72.8bn. So, the results for 2014 show a capital outflow which exceeded that of the crisis year 2008, and reached $151.5bn. This is 2.47 times greater than the corresponding index of the previous year. The increased economic and geopolitical risks resulted in a more than three-fold reduction in direct foreign investment.

Comparison of the GDP dynamics by the end-use components shows a reduction in the share of gross capital formation and net exports. Under the impact of a sharp drop in income to the economy, the proportion of gross capital formation in the 2014 GDP fell to 26.1% (in 2013 this index was 27.5%), and the share of investments in fixed assets fell to 19.0% (the average during the period 2010–2013 was 19.8%, of GDP).

The capital account of the balance of payments shows the asymmetry of the formation of domestic saving resources and their use for investment purposes. A characteristic feature of the Russian investment model is the significant volume of savings, a sizeable part of which the economy is not able to transform into investment. We should note that capital account analysis shows that the Russian economy has been a net creditor over the past decade.



Source: Rosstat.

Fig. 10. Dynamics of final consumption of households and investments in fixed assets in 2010–2014, % compared with the previous year

Table 6

Key indicators of the investment potential of the economy during 2008–2014, % of GDP

	2008	2009	2010	2011	2012	2013	2014
Gross saving	33.3	24.6	29.8	32.9	30.9	27.5	26.1
Gross capital formation	25.5	18.9	22.6	25.0	24.9	22.9	20.9
Of which:							
gross saving of fixed capital	22.3	22.0	21.6	21.4	21.9	21.9	20.7
change in inventories	3.2	-3.1	1.0	3.6	2.9	1.0	0.2
Investments in fixed assets	21.3	20.6	19.8	19.3	20.2	20.0	19.0
End-of-year resources of the Reserve Fund	9.8	4.7	1.7	1.5	3	4.3	6.4
End-of-year resources of the National Welfare Fund	6.3	7.1	5.8	5	4.3	4.3	4.4
End-of-year deposits of individuals	14.3	19.3	21.2	21.3	22.8	24.7	26.3

Source: Rosstat.

4.1.3. Structure of GDP formation by income sources

On the whole, the post-crisis development of the economy resulted in the reproduction of the economic proportions typical of 2007, and this was one of the factors causing the slowdown of economic growth in 2011–2014. The low growth rates of the Russian economy are a reflection of the declining development potential. This is confirmed by average capacity utilisation being at the level of the pre-crisis maximum, with an absence of large-scale investments, as well as by the record low level of unemployment.

The situation is complicated by the long-term trend of rising production costs associated with the tariff policies of the infrastructure monopolies, increase in the costs of raw, and other, materials outstripping the prices for the final goods, as well by rising labour costs.

Economic relations in 2010–2014 were characterised by the redistribution of income from enterprises to the population. The share of wages in the GDP increased from 49.7% in 2010 to

52.3% in 2014. As a result, the commodity sector has faced serious constraints on further increases in expenditure on wages, taking into account the existing trend (since 2012) for a weakening of the growth of both production volumes and productivity.

Table 7

Structure of GDP formation by income sources in 2010–2014, % of total, at current prices

	2010	2011	2012	2013	2014
Gross domestic product	100	100	100	100	100
Including:					
remuneration for labour of employees, including hidden wages and mixed income	49.7	49.6	50.2	51.8	52.3
net taxes on production and imports	17.7	19.4	15.9	15.2	15.2
gross profit of economy and gross mixed income	32.6	31.0	33.9	32.9	32.5

Source: Rosstat.

In 2014, by reducing the financial performance of the activities of enterprises and manufacturing industry, these organisations changed their pricing policies. That year's price index for manufacturing industry increased by 8.5% (compared with 1.6% in 2013). On the whole, for 2014, the net financial result of the activity of the organisations throughout the economy fell by 9.9% compared with the previous year. This decrease in the financial results was due to a continuing low level of business activity, a deterioration of the external trading conditions and a narrowing of consumer and investment demand.

The dynamics of industrial production in 2014, to a considerable degree, was driven by the conditions for lending and for the financing of working capital. The proportion of working capital in manufacturing industry being funded by bank credits amounts to nearly 40%, and in the production of machinery and equipment, to almost 80% (due to the long-term technological production cycles). Accordingly, the limitations of the access by companies to borrowing on the global financial markets, the increased cost of credit, and the depreciation of the ruble have resulted in an increase in manufacturers' prices, which has put additional pressure on profitability and the overall level of profits.

On the whole, the net financial result of the activity of organisations throughout the economy has been falling since 2013. The dynamics of this net financial result over the year was heterogeneous: since August the growth in H1 2014 has been replaced by a fall due to the influence of the sectoral and financial sanctions. By the end of 2014, it had decreased by 9.1% compared with 2013 and by 23% compared with 2012.

The negative dynamics of the net financial result of the activity of the organisations was due to a continued contraction in demand, especially for investment; to the deceleration of demand growth in the consumer market, and, at the end of the year, to the deterioration of the external economic market conditions for hydrocarbons, and to increases in costs.

The dynamics of the net financial result for certain types of activity have been volatile, depending on their orientation towards exports or the domestic market.

Devaluation of the ruble positively influenced the financial results in the extractive sector (growth by 54.4%, while in the previous year there had been a fall of 2.6%), including in the extraction of fossil fuels (growth by 62.6%; in the previous year only by 1.9%).

In practically all types of activity oriented towards final demand, the net financial result for enterprises has been falling since August 2014. In the manufacturing industries the net financial result fell by 44.0% in 2014 (in the previous year it had fallen by 28.2%).

In 2014 changes could be observed in the structure of the net financial result for manufacturing industries due to the increase in the share of the metallurgical sector, which received additional profit growth as a result of the weakening of the ruble exchange rate, improvements in the conditions on the global markets and an increase in domestic prices. There was a further contribution from the increase in the share of the food industries as a result of higher price growth as a consequence of the weakening of the competition from imports and increase in production volumes.

In the production of goods of investment demand in 2014 there was a greater fall in the net financial result and a reduction in production profitability.

The negative dynamics of the net financial result can be observed in other major sectors of the economy: in construction (81.9% compared with 2013) and in transport and communication (42.1%).

Table 8

Profitability of sold goods, products, works and services by types of economic activity in January–September of 2010–2014, %

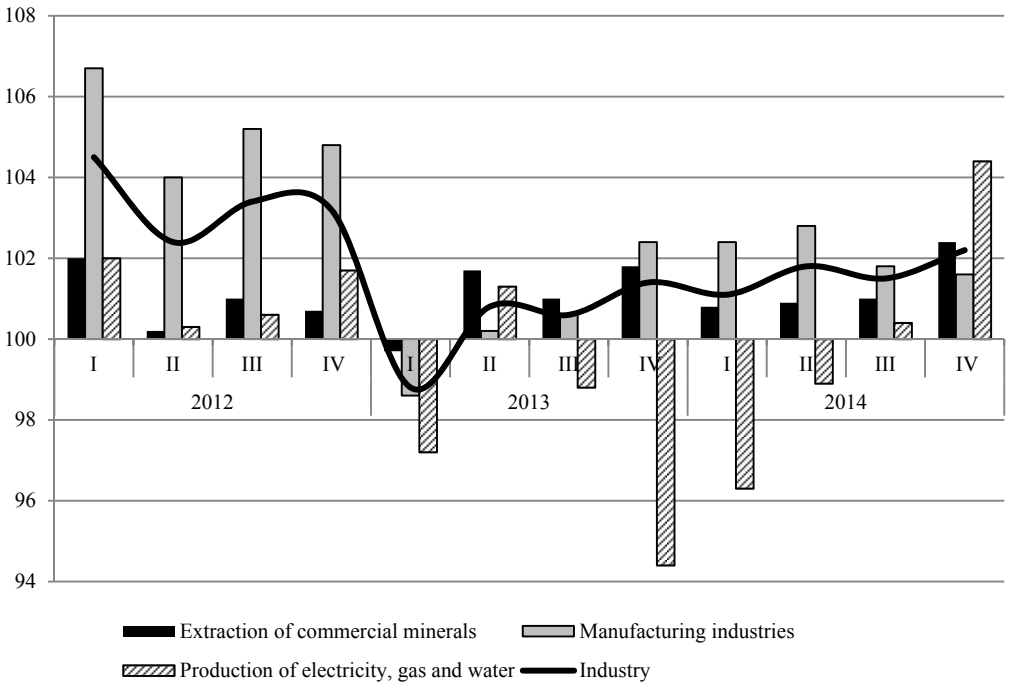
	2010	2011	2012	2013	2014
Total	11.6	11.2	10	7.7	8.7
Including:					
Agriculture	12.2	11.8	15.2	7.1	18.3
Fishery, fish-breeding	25.0	22.9	23	19.7	32.4
Extraction of commercial minerals	32.8	36.4	32.6	27.3	25.4
Including:					
fossil fuel extraction	30.4	32.5	30.2	26.3	24.1
Manufacturing industries	14.4	13.4	11.9	9.7	10.2
Among them:					
production of food products	12.6	8.3	11.2	9.9	9.8
textile and clothing production	5.3	7.2	7.8	6.1	9.5
production of leather, leather goods and footwear	6.9	7.7	8.9	9.7	5.3
processing of wood and wood products	1.0	6.0	5.5	7.0	12.0
cellulose and paper production;	10.6	11.9	10.9	8.3	10.5
production of coke and oil products	22.8	20.0	14	10.1	9.7
chemical production	19.1	24.1	23.9	18.3	19.7
production of rubber and plastic articles	7.5	7.5	8.5	10.1	7.0
production of non-metallic mineral products	8.1	12.0	13.5	10.4	9.1
metallurgical production and ready-made goods	19.5	16.7	12.2	10.7	15.2
production of machinery and equipment	7.3	7.0	7.3	7	6.4
production of electric, electronic and optical equipment	9.0	8.5	8.3	7.7	8.8
production of vehicles and equipment	4.2	6.1	6.8	5.8	4.0
production and distribution of electricity, gas and water	6.9	6.6	3.8	4.1	4.3
construction	4.1	3.4	3.8	3.5	3.3
wholesale and retail trade	8.3	9.4	8	6.7	7.1
hotels and restaurants	7.3	6.6	7.4	6.3	6.6
transport and communication	15.0	13.4	13.8	11.3	10.7
Among them:					
railway transport activity	8.8	6,1	7.8	3.3	3.6
other overland transport activity	-4.2	-5.9	-2.9	-6	-8.1
transportation via pipelines	17.4	19.1	17.1	15	15.8
communications	51.5	27.9	27.7	28.3	25.6

Source: Rosstat.

4.1.4. Dynamics and structure of production by types of economic activity

Since H2 2012 the Russian economy has started to show the signs of a deceleration in growth. The greatest influence has been its own inherent limitations, connected with the fact that the structure of the economy has not undergone any substantial changes, and the impact potential of the factors contributing to the growth has turned out to be almost exhausted. Thus, external demand for Russia's main commodities, which constitute the basis of her export potential, has been falling while domestic demand has weakened as a result of the decline in the income of the economy and the growth in costs. The volumes of domestic and foreign investments in fixed assets have also contracted sharply. In 2014 the situation became even more complicated, influenced by the weakening of the national currency, increases in the manufacturers' prices and the imposition of mutual sanctions.

Compared with the previous year the results of 2014 show a growth of industrial production amounting to 1.7%; a growth in the extraction of commercial minerals by 1.4% and a growth in manufacturing industry by 2.1%. The rapid pace which manufacturing industry had been registering from Q4 2013 until Q3 2014, only yielded its first position to the extraction of commercial minerals in Q4 2014.



Source: Rosstat.

Fig. 11. Dynamics of industrial production by types of economic activity in 2010–2014, % compared with the corresponding quarters of the previous year

The dynamics of the manufacturing industries are quite significantly differentiated by the type of economic activity, while they are mostly affected by the different relative production rates of capital and consumer goods. A slow recovery of investment demand determined the peculiarities of the functioning of the machine-building complex.

Table 9

Production indices of the main types of the manufacturing industries in 2010–2014, % compared with the previous year

	2010	2011	2012	2013	2014
Manufacturing industries	110.6	108.0	105.1	100.5	102.1
production of food products, including beverages, and tobacco	103.2	103.9	104.1	100.6	102.5
textile and clothing production	108.8	100.8	100.7	104.3	97.5
production of leather, leather products and footwear	119.9	105.7	98.1	95.6	97.2
processing of wood and wood products	113.4	110.2	96.2	108.0	94.7
cellulose and paper production; publishing and printing activity	103.1	106.5	105.8	94.8	100.4
production of coke and oil products	106.0	103.8	103.1	102.3	105.7
chemical production	110.6	109.5	104.1	105.4	100.1
production of rubber and plastic articles	124.4	111.4	112.8	105.9	107.5
production of other non-metallic mineral products	114.5	107.4	110.7	98.0	101.8
metallurgical production and production of ready-made metallic goods	112.4	107.0	104.8	100.0	100.6
production of machinery and equipment	115.2	111.1	102.7	96.6	92.2
production of electric, electronic and optical equipment	118.9	111.9	106.4	99.0	99.5
production of vehicles and equipment	127.2	117.2	110.3	102.2	108.5
other industries	120.6	105.3	102.6	95.4	102.7

Source: Rosstat.

Compared with the average index for manufacturing industry in 2014, very rapid growth was registered in the production of food products (102.5%), oil products (105.7%) and in the production of rubber and plastic articles (107.5%). The instability of the dynamics of the machine-building and metallurgical complexes was determined by the weakening of the investment demand dynamics which had started in November 2012. In 2014 the production of machinery and equipment fell by 7.8%, and the production of electrical, electronic and optical equipment fell by 0.5% compared with the previous year. In the production of vehicles and equipment the differentiation of results by the type of production was strengthening: in 2014, in the automotive industry, the fall in production reached 12.5%, while, by contrast, production of vessels, aircraft, spacecraft and other vehicles increased by 24.0% compared with the previous year. As a result, the overall annual increase in the "production of vehicles and equipment" was 8.5% and was actually entirely due to the scaling-up of government orders.

The consumer sector of industry was also characterised by unstable development dynamics. In textile and clothing production the reduction of the output in 2014 amounted to 2.5% and in the production of leather, leather products and footwear, by 2.8%. The difficulty of the situation on the corresponding commodities markets was a result of the downtrend of production in these areas being superimposed on a decline in imports under the corresponding headings.

The dynamics of the extraction of commercial minerals in each quarter of 2014 was characterised by some acceleration. The index of extraction of fossil fuels in 2014 compared with the previous year amounted to101.0%, and in Q4 had increased to 102.4%. Compared with the previous year oil extraction in 2014 had increased by 1.3%, with an increase in processing volume by 4.9%. The fast growth of oil product production conditioned the acceleration of the increase in the rates of export of the products by 8.7% with a reduction in the volume of exported crude oil by 5.6% compared with 2013. Compared with the same year, the extraction of gas fell by 5.8% while its export fell by 12.1%.

4.1.5. Characteristics of demand and use of the workforce

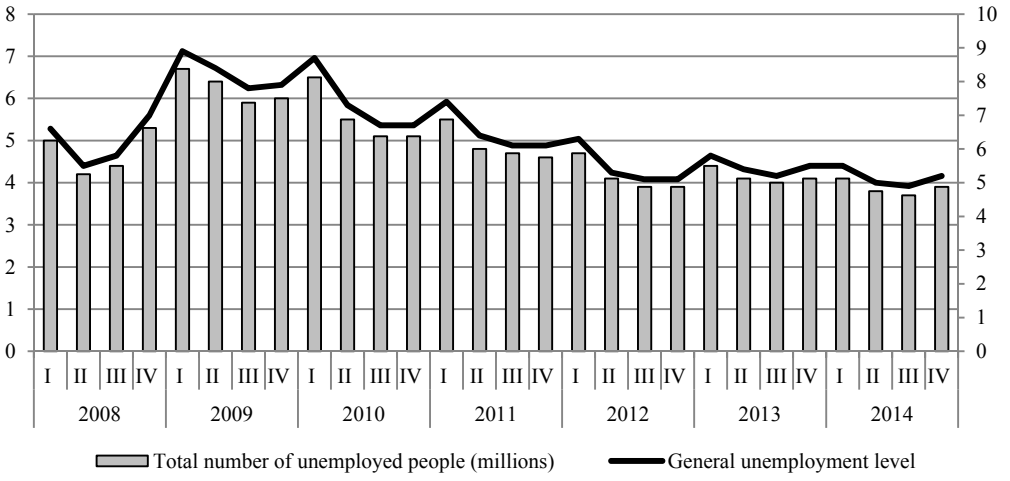
Over the past fifteen years Russian economic development has been characterised by weak growth in the level of employment, with a fairly stable trend towards an increased level of the

economic activity of the population and for a decrease in total, and registered, unemployment. We should note, that the crisis of 2008–2009 did not, itself, sharply and negatively affect the labour market, and this fact was also due to the government's complex of anti-crisis measures. In 2013 the average annual number of people engaged in the economy actually recovered to the pre-crisis level of 2008, and the overall level of unemployment fell to its minimum for the whole period of observation since 1990. However, it is worth mentioning, that the changes in the main features of the labour market in 2009–2014 were taking place against a background of a significant deceleration in the rate of economic growth, and at the same time the increased demand for labour largely reflected the inherent limitations of economic development, conditioned by a decrease in efficiency of the use of labour resources.

In 2014 the number of the economically active and employed population, on average, amounted to 75.4m, which corresponds closely to the indices for 2012. The unemployment index in 2014 remained at a level of 5.2% (using International Labor Organisation methodology), although in H2 2014 the decrease in unemployment came to a halt.

The employment services recorded that, on average, 9.1% fewer citizens were registered as unemployed in 2014 compared with in 2013. During the whole of 2014 the number of vacancies recorded by the employment services exceeded the number of registered unemployed people. However, the employers' need for staff started to decrease from 2.1m in August 2014 to 1.4m vacancies in December. The tension coefficient, calculated per 100 declared vacancies in December increased to 73.4 people, compared with 46.8 people in July 2014.

The deterioration of the economic situation predicted for 2015, will provoke an increase in unemployment and a reduction of employment on the labour market. However, the expected scale of layoffs will be less significant compared with the crisis of 2008–2009 since the restructuring of employment in recent years has resulted in a reduction of the scale of overstaffing. Furthermore, the fall in the working age population, as a demographic factor, will smooth the tension in the labour market.



Source: Rosstat.

Fig. 12. Total number of unemployed people in 2008–2014 (millions)

Since the year 2000, the average number of people in the Russian economy employed in industry and in agriculture has been decreasing, while there has been an expansion of demand for labour in trade, construction, the financial sectors and state administration, and this largely

mirrors the overall global trends in the labour market. However, during this period in Russia, the number of people, employed in the science and education sectors has begun to decrease.

In industry the number of people employed has been decreasing at the highest rate, largely due to a decrease in demand for staff in manufacturing industry, with the cautious staffing policies in the mining and energy sectors.

The structure of employment in manufacturing industry has been determined by the dynamic reduction of the number of people employed in the machine-building and consumer complexes.

The significant differentiation of the wage levels by type of economic activity has particularly influenced the changes in the structure of employment (*Table 10*).

Table 10

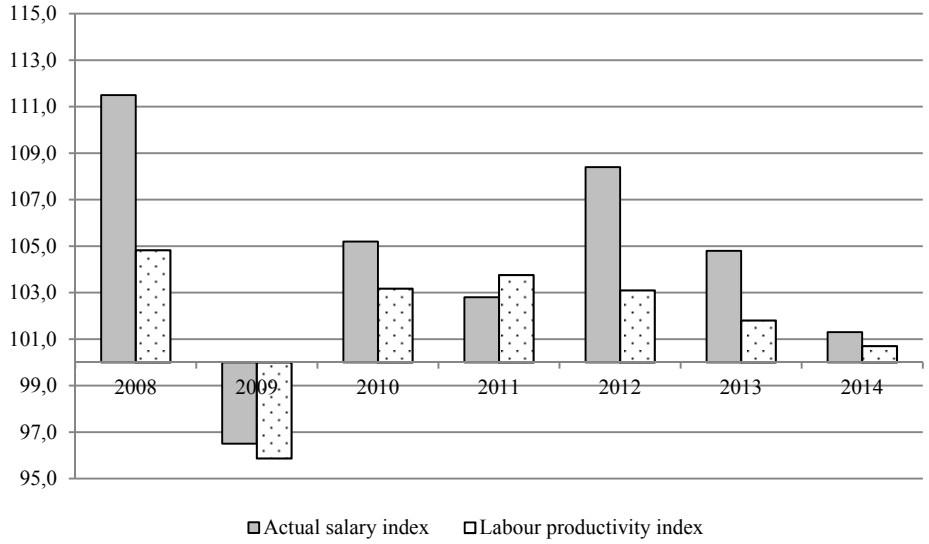
Average annual rates of change in the number of people employed in the economy, and of their nominal salaries, by type of economic activity in 2008–2014

	Average annual rates			Relation of nominal salary to the average Russian level, %		
	of the number of employed people	of nominal salary				
	2008–2013	2008–2013	2014	2008	2013	2014
Average indices throughout the economy	99.8	111.5	109.2	100	100	
Agriculture, hunting and forestry	99.1	113.2	111.4	49.0	52.8	54
Fishery, fish-breeding	99.6	110.7	111.9	112.8	108.9	111
Extraction of commercial minerals	100.6	110.3	109.2	192.1	181.8	181
Manufacturing industries	97.9	111.0	10-9.2	92.8	90.8	90.0
Production and distribution of electricity, gas and water	100.5	111.1	108.0	110.2	108.2	107
Construction	100.9	108.3	107.7	107.4	93.0	90.0
Wholesale and retail trade	100.6	109.2	109.2	86.3	77.8	79.0
Transport and communication	99.9	110.7	107.6	120.1	116.1	114
Financial activity	102.9	108.6	109.7	242.2	212.6	210.0
Operations with real estate, leasing and provision of services	102.5	109.7	111.0	123.0	113.6	116.0
State administration and provision of military security; social insurance	99.9	113.6	105.4	123.4	135.8	131.0
Education	98.6	115.7	110.3	65.5	78.7	79.0
Healthcare and provision of social services	99.4	113.4	110.9	75.5	82.0	83

Source: Rosstat.

In terms of wage levels, the leaders in the economy over the last fifteen years have remained the extractive industries, the production of oil products and the financial sector. Only in 2013 did the machine-building complex come close to the average economy index for wages and exceeded, on the whole, the salary levels across the rest of manufacturing industry. The shortfall of remuneration for workers in the scientific research and development sector has started to close. However, in the education and healthcare sectors pay levels remain below average.

Analysis of the dynamics of the Russian economy during the past 20 years shows that, with the established labour market model, the reaction of employment to sharp crises in the economy has been less significant compared with the sharp falls in actual salary. The post-crisis recovery was accompanied, as a rule, by weak growth in the demand for labour and this illustrates the general low efficiency in the use of labour. The reaction of wage levels during such periods was significantly greater.



Source: Rosstat.

Fig. 13. Indices of actual salary and labour productivity in 2008–2014 throughout the economy, % compared with the previous year

The shift of employment from the goods manufacturing sector to the services sector during the period of 2009–2014 was accompanied by an overall increase in productivity and the faster growth of real wages. The growth in demand for labour in the extraction of commercial minerals sector with a reduction in the efficiency of the workforce has resulted in an increase in overall wage costs and has limited the possibilities for increasing average monthly pay rates. With regard to the production of electricity, gas and water, as well as in the field of construction, with the weakening of growth in added value in these types of activity in 2009–2014, there was registered a decrease in labour productivity, but at the same time there has been a positive trend in the growth of real wages.

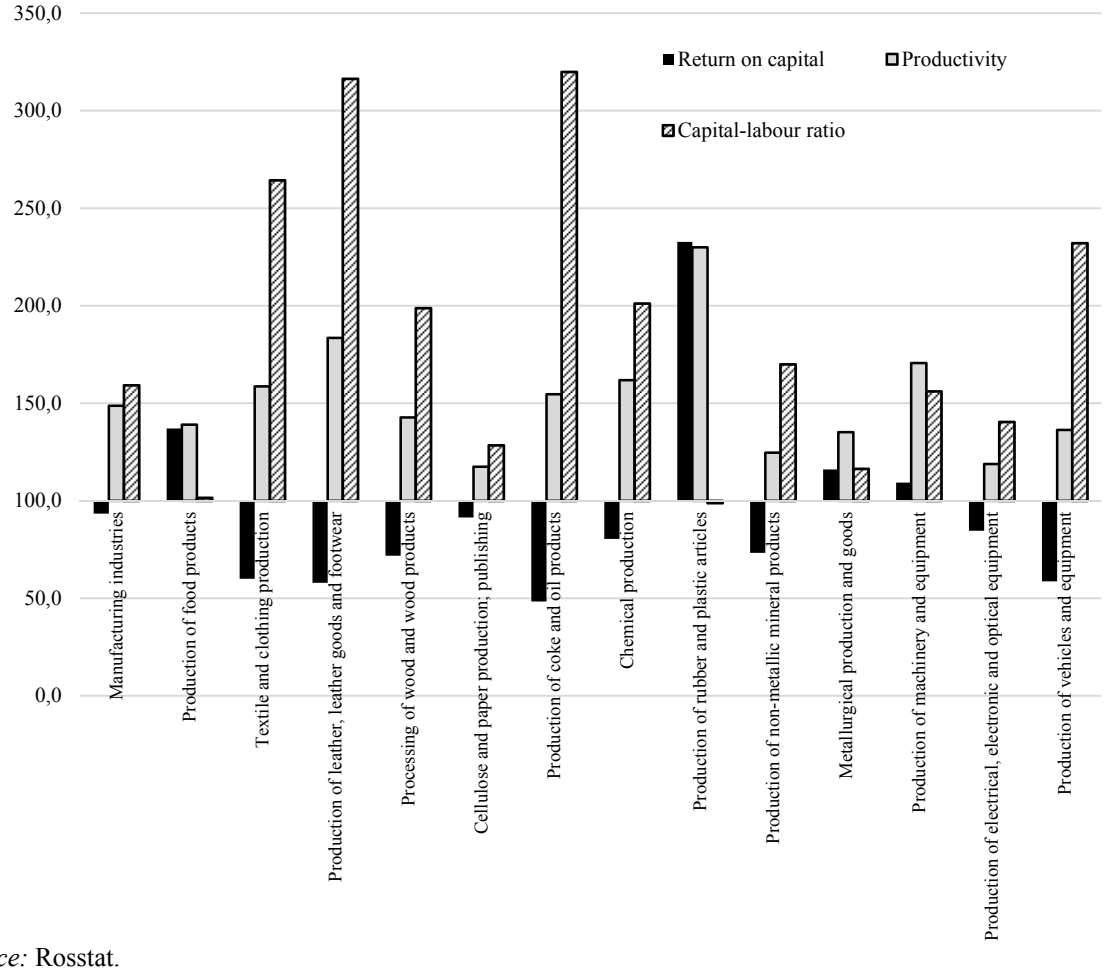
Manufacturing industry has shown a preservation of the trend towards the restructuring of employment through reducing unproductive jobs. The average annual rate of reduction of the number of employees in manufacturing industry in 2009–2014 amounted to 2.1% (during the period of 1999–2008 this index was 1.2%). As a result, labour productivity in manufacturing industry is growing at a rate twice that of the average in Russia.

From 1999–2014 a growth of production in manufacturing industry was registered across almost all types of economic activity, with fairly significant variation in the dynamics of the annual reduction in the average number of workers. We can assume, that the average salary, by type of activity, in manufacturing industry (excluding the production of oil products), is within the range of 44–117% of the average Russian level, and that this has had a significant impact on the inter-branch and inter-sectoral mobility of the workforce.

The highest rates of reduction in the number of workers are typical of such types of activity as manufacturing, textile and clothing production (pay rates here are only 44% of the average-Russian level), the processing of wood and wood products (57%), the production of rubber and plastic articles (71%), and the production of machinery and equipment (93%), together with a number of other types in which the actual wage levels remain markedly lower than the average-Russian pay rate.

With high rates of staff turnover (hiring and firing) the turnover of jobs (the elimination of old positions and the creation of new ones) – as a feature of their renewal – remains rather low. Moreover, the rate of turnover is the result mostly of the liquidation of jobs within active enterprises, rather than by their creation.

Comparison of the dynamics of product output, investment in fixed assets and the number of people employed, by type of economic activity, shows that, to provide increased labour productivity, it is those aspects related to the efficient use of basic production factors which are of paramount importance. During the period 2005–2012, with the growth of investment in fixed assets, typical of Russian industry, generally outstripping the product output dynamics, and with the trend towards a reduction of the number of staff, growth took place in the capital costs per worker. However, this did not result in adequate changes in labour productivity, and, in the end, strengthened the trend for a reduction in return per unit of capital. Thus, we can assume that irrational investment policy has led to a reduction in the efficient use of the factors of production, and that this has negatively affected the financial results of economic activity.



Source: Rosstat.

Fig. 14. Labour productivity, capital-labour ratio and return on capital in manufacturing industry in 2012, % compared with 2005

It is worth adding, that, despite the rather restrained rates of renewal of fixed assets and of the rate of introduction of new jobs, a steady trend in the restructuring of employment by level of education has appeared in the economy. The structure of the labour market is rapidly shifting towards the growing demand for a high-skilled workforce. Throughout almost all observed types of economic activity within the structure of employment one can observe an increase in the proportions of employees with higher and secondary vocational education.

Forecasts regarding the structure of the Russian workforce in relation to educational attainment in the coming decades warn of the possibility of a growing imbalance between the quality of the workforce and requirements of the jobs available, as well as the mismatch in the structure of the demand for employees in relation to the types of activity compared with their existing competencies.

4.2. The Decomposition of Russia's GDP Growth Rate in 1999–2015

Since about the mid last year, Russian expert community has been actively involved in adjusting forecast on the Russia's 2015 economic growth rates downgrading it to negative. For example, unlike the forecasts in July 2014, with growth rates within a range of around 1-2% year-on-year, currently we are talking about an economic slump. Forecasts as of March 2015 predict contraction at: 1.5% - Fitch Rating, 2.9% - World Bank, 3% - the RF Ministry of Economic Development, IMF and Citi Group, 4.8% - the RF CB and EBRD and 5.5% - Moody's. Moreover, solely forecasts made by OECD and the UN remain relatively optimistic. The OECD forecasts zero growth in Russia and the UN – stagnation and slow positive trend at 0.2%.

At present, according to the January version of the official (Ministry of Economic Development) MED's forecast,[1] the RF GDP this year will contract by 3% against last year, with an average annual price of oil being $50 per barrel. As far as production factors are concerned, they are going to see negative dynamics: labor force will contract by 0.9% (from 67.9 in 2014 to 67.4m in 2015), while investment will fall by 13.7%; and net capital outflows will come up to $115bn.

It is our opinion that the economic contraction forecast for 2015 is not too pessimistic because of the negative dynamics of the key factors having an effect on the development of GDP. These factors can be identified using the method we suggest, which is based on the method of decomposing the macroeconomic indicators into their structural, foreign trade, and cyclical (business cycle and random shocks) components which is applied in developed countries (OECD), except that it has been refined to take account of the Russian economy peculiarities. These peculiarities imply a heavy reliance on foreign trade trends approximable through the dynamics of global crude oil prices.

Following the logic of our calculations, *the first stage* in the decomposition of the GDP growth rate into its components consists in separating the structural component in accordance with the methodology practiced in the OECD countries.

The structural component of the economic growth index is the fundamental one. The most important property of the structural component is the slow movement of its value over time. In contrast to the structural component, the cyclical component, which is determined by a current situation in the market, is a rapidly changing value.

[1] http://economy.gov.ru/minec/activity/sections/macro/prognoz

One of the most frequently cited examples of extraction of the structural component of the macroeconomic index is the estimate that describes the potential (structural) GDP index (as well as the output gap) which, in accordance with one of the existing definitions of potential GDP, represents the maximum output level achieved when all production factors are used in full and the capacity load is at its normal level (60–65%). It should be noted that, in the framework of our decomposition methodology, the terms 'structural' and 'potential' will be applied as synonyms, with due regard for the existence of different interpretations of the notion of potential GDP.

In order to estimate the aggregate factor productivity index, the potential (structural) GDP, and the output gap, the OECD Economics Department applies the production function methodology,[1] whereby it is possible to derive the potential GDP value by separately estimating the inputs of production factors into the rate of economic growth. This method applies the following log linear equation, where GDP is estimated on the basis of labor input, capital input and aggregate factor productivity (AFP) values (1):[2]

$$\Delta \ln(Y_t) = \Delta \ln(E_t) + \alpha \Delta \ln(K_t) + (1-\alpha)\Delta \ln(L_t), \quad (1)$$

where Y – is actual GDP volume
K – is actual capital volume,
L – is actual labor volume,
E – is AFP,
α – is elasticity of capital input in output; the value of returns to scale effect is assumed to be constant, i.e. $\alpha = 0.3$, and $1 - \alpha = 0.7$.[3]

Once the average estimated labor and capital inputs in GDP are found (the coefficients applied to logarithms of the variables of labor and capital inputs), the value of aggregate factor productivity can be found; its smoothed-curve representation is obtained by applying the *Hodrick–Prescott filter*, which demonstrates 'trend' or 'potential' factor productivity. Then the resulting value is once again entered in the production function equation alongside the values of actual capital reserves and the estimated 'potential' labor volume (based on the already known non-accelerating rate of unemployment (NAIRU)), and the resulting GDP growth rate is taken to be the potential GDP.

The Hodrick–Prescott filter was applied to the structural component of the GDP growth rate obtained by applying the method described above in order to remove the fluctuations that are difficult to explain in economic terms.

The second stage of Russia's GDP growth rate decomposition consists in separating its foreign trade component explainable by specific trade conditions, in particular the movement of world oil prices.

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[1] Giorno C., Richardson P., Roseveare D. and van der Noord P. *Estimating Potential Output, Output Gaps and Structural Budget Balances // Economics Department Working Papers.* 1995. No. 152. OECD.

[2] For the purpose of our calculation, this function is expressed as *logarithmic increments*, i.e., growth rates.

[3] In our calculations, we apply the empirically obtained estimates of labor input elasticity and capital input elasticity for the developed countries, which are also compatible with Russia's statistics (for further detail, see Bessonov V. A. *O dinamike sovokupnoi faktornoi proizvoditel'nosto v Rossiiskoi perekhodnoi ekonomike* [On the Aggregate Factor Productivity Movement in the Russian Economy in Transition]. *Ekonomicheskii zhurnal VShE* [The Economics Journal of the National Research University Higher School of Economic]. 2004. No 4, pp. 542–587).

The theoretic substantiation for the hypothesis that explains the influence of the oil price growth rate and the price level on the growth rate of GDP relies on the mechanism whereby oil prices influence the rate of economic growth in the long run (cointegration ratio) and over short-term periods (error correction model)[1]; and on the analysis of household behavior in terms of changes in their inclination to save and to consume in response to temporary and constant increases in the level of household income (microeconomic level).

The dependence of the level of GDP on the movement of oil prices can be described by an investment mechanism within the framework of the Solow model, which works as follows: an improvement in trade conditions causes a transfer of income, which is subsequently invested, in its turn increasing the amount of capital and pushing up GDP. Thus, in a long run, a dependence can be observed between the levels of GDP and oil prices (or, which is the same thing, between the growth rate of GDP and the growth rate of oil prices). At the same time, over the entire period under consideration, we observe a rising level of world prices for oil and the transitional movement between different phases of economic development, with their specifically different rates of GDP growth. In other words, we follow the correlation between the level of world prices for oil and the growth rate of GDP (and not GDP level), which can be estimated by using cointegration ratios and the error correction model.[2]

The strength of this dependence can be further enhanced by the effects of the mechanism of economic agents' response to changes in the level of income received by them. The logic of analysis of the effects of temporary and constant income increases corresponds to the permanent income hypothesis suggested by M. Friedman in 1957.[3] In case of an unexpected income increase, an individual considers it to be only a temporary phenomenon, and so a considerable portion of the income increment is saved instead of being spent on current consumption. If later on the income remains high, the individual adapts (get used) to this higher income level and begins to consume more, while the saving norm is reduced. Consequently, the inclination to consume is low if the increase in income is temporary. When this principle is applied to our mechanism of response to income movement, it means that economic agents, while adapting to new levels of oil prices, do not believe that this higher level of oil prices will stay over a long-term period (or become permanent)[4].

In our model, the logic employed in estimating the consequences of changes in the level of oil prices is analyzed in relative terms; in other words, the important factor is the starting oil price level before the onset of its growth/decline - that is, returns to scale related to the movement of oil prices. Thus, in order to identify the foreign trade component within the rate of GDP growth dependent on the deviation of the actual price of oil from its multiyear average estimate (i.e. trade conditions), it is feasible to estimate the interdependence between the

[1] For more detail, see *Kazakova* M.*,* Sinelnikov-Murylev S. *Kon"iunktura mirovogo rynka energonositelei i tempy ekonomicheskogo rosta v Rossii* [Economic Situation on the World Energy Carriers Market and Rates of Economic Growth in Russia]. *Ekonomicheskaia politika* [Economic Policy]. 2009. No 5, pp. 118–135.

[2] *Kzakova M.V.* Vklad neftegazovogo sektora v dinamiku *ekonomicheskikh pokazatelei v Rossii* i v mirovoi praktike [Input of the Oil and Gas Sector in the Movement of Economic Indexes in Russia and in the World Practices] // *Rossiiskii vneshneekonomicheskii vestnik* [Russian Foreign Trade Herald]. 2009. No 8, pp. 66–72.

[3] Friedman, M. A *Theory of the Consumption Function.* Princeton. NJ: Princeton University Press, 1957. Ch. 2, 3.

[4] For more detail, see Sinelnikov-Murylev S.*, Drobyshevsky S., Kazakova M. Dekompozistiia tempov rosta VVP Rossii v 1999–2014 godakh* [Decomposition of Russian GDP Growth Rates in 1999-2014] // *Ekonomicheskaia politika* [Economic Policy]. 2014. No 5, pp. 7–37.

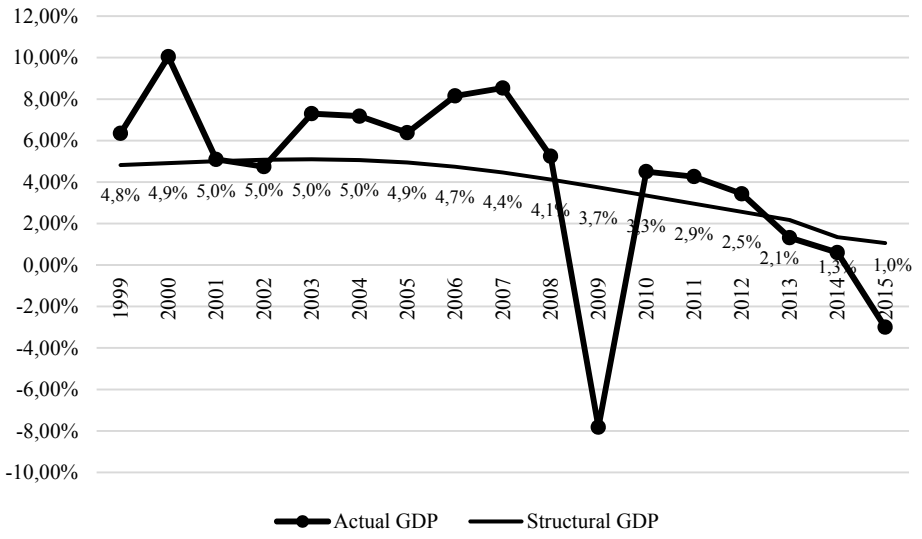
'residual values' after subtraction from the value of actual structural GDP growth (GDP growth unexplainable by the movement:

$$\Delta Y_t^{resid} = \gamma_0 + \gamma_1 \frac{P\_oil_t}{\overline{P\_oil_t}} + \tau_t. \quad (2)$$

The estimation derived from equation (2) makes it possible to identify the GDP growth component dependent on trade conditions, with due regard for the scale of deviation of the actual price of oil from its multiyear average. The foreign trade component of GDP growth rate, explainable by favorable trade conditions, is estimated by the theoretic significance of the relevant variable applied in the regression described above (2) (i.e., the theoretic significance of the difference between the actual and structural GDP growth rates at a given actual ratio of the current oil price to its multiyear average).

At the *last stage* of the decomposition of GDP growth rate into its components, its cyclical component is separated, which incorporates the business-cycle component and random shocks. This component can be interpreted as the residuals from equation (2) obtained after subtraction of the structural and foreign trade components from the actual GDP growth rate.

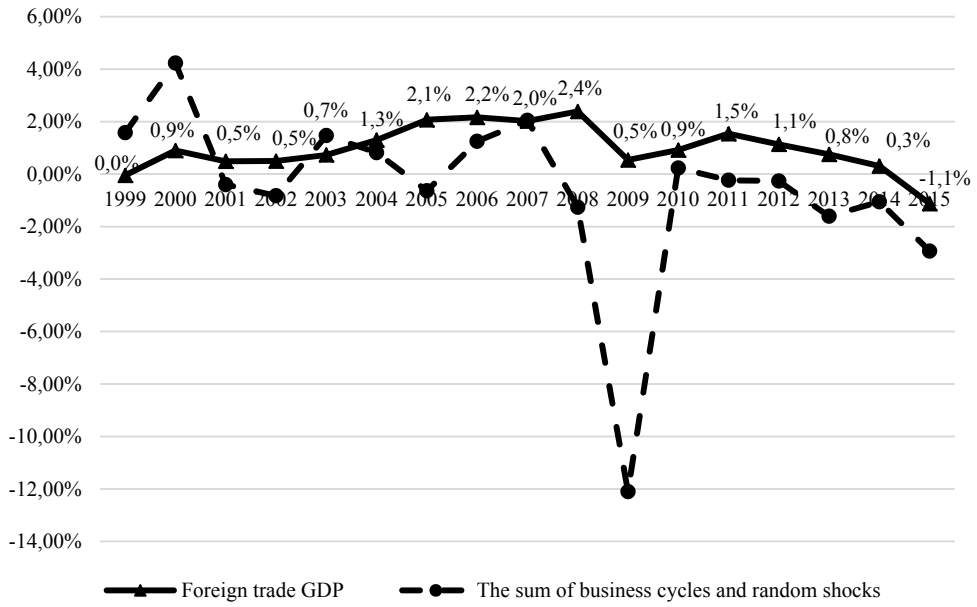
As a result, the actual, structural and foreign trade components of Russia's GDP growth rate, as well as its cyclical component (i.e. the sum of the business-cycle component plus random component) - the calculated residuals of regression (2)), will appear to be as follows *Fig. 15* and *16*. These components of the GDP growth rates were estimated by us parting from the first Federal State Statistics Service (Rosstat) estimates of Russia's economic growth rates and the IMF assessment of the world oil price in 2014. Moreover, in our calculations we used the official MED forecast according to which Russia was facing a 3% slump vis-à-vis previous year at the average annual oil price of $50 per barrel.



Source: Rosstat, MED, own calculations.

Fig. 15. The Actual and Structural GDP Growth Rates, as a percentage to the previous year, 1999–2014, 2015 forecast

According to our estimates, over last 10 years structural component in Russia's economic growth rate contracted (about from 5% to 1.3%, see *Fig. 15*) and in 2015 will also decline (to 1%). It should not be surprising: as was mentioned above, labor and investments are contracting, money does not go to the economy, and, on the contrary, leave it.



Source: Rosstat, MED, IMF, own calculations.

Fig. 16. Foreign trade and cyclical growth rates of GDP, % to the previous year, 1999–2014, and 2015 – forecast

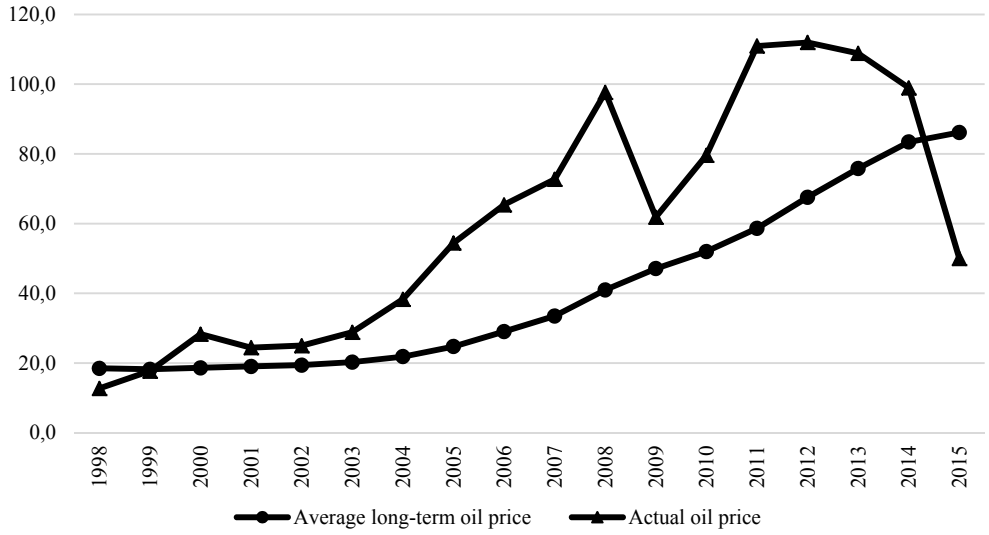
Regarding foreign trade component, commencing sustainable oil price growth this component also went up. Moreover, if in 2000 the foreign trade component was less than 1 percent, than in 2008 it reached its maximum for the whole period of 2000-2008 to about 2.4% with the oil price at 98dol/barrel (also maximum for given period). It should be noted that due to favorable terms of trade the Russian economy got out of the 2008-2009 crisis with minimum losses than it could have been under unfavorable terms of trade (note that in 2009 oil price dropped to $62 per barrel for a short-term period and already in 2010 oil prices reached $80 per barrel).

The period 2008-2014 was characterised by overheating of the economy (early 2008), and then the global economic crisis (second half of 2008-2009) and a subsequent new phase of the business cycle of the Russian economy. In these years a gradual decrease in the structural and foreign trade components of the growth can be observed due to the slowdown in the growth of the fundamental factors and decreased demand for Russian exports, the key items of which are raw materials.

Over 2010-2012 favorable terms of trade allowed the Russian economy to preserve positive growth rates at 3-4% with oil price above $110 per barrel. However, already in 2013 GDP growth rates contracted to 1.3% and in 2014, according to the latest Rosstat data, constituted only 0.6%. It should be noted that average annual price of oil were high and constituted nearly $99 per barrel. The sharp drop of oil prices happen in the end of the year. Low GDP growth rates with favorable terms of trade are explained by the fact that the economy gets

adapted to high prices (and consequently to high export revenues) and with time invest less and spend more on current consumption by analogy with an individual within permanent-income hypothesis described above. Moreover, the scale of oil price change is important: when we speak about the growth from $38per barrel in 2004 to $54 per barrel in 2005, transfer of 'oil' revenues to the economy turns out to be more than in case of price growth from $110 per barrel to $112 per barrel in 2011-2012. Thus, with time importance of oil prices in the economic growth rates decline and in the long-term practically comes to zero.

The negative foreign trade component of Russia's GDP growth rates in 2015 (–1.1%) can be explained by the logic of our method of decomposition: the worsening of the terms of trade (a fall in crude oil prices to $50 per barrel) makes the actual price fall below the long-time average annual ($86 per barrel) (see *Fig. 17*).



Source: IMF, own calculations.

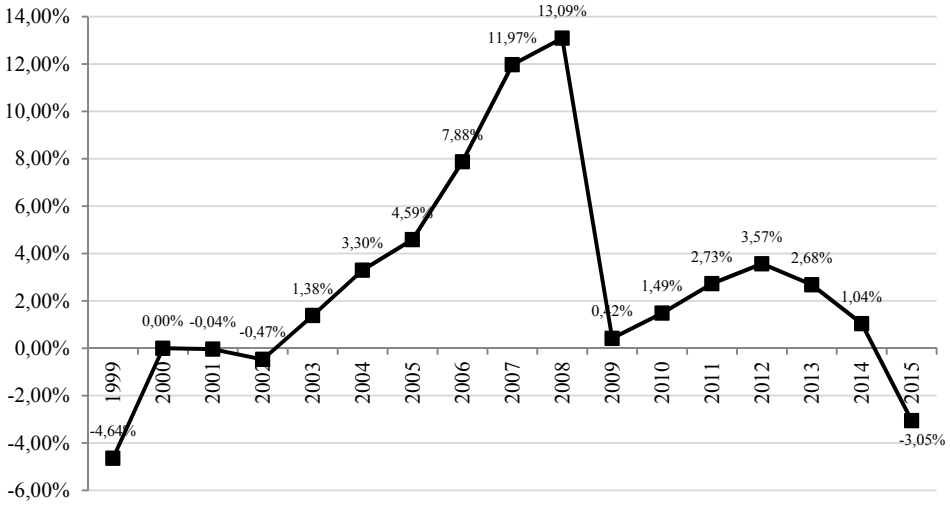
Puc. 17. Actual and average long-term price of Brent, $ per barrel, 1999–2014, 2015 forecast.

Whereas in 2012–2014, the Russian economy entered the lower phase of the economic cycle after overheating and, consequently, cyclical component shifted into negative area (see *Fig. 16)*. The aggregate rate of economic growth is close to zero, because the negative value of the cyclical component is compensated by the positive foreign trade component.

The cyclical component of the economic growth remains negative in 2015, besides it contracts vis-à-vis 2014 which allows us to draw a conclusion about strengthening of the cyclical recession in the Russian economy in the current year.

The decomposition of the GDP growth rate into its components has allowed us to estimate Russia's GDP output gap, that is the deviation of the current GDP from that obtained on the basis of the above method of determining structural GDP, which, as shown, in certain conditions can be considered as the potential GDP (*Fig. 18).*

As can be seen on *Fig. 16* and *18*, in 2012–2015 Russian economy moved to the low cycle phase after overheating, and consequently cyclical component turned negative. Aggregate economic growth rates were close to zero because the negative cyclical component is compensated by a positive foreign trade one.



Source: authors' calculations.

Fig. 18. The output Gap in the Russian Economy (%), 1999–2014, 2015 forecast.

Between 2010 and 2014, the gap in the output is a positive one and constitutes about 2-3% due to the fact that the level of real GDP exceeds a structural one. Nevertheless, there was no economic overheating because the real GDP growth rates were less than the structural GDP growth rates: under high oil prices, production factors are used to 100% and there is no growth of their volume

In 2015, the output gap resulting from the decomposition of Russia's GDP growth rates appears to be negative (see *Fig. 16*), being indicative of the fact that there is no economic growth factors for the time being.

Based on our estimates, the Russian economy in 2014 got closer to its *production possibility frontier* (in other words, the actual growth rate of GDP was near to its potential value). Under the circumstances, stimulating fiscal and monetary policies are inefficient. However, with a negative gap in 2015, the actual output appeared to be less than the potential one, in which case, stimulating monetary and fiscal policies would have a positive effect on the economy in terms of higher economic growth rates.[1] At the same time, it is worthwhile noting that this effect should not be expected to last long. The support to import substitution and the manipulation with interest rates or the ruble's exchange rate can indeed have some impact on GDP growth rates, but within a very short period of time, because the foregoing factors are not essential for economic growth.

According to the Gaidar Institute estimates, in order to achieve potentially feasible growth rates which approximately equal average world growth rates (about 3%), Russia needs to annually over 3 years increase its workforce by 1 m people, investments in main capital should grow by 3.4% (in other words, $200-300 bn for 3 years). Instead, over last several year investments do not grow (for example, 2013 demonstrated a slump by 0.2% against 2012, and

[1] A more detailed description of the method of decomposing Russia's GDP growth rates and the interpretation of the results we obtained can be found[1].in the article written by *Sinelnikov-Murylev S.,Drobyshevskiy S., Kazakova M. The decomposition of Russia's GDP growth rates in 1999—2014. Ekonomicheskaya Politika. 2014. No. 5. pp. 7–37, and* http://iep.ru/ru/publikatcii/7125/publication.html

in 2014 by 2.5% against 2013. As for 2015, the official forecast reports a slump, as was mentioned before, by 13.7%). The number of employed in the economy does not growth either over recent years (this number comes to about 68 m people). Forecast for 2015 posts its reduction and consequently growth of unemployment.

Currently unfavorable terms of trade are coupled with acute geopolitical situation, including sanctions and countersanctions. Nevertheless, to our mind, current slowdown of Russian economy is, first of all, explained by structural factors: contraction of labor force and investments. In these circumstances, according to a classical economic growth model, the only source of growth lies in the growth of total factor productivity (in other words, efficiency of available factors) which is not feasible in the near future. In view of this, measures aimed at increasing the efficiency of production functions usage should, first of all, include quality upgrade of institutions and business environment, including clamp down on the corruption, reform of the judicial and law enforcement systems, reduction of barriers and market monopolization, quality reform of the social safety net (including education, health care and pension systems which, in turn, contribute to the increase in the quality of human capital as a new factor in economic growth). These measures lay the foundation for the implementation of structural reforms aimed at the diversification of the economy and, as a result, at moving to a new path of long-term economic growth and advance in living standards.

4.3. Russian industrial enterprises in 2014. (analysis on the basis of surveys)

This section was prepared on the basis of the business surveys of industrial enterprise managers, carried out on a monthly basis from September 1992 by the E. T. Gaidar Institute for Economic Policy (the “IEP”) in accordance with the European harmonized methodology, and covering the whole territory of the Russian Federation. The panel includes nearly 1,000 enterprises, with a combined workforce exceeding 13% of the workers, employed in industry. The panel is biased towards large enterprises in each of the defined sub-sectors. The typical rate of return of questionnaires is 70–75%.

The business survey questionnaire contains a very small number of questions (not more than 15–20). The questions are qualitative, not quantitative. The simple structure of the questions and answers allows respondents to fill in the questionnaires quickly and without using any other documentation. It is crucially important that the respondent for each enterprise is a manager at the highest level, having a complete picture of the overall situation within the company and directly linked to the management of the enterprise.

During the analysis of the business survey results a specific derived index, called the 'balance', is used. Balances are calculated as the difference between the percentage of those who answered “will increase” (or “above the norm”) and the percentage of those who answered “will decrease” (or “below the norm”). The difference thus obtained allows us to represent the distribution of answers to each question as a single digit with either a '+' or '–' sign.

The balance is interpreted as the first derivative or speed of a certain process. If the balance of the answers related to any expected change in prices has a '+' sign, it means that the average prices will increase in the nearest future (in other words, the number of enterprises, which have returned information about the projected growth of their prices, prevails). For instance, a monthly increase of the balance from +10 to +17% indicates that the average industry prices will increase more intensively, since the number of enterprises forecasting their growth, has increased. A negative balance would mean a decrease in average prices (a larger number of

enterprises planning deliberately to decrease their prices). A change of the balance from -5 to -12% would be interpreted as an increase in the intensity of price reductions.

4.3.1. Dynamics of the main indices of Russian industry

The year just ended, 2014, did not become a turning-point for the crisis in Russian industry. The industry remained relatively stable during this period which had been difficult, both for Russian society and for the Russian economy. Moreover, the IEP industrial optimism index[1] showed that in the second half of the year companies felt more confident than they did at the beginning of the year (*Fig. 19*). Furthermore, even during the last two months, the managers of those enterprises remained optimistic, despite the shock behaviour of the currency and credit markets, while there was also heightened public anti-crisis rhetoric from the government.

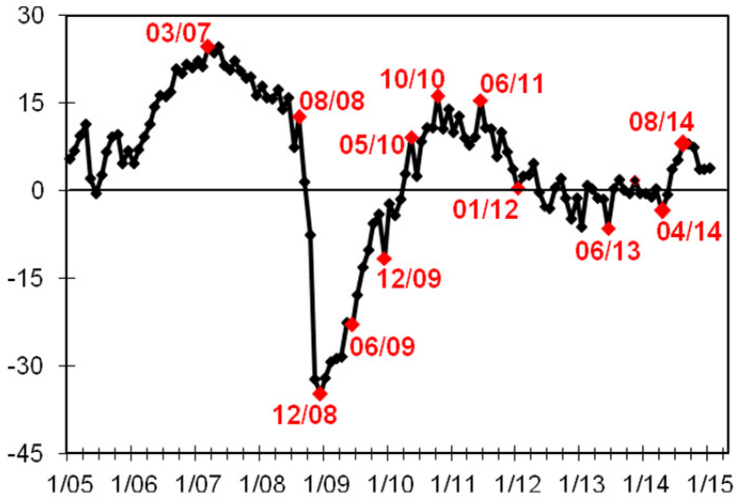


Fig. 19. The IEP industrial optimism index, 2005–2015

The beginning of 2014 turned out to be fairly comfortable for Russian industry. The positive dynamics of demand provided support for output without an increased redundancy in the stocks of finished products. The typical start-of-year decrease in demand for industrial products was lower than usual. In January, measured on the basis of the initial data, the dynamics of production output, following the demand, showed not such a strong decrease compared with that of previous years. After clearing the data of seasonality, on balance, the changes in output in January even became positive.

[1] The index is based on the arithmetic mean value of balances (different answers) of four questions from the IEP's monthly business questionnaire:
1. Actual change in demand, balance = % growth – % decrease.
2. Evaluation of demand, the difference of evaluations = % above the norm + % norm – % below the norm.
3. Evaluation of the stocks of finished products, balance = % above the norm – % below the norm, the opposite sign.
4. Plans to change output, balance = % growth – % decrease.

The balances of the 1st and 4th questions are cleared of seasonal and calendar factors. The index may vary from –100 points to +100 points. Positive values of the index mean that positive evaluations prevail. Negative values of the index mean that negative evaluations prevail. A decrease in the value of the index means a worsening of the situation, while growth in the value of the index means an improvement in the situation.

However, pessimistic forecasts of the demand, output, prices and investment indicated that the enterprises were uncertain of early and steady industrial growth. The demand and output forecasts did not manage to reach the usual beginning-of-year positive level. Therefore investment plans remained at the post-crisis minimum level which was established as early as August 2013.

Indeed, the following months showed that the recovery of the operational mode of Russian industry in the beginning of 2014 was carried out with difficulty and this did not bode well for the formation of new positive trends. The more intense than usual decline in demand caused a deceleration of output, while retaining normal levels of surplus stocks of finished products. As a result, the evaluations of unsatisfactory current demand continued to prevail. But such a predominance was relatively small, stable and, on the whole, better than in the previous year. Companies were therefore not inclined to give sharply negative assessments of the situation at the beginning of 2014.

However, at that time the enterprises could only increase their prices with extreme caution, and forecast only modest growth for the future (*Fig. 20*). The growth of the actual prices in January and February 2014 turned out to be the most moderate within the period of 2009–2014, with the natural exception of the beginning of 2011, when an increase in insurance premium rates pushed companies into the most rapid rate of increase in prices at the beginning of a year in the period since 1995 (!). According to detailed analysis, almost all of the momentum of the price increases at the beginning of 2014 fell on government enterprises.

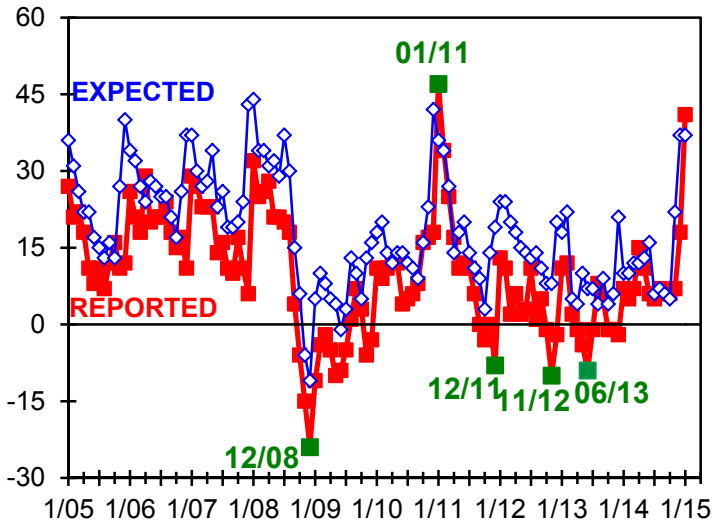


Fig. 20. Changes in selling prices (balance = %growth - %decrease)

The situation is similar with regard to price forecasts. The spike in this index was registered by the surveys only in December 2013, after which the projected price growth rate returned to the band it had occupied in March-November 2013. In previous years the enterprises retained high price forecasts during the first two to three months of each year. The government sector of Russian industry retained its leadership with regard to the price expectations of January-February 2014.

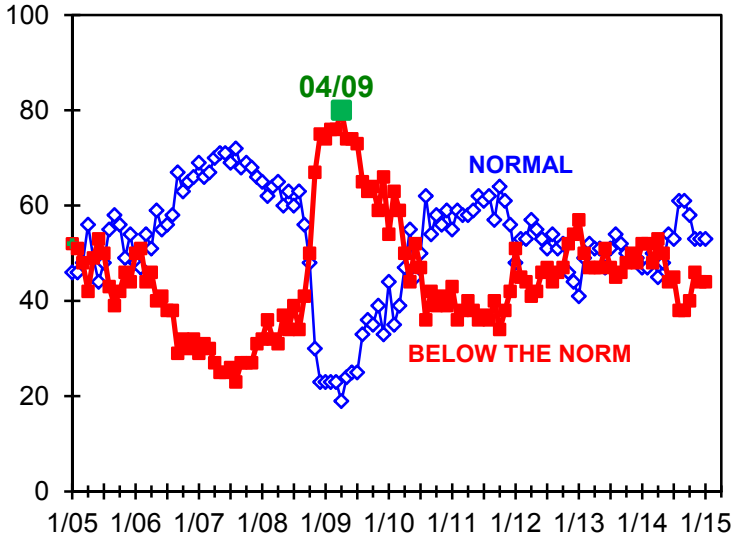


Fig. 21. Dynamics of the main evaluations of solvent demand

The end of Q1 did not demonstrate any fundamental changes in comparison with the first months in respect of demand, output, employment or the investment dynamics of Russian industry. The recovery of demand, which finally started, received adequate evaluation on the part of companies with, for the first time in 2014, the proportion of "normal" evaluations exceeding (although minimally) the "below the norm" evaluations *(Fig. 21)*. Industry demonstrated once again its high adaptive capacity under the conditions of the current complex situation and uncertainty, which has increased due to the Ukrainian crisis. The modest volumes of surplus stocks of finished products confirm this point of view (*Fig. 22*). Nevertheless, it is completely understandable that the enterprises have decided to continue their investment pause. The balance of investment intentions remained in the negative zone, i. e. the answers in respect of planned decreases prevailed over those on possible investment growth. However, the actual deceleration of investment and the pessimism of their plans were perceived as quite normal by the majority of Russian industrial enterprises under the conditions of protracted stagnation and the total absence of observable prospects of any exit from such a situation. Only 37% of them considered the volumes of their actual investments in Q1 2014 to be "below the norm".

In March the prices set by the enterprises started to give in to inflationary pressure. Industry was forced to maintain a relatively high price growth rate, although during the last two years the balance by the end of Q1 had already lost its high January rate and tended towards zero. In 2014, under the conditions of pressure on the ruble exchange rate and the strengthening of inflationary processes, companies were forced to change their price policies even to the detriment of sales. Increases in costs to companies also influenced their changes in pricing policy. According to the surveys, the rate of growth in production costs increased in late 2013- early 2014 and reached its highest level since the beginning of 2011.

The terms of lending to the industry, despite the efforts made by the Central Bank of the Russian Federation, in Q1 2014 did not undergo any visible changes. According to the assessments made by the enterprises, the summary credit availability remained at a level of 70%, still within the band in which it had been resting for the previous 4 (four!) years. Neither

was there a change in the average minimum ruble credit rate, offered by banks. It amounted to 12.5% per annum, remaining unchanged for the fourth consecutive month.

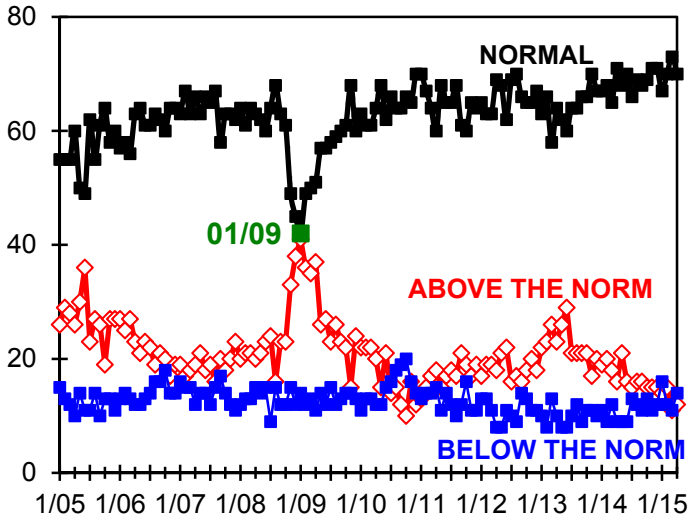


Fig. 22. Dynamic estimates of stocks of finished products, %

The beginning of Q2 turned out to be a difficult period for the industry. The actual changes in demand and output had negative dynamics, and their forecasts did not promise any improvement in the situation. The initial data showed an absolute growth in demand in March, but it was extremely weak. According to the enterprises' evaluations, by April 2014, the Ukrainian crisis had had a heavy impact, particularly on the sales of Russian products on Ukrainian markets. All other consequences of these events are significantly behind the decrease in demand on the part of the Ukrainian consumers in terms of scale. Under these conditions, the expectations of the enterprises for future changes in demand (according to the initial data) had dropped almost to zero, although during the previous post-crisis years the April levels had remained at +10 to +17 points. Exclusion of seasonality reduced the index to the post-crisis minimum (-4 points), which had previously only been registered in the middle 2012. Neither have further production dynamics made the enterprises optimistic. During March and April the initial balance of output plans lost 30 points; cleared of seasonality, minus 6 points, and dropped to an eighteen month minimum. At the same time, industry had been forced into more intensive price growth, which was hardly likely to contribute to the stimulation of demand.

However, in May the situation improved for Russian industry. The initial data on demand did not show the traditional holiday decrease in sales compared with April (as had happened in 2013). As a result, exclusion of seasonality indicated an improvement in the demand dynamics. This situation became more promising to a slightly larger proportion of enterprises than previously: the share of the “normal” answers increased to 50% when evaluating the demand, equaling the “below the norm” percentage of answers. Similarly, production output in May 2014 did not undergo the decline typical for this month. The initial data showed that it remained at the April level, and the data, cleared of seasonality, indicated a growth in intensity, rare in the two previous years. It appears that, in May industry neither felt the recession predicted for it, nor the effects of sanctions, promised by our Western 'partners'. In fact, the

events in Ukraine tended to favour Russian industry output, both as a result of the objective departure of the Ukrainian competitors from the sales, raw materials and materials markets, and by the subjective growth of military and political patriotism under the new geopolitical conditions. A growth of optimism was also registered in the enterprise forecasts in May. As a result, all the previous losses shown by this index in March and April were won back, and the balance of the output plans returned to the normal level of expectation – which, though moderate when compared to the standards of the pre-crisis and first post-crisis years, was still very decent considering the wide-spread expectations of recession.

Business investment intentions in May improved slightly and reached -5 points. That is, plans to decrease investments still prevailed over intentions for expansion, although this predominance decreased month on month. During the first 5 months of 2014, the balance of investment intentions (*Fig. 25*) grew by 9 points after its failure, in the summer of the previous year, when it had dropped by 16 points. The industry, thus, was constantly getting rid of its investment pessimism. At the same time, the Ukrainian crisis did not have any adverse impact on the investment plans of Russian industry: only 1% of the respondents in Q2 indicated any decrease in their investments (plans) under the influence of these events.

However, the end of the first half of 2014 turned out to be unsuccessful for Russian industry. In June the actual dynamics of the majority of industry indices showed a return to the previous, less promising pathways. The June demand dynamics preserved those of May with demand changing towards a negative balance. But, while for the 'holiday' month of May this had actually appeared to be an encouraging result, for more or less normal-working June this kind of dynamic was evaluated as a deterioration of the situation when using formal clearance methods. The intensity of the drop in demand returned to that of the previous, February-April levels. However, evaluations of the June sales volumes demonstrated a growth in satisfaction with the current demand among enterprises. The proportion of the “normal” answers increased by 5 points and reached 53%, becoming the ten-month maximum of this index. Industry, thus, gave a positive assessment of the sales dynamics by the end of Q2. The rates of both output and growth in demand during June remained at the previous level of May. However, the difference in the number of working days also resulted in a decrease in the index, cleared of seasonality, by 5 points, but it still remained in the positive zone. So, output growth in June was sustained, although with lesser intensity.

According to the business evaluations bank lending terms in Q2 2014 underwent changes, both in respect of the offers and of the ability of the enterprises to service them. However they were so minor that they did not go outside the bands in which they had remained for the previous four years. In June, the average minimum rate, offered by the banks dropped to 12.6% after having reached its twelve-month maximum of 12.7% in May. Note that in February 2014 a twenty-two-month minimum of this index was registered, at 12.3%. The absolute minimum of the post-crisis monitoring of the bank rate was recorded by the enterprises in October 2011, at 11.8% per annum in rubles. On the whole, the availability of credit (taking into account all lending terms) in Q2 2014 was acceptable to 67% of the industrial enterprises. This was 3 points worse than the result for Q1, but still it did not move outside the band in which this index had remained for 4 consecutive years.

Since the end of 2013, the industry has continued to have sufficient capacity to service its current loans, and was equal to 82% of the enterprises, which had taken loans. The industry's maximum capacity to pay its debts was registered on the basis of the surveys in Q3 2013 and was equal to 87%. Note that this index has not fallen below 80% since Q2 2010.

Early in the H2 2014 the surveys showed obvious positive changes in most of the industry indices. The improvement of the dynamics of demand and estimates of the stocks of finished products caused active growth in industrial production. The initial growth rate increased by 14 points (cleared of seasonality, by 10 points) and reached its three-year maximum. The production plans of the enterprises also looked optimistic. Over three consecutive months the initial balances (increase-decrease) of the index remained constant, with a very high level of optimism: a three year maximum when cleared of seasonality. Industry, thus, not only ventured to grow its output in July, but also retained its 'appetite for risk' over the following months.

The positive dynamics of the actual output and industry plans were maintained at the beginning of H2 by fundamental changes in the structure of the limitations on industrial growth (*Fig. 23*). The July demand recorded a sharp reduction of the limitations on the demand side – domestic demand held back output growth of only 48% businesses, while in Q2 2014 this factor stood at 58%. The minimum mention of domestic demand after the 2008–2009 crisis was registered at the end of 2010 and amounted to 45%. The negative impact of competing imports was recognised in the middle of the year by 26% of the enterprises and was sustained for the second consecutive quarter at this lowered level due to the exchange rate policy carried out by the Central Bank of the Russian Federation. Correspondingly, at the end of 2013, industry reported that it had reached the historical maximum (34%) of the negative impact of imports on the output dynamics (since 1995!). Pre-default local maximum (1998) had amounted to 16%, while the pre-crisis maximum (of 2008–2009) was 31%.

There were fewer limitations of demand on the supply side. The most interesting result of July 2014 was the decrease to 29% in references to the "uncertainty of the current economic situation and its prospects", compared with 34% in April. It looks as if the negative impact of the Ukrainian crisis and the loud announcements of Western sanctions were more than successfully countered by the response measures (rhetoric) of the Russian Government. A lack of equipment (production capacity) was subsequently mentioned less and less often, which obviously contradicted the conclusions drawn by some experts on the "overheating" of Russian industry (the economy), allegedly, at that time, working at the limit of its production capacity. In the summer of 2014 Russian industry suffered more strongly (on a greater scale) from a lack of staff, than from a lack of production capacity. At least one third of businesses lacked sufficient workforce, to increase their output growth. In fact such a situation was being registered by the surveys for the previous eighteen months despite the soothing official statistics regarding the low level of unemployment. This last circumstance brings with it substantial problems for businesses.

In August 2014 a strengthening of the positive trends in Russian industry took place. The actual changes in demand retained their positive dynamics, and as a result, the reached sales volumes were particularly appreciated by manufacturers, allowing them to preserve the growth in output. The dynamics of demand and its forecasts definitely and positively influenced the assessments of the stocks of finished products. The demand balance index improved in August by three more points, with the positive changes during the summer months amounting to 12 points. As a result, the estimates of demand reached the top of the forty-month indices. Another advantage was the strengthening of the positive investment plans of industry. The balance of this index, starting from June, was positive (after a twelve-month negative period) and reached +7 points. Against the background of the positive dynamics of demand, output and the assessment of the stocks of finished products such a build-up of investment

optimism looked natural, but was not realised in official statistical reporting and was not reflected in official forecasts.

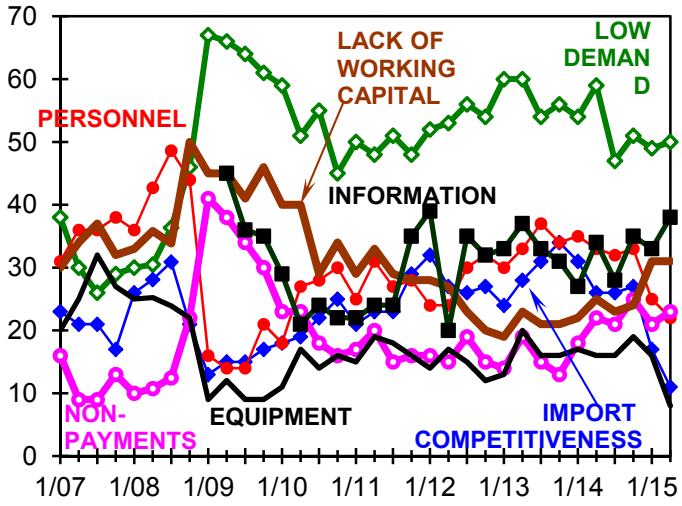


Fig. 23. Limitations of industrial growth, 2007–2015, %

The only negative trend in August was an increase in lending rates offered by the banks, by 0.5 percentage points. However, at the time this did not impact on the evaluation of credit availability by businesses.

At the end of Q3 the majority of the indices of Russian industry had remained at their previous levels. Stable demand dynamics allowed the maintenance of the previous output growth rates given the unchanged evaluations of stocks of finished products and the steady price policies of manufacturers. The moderation of price growth was also explained as a result of the success of enterprises in lowering costs. In the Q3 2014, according to evaluations by the manufacturers, the rate of growth of product costs fell to +12 points after reaching +33 points at the end of 2013, a record for the previous two and a half years. The forecasts of changes in the costs, received in 2014, suggested a further lowering of this index. In Q3 the forecasts fell to a post-default minimum. In other words, Russian industry had never planned such a moderate growth of product costs, as occurred in the second half of 2014, since July of 1998.

The demand forecasts in Q3 continued to gain in optimism, which in September reached a sixteen-month maximum. The same situation existed in respect of business output plans. Since May they had been approximately constant at a very optimistic, level, although, after a January-February rise the optimism of these evaluations is typically expected to vanish gradually and, by October-December to move into the negative zone (i. e. expectations of a decrease in output start to prevail over plans for output growth). Once cleared of seasonality the September 2014 figures showed that the optimism of the output plans had reached a three-year maximum.

It was only the terms of providing loans to the industry that upset the optimism of the Q3 evaluations. In September the industrial enterprises began to feel the deterioration in the lending terms that had been projected by the experts for a long time. Firstly, the summary credit availability fell to a four and a half year minimum and satisfaction with the proposed lending terms fell to 61%. During the previous four and a half years this index had not gone below 65%. Secondly, the average minimum rate on credits offered by the banks, exceeded 13%, a

situation which had not happened in the previous eighteen months. The tightening of the lending terms logically affected business borrowing plans. In Q3 the balance of this index fell to +8 points, which was the minimum for the whole four-year period of its being monitored. However, industry maintained a high capacity to service its existing credits. Moreover, in Q3 2014 this capacity increased up to 89%. The proportion of enterprises, capable of servicing their credits, turned out to be the highest for the whole monitoring period (since the beginning of 2009).

The beginning of Q4 was evaluated no less positively by the enterprises than the end of Q3. Good demand dynamics and successful control over the stocks of finished products allowed industry to maintain production growth in October. On the whole, the demand dynamics in 2014 showed a positive pathway which was atypical of recent years. The initial data showed the preservation of the sales change rates after January within a very narrow corridor, without the deterioration of the index at the beginning of Q4 typical of the previous post-crisis years. This fact was duly evaluated by the manufacturers: satisfaction with the demand in August-October was at the highest levels since the end of 2011.

The dynamics of industrial production (*Fig. 24*) in H2 2014 also differed for the better from the output dynamics of the previous year. The initial balance of the index (growth rate) was more stable and remained at higher levels in comparison with the corresponding periods of 2012–2013. Clearance of seasonality showed a stabilisation of the output growth rates at the level of the two-year maximum.

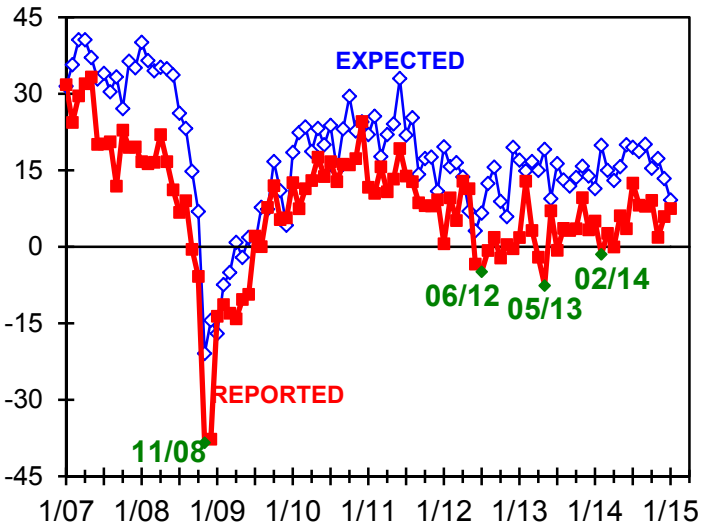


Fig. 24. Changes in production volumes, cleared of seasonality
(balance = %growth - %decrease)

The evaluation of obstacles to output growth in Russian industry allows to confirm the positive changes in the demand and output dynamics within H2 of 2014, and also allows evaluation of the actual scale of resource limitation in respect of further growth of production.

The restraining influence of the domestic demand at the beginning of H2 fell by 12 points and almost reached the post-crisis minimum. Furthermore, growth of the index in Q4 amounted only to 4 points, and as a result only half of Russian industry faced limitations on the side of demand by the end of the year (*Fig. 21*). However, inadequate demand remains the most

common obstacle to growth in the output from Russian industry. Resource limitations were mentioned by the enterprises to a much smaller extent. One third of Russian industry is fearful of increasing production due to the "uncertainty of the current economic situation and its prospects" (on *Fig. 23* this specified factor is indicated as "information"). With the developing Ukrainian crisis this factor moved to second or third position in the enterprise ratings, although before the crisis it had fallen to 5th position.

The "lack of skilled personnel" took second place in order of importance as a resource limitation (and was third in the general rating) for Russian industry. It was mentioned in Q4 2014 by 30% of the enterprises. In addition to this, during the previous 6 quarters, lack of personnel took second position in the ratings on four occasions, i.e. it was considered by the enterprises as the second most important resource limitation after inadequate demand. The third-placed factor in resource limitation for industry was the shortage of the working capital. In 2014 the deficiency of this resource was mentioned by 23% of the enterprises, which is just 2 points bigger (i. e. is worse) than the average result of 2013, when the absolute minimum of the index, amounting to 19%, was registered (for the whole period from 1993–2014). So, the tightening of the lending terms (with the loans most often being used by business precisely for financing working capital) has not significantly worsened the availability of these resources to industry as yet.

Production capacities take only fourth position among the limits on the resources necessary for industry to increase production. By the end of 2014 only 20% of industrial enterprises faced a lack of production capacity in the short term. This index value is the post-crisis maximum. In other words, even under the conditions of the greatest lack of production capacity since the beginning of 2009, the scale of the phenomenon is significantly behind that of the shortage of other resources. Even fewer problems were experienced by Russian industry with regard to raw materials and semi-finished products. Only 11% of the enterprises pointed at a shortage of these production resources, even though this index became the maximum for the previous 15 quarters.

November became the only month of the second half of the year when the enterprises did not manage to maintain positive dynamics of the main industrial indices. Negative changes in demand did not live up to expectations for the import substitution effect which had been indicated by the Government, although a positive attitude was preserved in the plans, forecasts and evaluations of the stocks of finished products. The output growth rate, which, in the previous months had been showing unexpectedly positive values, in November, moved to more expected levels. However, the plans of the enterprises did not become sharply negative. In November they lost only 4 points in respect of the initial data, which even allowed the formal methods of clearance to show an improvement in the resulting value of the output plans by 3 points and that the plans' balance had maintained its closeness to the post-crisis maximum.

By the end of 2014, a powerful inflationary wave finally reached the costs and price plans of the enterprises. In Q4 2014 the rate of growth of industrial production costs jumped by 21 points. The surveys had not registered such sharp changes in this index in any of the previous 7 years. As a result the balance of the changes in costs reached their maximum for the previous 15 quarters. The forecasts of changes in production costs were adjusted even more. After the rate of their expected growth had been registered in Q3 as the minimum for the preceding sixteen years (i.e. for the whole post-default period!), in November this rate increased by 36 points. This change in the index even surpassed the record for the end of 2010, when industry

was preparing for the increase in insurance premiums, and it was second only to the leap in cost forecasts in the post-default October of 1998.

In Q4 the investment plans of the enterprises started to lose their optimism (*Fig. 25*). In November their balance went down by 6 points, reaching a level of -11 points. So, the short period of expectation of a revival in investment activity (June-September) changed to a sharp return to the previous, extremely pessimistic investment moods of industry. That is why the decrease in the evaluations of investment plans by 18 points during these three months may serve as evidence of a further deepening of the investment crisis in Russian industry, even taking into account the import substitution, expected (planned) by the Government. However, the influence of the latter on investments is not as clear cut. If the import substitution, generated both by administrative measures, and by the exchange rate policy really does lead to an increase in demand for domestic products, this situation will put Russian manufacturers in a privileged position and allow them to use idle capacity, which under the previous conditions had been uneconomic. As a result, the incentives for companies to modernise and to extend their facilities may weaken. The unpredictability of political decisions with regard to economic sanctions also discourages investment. The problem is that if sanctions are cancelled, those Russian enterprises that had decided to invest, may once again find themselves in the same competitive market with imports. In this case they will hardly be able to achieve their planned results, since, for example, they may have previously been forced to use only affordable domestic equipment in their investment projects, due to the sanctions imposed.

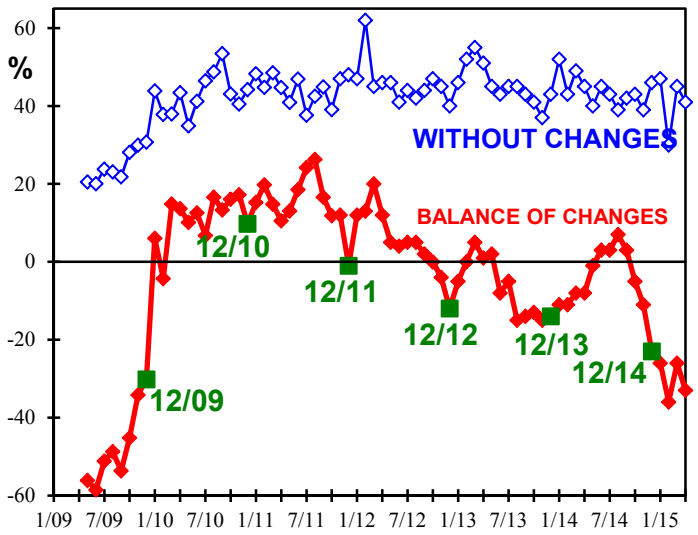


Fig. 25. Expected changes in capital investment in fixed assets in comparison with the previous year, %

Another factor in the decrease of investment activity was the further tightening of lending terms. Firstly, the average minimum rate, offered by the banks, reached 13.9% per annum (*Fig. 26*). There had not been such a high level of the ruble credit rate since the middle of 2010. Secondly, the overall evaluation of credit availability for industry also deteriorated. The perceived difficulty in obtaining credit jumped by 11 points and reached 27%. This figure represents the proportion of the industrial enterprises that considered the current credit availabil-

ity to them to be “below the norm”. Such a pessimistic evaluation of the situation with credits had not been registered by industry since the beginning of 2010.

In December, Russian industry managed to avoid a crisis recession. The initial data on the demand dynamics at the end of 2014 showed the typical growth of negative trends. The balance of changes (the growth rate) fell to -20 points, thus reaching the sort of December values common in previous years. Consequently, there was no mention by Russian industrial enterprises of anything 'crisis-like' or even of 'pre-crisis'” in the sales dynamics. Exclusion of seasonality did not provide any unusual negative signs, either. The current rates of the changes in demand turned out to be worse in comparison with the levels seen for the beginning and middle of 2014, but similar to the indices for twelve months previously. Neither did the stocks of finished products give the enterprises any cause for concern. During the whole second half of 2014 Russian industry showed the utmost care in the management of its stocks, maintaining stock levels with minimum redundancy so that the balance of evaluations (“above the norm” - “below the norm”) remained constant. On the contrary, the proportion of the “normal” responses in November-December reached its historical maximum. In such a situation a possible crisis of production would not receive any additional support through the use of accumulated stocks, and any unexpected positive scenario in 2015 would be supported by the need to replenish stocks. The output dynamics of Russian industry at the end of 2014 looked very optimistic. In December, according to the industry evaluations (based on initial data), the rate of change in production improved and surpassed the corresponding results of the previous years. Exclusion of seasonality shows an index growth of 3 points after the November decline of 7 points.

However the pricing policy, lending terms and investment plans of industry at the end of 2014 were adequate for the actions of the Central Bank of the Russian Federation. In December, Russian industry predictably and successfully realised the November price forecasts. These forecasts suggested one of the most intense increases in sales prices since the increase in Uniform Social Tax (insurance premiums) at the beginning of 2011. The rate of growth in prices during the month increased by 11 points, after having remained more or less constant over the previous six months. However enterprises had to plan for further price growth: the December forecast increased further, by 13 points, and reached a four-year maximum. Industry investment plans, on the contrary, continued to deteriorate. By December the balance of the index fell to a five-year minimum. Worse values were registered only in the crisis year 2009. So, the short period of renaissance of investment plans, as registered by the surveys of June-September 2014, changed to an even deeper decline in the index, a decline which no one expects will be overcome in 2015.

Credit lending terms for industry at the end of 2014 continued to become tougher as expected (*Fig. 26*). According to the evaluations (which did not show a 'win back' to the full extent of the rise to 17% of the key rate of the Central Bank of the Russian Federation on 16 December) credit availability in December fell to 50%, although in August 2014 this index was still equal to 67% and remained within the band which had been established for more than 4 years. The minimum rate, according to which the banks were ready to lend money to Russian industry, also increased in December. It reached 14.8% per annum in rubles, although, of course, this does not reflect the more recent changes in the credit market.

The first data on the state of Russian industry for the beginning of 2015, declared to be a crisis year, contain few signs of a crisis. The actual dynamics of demand and output, evaluation of the stocks of finished products and plans for the recruitment of workers are typical for

the month of January, and even look optimistic against the background of the (pre-) crisis panic. The latter, however, affected the forecasts of demand, output plans and investment intentions, which therefore could not reach the usual level of optimism. By contrast, the pricing policy of industry and the bank lending terms has reacted very decisively and adequately to the policy being carried out by the Government.

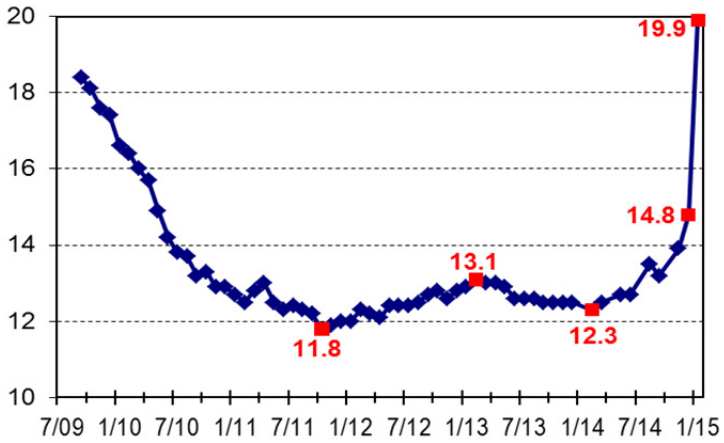


Fig. 26. Average ruble credit minimum rate, offered by banks, % per annum

4.3.2. The effect of the Ukrainian crisis on Russian industry

The Ukrainian crisis, in which Russia actively started to participate from the beginning of March of 2014, immediately provoked the first and, naturally, strong reaction on the country's stock and currency markets. The statistics for these segments of economics allow us to monitor, the behaviour of the players on, literally, a minute-by-minute basis. So, what were the moods and expectations in Russian industry? How did Ukrainian crisis affect the real economy?

To evaluate the initial reactions of the industrial enterprises to the Ukrainian crisis, from 3–5 March 2014 the Gaidar Institute conducted the first express survey among enterprise managers, using the new method, developed in recent years. The results of the survey allow us to understand how the negative scenario of the development of military and political events related to Ukraine, can affect the volumes of Russian industrial production. The middle of March was also marked by two other important events: the referendum conducted in Crimea, and the subsequent acceptance of Crimea and the city of Sevastopol as constituent members of the Russian Federation. This prompted us to conduct a repeat survey with precisely the same questions, but in a radically new situation. The two weeks, which had passed after the first survey, allowed the enterprises to evaluate more precisely the consequences of the foreign policy crisis for their own production, together with their actual actions and active probing of the positions of business partners when taking into account the massive propaganda campaigns triggered in all the participants in the conflict.

The reactions of the enterprises to these surveys themselves allows us to draw some first conclusions. Firstly, unusually large numbers of answers were received very quickly, indicating the presence of extreme tension in our society, resulting from the Ukrainian crisis. Secondly, the phrase “the negative scenario of development of the military and political events,

related to Ukraine" did not give rise to either a single objection or request for clarification, even though the respondents have the opportunity to do this and constantly use it in other situations. It appears that, in regard to this question, there is a significant similarity of attitudes across our society. Thirdly, the answers to a question having a simple definition and a style of answers familiar to our respondents, were, unusually, often accompanied by additional comments. Fourthly, the majority of answers from the enterprises were definite and without reservation. This means that the respondents had clearly formed their vision of the consequences of the above events, so this, in turn, leads to the following, meaningful conclusions:

The first (at the beginning of March) evaluations, made by the enterprises, were almost equally divided between the two variants: "there will not be any significant influence" (50%) and "there will be a decrease in output" (46%). So, industry initially expected a massive decrease in output due to the Ukrainian crisis. The reasons for this could be twofold. Firstly, the consumers of Russian products in Ukraine may just reduce their purchases solely as a result of internal economic problems, which would be exacerbated by the explicit and implicit participation of Russia in this crisis. Secondly, the aggravation of Russian-Ukrainian relations may lead to frequent border closures, increased political risks for Russian suppliers and their refusal to ship their products. Although Russia, by contrast, called for the preservation of economic ties and tried to revive economic cooperation with separate regions of Ukraine, the comments made by the companies indicated that, in the first stage of the crisis, Russian industry was evaluating mostly the direct consequences of the decrease in demand on the part of Ukraine in the case of the developing negative scenario of events. More long-term and indirect production losses, resulting from the deceleration of business activity within the Russian economy could not be efficiently and adequately evaluated at that time.

The actual development of the crisis changed the expectations of Russian industry. Among the enterprises questioned in the middle of March, there were fewer forecasts of the restraining effect of the negative development of the crisis on production volumes. While, in the first survey, 46% of the enterprises made such forecasts, this number then dropped to 37%, and the proportion of the "there will be no significant influence" answers increased to 57%, with the forecasts of a positive influence reaching 7% (4% in the first survey). So, industries started to evaluate the impact of the Ukrainian crisis on their own output less pessimistically.

A detailed comparison of the results of these two surveys at a micro-level (this was possible, since almost precisely same enterprises took part in both surveys) showed that nearly 80% of the participants preserved their forecasts of the impact of a negative development of the crisis on industrial production volumes, while 17% reconsidered that the effect would be for the better, and 3% indicated that it would be worse.

The results of the two surveys showed the highest expectations of negative changes to be for ferrous metallurgy, while, in the space of these two weeks, chemical production and mechanical engineering had reconsidered their forecasts to show improvements although they were still in the forefront of those expecting a decrease in output. In light industry 30% of enterprises also expected a decrease in production. It looks as if the public statements of our Western partners, about the targeting of the sanctions, have had an impact on Russian industry evaluations of their consequences. While, in the first survey, the Government industrial sector expected a fairly moderate influence of the Ukrainian crisis on its output, in the second survey such fears among the "state-owned plants" were particularly prevalent.

Summing up the results of these two express surveys of industry managers in relation to the influence of the negative development scenario of the Ukrainian crisis on the output of

Russian, we can come to the following conclusions: Firstly, according to the forecasts made by the enterprises, the escalation of the crisis will have a significant influence on Russian industry, and in most cases it will be negative. Secondly, different branches of industry will suffer to different extents because of the crisis. Thirdly, the characteristics of the nation building events in modern Ukraine, the perceived bourgeois spinelessness of our 'Western partners' and the decisiveness of the Russian Government have allowed the enterprises to reduce the pessimism of their initial forecasts.

To evaluate the full range (rather than just the output volumes) of the actual (and unexpected) consequences of the Ukrainian crisis, we conducted three additional surveys among the enterprises: in Q2, Q3 and Q4 2014.

In April we introduced a new question for the enterprises on the actual consequences of the Ukrainian crisis for industry in respect of a much broader set of considerations. In July and October this question was repeated. The results provided an evaluation of the actual economic consequences of the crisis for Russian industrial enterprises in these three quarters of 2014.

According to the surveys, the majority of enterprises are still not feeling any consequences of this crisis on their activity (*Fig. 27*). The proportion of the "there are no significant consequences" answers confidently takes first position. However, at the end of 2014 the level of the sentiment regarding the "insignificance" of the Ukrainian crisis essentially fell from two thirds to a half. It appears that the protracted nature of this conflict and the efforts made by its participants (despite these efforts sometimes being very half-hearted and selective) did their job – almost half of Russian industry had started, finally, to feel its consequences.

The greatest actual influence of the Ukrainian crisis on Russian industry in 2014 consisted of a decrease in demand on the part of Ukrainian consumers. The topmost placing of this factor is totally logical, since the economy of our neighbouring state is going through an extremely difficult situation with uncertain prospects. But another aspect is surprising: during the period following the first measurement, the evaluation of the decrease in demand only rose by 5 percentage points, despite the evident aggravation of the military, political and economic situation.

The only problem, the scale of influence of which significantly increased during the three monitoring waves, was the delivery of raw materials, other materials and component parts from Ukraine. It appears that the political will of Kiev influenced this situation under the conditions of the expanding conflict, by stopping the deliveries of goods, critically important for Russian industry. It is far less likely to suspect that the Ukrainian manufacturers themselves had voluntarily refused to sell their products in Russia. However, since August 2014 the Russian side has also started to use administrative limitations with regard to the import of Ukrainian manufacturers' products.

As a result, by the end of the year, the decrease in output due to the Ukrainian crisis was marked for only 9% of Russian industrial enterprises. This result is higher than the evaluations made in Q2 and Q3, but it still remains extremely insignificant, taking into account the growing tension and the public activity of the participants in the conflict. We can add to this negativity the equally insignificant decrease in demand on the part of other Russian enterprises, suffering from decreased sales to Ukraine.

Although Russian industry has received some advantages as a result of this crisis, and the scales of these increased by the end of the year, they still remain insignificant. Only 11% of Russian manufacturers had felt the effects of the departure of their Ukrainian competitors

from the joint sales markets, and only 6% noticed their departure from the markets for raw materials and other materials.

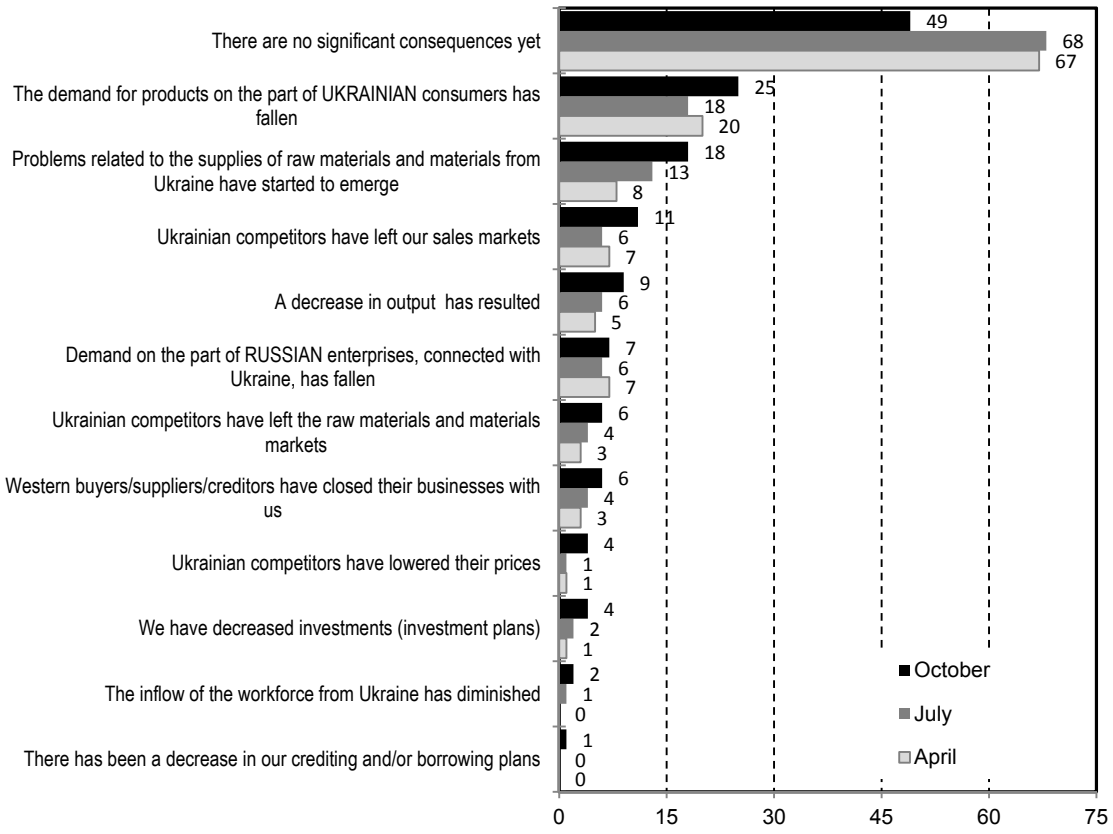


Fig. 27. Actual consequences of the Ukrainian crisis for Russian industry, 2014, %

The sanctions constantly being announced by politicians, have been put in place by the Western partners against up to 6% of Russian industrial enterprises. However, their effects remain very insignificant and dramatically contradict the abundance of words, spoken in relation to this matter.

4.3.3. Reserves of production capacity in Russian industry

The problem of capacity utilisation by Russian industry became one of the hot topics of 2014. Almost the only results from this discussion were a) the point of view that Russian industry is working at the limit of its (possible) production capacity and b) that the measures aimed at the stimulation of demand for industrial products, are dangerous due to the growth of inflation. Let us consider the evaluations of the sufficiency / insufficiency of production capacity, made by the enterprises themselves, on the basis of a representative set of direct indices, as a result of recent data (collected in October 2014).

The results of the surveys show that, in 2014, the production capacity utilisation in Russian industry amounted on average to 66%, starting at 65% at the beginning of the year and rising to 68% in Q4. This data may be assessed in different ways, taking into account the dampened

growth of the economy. Let us evaluate the data by considering the maximum possible capacity utilisation.

Direct evaluations of the latest index show that Russian industry is ready immediately, without any further investment, to bring capacity utilisation under normal operating conditions (i. e. with all relevant maintenance and repair procedures) for the output of competitive products (i. e. manufactured products, which will be sold) up to 81–82%. The total spare capacity is thus 13–14 percentage points, i. e. the volume of industrial product output could be increased by almost 20% compared with the current level.

However in different sectors of industry the capacity reserves differ fundamentally. While the food industry reserves stand at 20 points, in light industry and forestry an increase in utilisation of only 8 and 9 points is possible. The reserves for growth are significant in ferrous metallurgy (18 percentage points), mechanical engineering (16 percentage points) and the building industry (14 percentage points).

According to direct evaluations, made by the enterprise managers (who, one must suppose, know the real possibilities of their production better than anyone), after the crisis of 2008, a lack of capacity connected with the expected changes in demand was registered for only 6–9% of enterprises (*Fig. 28*). In 2014 this index was equal to 7%. And 24% of enterprises have excess capacity (we must repeat that this is: "in relation to the expected changes in demand"). So, the balance of the evaluations turns out to be positive, and it has always been so. This was the case even in 2011, when the expectations of a return to the pre-crisis output growth rates were at a maximum. For the main, industry appears sufficiently provided with capacity for the expected industrial growth. In 2012–2014, 69% of enterprises were in this position. As a result we see, that not less than 90% of Russian industry has got at least sufficient capacity to satisfy the expected demand.

However, the expectations of the enterprises with regard to future demand may be extremely pessimistic. In other words, industry may be capable of satisfying only the decreasing volumes of demand which it is considering when evaluating its capacity. Such a suggestion is quite logical for the end of 2014, when the majority of even the official forecasts did not look too optimistic. However the direct monitoring of the enterprise forecasts shows otherwise.

Firstly, the annual balance of the demand forecasts by industry in 2014 was positive and equal to +6 points and turned out to be better, than the result achieved in 2013. However, only 13% of industrial enterprises in 2014 had predicted the decrease in demand for their products. This value is close to the post-crisis minimum of the index, which was registered in 2010 and amounted to 12%. The industry has the same low extent of pessimism in the forecasts of demand as it had at the beginning of the exit from the previous crisis. In 2014, most of industry was rather optimistic: 20% expected a growth in demand and 65% hoped to maintain its volume without any changes.

Secondly, the expectations of sales growth prevail over the forecasts of sales decreases in the demand forecasts made by those enterprises having enough production capacity to satisfy such demand. In other words, industry thinks that it has enough capacity to satisfy the growing volumes of demand. For 2010–2014, the level of capacity utilisation in the group of enterprises with sufficient volume was within the interval 69–71%. These figures may be interpreted as follows: the majority of these enterprises (namely 69%) are ready to satisfy the expected demand through the output of their products, without needing any additional investment, and that this includes increasing utilisation to a greater extent than is currently the case.

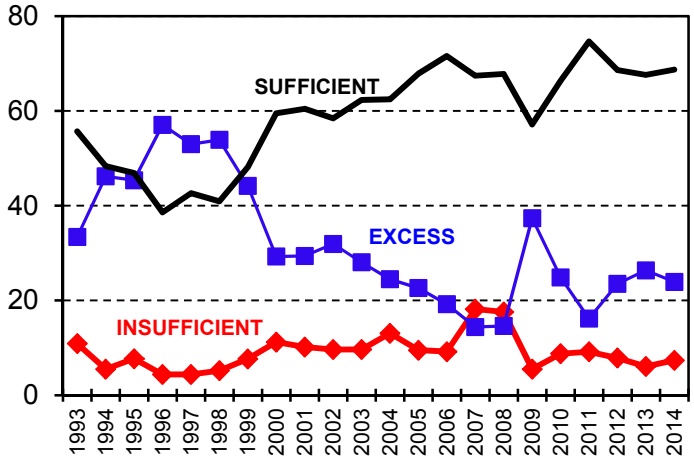


Fig. 28. Average annual evaluations of the capacity available for industrial growth, %

Thirdly, only those enterprises with excess capacity differ in their pessimism in relation to demand. This group's balance of sales forecasts was negative for 2014, i. e. their plans for a decrease in demand prevailed over their expectations for its growth, and stood at -9 points. With their excess capacity the ratio of capacity use was low and amounted to 56% in 2014. Furthermore, those enterprises with excess capacity have always shown the most moderate levels of utilisation. In the crisis year 2009, the index had fallen to 46%, but during the three following years it increased to 59%. Other groups of enterprises were not able to demonstrate such significant changes in utilisation. The reason for the increase in utilisation might, odd though it may seem, be the activation of investments in the phase of active exit from the crisis, since the companies' lack of competitiveness would be the result of the under-use of a significant part of their capacity.

Fourthly, enterprises with insufficient capacity are less represented in Russian industry. The forecasts of demand in this group are characterised, as would be expected, by their being the most optimistic. The balance of their expectations has never been negative. Even in the crisis year, 2009, it amounted to +4 points, and by 2011 had increased to +24 percentage points, i. e. it had almost reached the pre-crisis maximum (+26 percentage points). In 2014 it was equal to +16 percentage points being influenced, among other things, by the forecasts of decreasing sales.

So, after the crisis of 2008–2009 Russian industry has never worked at the limit of its production capacity. It has either had sufficient capacity for future industrial growth, or has had an excess volume of capacity. Only a very small proportion of enterprises (7%) were not able to change their capacity utilisation in response to changes in demand for their products.

One more index – the readiness of the idle capacity to be brought into competitive production – also shows the successes of industry with regard to the preparedness of its equipment for meeting possible growth in demand. According to the evaluations made in 2014, 23% of enterprises had idle capacity in the highest state of preparedness ("one has only to turn on the switch"). A year earlier such evaluations were made by only 11% of companies. The greatest successes in respect of such capacity were those registered to light industry, which during the previous year, was able to raise its share of idle capacity in the highest degree of preparedness

from 10 to 30%. By contrast the proportion of capacity requiring significant investment fell from 33 to 8%.

The proportion of capacity in the next highest degree of preparedness (use "with minimal investment") fell from 37 to 29%. A similar decrease (from 28 to 19%) also occurred with those parts of the capacity which were still able to produce competitive products, but required "significant investments". Light industry was, again, the most successful in this respect (a decrease from 33 to 8%).

The proportion of capacity beyond recovery (with which competitive products could no longer be produced even with investment) had fallen during the year from 10 to 5%. However, the results in 2013 turned out to be extremely high when seen in the context of the whole seven years of monitoring. In 2009–2012 the proportion of the capacity beyond recovery was evaluated by the enterprises as 2–3%.

On the whole, future (possible) industrial growth in Russia is better provided with production capacity, than with a sufficient workforce. Indeed, during recent years industry has seen a sustainable provision of excess capacity but a deficiency of staff (*Fig. 29*).

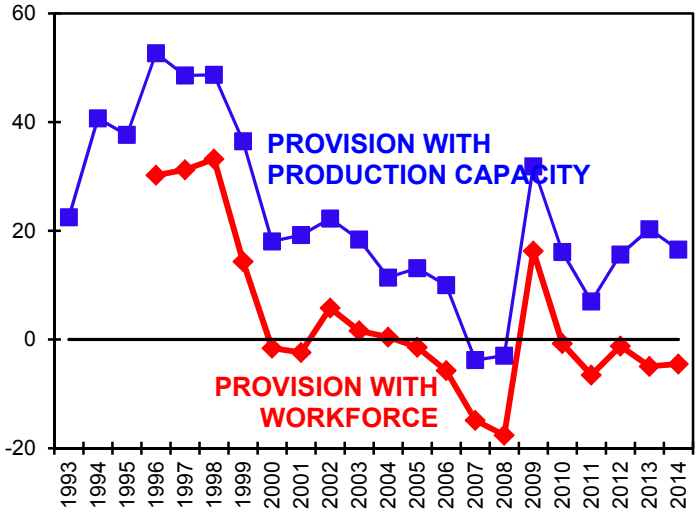


Fig. 29. Balances of provision of expected industrial growth with production capacity and workforce, %

A comparison of the evaluations of capacity and workforce at a micro-level provides detail for the previous conclusions and shows that, over the period 2009–2014, 66–73% of industrial enterprises were equally provided with these resources, i. e. the overwhelming majority. Within these enterprises the "sufficient" evaluations prevailed both with regard to capacity, and to workforce. The proportion of such enterprises in 2013 amounted to 55%. So, a little more than half of Russian industry had both enough capacity, and sufficient workforce for potential industrial growth. To this can be added another 9% of enterprises, the ones that had surpluses both of capacity and workforce, meaning that they, too, would not have any problems meeting a revival in demand.

By contrast, in 2014, 4% of enterprises suffered because of lack of both workforce and capacity, and were therefore in the most unenviable position. However, the size of this, the most problematic segment, is not large. Previously (in 2008) the proportion in this position had increased to 7% and while, in some quarters of that pre-crisis year, the index had reached 9%

this was not actually a particularly high value either, taking into account the heating up of Russian industry. But already, by 2009, the proportion of such provision (more precisely, of such lack of provision) of workforce and capacity in industry had dropped to 1%.

So, the domestic industry is now far better provided with production capacity than with an adequate workforce, meant to use its capacity in order to revitalise Russian industry and to meet the growth in demand for its products. Under such conditions which are at least evident to business, Government policy must be aimed at ensuring the availability of training and at directing the workforce to this sector of the economy by reducing, for instance, other types of 'post-school' education.

4.3.4. Industry staffing problems

The evaluations of staffing problems by Russian enterprises confirm this point of view. Firstly, the lack of sufficient industrial workforce has already been in either second or third position in the ratings of obstacles to growth in output for two years. Since the beginning of 2009, insufficient demand has ranked first.

As a result (and therefore secondly) industry has been forced to use its existing workers more intensively than its existing machinery and equipment. While “normal” + “above the norm” intensities of capacity utilisation, were registered in the middle of 2014 for 54% of enterprises, the corresponding levels for the utilisation of workers was registered for 68% of enterprises.

Thirdly, recruitment plans show that industry is still not able to solve its staffing problems. The balance of these plans, after the seasonal rise to +7 points in January of 2014 and its stabilisation in February-March at zero, then descended 'into the red' (i. e. there were more forecasts within the industry of decreases in the numbers of workers, than of their increase), though this was not so significant, as in previous years.

Fourthly, one cannot rely on a growth in labour productivity as a way of solving the staffing problems of Russian industry. No less than 60% of the enterprises surveyed after the crisis evaluated their actual productivity as normal, and in 2014 this index amounted to 66%. Thus, the evaluations of this situation by the majority of the enterprises surveyed are clearly different from the evaluations made by experts and officials. The plans announced by industry to increase productivity in Q3 2014 showed a positive balance, amounting to only +6 points, while in Q2 in stood at +15 points.

Nevertheless there is still an opinion among the experts and politicians, that enterprises, at their own initiative, are making workers redundant because of overstaffing due to stagnation, and that by doing so, they are achieving the optimal number of workers for those enterprises under the current conditions. Since the official statistics did not give a direct answer to the question about the real reasons for the dismissal of workers from Russian industrial enterprises, in 2012 the Gaidar Institute began conducting an annual monitoring of this problem, by asking direct (and sometimes unpleasant) questions of company managers. As a result, we now have three different approaches that allow us speak quite confidently about the real, rather than the official reasons for the dismissal of workers from Russian industry, and which logically supplement the multi-year monitoring of business staffing problems.

The overall assessment of the results, obtained in 2014, showed the preservation of a negative situation on the labour market for employers: the workers more often leave at their own initiative, than by being dismissed by the administration. In 2014 these proportions were respectively: 71% and 24%. In 2012 they were: 65% and 27% while in 2013 the figures were

76% and 30%. So, currently, workers are almost three times more likely to leave a company of their own volition, than as a result of 'urging' by the administration. During previous years this ratio was 2.4 and 2.5 times respectively.

Amongst the reasons for workers leaving enterprises on their own initiative, reaching retirement age continued in top position (*Fig. 30*). Of the enterprises consulted 50% indicated this as the reason in 2014. The result, obtained in 2013, was similar (54%) where this cause also took first position in the ratings, while it was only in 2012 that the voluntary retirement of workers who reached the retirement age took second position, according to the employers.

So, Russian industry has entered an era of staffing deficiency, the main (in terms of numbers) reason for which is the irreversible (in the truest sense of the word) process of aging of the workers. This problem could be solved only by training new workers in specialised secondary educational institutions. However, the Soviet system of industrial and technical education was replaced almost totally by the higher education system, and its graduates have little willingness to be employed as workers in industrial enterprises. According to the results of our monitoring, such industrial enterprises have difficulties particularly with the recruitment of skilled workers, while the demand for other categories of workers (non-skilled workers, technical and engineering employees and managers) is either absent, or easily satisfied by means of recruitment. As a result, industry is already irreversibly losing skilled workers and this cannot be stopped even by raising salaries. The reinstatement of the system of specialised secondary education, and the redirection to this system of school leavers is a long process, and our Government and industry has less and less time to perform this as a means of providing a civilised solution to the problem. However, the stagnation of the economy, under the conditions in which we have been living during recent years, has postponed the occurrence of the really tough consequences of the education policies which have been in place over the last twenty years. However this does mean that there is still some time to search for a solution to the problems.

In 2014 the largest voluntary retirements took place in the forestry industry (64% of the answers among enterprises, 2013 – 52%), the chemical industry (58% and 53% of the enterprises, respectively), mechanical engineering (56% and 45%) and light industry (53% and 51%). The metallurgical industry had probably, in the previous years, 'solved' the problems of many of its staff reaching retirement as its retirement rate has now decreased by more than a factor of two. Traditionally, the voluntary retirement of older staff, during the years over which monitoring has been conducted, has been smallest in the food industry.

Low salary levels have for the second year taken second position in the ratings for why workers leave their employment. In 2014 it was mentioned by 41% compared with 47% during the previous years. So, this reason for leaving became less prevalent in industry, although it retained its position behind leaving as a result of reaching retirement age to almost the same extent as in 2013.

The reduced prevalence of leaving due to low salaries may be linked to a growth in salaries. The quarterly monitoring showed an increase of 9 points in the proportion of "normal" evaluations by the enterprise managers for the salary sizes of workers, technical and engineering employees. As a result, 71% of industrial enterprises currently pay their workers a “normal” salary. This result represents a maximum for the whole seven-year monitoring of the index. Its minimum value was registered in April 2009, at 37%.

The main industries which had seen large numbers of workers leaving in 2013 due to low salaries, generally retained their ratings in 2014 as well. In 2014 the industries from which

most workers left due to low salaries were the building industry (56%, 2013 – 63%), the forestry industry (52%, 2013 – 64%), the food industry (47%, 2013 – 65%) and mechanical engineering (46%, 2013 – 55%). During last year the metallurgical industry managed to reduce its losses of personnel because of low salaries, while the chemical industry traditionally has the fewest problems in this area.

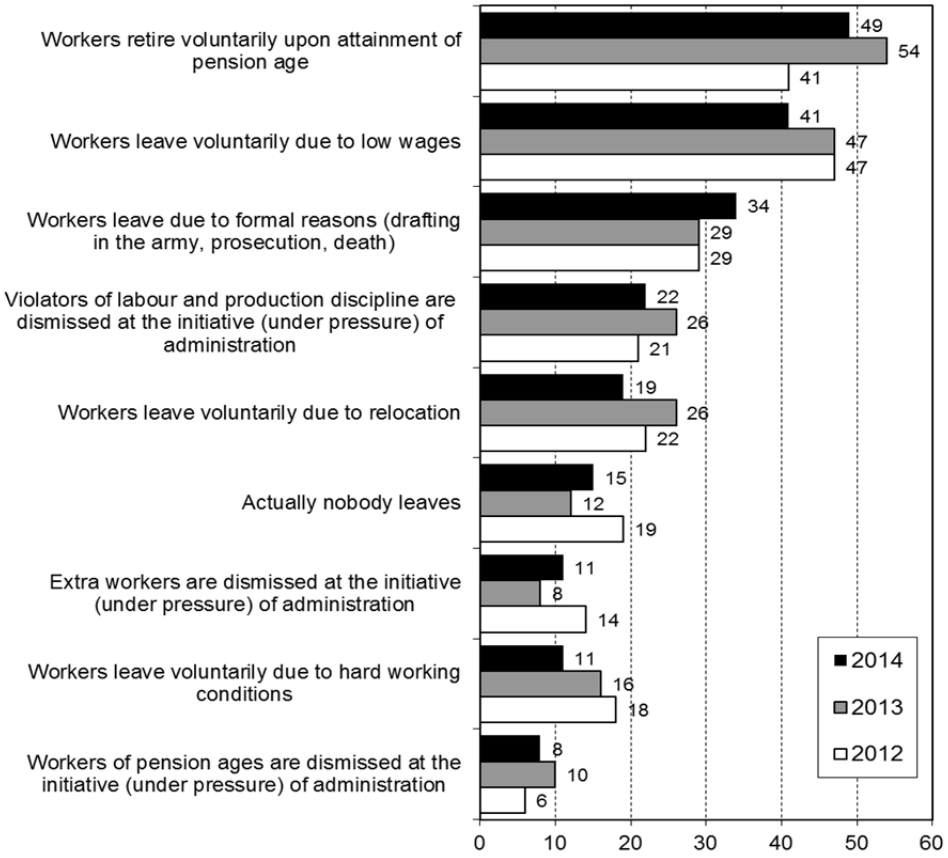


Fig. 30. Real reasons for why workers left industrial enterprises, 2012–2014, %

'Harsh working conditions' was the third reason causing workers to choose to leave their industry, as tracked during the monitoring. It consistently takes last position in the reasons rating, in 2014 being mentioned by only 11% of the enterprise managers.

Violations of labour (production) discipline remain the main (in terms of numbers) reason for the dismissal of workers by their industrial employers. In 2014 such dismissals were exercised by 22% of the enterprises, compared with 26% in 2013 and 21% – in 2012. The possibility of this reason for dismissals in 2014 was growing due to the increase of a company size, and was most prevalent in ferrous metallurgy, the food industry and forestry.

Redundancies of excess (surplus) workers are almost two times less frequent. In 2014 this approach was exercised by 12% of the enterprises surveyed, which is close to the average value over the three years of monitoring. As in the previous case, the likelihood of dismissal for this reason also increases with growth in enterprise size and is especially high in ferrous metallurgy.

The dismissal of workers because they have reached retirement age takes last position in the ratings for dismissals at the employer's initiative. On average, the monitoring showed that 8% of enterprises use this practice. Again, the possibility of such dismissal also increased with the growth of enterprise size. However such dismissals are used far less frequently in some sectors. In non-ferrous metallurgy, forestry and the building industry it is preferred not to dismiss workers simply because they have reached retirement age.

So, for Russian industrial enterprises the problem of having sufficient skilled personnel remained the most acute resourcing issue of 2014. The potential for crisis reduction in industrial production in 2015 will only be able to displace the critical aggravation a little way towards the recovery of stable economic growth, but will not solve it. Obtaining the required numbers of skilled workers for industry through the use of migrant labour, or as a result of increased domestic birth rate are either unreal, or require such a long period of time and sufficient resources from the Government that realisation of them cannot be considered to be on the foreseeable planning horizon. Increased labour productivity therefore remains the only reasonable strategy for solving the problem.

4.4. Investments in fixed assets

Last year the trend towards declining investment in fixed assets was fairly predictable being determined by the fall of investments, which had been under way since Q2 2013. According to the results of 2014, investments in fixed assets amounted to 97.5%, while the volume of completed construction works was 95.5% of that in the previous year. The proportion of investments forming the GDP in 2014 amounted to 19.1% and was thus 0.9 percentage points lower than the corresponding index in 2013.

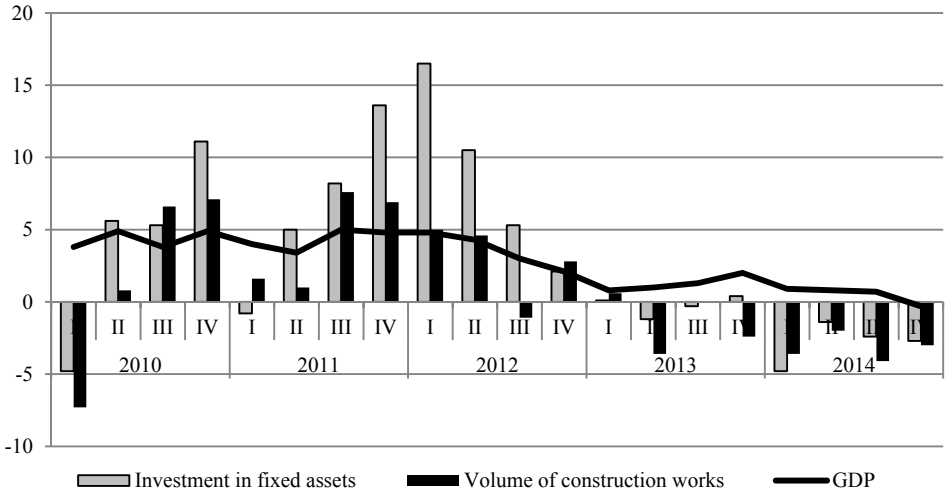
The dynamics of investment in fixed assets is differentiated for large and small enterprises. Through a reduction of the total volume of investment in fixed assets in 2014 by 2.5%, the investment in the fixed capital of large and medium-sized enterprises declined by 4.3% (*Table 11*). So, under conditions of increasing unpredictability in the development of the situation on the domestic market, big business regarded taking investment decisions with great caution. Investment by small businesses and the volumes of their investments showed positive dynamics (although not observable by direct statistical methods), and the cumulative share of these in 2014 was 27.1% of the total volume of the investments in fixed assets.

Table 11

Dynamics of the physical volume of investments in fixed assets 2009–2014, % in comparison with the previous year

	2009	2010	2011	2012	2013	2014
Investment in fixed assets (across the full range of organisations, including recalculations for investments, not observable by direct statistical methods)	84.3	106.0	108.3	106.6	99.8	97.5
Large and medium-sized organisations (investments in fixed assets not including small business entities and volumes of investments, not observable by direct statistical methods)	82.5	105.1	110.4	100.7	91.4	95.7

Source: Rosstat.



Source: Rosstat (Russian Statistics Service).

Fig. 31. Dynamics of investments in fixed assets in 2010–2014, % compared with the corresponding quarters of the previous year

The structure of investments in fixed assets by type of main funds in 2012–2014 changed due to an increase in the volumes and proportion of investments in the construction of dwellings and a reduction in the specific weight of investments in non-residential buildings and other forms of construction.

This change of investment structure between housing and industrial construction determined the features of the development of the construction and investment complex in 2014, which was reflected in a reduction in the total investment in machinery and equipment, and vehicles (*Table 12*).

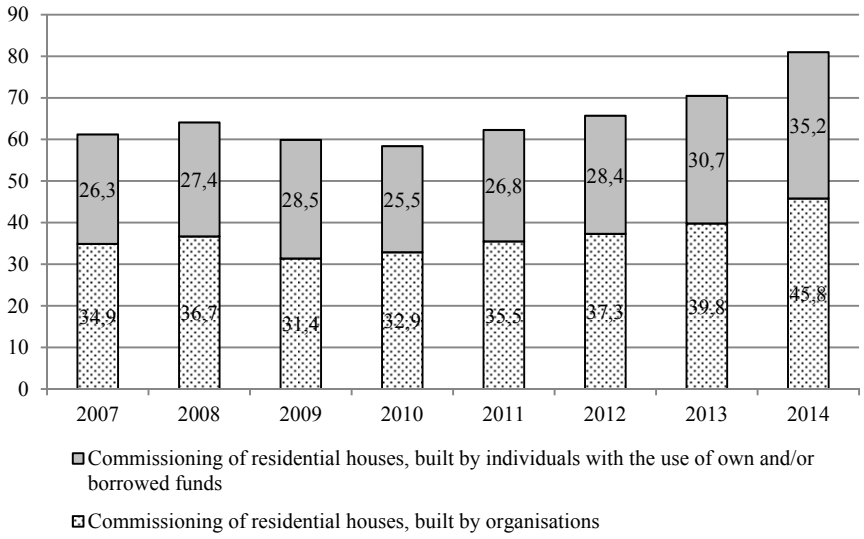
Table 12

Investments in fixed assets by type of the main funds in 2010–2014 (excluding small businesses and any parameters of informal activity)

	Rb bn					% of the total				
	2010	**2011**	**2012**	**2013**	**2014**	**2010**	**2011**	**2012**	**2013**	**2014**
Investments in fixed assets	6,625	8,445.2	8,446.2	9,493.4	9,852.91	100	100	100	100	100
Including: dwellings	384.3	396.9	439.2	550.6	642.3	5.8	4.7	5.2	6.1	6.5
buildings (except residential) and constructions	3,610.6	4,577.3	4,417.4	4,840.8	4,909.6	54.5	54.2	52.3	50.2	49.8
machinery, equipment, vehicles	2,179.6	2,896.7	3,006,8	3,366.5	3,358.5	32.9	34.3	35.6	35.1	34.1
among these:										
acquisition of domestic machinery, equipment, vehicles	1,787.3	2,357.9	2,519.7	2,825.2		27.0	27.9	29.8	29.8	
acquisition of foreign machinery, equipment, vehicles	392.3	538.8	487.1	541.3		5.9	6.4	5.8	5.7	
Other	450.5	574.3	582.8	735.5	942.5	6.8	6.8	6.9	7.7	8.6

Source: Rosstat.

Positive changes in the commissioning of the total area of residential development had been under way since H2 of 2011, and was connected with some improvements in the situation related to the financing of housing construction. In 2014, across all types of properties, a total of 81.0m sq. metres was commissioned, which was 14.9% bigger than the corresponding index of the previous year. Individual developers built 35.2m sq. metres of total residential space, which made up 43.5% of the total volume of the dwellings commissioned in 2014. (*Fig. 32*).



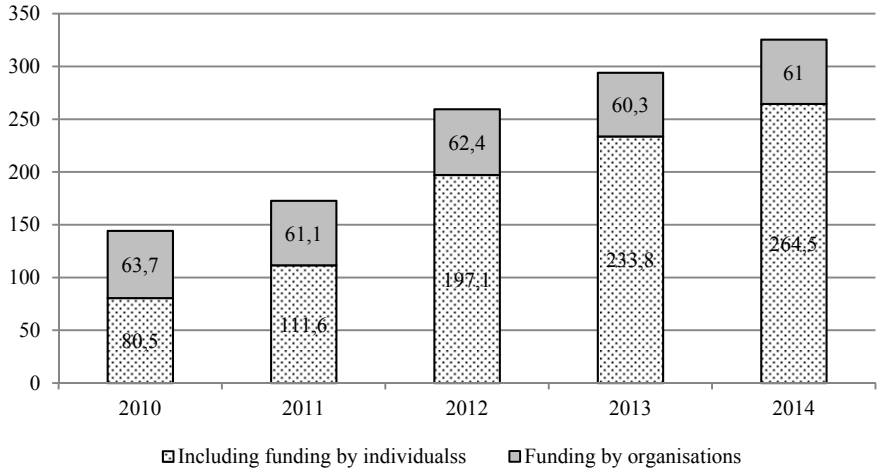
Source: Rosstat.

Fig. 32. Dynamics of commissioning of residential houses in 2007–2014, million sq. metres

Within the structure of the financing of shared housing construction we can observe an increase in the volume and proportion funding by individuals (i.e. members of the public) with a decrease in the extent of funding by organisations (*Fig. 33*). In 2014 the total of funding by private individuals amounted to 81.2% of the total volume of funding by organisations and individuals, directed at equity in construction, which was 5.3 percentage points higher than the corresponding index in 2012 when the volume of contributions had recovered to its pre-crisis level. The increase in individuals' investment activity was supported by the scale-up of lending. In 2014 mortgage loans were granted to the sum of Rb 1,806.9bn, which was 1.3 times bigger in comparison to the previous year.

The financing of investment activity in 2014 was clearly segmented. In nominal terms, the investments using enterprises' own funds increased while investment with the use of budgetary funds and bank credits fell, in comparison with 2013.

The results for 2014 indicate that the proportion of enterprises' own funds in the structure of investments in fixed assets increased to 48.1%, exceeding by 2.9 percentage points the index of the previous year (*Table 13*).



Source: Rosstat.

Fig. 33. Funding of shared housing construction according to source of finance in 2010–2014, Rb bn.

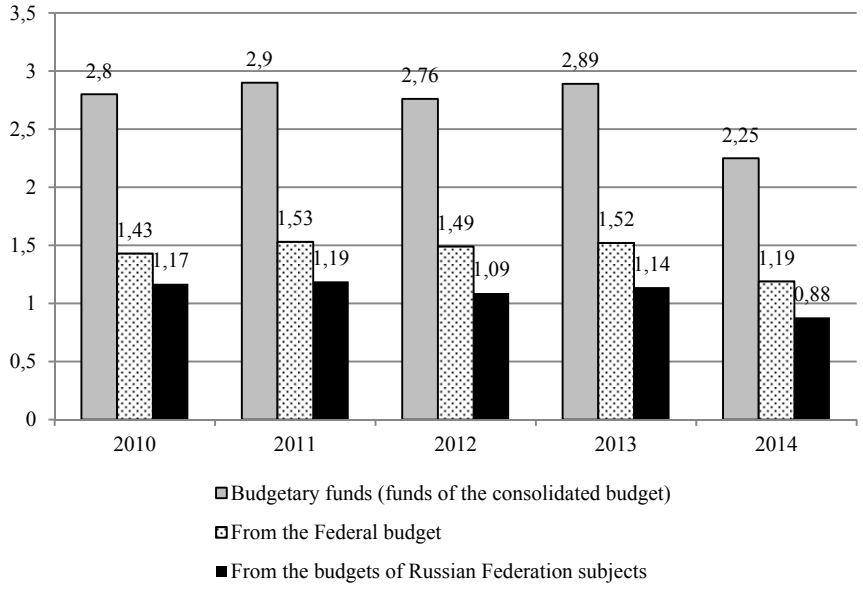
Table 13

Investments in fixed assets, by funding source 2010–2014 (excluding small businesses and investments, not observable by statistical methods)

	Rb bn					% of the total				
	2010	**2011**	**2012**	**2013**	**2014**	**2010**	**2011**	**2012**	**2013**	**2014**
Investments in fixed assets	6,625	8,445.2	9,595.7	10,047.5	9,852.9	100	100	100	100	100
Including by funding source:										
own funds	2,715	3,539.5	4,274,6	4,548.5	4,736.7	41.0	41.9	44.5	45.2	48.1
raised funds	3,910	4,905.7	5,321.1	5,499	5,116.2	59.0	58.1	55.5	54.8	54.8
Including:										
bank credits	595.8	725.7	806.3	1,000.9	918	9,0	8.6	8.4	10.0	93
among them the credit granted by foreign banks	150.0	149.4	113.7	107.4	108.5	2.3	1.8	1.2	1.1	1.1
borrowed funds of other organisations	404.7	485.8	588.2	625.1	632.6	6.1	5.8	6.1	6.2	6.4
investments from abroad				78.8	83.6				0.8	0.9
budgetary funds	1,294.9	1,622	1,712.9	1,909.7	1,598.3	19.5	19.2	17.9	19.0	16.2
from the Federal budget	661.9	855,1	926.6	1004.8	846.5	10.0	10.1	9.7	10.0	8.6
from the budgets of the constituent subjects of the Russian Federation	542.8	665.7	677	752.1	622.9	8.2	7.9	7.1	7.5	6.3
from local budgets			109.3	152.8	128.9			1.1	1.5	1.3
resources of extra-budgetary funds	21	18.2	33.3	27.9	20.9	0.3	0.2	0.4	0.3	0.2
funds of organisations and individuals, raised for shared construction	144.2	172.7	259.5	294.1	325.5	2.2	2.0	2.7	2.9	3.3
including individuals' own funds	80.5	111.6	197.1	233.8	264.5	1.2	1.3	2.1	2.3	2.7
other	1,449.4	1,881.3	1,920.9	1,562,5	1,537.3	21.9	22.3	20.0	15.6	15.6
funds of higher level organisations	1,161.8	1,604.0	1,611.3	1,192.1	1,248.4	18.0	19.0	16.8	13.0	12.7
funds received from the issue of corporate bonds	0.9	0.4	4.2	8.6	7.1	0.01	0.01	0.04	0.0.2	0.1
funds received from share issues	72.4	82.0	95.6	98.3	84.7	1.4	1.0	1.0	1.0	0.9

Source: Rosstat.

The proportions of budgetary funds changed within the structure of the borrowed funding used for financing investments in fixed assets. In 2014, Rb 1,598.3bn of investment in fixed assets was financed using budgetary funds, which amounted to 16.2% of the total volume of investment in the economy. In comparison with the year 2013, the volume of financing of investments in fixed assets using budgetary funds had therefore fallen by Rb 311.4bn, with approximately equal participation of the funds, received from the Federal budget and other budget sources (*Fig. 34*). The share of state investments in 2014 amounted to 2.25% of GDP, having fallen by 0.74 percentage compared with 2013.



Source: Rosstat.

Fig. 34. Share of budgetary funds in investments in fixed assets in 2010–2014, as % of GDP

In accordance with the Federal Targeted Investment Programme for 2014 (as revised on 1 January 2015) provisions, in the amount of Rb 596.70bn, including Rb 575.01bn from the Federal budget, were made available. In 2014, using annual limit, provisions in the amount of Rb 413.3bn (71.9%) from the Federal budget, and Rb 12.9bn from the budgets of the Federation subjects, were made available. The actual use of funds from all sources of finance amounted to Rb 369.7bn, or 62.0% of the volume of the funds, available for the year, from all sources.

Altogether, in 2014 2,476 construction sites, facilities and events were financed. According to Rosstat data, in 2014 207 objects were actually commissioned out of the 826 objects which it had been, planned to commission. One of the main reasons for delays in commissioning remains the late elimination of restrictions on financing by the main budgetary fund managers.

In 2014, the structure of investments in fixed assets by type of ownership underwent changes due to the influence of a reduction in investment by the state and state-owned corporations. In 2014, the aggregate share from organisations with these types of ownership was

equal to 20.7% of the total volume of investments in fixed assets (in the previous year this index was 24.3%).

The main factor, impeding the development of negative tendencies in the construction and investment complex, remained the increase in the absolute volumes and proportions of private investments, as well as the investments, made by organisations and enterprises of mixed, foreign and joint (Russian and foreign) ownership, in the structure of investments in fixed assets.

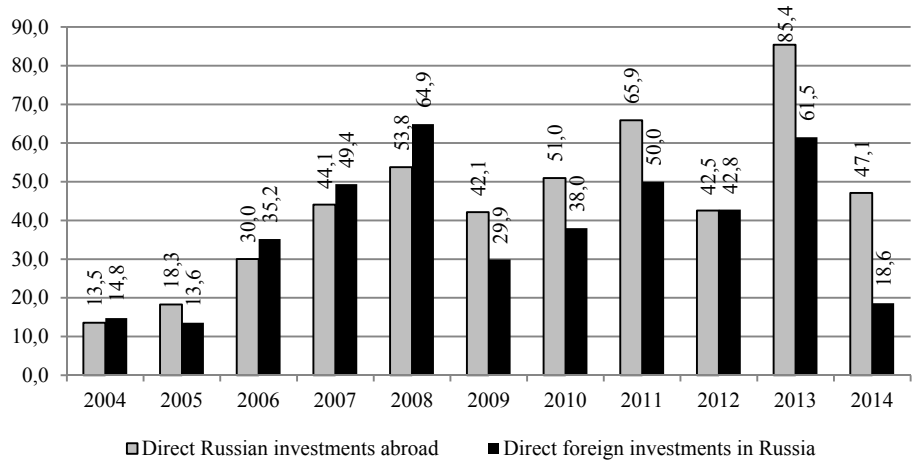
With the reduction in volume of the state funding of investments in fixed assets in 2014, the participation of the banking sector notably weakened. In 2014 the proportion of bank credits in the structure of funding sources amounted to 9.3%, compared with 10% in the previous year. The changes in the bank lending structure in 2011–2013 were defined by an increase in the volume and proportion of the credits granted by Russian banks, which replaced credits with foreign banks. In 2014 the absolute reduction of bank lending in comparison to that of 2013, was connected with a Rb 83.5bn decrease in lending by Russian banks.

It is worth noting, that in 2014 the volume of funds, aimed at investments using credits with foreign banks, increased by Rb 1.1bn compared with the previous year, however this did not compensate for the contraction of foreign credits, which took place in 2013. In 2014 the credits, granted by foreign banks, remained below their level in 2010 by almost 28%.

The reaction of foreign investors to the change in the geopolitical situation was a sharp reduction of the scales of investment in the Russian economy. The investments, received from abroad in 2014, amounted to Rb 83.6bn, and their share was equal to just 0.9% of the total volume of investments in fixed assets.

The financing of investment programmes was adversely affected by a strengthening of the tendency towards capital outflow, amounting to $151.5bn (in 2013 this index amounted to $61.6bn).

Foreign direct investment in the non-financial sector of Russian enterprises in 2014 decreased 3.3 times compared with that in 2013 and amounted to 62% of the index in the crisis year, 2009. Russian investments abroad in 2014 fell in comparison to 2013, after reaching a maximum during the period 2009–2014. So, in the period 2009–2014 the non-financial corporation sector was a net exporter of capital (*Fig. 35*).



Source: the Central Bank of the Russian Federation.

Fig. 35. Direct foreign investments in the Russian economy and Russian investments abroad by non-financial enterprises in 2004–2014, $bn.

The share of investment, using the funds from parent organisations in the structure of financing sources fell to 12.7% (in 2012 this index was 19.0%). In Russian practice, the funds of parent organisations are mostly represented by large holdings, joint-stock companies and financial and industrial groups with state participation. The weakening of the activity of these institutional investors during 2013–2014 had an extremely negative impact on the overall dynamics of investments in fixed assets.

In 2014, the own funds of enterprises and organisations remained the main source of finance for investments in fixed assets. It is worth noting that, in a situation of increasing risk and a general trend towards a decrease in income, enterprises behaved in a rather reserved fashion towards any investment in production.

In 2014, the changes in the structure of investments in fixed assets in relation to type of economic activity were defined by a stabilisation of the construction and investment activity of industry and by an increase of activity in pipeline transport, the cumulative share of which amounted to almost half of the total investment in the economy. The volume of investment in pipeline transport amounted to 104.7% when compared with the corresponding index in 2013, and was the result of a continuation of existing investment projects. It is worth mentioning, that the current structure of investment in transport is increasing the risks of a growing disparity between the development of different types of transport. Over the last four years investment in rail transport has been diminishing, which, in the medium term, may lead both to limitations of the overall transit potential, and have an impact on the development of logistics services (*Table 14*).

Table 14

Investments in fixed assets (excluding small businesses and volumes of investment, not observable by direct statistical methods), % in comparison with the previous year

	2010	2011	2012	2013	2014
Total	106.0	108.3	106.6	99.8	95.7
agriculture	89.1	114.6	92.8	96.0	93.0
fishery, fish-farming	108.8	137.4	127.4	77.4	83.3
industry	106.1	110.9	107.4	96.8	99.9
extraction of commercial minerals	106.6	113.8	111.8	93.6	105.9
manufacturing industries	101.5	105.3	106.7	101.4	98.6
production and distribution of electricity, gas and water	112.5	114.7	101.7	95.8	92.9
construction	110.9	90.6	79.9	84.0	81.2
wholesale and retail trade	120.2	90.0	107.1	103.1	110.7
hotels and restaurants					108.4
transport and communications	102.4	118.3	98.4	88.5	92.1
financial activity	112.9	136.8	111.4	80.8	74.9
real estate operations	125.4	91.9	100.8	104.4	103.1
state administration	115.2	112.4	98.7	93.7	84.4
education	84.9	122.0	85.2	77.9	97.4
healthcare and provision of social services	109.7	113.0	93.6	98.8	71.9
provision of other services	103.6	103.5	111.8	75.0	72.7

Source: Rosstat.

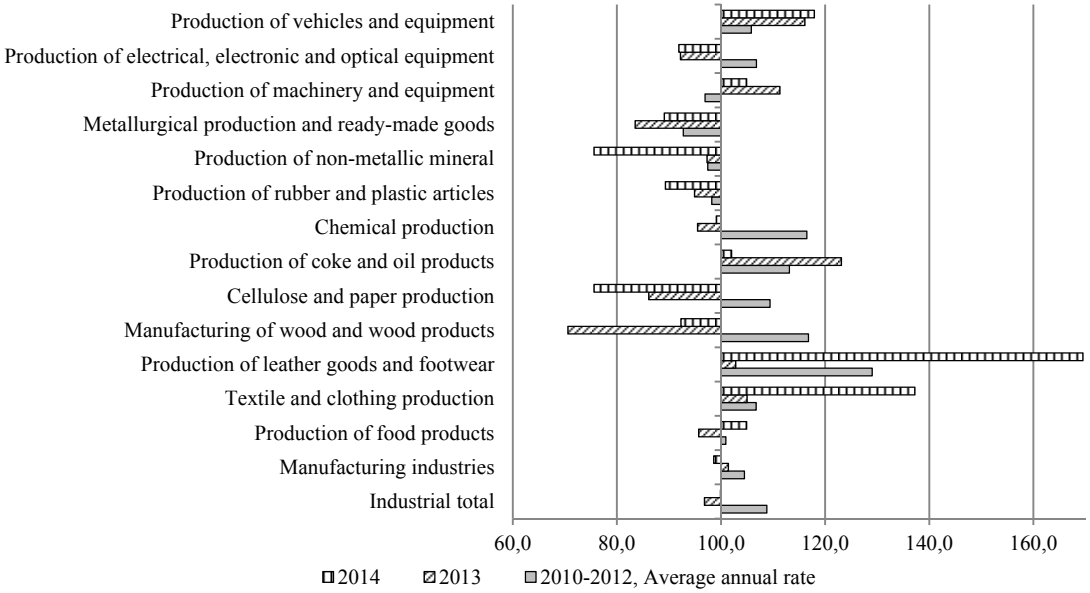
In 2014, investment in fixed assets in industry by physical volume remained approximately at the level of the previous year. However, in the same year the structure of the investments in fixed assets in industry underwent changes due to the influence of an upsurge in investment activity in the field of fossil fuel extraction. This upsurge compensated for its failure in the previous year and allowed a stabilisation of the situation in this type of economic activity.

Investments in fixed assets for the production and distribution of electricity, gas and water fell by 7.1% in comparison with 2013. A notable feature of 2014 was the suspension of the positive dynamics of investment in fixed assets in the manufacturing industry, which had been observed over the previous four years.

In 2014 investments in fixed assets in the field of vehicle production (117.9%), the production of coke and oil products (102.0%) – the cumulative share of which amounted to more than 40% of the investments in the fixed assets of manufacturing – were growing at a faster pace than the overall average. At the same time it is worth mentioning, that the investment activity in these branches of economic activity was accompanied by a simultaneous increase of investment activity on the part of associated industries of the machine building complex, producing capital goods. In 2014 investment in the production of machinery and equipment amounted to 104.9%. Investment in the production of electrical equipment, electrical and optical equipment over the previous six years had been subject to fairly substantial fluctuations, and, although, this type of economic activity in investment in fixed assets exceeded the pre-crisis level of 2008, the reduction in activity in 2013–2014 does not provide sufficient grounds for any positive forecasts in the short term.

With the tendency towards an overall reduction in the volume of investment in fixed assets, which has become established in the last three years, a decline has been registered for investments in the development of industries associated with metallurgy (89.1% in comparison with the same index in 2013) and those industries producing constructional materials (75.6%).

In 2014 the tendency for an increase in investment activity in the consumer complex was preserved, being connected with an active involvement in the production of competitive capacity and the activation of import substitution. In the food products industry the increment of investments in comparison with the previous year amounted to 4.9%, while, in textile and clothing production it was 37.2%, and in leather and footwear production, 69.5% (*Fig. 36*).



Source: Rosstat.

Fig. 36. Dynamics of investment by type of activity in manufacturing industries in 2010–2014, % in comparison with the previous year

In 2013–2014 the main factors, restraining the investment activity of organisations, were insufficient demand for products and high interest rates, as well as uncertainty over the economic situation. In 2015 it is expected, that the predicted decline of investment in fixed assets will make the largest contribution to the rate of decrease of economic growth.

4.5. Oil and Gas Sector

Oil and gas industry remains the basic sector of Russian economy playing the key role in shaping revenues of the state budget and the country's trade balance. In 2014 the national crude oil output reached its maximum over the period since 1990. In the second half of the year the sector's performance felt a negative impact of the lowering world prices for oil and the financial and technological sanctions introduced against Russia. Legislative acts providing for tax incentives in order to encourage the development of hard-to-recover oil reserves and for the differentiated taxation of natural gas production have come into effect and the principal decisions regarding restructuring of the system of oil sector's taxation have been taken.

4.5.1. Dynamics of the World Oil and Gas Prices

In the first half of 2014 the situation on the global oil market was characterized by the persistence of high world prices for oil observed all through the recent years (*Table 15, Fig. 37*). The basic factors shaping such prices were a noticeable strengthening of demand for oil due to the world economic growth (first of all, in China and other Asian countries) and the conservative policy of OPEC as regards the increase of oil production by countries – members of the organization. However, in the second half of the year the situation changed dramatically: the continuing growth of global oil production combined with relatively weak demand led to the remarkable drop of the world prices for oil. In 2014 the global oil output was up 2.1% primarily due to the growing production in the US that was conditioned by the development of shale oil deposits. Meantime, the increase of the global demand for oil was as small as 0.7% (*Table 16*). As a result of the notable excess of oil supply over demand the price for Brent crude oil fell from $111.9 per barrel in June 2014 down to $62.2 per barrel in December. However, OPEC did not take any steps to reduce production of oil in order to balance the global oil market: it chose to leave unchanged the earlier established output quota thus prioritizing the preservation of its market share. As a result in 2014 the price for Russian Urals crude oil on the world (European) market averaged $97.7 per barrel, or fell by 9.3% as compared with the previous year. It hit the bottom in December when the price for Russian oil dropped down to $61.1 per barrel.

Table 15

World prices for oil in 2000–2014, $/barrel

	2000	2005	2010	2011	2012	2013
Price for Brent crude oil, Great Britain	28.5	54.4	79.6	111.0	112.0	108.8
Price for Urals crude oil, Russia	26.6	50.8	78.3	109.1	110.3	107.7

Table 15 (continued)

	2014 IQ	2014 IIQ	2014 IIIQ	2014 IVQ	2014
Price for Brent crude oil, Great Britain	107.9	109.8	102.1	76.0	98.9
Price for Urals crude oil, Russia	106.5	107.7	101.2	75.3	97.7

Source: IMF, OECD/IEA.

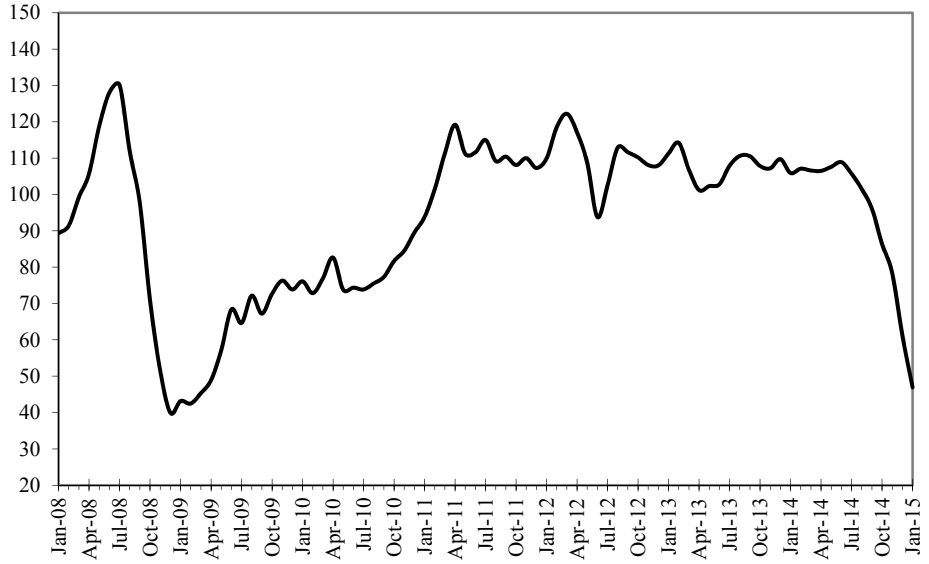
Table 16

World demand for oil in 2010–2014, as % of the previous year

	2010	2011	2012	2013	2014
World, total	3.1	0.9	1.2	1.4	0.7
OECD countries	1.3	–0.8	–1.1	0.4	–1.1
including: North America	2.0	–0.3	–1.7	2.1	0.0
Europe	–0.3	–2.3	–3.2	–0.9	–1.9
Non-OECD countries	5.2	3.0	3.6	2.4	2.4
including: Asia (except for countries of the Middle East and former USSR)	7.9	3.2	4.0	2.5	2.5

Source: OECD/IEA.

The price for Russian natural gas on the European market also displayed a downward trend. The prices for gas supplied under long-term contracts are usually tied to prices for petroleum products and with a certain lag follow the world prices for oil (*Table 17*). Moreover, in recent years prices for Russian gas were also pulled down by the changing situation on the European gas market, i.e. the growing competitive supply from other gas producing countries and lower spot prices for gas as compared with prices under long-term contracts. All this has forced "Gazprom" to bring down its sale prices for gas on the European market.



Source: Ministry of Economic Development of the Russian Federation.

Fig. 37. Price for Urals crude oil in 2008–2014, $/barrel

Table 17

World prices for oil and natural gas in 2005–2014

	2005	2010	2011	2012	2013	2014
Average world price for oil, $/barrel	53.4	79.0	104.0	105.0	104.1	96.2
Price for Russian gas on the European market, $/1,000 m^3	212.9	296.0	381.5	431.3	402.0	376.0

Source: IMF, Rosstat.

4.5.2. Dynamics and Structure of Production in the Oil and Gas Sector

In 2014 the output of oil in Russia reached 526.7 million tons which is the maximum level over the period since 1990 (*Table 18*). A positive effect on the dynamics of oil recovery was produced by the recent putting in operation of several large new fields in Eastern Siberia and the changes in taxation system that stimulate the development of new production regions and better oil recovery at the functioning fields. At the same time the growth rates of oil production in recent years have been notably falling (*Table 19*) primarily due to the worsening of recovery conditions. A great share of operating fields have entered the stage of declining output while new fields in most cases have worse mining, geological and geographic parameters and their development requires higher capital, operational and transport expenditures. At the moment Russian oil industry has approached the ceiling of its production capacities. To make up for the declining production of oil at the operating fields, one has to develop both new fields in regions with poorly developed or lacking infrastructure and idle reserves of lower quality oil in the developed regions.

Table 18

Oil production and processing in the Russian Federation in 2000–2014

	2000	2005	2010	2011	2012	2013	2014
Production of crude oil including gas condensate, million tons	323.2	470.0	505.1	511.4	518.0	523.3	526.7
Primary oil refining, million tons	173.0	208.0	249.3	258.0	270.0	278.0	294.4
Ratio of oil refining to crude oil production, %	53.5	44.3	49.4	50.4	52.1	53.1	55.9
Crude oil conversion rate, %	71.0	71.6	71.1	70.8	71.5	71.7	72.4

Source: Federal Service of State Statistics, Ministry of Energy of the Russian Federation.

Table 19

Production of crude oil, petroleum products and natural gas in 2000–2014, as % of the previous year

	2000	2005	2010	2011	2012	2013	2014
Crude oil including gas condensate	106.0	102.2	102.1	100.8	101.3	100.9	100.7
Primary oil refining	102.7	106.2	105.5	103.3	104.9	102.7	104.9
Gasoline	103.6	104.8	100.5	102.0	104.3	101.3	98.8
Diesel fuel	104.9	108.5	104.2	100.3	98.7	103.1	107.4
Heating oil	98.3	105.8	108.5	104.6	101.6	103.3	102.0
Natural gas	98.5	100.5	111.4	102.9	97.7	102.1	95.7

Source: Federal Service of State Statistics, Ministry of Energy of the Russian Federation.

At the same time in 2014 growth rates of oil processing remained higher than those of oil production primarily due to faster growth of petroleum products' export that was stimulated by lower export duties on these items as compared with export duties on crude oil. As a result of higher growth rates in primary oil refining, its ratio to crude oil production increased from 42.5% in 2004 to 55.9% in 2014. However, the crude oil conversion rate over this period actually did not improve and in 2014 was as low as 72.4% which is far below the level of developed countries where this indicator reaches 90-95%. The technological upgrading of oil processing industry remains one of the most critical tasks for the development of Russia's oil sector.

The largest producers of oil in 2014 were "Rosneft", "LUKOIL", "Surgutneftegaz" and "Gazprom". The share of these four companies amounted to 73.8% of the total oil production in the country. Medium-size companies ("Tatneft", "Bashneft", "Slavneft" and "RussNeft")

accounted for 13.1% of the total oil output. The share of other producers (over 100 smaller oil-producing entities) was as small as 9.5% (*Table 20*).

Table 20

Share of selected companies in the total Russian output of crude oil in 2010–2014

	Total oil output in 2010, million tons	Share in the total output, %	Total oil output in 2012, million tons	Share in the total output, %	Total oil output in 2013, million tons	Share in the total output, %	Total oil output in 2014, million tons	Share in the total output, %
Russia, total	505.1	100.0	518.0	100.0	523.3	100.0	526.7	100.0
Rosneft	112.4	22.3	117.5	22.7	192.6	36.8	190.9	36.2
LUKOIL	90.1	17.8	84.6	16.3	86.7	16.6	86.6	16.4
TNK-BP	71.7	14.2	72.5	14.0	–	–	–	–
Surgutneftegaz	59.5	11.8	61.4	11.9	61.5	11.8	61.4	11.7
Gazprom including Gazprom neft	43.3	8.6	46.1	8.9	48.5	9.3	49.8	9.5
including: Gazprom	13.5	2.7	14.5	2.8	16.3	3.1	16.2	3.1
Gazprom neft	29.8	5.9	31.6	6.1	32.2	6.2	33.6	6.4
Tatneft	26.1	5.2	26.3	5.1	26.4	5.0	26.5	5.0
Bashneft	14.1	2.8	15.4	3.0	16.1	3.1	17.9	3.4
Slavneft	18.4	3.6	17.9	3.5	16.8	3.2	16.2	3.1
RussNeft	13.0	2.6	13.9	2.7	8.8	1.7	8.6	1.6
NOVATEK	3.8	0.8	4.2	0.8	4.3	0.8	4.3	0.8
Operators of PSA	14.4	2.9	14.1	2.7	14.0	2.7	14.4	2.7
Other producers	38.2	7.6	44.1	8.5	47.6	9.1	50.1	9.5

Source: Ministry of Energy of the Russian Federation, author's calculations.

In recent years, the share of public sector in the Russian oil industry has notably expanded. In 2013, the state-owned company "Rosneft" took over "TNK-BP" that inclusive of its share in "Slavneft" produced 15.7% of the total domestic output of oil. In 2014 the ownership title to "Bashneft" accounting for 3.4% of the Russia's total oil output returned to the state. As a result in 2014 the share of state-owned companies in the national oil production reached 58.6% (our own estimates, *Table 21*). Meantime, the respective share of "Rosneft" taking into account its part in other entities was as high as 38.1%.

Table 21

Share of state-owned companies in the Russian crude oil production in 2014

	Total oil output, million tons	Share in the total oil output, %
Rosneft including its share in the output of other entities	200.5	38.1
Gazprom including Gazprom neft including their share in the output of other entities	60.6	11.5
Tatneft	26.5	5.0
Bashneft	17.9	3.4
Zarubezhneft (production on the territory of Russia)	3.2	0.6
State-owned companies, total	308.7	58.6

Source: Ministry of Energy of the Russian Federation, author's calculations.

"Gazprom" preserves its dominant positions in the Russian gas sector. However, in recent years its share in the total domestic output of natural gas notably reduced: from 83.2% in 2008 down to 68.1% in 2014 (*Table 22*). At the same time the contribution of other producers (oil companies, "NOVATEK", operators of PSA, etc.) increased. Altogether, the share of independent producers in 2014 gas output reached 31.9% including 8.2% provided by the largest independent producer of gas - "NOVATEK" company.

Table 22

Share of selected companies in the total Russian output of natural gas in 2010–2014

	Total gas output in 2010, billion m^3	Share in the total output, %	Total gas output in 2012, billion m^3	Share in the total output, %	Total gas output in 2013, billion m^3	Share in the total output, %	Total gas output in 2014, billion m^3	Share in the total output, %
Russia, total	665.5	100.0	671.5	100.0	684.0	100.0	654.2	100.0
Gasprom including Gasprom neft	513.9	77.2	489.4	72.9	489.1	71.5	445.5	68.1
including: Gasprom	509.0	76.5	478.5	71.3	476.3	69.6	432.1	66.1
Oil companies	66.6	10.0	71.1	10.6	76.8	11.2	78.1	11.9
NOVATEK	37.8	5.7	51.3	7.6	53.0	7.7	53.7	8.2
Operators of PSA	23.3	3.5	26.8	4.0	27.8	4.1	28.0	4.3
Other producers	23.9	3.6	32.9	4.9	37.3	5.5	48.9	7.5

Source: Ministry of Energy of the Russian Federation, author's calculations.

A new factor able to affect further development of the national oil and gas sector are economic sanctions against Russia introduced in 2014 by the US, the EU and some other countries in response to the Ukrainian developments. In addition to financial sanctions limiting access to external financing for Russian companies, in the second half of 2014 a number of developed countries introduced a ban on the supply to Russia of equipment and technologies for the development of three categories of fields: deposits in the Arctic shelf area, deepwater deposits and shale oil deposits. All the three categories of projects are critically dependent on foreign technologies. At the same time the investment cycle of projects for the development of Arctic shelf and deepwater fields is rather protracted and from the oil production point of view the negative effect of blocking such projects may show up only in the long term. Besides, in case prices for oil remain low the implementation of many projects of the kind will be suspended due to their economic inefficiency.

The situation with technologies for the development of shale oil deposits is more difficult. According to estimates of US EIA, Russia ranks first in the world by technically recoverable resources of shale oil. In case of applying modern technologies the development of these deposits is more cost-effective than the development of offshore fields. Meantime, the time needed for the development of these resources is much shorter. Under the conditions of sanctions Russia won't be able to develop its resources of shale oil and thus offset the decline of production at dwindling operating fields.

It should also be taken into account that technologies used for the development of shale oil deposits (horizontal drilling, hydraulic fracturing) are applied as well for the development of traditional oil deposits, first of all the ones with high level of resource depletion, in order to provide better oil extraction. Therefore, the ban on supply of equipment for horizontal drilling and hydraulic fracturing may also lead to the premature closing of operating fields due to the impossibility of their enhanced recovery.

Under the conditions of technological sanctions deeper recovery of traditional fields assumes crucial importance for the sustaining of oil production and export. In this regard both more active use of respective foreign technologies not included in the sanction list and the development of own technologies for enhancing oil recovery are necessary.

4.5.3. Dynamics and Structure of Oil and Gas Exports

In the situation of slowing growth of oil production, one can observe stabilization of petroleum exports (*Tables 23* and *24*). In 2014 the total exports of crude oil and petroleum products amounted to 388.2 million tons or were only 0.05% above the level of the previous year. Exports of petroleum products continued growing (up 8.7% as compared with 2013) while exports of crude oil shrank (by 5.6%). In 2014 the ratio of oil exports to oil output fell down to 42.4%. At the same time the ratio of exports to the output of heating oil exceeded 90%, the ratio for diesel fuel reached 61.6%. The ratio of gasoline exports to the output of this product was 10.9% (for reference: in 2005, it amounted to 18.5%, in 2010 – to 8.2%, in 2013 – to 11.2%).

Exports of natural gas in 2014 notably fell (by 12.1% as compared with the previous year). In recent years, the basic factor of gas exports' decline was the shrinking of supplies to the European market where the share of other gas producing countries has greatly increased. As a result, exports of Russian gas to the non-CIS countries in 2014 fell by 23% as compared with 2006 when the volumes of gas supplies from Russia to Europe reached their maximum. The ratio of net exports to the output of gas dropped from 31.4% in 2005 to 25.3% in 2014.

Table 23

Proportions between production, consumption and exports of oil and natural gas in 2000–2014

	2000	2005	2010	2011	2012	2013	2014
Oil, million tons							
Production	323.2	470.0	505.1	511.4	518.0	523.3	526.7
Exports, total	144.5	252.5	250.4	244.6	239.9	236.6	223.4
Exports to non-CIS countries	127.6	214.4	223.9	214.4	211.6	208.0	199.3
Exports to CIS countries	16.9	38.0	26.5	30.2	28.4	28.7	24.1
Net exports	138.7	250.1	249.3	243.5	239.1	235.8	222.6
Domestic consumption	123.0	123.1	125.9	140.7	142.1	137.5	141.3
Net exports as % of production	42.9	53.2	49.4	47.6	46.2	45.1	42.3
Petroleum products, million tons							
Exports, total	61.9	97.0	132.2	130.6	138.1	151.4	164.8
Exports to non-CIS countries	58.4	93.1	126.6	120.0	121.2	141.1	155.2
Exports to CIS countries	3.5	3.9	5.6	10.6	16.9	10.3	9.6
Net exports	61.5	96.8	129.9	127.2	136.8	150.0	162.8
Oil and petroleum products, million tons							
Net exports of oil and petroleum products	200.2	346.9	379.2	370.7	375.9	385.8	385.4
Net exports of oil and petroleum products as % of oil production	61.9	73.8	75.1	72.5	72.6	73.7	73.2
Natural gas, billion m^3							
Production	584.2	636.0	665.5	687.5	671.5	684.0	654.2
Exports, total	193.8	207.3	177.8	184.9	178.7	196.4	172.6
Exports to non-CIS countries	133.8	159.8	107.4	117.0	112.6	138.0	124.6
Exports to CIS countries	60.0	47.5	70.4	67.9	66.0	58.4	48.0
Net exports	189.7	199.6	173.5	179.2	171.6	189.3	165.5
Domestic consumption	394.5	436.4	492.0	508.3	499.9	494.7	488.7
Net exports as % of production	32.5	31.4	26.1	26.1	25.6	27.7	25.3

Source: Federal Service of State Statistics, Ministry of Energy of the Russian Federation, Federal Customs Service, author's calculations.

Table 24

Dynamics of Russian exports of oil, petroleum products and natural gas in 2005–2014, as % of the previous year

	2005	2010	2011	2012	2013	2014
Oil, total	98.4	101.2	97.6	98.2	98.6	94.4
including: non-CIS countries	99.1	106.1	95.7	98.7	98.3	95.8
Petroleum products, total	117.9	106.2	98.5	104.4	109.6	108.7
including: non-CIS countries	119.1	109.6	94.6	100.8	116.4	109.8
Gas, total	103.7	105.6	104.0	96.6	109.9	87.9

Source: Federal Service of State Statistics.

The analysis of dynamics of Russian oil exports over a long term reveals a notable strengthening of oil sector's export orientation as compared with the pre-reform period. The ratio of net exports of oil and petroleum products to the output of oil increased from 47.7% in 1990 to 73.2% in 2014. However, one should keep in mind that this is due not only to the increase of absolute export volumes but also to the remarkable drop of domestic oil consumption following market transformation of the Russian economy, improvement of oil utilization efficiency and replacement of heating oil by natural gas. It's noteworthy that the share of petroleum products in the total petroleum exports increased from 18.2% in 1990 to 42.2% in 2014 (*Table 25*). Still, one should take into account that due to the low oil refining depth the major part of Russian exports of petroleum products consists of heating oil that in Europe is used as an input for further processing and production of light oil products. In 2014 the share of heating oil in the total exports of petroleum products amounted to 53%.

Table 25

Net exports of petroleum products in 2005–2014

	2005	2010	2011	2012	2013	2014
Net exports of petroleum products, million tons	96.8	129.9	127.2	136.8	150.0	162.8
Share of petroleum products in the net exports of oil and petroleum products, %	27.9	34.3	34.3	36.4	38.9	42.2

Source: Federal Service of State Statistics, Federal Customs Service, author's calculations.

The lowering of world prices for oil and gas and the reduction of physical volumes of gas export resulted in the shrinking of fuel and energy items' share in the Russian exports down to 69.5% in 2014, with the share of crude oil amounting to 31.0% and the share of natural gas – to 11.0% (*Table 26*).

Table 26

Cost and relative importance of fuel and energy exports in 2005–2014

	2005		2010		2013		2014	
	Billion $	%*	Billion $	%*	Billion $	%*	Billion $	%*
Fuel and energy items, total	154.7	64.1	267.7	67.5	371.8	70.6	345.4	69.5
including: oil	83.8	34.7	134.6	34.0	173.7	33.0	153.9	31.0
natural gas	31.4	13.0	47.6	12.0	67.2	12.8	54.7	11.0

* as % of the total Russian exports.
Source: Federal Service of State Statistics.

4.5.4. Dynamics of Prices for Energy Products on the Domestic Market

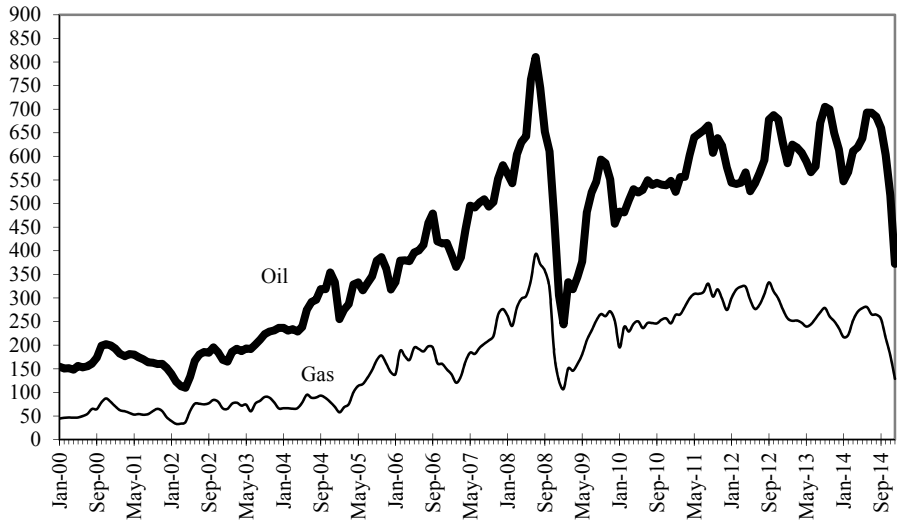
Prices for oil and petroleum products on the domestic Russian market are basically determined by the corresponding world prices so that to provide equal profitability of supplies to foreign and home market, i.e. are net back prices equaling the world price minus export customs duty and export shipment costs. In recent years the growth of world prices for oil and petroleum products drove the rise of prices on the domestic market. But in the second half of 2014 lower world prices and ruble exchange rate resulted in a notable decline of domestic prices in dollar terms (*Table 27, Fig. 38* and *39*). It's noteworthy that due to the high export duties there still remains a great gap between the world and domestic prices. In 2014 the domestic price for oil (producer price) averaged only $41.1 per barrel, or 42.1% of the world price (price for Urals oil on the European market).

Table 27

Domestic prices for oil, petroleum products and natural gas in dollar terms in 2000-2014 (average producer prices, $/ton)

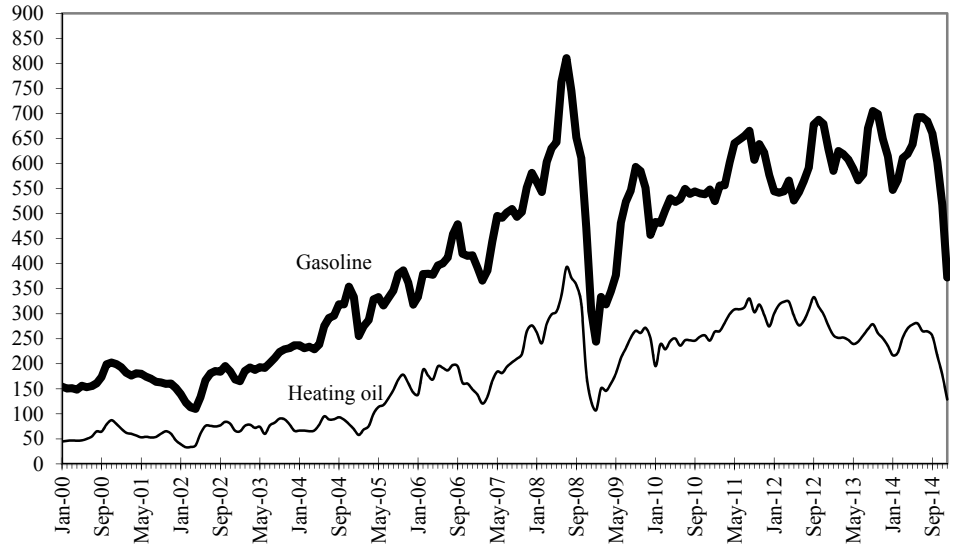
	2000 Dec.	2005 Dec.	2010 Dec.	2011 Dec.	2012 Dec.	2013 Dec.	2014 June	2014 Dec.
Oil	54.9	167.2	248.2	303.3	341.1	346.1	364.6	178.9
Gasoline	199.3	318.2	547.9	576.9	628.7	614.4	692.7	372.3
Diesel fuel	185.0	417.0	536.1	644.9	774.2	698.0	677.2	419.3
Heating oil	79.7	142.7	246.3	274.6	275.3	235.8	280.6	128.7
Gas, $/1,000m^3	3.1	11.5	20.5	21.3	40.3	39.8	42.4	29.1

Source: calculated using data of the Federal Service of State Statistics.



Source: calculated using data of the Federal Service of State Statistics.

Fig. 38. Average producer prices for oil and gas in dollar terms in 2000–2014 (oil - $/ton, gas - $/1,000m^3, right axis)



Source: calculated using data of the Federal Service of State Statistics.

Fig. 39. Average producer prices for gasoline and heating oil in dollar terms in 2000–2014 ($/ton)

Domestic prices for gas remain the subject of state regulation. In order to ensure the competitiveness of national economy the government supported far lower level of the domestic gas prices as compared with that of the world market. In 2014 the domestic price for gas (the price paid by industrial consumers less indirect taxes) averaged only 26.4% of the price for Russian gas on the European market.

4.5.5. Tax Regulation of the Oil and Gas Sector

In the beginning of 2014, new statutes of tax regulation aimed to encourage the development of hard-to-recover oil reserves came into force. These provisions were enacted by Federal Law No. 213-FZ of July 23, 2013 "On introducing amendments to Chapters 25 and 26 of Part II of Tax Code of the Russian Federation and Clause 3.1 of the Law of the Russian Federation "On customs tariff"". This Law establishes differential rates of mineral extraction tax (MET) depending on the reservoir permeability, size of the oil-bearing formation and the degree of deposit depletion. The Law establishes application of a special MET degression coefficient *Кд* [Kd] reflecting the difficulty of oil recovery. Depending on the parameters of a specific field (hydrocarbon reservoir) the *Кд* value may be 0.8, 0.4, 0.2 and 0. A special coefficient – *Кдв* [Kdv] – is introduced for reflecting the depletion of a specific hydrocarbon reservoir. In case of high depletion (over 80%) the coefficient is degressive and its value is determined using a special formula.

So, five coefficients reflecting major rent-shaping factors are currently applied to MET: coefficient *Кц* [Cts] reflecting the dynamics of world prices for oil; coefficient *Кв* [Kv] reflecting the degree of depletion of a specific subsoil area; coefficient *Кз* [Kz] reflecting the size of reserves in a particular field; coefficient *Кд* [Kd] reflecting the difficulty of oil recovery and coefficient *Кдв* [Kdv] reflecting the depletion of a specific hydrocarbon reservoir.

The application of price coefficient (*Kц*) for the purposes of taxation permits making allowances for the world prices for oil that shape producers' gross income. This coefficient is applied for all deposits. Meantime, other coefficients are designed to alleviate tax burden for fields with increased development costs (depleted fields, small deposits, hard-to-recover reserves). Higher costs associated with the development of such deposits are taken into account by applying lower tax rates.

In 2014 amendments to Law No. 5003-1 "On customs tariffs" adopted by Federal Law No. 213-FZ came into effect. According to them oil recovered in the fields where the share of initial recoverable oil reserves qualified as productive sediments of Tyumen suite in the total initial recoverable oil reserves in the deposit is not less than 0.8, is included in the list of oil types for which special formulas of calculating export duty rates are established. These formulas envisage lower export duty rates for oil from such deposits.

Special formulas for calculating export duty rates are also applied for high viscosity oil and oil developed in fields located in Eastern Siberia (within the borders of the Sakha (Yakutia) Republic, the Irkutsk Region and Krasnoyarsk Territory), the Nenets Autonomous District, the Yamalo-Nenets Autonomous District to the north from 65 degrees north latitude as well as in Caspian sea and on continental shelf.

The system of taxation in gas sector was also notably revised in 2014. On July 1, 2014 a new procedure for determining MET rates for producers of natural gas and gas condensate came into effect. It is based on applying special formulas and coefficients that take into account various factors shaping profitability of gas and gas condensate production and marketing. This procedure was adopted by Federal Law No. 263-FZ of September 30, 2013 "On introducing amendments to Chapter 26 of Part II of Tax Code of the Russian Federation and Clause 3.1 of the Law of the Russian Federation "On customs tariff"".

The new procedure provides for considering a number of important rent-shaping factors when establishing MET rates: the price for gas on foreign and domestic markets, the price for gas condensate, the price for Urals oil, the rate of export duty on oil, the exchange rate of US dollar relative to ruble, the share of recovered gas in the total amount of crude hydrocarbons recovered from a particular field, the difficulty of recovering gas and gas condensate, the degree of depletion of a specific subsoil area, the geographic location of a field, the depth of hydrocarbon reservoir, the specifics of developing particular fields.

The introduced procedure of establishing MET rate for natural gas allows taking into account basic factors that determine profitability of gas production and marketing and provides for the necessary differentiation of tax burden depending on the specific conditions of fields' development.

Besides, in 2014 came into effect a special soft tax regime for the development of new offshore fields. It was adopted by Federal Law No. 268-FZ of September 30, 2013 "On introducing amendments to Parts I and II of Tax Code of the Russian Federation and relevant legislative acts of the Russian Federation in connection with implementing measures for tax and customs tariff stimulation of crude hydrocarbons production on the continental shelf of the Russian Federation". This regime is based on lower ad-valorem MET rate differentiated by shelf zones and the standard profit tax. Export duty and property tax are not levied in case of offshore projects.

Principal decisions on restructuring the system of oil sector's taxation were taken in 2014. Federal Law No. 366-FZ of November 24, 2014 "On introducing amendments to Part II of Tax Code of the Russian Federation and relevant legislative acts of the Russian Federation"

envisages a notable lowering of export duties on oil and petroleum products and the compensatory raising of MET base rate. According to the taken decisions the base rate of MET for oil producers is to be raised step by step from Rb 493 per ton in 2014 up to Rb 919 per ton in 2017. At the same time the marginal rate of export duty on oil (coefficient in the formula for calculating the marginal rate) is reduced from 59% in 2014 down to 30% in 2017 (*Table 28*). Simultaneously, export duties on "dark" petroleum products relative to the export duty on crude oil are raised (up to 100% thereof in 2017) while those for "light" petroleum products are reduced.

Table 28

Rates of MET and export duties on oil and petroleum products in 2014–2017

	2014	2015	2016	2017
Basic rate of MET for oil production, rubles per ton	493	766	857	919
Export duty on crude oil: coefficient in the formula for calculating the rate of export duty	0.59	0.42	0.36	0.30
Export duties on petroleum products: coefficients relative to the export duty on oil				
Gasoline	0.90	0.78	0.61	0.30
Diesel fuel	0.65	0.48	0.40	0.30
Heating oil	0.66	0.76	0.82	1.00

Source: Tax Code of the Russian Federation, Federal Law No. 366-FZ of November 24, 2014.

The implementation of these measures that have been called "a tax maneuver" will result in a remarkable redistribution of tax burden: the share of MET in rent taxes imposed on the oil sector will grow sizably while that of export duties will notably reduce. So, MET will become the principal rent tax and will perform the basic functions of tax regulation in the sector.

To our mind, such changes are economically indispensable and correspond to the principles of rent taxation and international practices. MET should play the key role in the oil sector's taxation system while the role of export duties should be seriously diminished (up to their total cancellation in the future). At present, it is the export duty that actually serves as the basic tax in the oil sector. In 2014, the share of export duty in the structure of price for exported oil (given standard tax rates) amounted to nearly 50% and was almost twice higher than that of MET.

The high level of export duty on oil makes it necessary to regulate the effective rate of this tax (set lower duty rates and the term of their application for selected fields) in order to bring the tax burden in compliance with the actual conditions of oil recovery, i.e. to assign export duty the functions that should be performed by MET. Meantime, MET cannot fully perform its regulating function due to the high export duty.

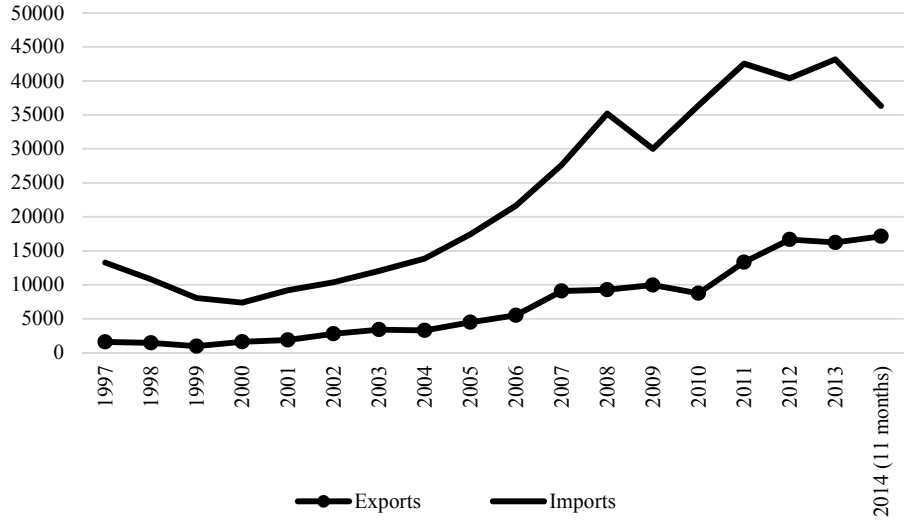
The lowering of export duties on oil and petroleum products will have a number of positive effects. First of all, it will reduce the ongoing subsidizing of oil processing sector and thus will create real stimulus for its modernization and deepening of oil refining. Besides, it will greatly decrease the subsidizing of other Customs Union members by Russia that occurs owing to duty-free supplies of Russian oil and petroleum products. At the same time the growth of domestic prices for oil and petroleum products with their approaching to the world level as a result of export duties' lowering will create correct price guides for market operators and will strengthen incentives for the improvement of energy efficiency that in its turn will foster the decrease of Russian economy's energy intensity.

4.6. Russian agriculture: the impact of sanctions

4.6.1. General Outline of Agricultural Performance

On 7 August 2014 Russia introduced restrictions on import of food products from countries of the European Union, the US, Canada, Norway and Australia[1] (hereinafter – retaliatory sanctions) in response to their sanctions against Russia driven by political developments in the Ukraine. This step astonished a lot of people in the country and even more so abroad as at the moment of enforcing retaliatory sanctions Russia remained a large-scale importer of foodstuffs. For many years one could observe an upward trend in imports of agricultural and food products that by 2013 amounted to $43.2bn *(Fig. 40)*.

High import volumes used to be a subject of public scrutiny and concern. But beginning from 1998 and even more so from 2006 the pattern of agricultural production in Russia started undergoing great changes: agriculture was adjusting to new conditions, new efficient production facilities were being put in operation, the location of production over the country's territory was actively transforming, in some sectors the output was falling while in the others it was growing. In 2006 the Federal Law "On the development of agriculture" was adopted that established a middle-term planning for state support of agriculture – initially the term was set at 5 years but later it was extended up to 8 years (in the framework of State programs for agricultural development and regulation of agricultural, input and food markets). In 2006 started the implementation of Priority national project of agrifood sector development and beginning from 2008 state support was provided under the State Programs. This resulted in the growth of budget funding and higher predictability of state support to agriculture.

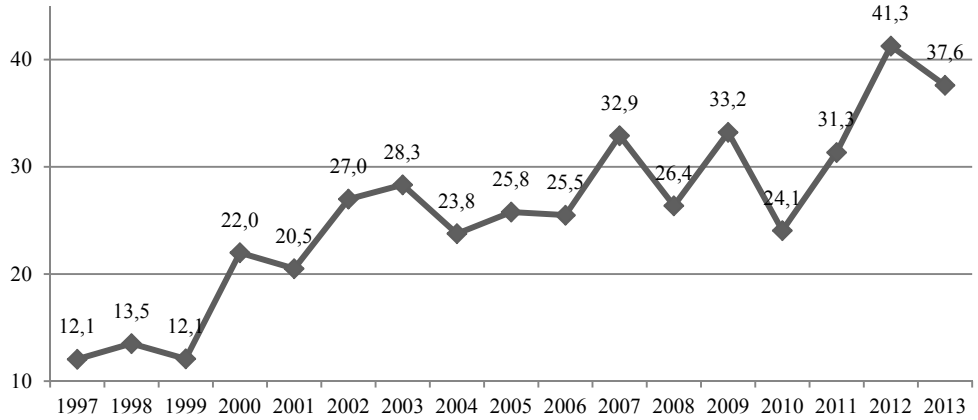


Source: Rosstat, Federal Customs Service.

Fig. 40. Exports and imports of agricultural and food products, million dollars

[1] RF Government Resolution of August 7, 2014 No. 778 "On measures for the implementation of RF President Decree of August 6, 2014 No. 560 "On the enforcement of selected special economic measures aimed at ensuring food security of the Russian Federation"".

These developments led to the change of some regions' contribution to the overall production. The growing import purchases of items the production of which in the country in that period was not profitable due to different reasons were accompanied by bigger export sales of other items that were competitive on the foreign markets. First of all this relates to grains including corn and vegetable oils. The structure of export and import transactions started to improve. For instance, while in 1997-1998 exports were as small as 12-14% of import volumes, in 2012-2013 the proportion grew up to 41-38% (*Fig. 41*). It implies that Russia has become not only a large importer but also a large exporter of agricultural products. In 2013 total exports amounted to $16.2bn thus exceeding the 2006 level almost 3 fold.



Source: Rosstat, Federal Customs Service.

Fig. 41. Russia: ratio of food and agricultural exports to imports in 1997–2013, %

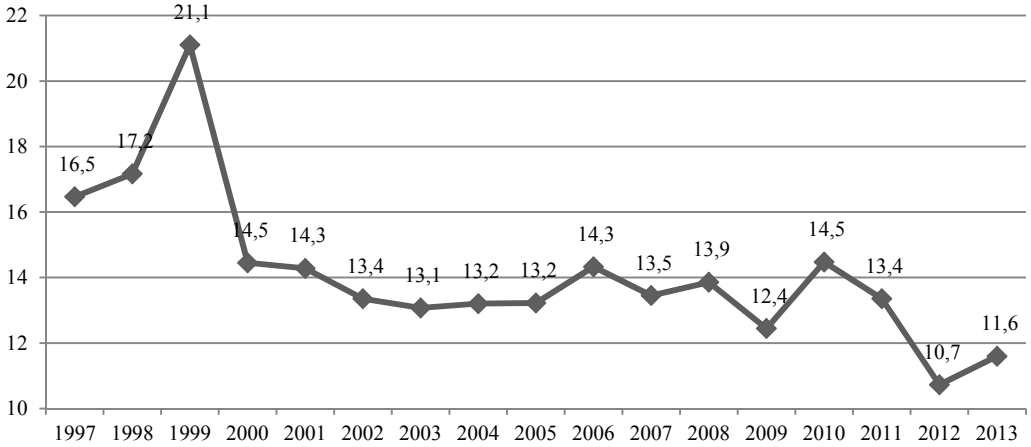
As a result, if measured by the ratio of import-export balance to the expenditures of population on foodstuffs, the general indicator of food dependency has fallen and beginning from 2000 is relatively stable ranging from 11 to 14% (*Fig. 42*). In the country at large food products became more affordable for consumers (despite some negative developments persisting in some regions and groups of population) owing to the general growth of real incomes: the share of foodstuffs in the total consumer expenditures has fallen, the structure of personal consumption improved and the level of per capita consumption of meat products became comparable to that of the pre-reform period.[1]

The Doctrine of Russia's food security[2] sets thresholds of food independency for 8 products or product groups. By the moment of retaliatory sanctions' launching the level of demand satisfaction met these requirements for grains, potatoes, vegetable oils, sugar and poultry meat. There still remained problems with the supply of dairy products, beef, pork, vegetables and fruit. *Fig. 42* and *43* show that before the introduction of sanctions and retaliatory sanctions not only the general indicator of dependency on imports but also similar indicators for selected groups of foodstuffs (except milk and dairy products) were improving. Still, domestic

[1] Uzun V.Ya., Shagayda N.I. *Prodovol'stvennaya bezopasnost' v Rossii: monitoring, tendentsii i ugrozy* [Food security in Russia: monitoring, trends and threats]. // Russian Presidential Academy of National Economy and Public Administration (RANEPA), 2014. http://www.ranepa.ru/news/item/3674-prod-bez.html

[2] RF President Decree of January 30, 2010 No. 120 "On the adoption of Doctrine of food security of the Russian Federation".

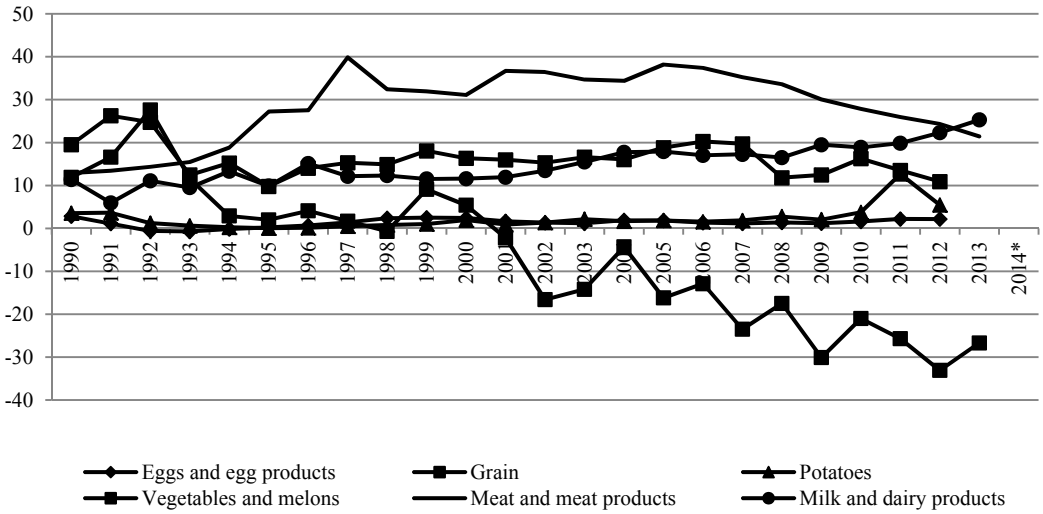
output failed to satisfy respective demand. Therefore the substitution of imports by Russian products could not occur at once but required some time and certain conditions. Consequently, an instantaneous ban on import should have resulted in the replacement of importers by other ones but it also could not happen at once.



Source: Rosstat, Federal Customs Service.

Fig. 42. General indicator of food dependency in 1997–2013, %

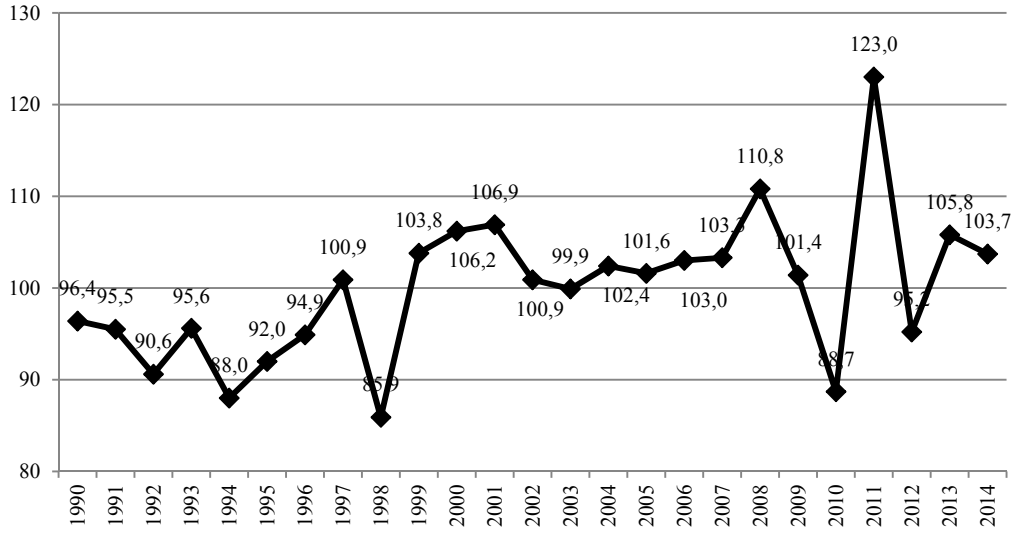
According to data of the RF Federal Customs Service, in August 2014 the decrease of imports relative to the respective period of 2013 was 3%, in September – about 11%, in October – already 18% and by the year end – 25%. To some extent this is due to the shrinking demand for food. For instance, in November 2014 the sales of meat and meat products fell by almost 7% as compared with October, those of milk – by 1.8%, of bread – by nearly 5%. At the same time the sales of fish and fish products grew by 4.8%, of vegetable oils – by 1.5%, of eggs – by 1.3%, of flour – by 8.2%.



* 9 months.
Source: Rosstat.

Fig. 43. Dependency on imports (ratio of import-export balance to the domestic consumption), %

Many experts regarded the ban on import of agricultural and food items to Russia from selected countries as a new opportunity for the development of domestic farming. Indeed, 2014 was favourable for agriculture – the sector's index of production exceeded the respective indicator for 2013 that was quite a good year for farming (*Fig. 43*).



* preliminary data.
Source: Rosstat.

Fig. 44. Growth rates of agricultural production relative to the previous year in 1990–2014, %

Growth rates of agricultural production relative to 2013 amounted to 103.7% (in 2013 – 105.8%).

In 2014 the output of grain reached 103.8 million tons, the output of sunflower seeds – 8.8 million tons, that of sugar beets – 32.7 million tons, of livestock and poultry (slaughter weight) – 8.5 million tons (including 2.8 million tons of pork and 3.8 million tons of poultry meat), milk – 30.5 million tons, eggs – 41.3 billion pieces[1].

A sharp devaluation of ruble has provided additional advantages for Russian farm producers on the markets occupied by importers. Products of the latter are becoming too expensive for Russian consumers and they will have to reorient to domestic produce. According to data of the Customs Service, in 2014 the cost amount of food imports fell by 7.7% as compared with 2013. The biggest decrease of physical import volumes was demonstrated by such items as cheese and curds (31.8%), fresh-frozen meat (24.3%), frozen fish (16.2%), poultry meat (13.6%) and butter (13.2%). Meantime, imports of corn grew (by 22.3%) as well as those of products containing cocoa (by 14.4%) and coffee (by 12.6%).

At the same time the continuation of sanctions war against Russia can have a negative effect on the performance of national agriculture since its success in recent years was largely determined by the adoption of new foreign technologies, the purchase of foreign seeds and other inputs. If introduced, retaliatory sanctions in respect of these inputs (a ban on supply of pedigree young stock, eggs, seeds and hybrids) will have serious consequences for the most advanced production units. In this regard less productive and poorly modernized corporate

[1] According to Rosstat data.

farms, individual private and even household farms turn out to be more sustainable to external shocks as compared with high-tech but reliant on imported inputs and technologies agroholdings.

The war of sanctions showed how much the country is dependent on the external world. Therefore, there is an urgent need to work out and implement the schemes for supporting agricultural research; for the creation of laboratories, seed stations and livestock breeding farms on the basis of public-private partnership in order to attract investments; for the development, maintaining and distribution of new varieties and breeds; for the education of students and provision of agricultural extension services. One should work out incentives that could motivate foreign companies to organize production and dissemination of elite seeds, modern technologies of herd improvement, to launch production of science-intensive products. With this in view it would be rational to extend the notion of food security by setting the threshold levels of self-sufficiency in elite seeds, pedigree livestock, inputs, etc.

4.6.2. Impact of Sanctions and Retaliatory Sanctions on Relationships within the Eurasian Economic Union

Russia faces serious risks due to the fact that the country's leadership takes a lot of strategic decisions without due regard to the interests of its allies and commitments before them. The Eurasian Economic Union (EAEU) has a common customs territory. The procedure of changing its borders is not specified in the treaties on the establishment of the Customs Union and the EAEU. In 2014, Russia incorporated Crimea and thus unilaterally changed the customs area of the EAEU. No official agreement of other countries-members of the Union was obtained. In response to Russia's actions the US, the EU and some other countries imposed sanctions on it. These sanctions had a negative effect not only on the Russian economy by also on the economy of other members of the EAEU.

When elaborating sanctions against Russia, the EU countries went through a long coordination procedure in order to reach consensus. The European Union introduced respective sanctions only upon receiving the official consent of all its members. In the EAEU Russia imposed the ban on import of agricultural products without negotiating it with the allies. The Protocol on measures of non-tariff regulation in respect of the third countries (Addendum 7 to the EAEU Treaty) contains a provision permitting unilateral introduction of sanctions (Clause 50 of the Protocol). The procedures of coordinating such a decision with countries-members and the Eurasian economic commission are specified in Clauses 51-56 of the Protocol. A similar rule was already in effect in accordance with the Agreement on non-tariff regulation measures of January 25, 2008. When launching retaliatory sanctions Russia got no official consent of its partners in the EAEU and the latter did not introduce similar sanctions. A lot of problems appeared because of that. Belarus and Kazakhstan continue importing products from countries against which Russia introduced sanctions. It's quite natural that businessmen from these countries have got a strong incentive to re-export the imported items to Russia. The legal acts of the Customs Union, the Common Economic Space and the EAEU have no provisions restricting re-export but Russian authorities are against it. Business has surely found ways for evading Russia's ban: falsification of documents on commodity origin, drawing up of transit documents, change of packing cases, minor processing, etc.

The effective agreements enable Russia to forbid import from the countries subjected to retaliatory sanctions without the consent of other countries of the Union. But the maximum term established for such restrictions is 6 months. Therefore, in February 2015 Belarus and

Kazakhstan will get the grounds to either require that Russia lifts retaliatory sanctions or to join them.

Russia needs to get the consent of its allies in simpler cases as well. For instance, if Russia imposes a temporary ban on the import of vine from Moldova, there can be all sorts of reasons for that. But in case no simultaneous bans are imposed by Belarus and Kazakhstan, the entrepreneurs from these countries will be able to import the items forbidden by Russia and to sell them on the territory of Russia as well.

The situation with Ukraine is similar. Russia threatens to exclude Ukraine from the CIS zone of free trade and to raise duties on its produce up to the level applied for the EU countries. Belarus and Kazakhstan do not support this idea and are going to preserve the effective terms of trade with Ukraine. The introduction of unilateral sanctions against Ukraine by Russia will generate new risks of the Ukrainian commodities' re-export.

In 2014 the lack of agreement in allies' actions has already provoked the appeal of Belarus to the Eurasian economic commission (EAEC) requesting not to extend import restrictions unilaterally imposed by Russia on the goods supplied to the customs territory of Belarus and forwarded in transit through the Russian territory to Kazakhstan. There were also applications to the EAEC concerning the introduced phytosanitary restrictions. Because of the discrepancies being in place, customs check-points at the Russia-Belarus border resumed their operation thus impairing the common customs territory.

It should be also noted that the association of Kazakhstan, Belarus and Russia into the Eurasian Economic Union *per se* poses certain risks to domestic agriculture. Countries-members should unify their customs duties, quotas and tariffs; revise regulations and standards of food safety; reform the procedures of certification and testing of compliance with regulations. Moreover, special attention should be paid to the working out of coordinated position of EAEU countries at the current negotiations with WTO, in particular concerning the rules of building state reserves for the purposes of food security.

So far, all the post-Soviet countries apply various tools for supporting agriculture - national measures of budget support differ greatly not only by their nature but also by amounts and mechanisms of implementation. For instance, in Russia the producer support estimate (PSE) calculated using the OECD methodology reaches 17% of output, in Kazakhstan – 12%, in Ukraine – 1%. In Belarus this indicator was not calculated but the study carried out by the RANEPA Center of agrarian policy showed that the ratio of budget support therein exceeds the respective Russia's and Kazakhstan's indicators several fold. Given that Russian farm producers *a priori* loose to their Belarus colleagues and it's still hard to talk about common agricultural policies. Many years are needed for forming mutually beneficial common policy in respect of the third countries.

4.6.3. Situation on Selected Food Markets

Import ban under retaliatory sanctions introduced by Russia in 2014 has had a short-term effect and will have long-term consequences for markets where the share of imports from countries subjected to restrictions is significant. Let's reiterate that these are meat and dairy markets and the market of fruit and vegetables.

On the market of pork the share of imports in consumption (including sub-products and fat) amounts to 26.2%, of them the share of countries against which sanctions are applied is as

high as 24.1%. For poultry meat these indicators equal 12.5% and 7.6%, respectively, for beef – 33.6% and 7.3%.[1]

In 2014 the RF government introduced restrictions on import of pork twice. First – in January when the embargo was set on import from the EU of live pigs, pork and products out of pork due to the detection of African swine fever virus in Lithuania and Poland. Second – in August when it was done in the framework of retaliatory sanctions. The restrictions resulted in a notable drop of pork imports – by 35.3% within 8 months 2014 as compared with the same period of 2013. The decrease of poultry meat and beef imports was less dramatic – by 16.3% and 9.2%, respectively.

The ban on import of pork has resulted in its remarkable restructuring and led to temporary complications in the import supply logistics. Due to the suspension of deliveries from the EU at the beginning of 2014, 40% of pork in the first 6 month of the year was imported from Canada[2]. And after the introduction of retaliatory sanctions in August Brazil has become the major supplier of pork to the Russian Federation. In October for the first time in 10 recent years started the deliveries of pork from China that were earlier forbidden due to the sanitary reasons.

The supplies from Brazil and China partially compensate the deficit of raw meat inputs on the market but they are unable to fully absorb the share of countries subjected to sanctions. Besides, in the conditions of market geography change importers needed time for signing new contracts and as a result in the first months after the introduction of bans there emerged a gap in the supply of raw meat. This had an impact on the price situation on the market. From the beginning of 2014 the growth of purchase prices for pork exceeded 65%[3].

The growth of prices on the pork market is due not only to the emerged deficit of raw meat inputs but also to the diversification of supplies shifting from most competitive to less efficient meat exporters.

After the introduction of retaliatory sanctions on import of food products the RF government sees its main task in ensuring accelerated import substitution. In the Russian pig breeding this process started in 2013 while earlier (in 2006-2012) the increase of domestic output just covered the positive dynamics of pork consumption.

Russian pig breeding has a potential for increasing production volumes thanks to large pig farms many of which have already announced construction of new complexes. Only the announced investments of seven biggest companies after their enterprises reach full capacity in 2017-2020 are able to provide for the increase of domestic pork output by 1.1 million tons live weight (or about 0.8 million tons slaughter weight). In recent years imports of pork and live pigs in slaughter weight didn't rise above 0.8 million tons and including sub-products and fat – above 1.2 million tons.[4] In this regard there is a risk of over-investment in the sector and the consequent over-saturation of the market, drop of prices and decline of profitability.

The dairy market is also characterized by a high share of imports with many EU countries being suppliers of milk products to Russia before the introduction of sanctions. According to estimates of IKAR the share of imports in the consumption[5] of cheese reaches 50.5% (2013),

[1] Data of the Institute for Agricultural Market Studies (IKAR).
[2] According to data of the National Union of Pig Breeders.
[3] Data of the Institute for Agricultural Market Studies (IKAR).
[4] Data of the National Union of Pig Breeders including trade with countries of the Customs Union.
[5] Including supplies from countries of the Customs Union.

in the consumption of butter – 41.1%. Imports from the countries subjected to retaliatory sanctions account for 30.3% of cheese consumption and 10.3% of butter consumption.

The comparison of import volumes in 2014 and 2013 allows to conclude that the introduction of retaliatory sanctions did not produce a strong effect on the Russian dairy market. By the end of 2014 imports of all categories of dairy products (except cheese) were not noticeably smaller than those in the previous year (*Table 29*). But this is just the surface reflecting short-term dynamics.

Table 29

Imports of dairy products in 2013–2014, tons

Item	2013	2014	2014/2013, %
Milk and cream, non-condensed	266 103	273 329	102.7
Milk and cream, condensed	220 184	164 596	74.8
Butter milk, coagulated milk and cream, yoghurt, kefir	80 928	72 158	89.2
Milk whey, condensed and non-condensed	143 071	115 541	80.7
Butter	144 359	137 795	95.4
Cheese and curd	438 498	288 141	65.7

Source: Federal Customs Service.

First, in the first half of the year imports of dairy products demonstrated growth as compared with the respective period of 2013 and as a result their reduction following sanctions did not have a serious impact on the annual total for 2014. For instance, in the first 6 months of 2014 imports of whole milk products to Russia increased by 49.7%, those of butter and milk fats – by 50.4%, dry milk – by 10.5%, dry milk whey – by 29.3%[1]. Growth of import volumes at the beginning of the year was conditioned by low prices for milk on the world market owing to the increase of dairy production in key exporters of this product – the EU, the US and New Zealand. Bigger imports of whole milk products to Russia covered the deficit of raw milk on the domestic market due to the decrease of its production in the country. Besides, Russian producers have higher unit costs of producing butter and therefore cannot compete with foreign suppliers.

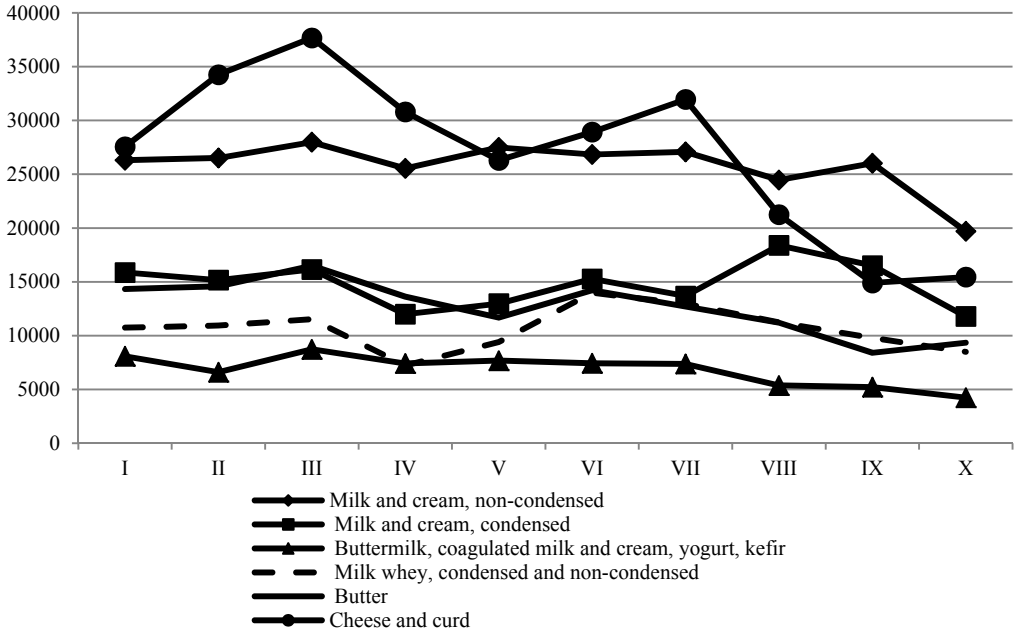
Second, an important role on the Russian market of milk belongs to the Belarusian produce that is not subjected to sanctions and is supplied (or at least should be supplied) to the territory of Russia under pre-agreed inter-state balances. In the first half of 2014 the share of Belarus in the total imports of whole milk products amounted to 71%, in those of condensed milk and cream – 82%, butter milk, yoghurt and kefir – 60%, dry milk whey – 76%. As a result of the introduced retaliatory sanctions the geographic structure of milk imports became less diversified and the share of Belarus surged up to 90% and more for some types of commodities.

The share of Belarusian products in the Russian imports of butter and cheese is not big (about 27%) while the dependence on European suppliers of these items was rather strong. The EU countries accounted for nearly 60% of import supplies of cheese. Therefore the introduction of sanctions primarily affected these groups of dairy products the processing of which requires the biggest milk inputs per unit (*Fig. 45*). The withdrawal from butter and cheese markets of countries under sanctions was partially compensated by larger supplies from Belarus whose share in the structure of butter imports grew from 27 to 52% and in the structure of cheese imports – from 27 to 64%.[2]

Such a strong dependence on Belarusian supplies of dairy products is fraught with certain risks. First, in the conditions of deficit of domestic raw milk on the Russian market, Belarus is

[1] According to data of the Federal Customs Service.
[2] According to data of the Federal Customs Service.

raising prices for this item supplied to Russia while prices for it on the world market have been falling all through 2014. Second, the own capabilities of Belarus to produce dairy products are not limitless. Following greater demand from Russia, the country itself felt short of raw milk. As a result various "grey" schemes are being applied when Belarusian milk processors buy inputs in the EU, e.g. in Lithuania.



Source: Federal Customs Service.

Fig. 45. Dynamics of dairy imports in 2014, tons

So, after the introduction of retaliatory sanctions Russian dairy companies have got a stimulus for development. One of the basic problems in the development of dairy production and import substitution is the deficit of raw milk. In the situation of year by year shrinking of dairy herd, decrease of raw milk output and non-efficient distribution of funds under the existing state support of the sector prices for raw milk in Russia rose by more than 40% over the two recent years. Still, there are some factors that hold back private investments in the dairy industry and impede its development. Low attractiveness of the sector is due to the long period of investments' pay back, high volatility of prices for raw milk and inputs on the Russian market, non-competitiveness (in terms of both price and quality) of milk-intensive products (cheese, butter, dry whey, dry skimmed milk, dry whole milk), the lack of extensive and consistent state support. In case the "window of opportunities" that opened owing to import substitution is not filled by domestic dairy producers, the decrease of imports from one group of countries will be compensated by more expensive imports from the other.

On the vegetable market the share of imports in consumption (2013 data) amounts to 18.8%, including 5.8% from the countries subjected to sanctions. Consumption of fruit depends on import supplies to an even greater extent – their share is as high as 58.5% including 14.7% from countries under embargo[1]. Given that the production of fruit and vegetables in Russia is a seasonal activity and the existing storage capacities are not sufficient, the depend-

[1] Data of the Institute for Agricultural Market Studies (IKAR).

ence on imports of vegetables and fruit is even greater in winter and spring periods (from November to April) when the market is affected by the deficit of domestic produce.

In 2013, the EU countries accounted for 20% of potato imports (Egypt – for 29%, China – for 13%). 24% of tomatoes were also supplied from the EU (39% - from Turkey, 10% - from China). At the same time the share of these countries in imports of frozen vegetables to Russia was as high as 79% (that of China – 7%).

Market supply of apples and pears on the Russian market is basically provided by imported items the share of which is about 80%. In 2013, the EU countries accounted for about 59% of the apple and pear imports.

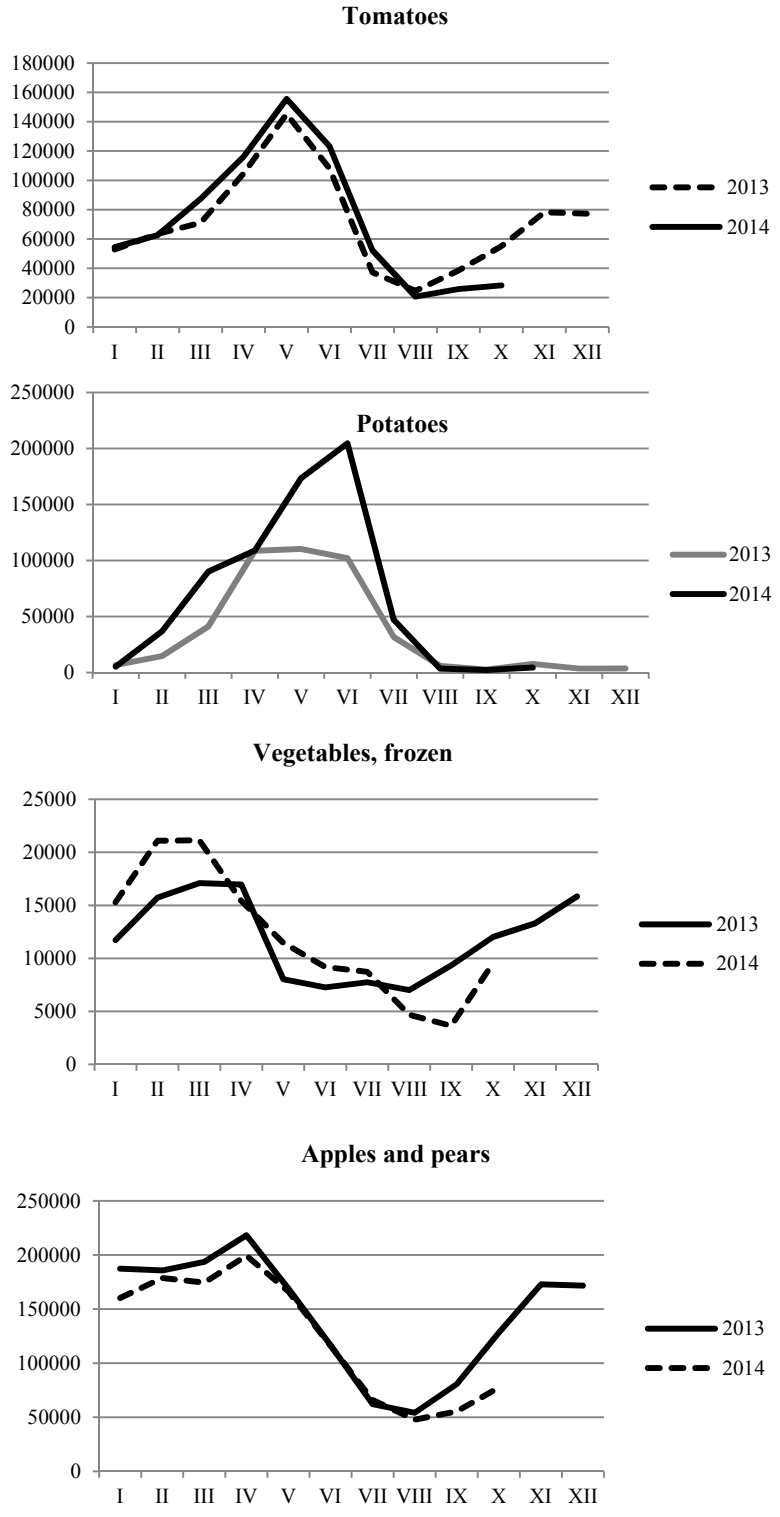
In 2014, 3155 thousand tons of vegetables were imported as compared with 2980 thousand tons in 2013 (annual total). Imports of fruit amounted to 5014 thousand tons versus 6352 thousand tons in the previous year[1]. So, the overall imports of vegetables in 2014 grew by 5.8% as compared with 2013 primarily due to the intensive imports (e.g. of potatoes) in the first half of the year. Imports of fruit dropped by 21% due to the introduced retaliatory sanctions.

The examination of import supplies' dynamics by selected groups of commodities reveals that right after the enforcement of sanctions imports of vegetables and fruit fell (*Fig. 7*). Imports from countries subjected to retaliatory sanctions were partially replaced by bigger supplies from other countries that had already been Russia's permanent trade partners. First of all, this refers to Belarus that increased exports of vegetables and fruit to the Russian market despite the fact that the country has never been their large producer. Therefore, the Belarusian origin of this produce raises doubts. Trade with other CIS countries – Kazakhstan and Moldova – became more active. There appeared few new countries among suppliers since time was needed for signing new contracts.

Following the enforcement of sanctions the geographic structure of import supplies changed. Belarus, Kazakhstan, China, Moldova and Israel were among major exporters of potatoes to Russia. There started purchases of frozen vegetables in China, Belarus, Ukraine, Serbia and Moldova. The major suppliers of apples and pears were China, Serbia, Azerbaijan, Belarus, Ukraine, Armenia and South Africa. Tomatoes were primarily imported from Ukraine, Belarus, Turkey, China, Morocco and Azerbaijan.

Do domestic producers have any chance for substituting imports of some groups of fruit and vegetables in the current situation or one can expect only a replacement of one import supplier by another? Traditionally big volumes of vegetables and fruit in Russia are grown by households. There are few large producers able to ensure sufficient volumes and stability of supplies to trade networks that feel short of quality domestic produce out of season. Besides, most of them have no storage capacities. Meantime, smaller producers – individual private farms – cannot offer traders big lots, year-round supply and suitable commodity assortment. Therefore, the development of competitive environment for medium-size farm producers urges the creation of a system of wholesale food markets.

[1] According to data of the Federal Customs Service.



Source: Federal Customs Service.

Fig. 7. Dynamics of vegetable and fruit imports in 2013 and January-October 2014, tons

So, the introduction of retaliatory sanctions against supply of food items from a whole range of countries opens opportunities for import substitution on some food markets. One more factor fostering this process is the devaluation of national currency conditioning the shrinkage of cheap imports to the country. At the same time, there are certain risks and dangers for the implementation of import substitution strategy as Russian producers use imported inputs the prices for which have surged. In the current economic situation the cost of investment resources is growing. Non-controlled growth of new investment credits supported by the government may result in over-production (first of all in pig breeding). In the medium run real disposable incomes of population are expected to further fall pulling the demand for food products down. In this case there may develop a situation when the ensuring of food security becomes impossible due to the aggravating problem of economic availability. And the most important factor is that lower rates of economic growth bring about the risk of curtailing budget support.

4.6.4. Shift of Budget Support Priorities

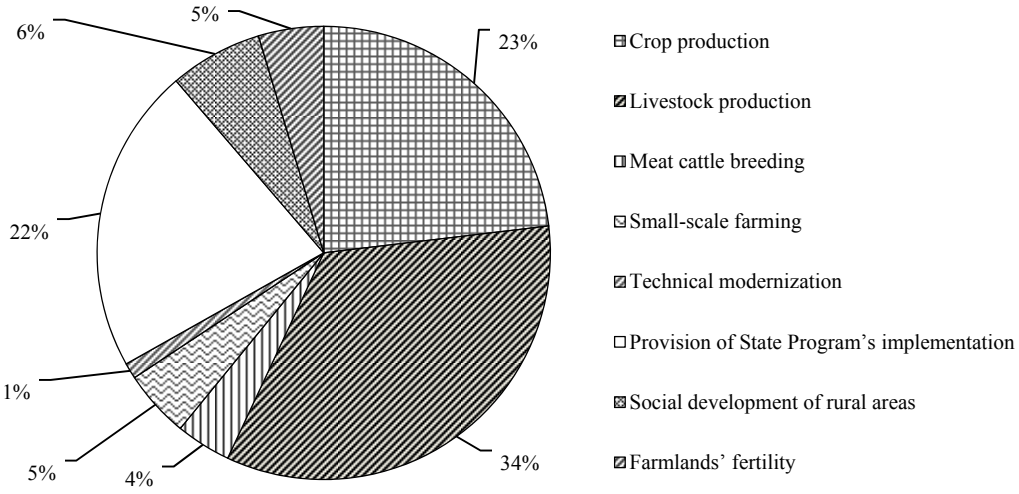
The State program for agricultural development and regulation of agricultural, input and food markets for 2013-2020 (hereinafter – the State Program) which is the second such program beginning from 2008 is one of the "longest" instruments of long-term planning in a selected sector of national economy. It consists of 8 basic blocks–sub-programs (*Fig. 8*), two of which are covered by separate federal target programs (FTP): FTP "Sustainable development of rural areas in 2014-2017 and for the period till 2020" and FTP "Development of Russian farmlands' reclamation for the period till 2020".

In 2014 the financing of State Program notably reduced as compared with the previous year – from Rb 213bn to Rb 170.1bn. However, while the funds allocated to the sub-program for crop production development were cut 1.7 fold, those for livestock production development – 1.2 fold, for technical and technological modernization – 4.3 fold, the outlays for administrative support of the State Program's implementation[1] were *vice versa* nearly doubled. Now measures for bureaucratic support of the Program cost almost as much as the development of crop production (23%). Appropriations to the development of meat cattle breeding, improvement of farmlands' fertility and sustainable development of rural areas slightly grew but the aggregate share of these measures does not exceed 15% of the allocated funds.

Essential amendments were made in the State Program due to the introduction of retaliatory sanctions against food supplies from the EU. A new point ranking second was added to the five traditional guidelines of agricultural and food policies that were: 1) ensuring of Russia's food independence in accordance with criteria set by the Doctrine of food security of the Russian Federation adopted by the RF President Decree No. 120 of January 30, 2010; 2) improvement of Russian food products' competitiveness on the domestic and foreign markets in the framework of Russia's accession to WTO; 3) improvement of financial stability of agricultural and food enterprises; 4) sustainable development of rural areas; 5) reproduction and more efficient use of land and other inputs in agriculture as well as "greening" of production.

[1] The sub-program "Provision of State Program's implementation" incorporates measures for improving the management of State Program and the system of taxation in agriculture, provision of public services and works, forming of public informational resources in the field of ensuring food security, carrying out of phytosanitary and veterinary control, etc. Except for the latter, all other measures have only an indirect bearing on the support of farm producers and are primarily intended for the strengthening of bureaucratic apparatus of agrifood sector management.

The newly added point is the accelerated import substitution for meat, milk, field and greenhouse vegetables, seed potatoes, fruit and vegetable products.



Source: State Program as amended by Federal Law No. 349-FZ of 02.12.2013 "On the federal budget for 2014 and for the planning periods of 2015 and 2016".

Fig. 47. Structure of financing by basic directions of State program for agricultural development and regulation of agricultural, input and food markets in 2014

For the implementation of this task 5 new sub-programs will be added to the 8 already existing beginning from 2015: "Development of field and greenhouse vegetable growing and seed potato production", "Development of dairy cattle breeding", "Support of pedigree livestock breeding, selection and seed production", "Development of wholesale distribution centers and social catering infrastructure", "Development of financial credit system of the agrifood sector" (*Table 30*).

Table 30

Financing of State Program from the federal budget, million rubles

Sub-program	Financing from the federal budget, million rubles				
	2013	2014	2015	2016	Total till 2020
1	2	3	4	5	6
Sub-program 1. Development of crop production, processing and marketing of crop products	67468	39288	51838	61678	555391
Sub-program 2. Development of livestock production, processing and marketing of livestock products	73313	57449	30709	40034	346447
Sub-program 3. Development of meat cattle breading	4903	6738	6949	9348	76548
Sub-program 4. Support of small-scale farming	8620	8189	9760	15 796	114280
Sub-program 5. Technical and technological modernization, innovational development	5300	1900	3145	4106	31 610
Sub-program 6. Provision of State Program's implementation	21429	37394	24045	25493	229031
Sub-program 7. Development of field and greenhouse vegetable growing and seed potato production	0	0	7000	7041	43039.6
Sub-program 8. Development of dairy cattle breeding	0	0	24224	34317	247401
Sub-program 9. Support of pedigree livestock breeding, selection and seed production	0	0	7190	12 707	77335
Sub-program 10. Development of wholesale distribution centers and social catering infrastructure	0	0	2433	10 310	79 279
Sub-program 11. Development of financial credit system of the agrifood sector	2000	0	10000	11200	86700

Cont'd

1	2	3	4	5	6
FTP Social development of rural areas till 2013	9012	0	0	0	9012
FTP Preservation and restoration of farmlands' fertility and of agricultural landscapes as the national endowment of Russia in 2006-2010 and for the period till 2013	6625	0	0	0	6625
FTP Sustainable development of rural areas in 2014-2017 and for the period till 2020	0	11293	13993	16129	139610
FTP Development of Russian farmlands' reclamation in 2014-2020	0	7899	8578	9981	81909.6
TOTAL	197671	170150	187864	258139	2126220

Source: Resolution of RF Government No. 1421 of December 19, 2014 "On introducing amendments to the State program for agricultural development and regulation of agricultural, input and food markets for 2013-2020".

So, the Ministry of Agriculture suggests supporting the "window of opportunities" that opened for Russian food suppliers following the introduction of retaliatory sanctions by the increase of State Program's financing within its 8-year term from the current Rb 1.5 trillion up to Rb 2.1 trillion.[1] Although earlier the government intended to optimize the State Program's budget by cutting it by at least 20%[2], it didn't happen – on the contrary, additional Rb 20bn of respective allocations were included in the enacted budget for 2015. However, this is rather a compensation of funds cut in 2014 than above-projected appropriations. There are plans to allocate Rb 50bn more in the framework of anti-crisis plan for supporting import substitution.

In order to improve availability of food in the aggravating economic situation and to foster demand for domestic produce the government adopted measures for forming the system of internal food aid. Thus, Government Executive Order No. 1215-r of July 3, 2014 enacted the Concept for developing internal food aid in the Russian Federation that specifies the latter as "a system of state assistance to population in the form of direct supplies of foodstuffs to relevant individuals or by providing them with monetary aid for the purchase of food in order to improve nutrition and ensure a balanced diet based on rational rates of food consumption". A similar system of assisting the neediest people short of funds for healthy nutrition such as pregnant and breastfeeding women, school children, handicapped, families with incomes below the subsistence minimum has long existed in developed countries, e.g. in the US and the EU. In case this measure embraces 15 million of most vulnerable Russian citizens, the demand for domestic produce will surely rise. According to estimates of the RF Ministry of Agriculture, in 2014 the total deficit of food for poor people was as big as 5.7 million tons to the amount over Rb 317bn.

There is a very serious lagging behind in the implementation of sub-program "Technical and technological modernization, innovational development of the sector". Modernization of agriculture first of all suggests technical re-equipment and transfer to more advanced farm technologies in order to reduce costs and raise productivity. Low rates of technical and technological renovation of agricultural production on the whole and stagnation of farm machinery building in particular were identified as the most serious challenges for the Russian agri-

[1] Presentation of amendments to the State Program: speech of the RF Minister of Agriculture N. Fyodorov, October 2014.

[2] Report of the RF Minister of Finance A.Siluanov at the meeting of the Government *"Gosprogrammy urezhut radi optimizatsii byudgeta"* [State programs will be cut in order to optimize the budget]. *Nezavisimaya gazeta*, No. 215 (6262), 06.10.2014.

cultural sector.[1] To overcome this negative trend, next year the support of investment projects will be provided not through subsidizing of credits and loans taken for these purposes but by direct reimbursement of a part of their cost upon putting of investment objects in operation. For that end the Ministry of Agriculture is working out an investment map of Russian agriculture taking into account proposals of regions.[2] The following directions are named as priority ones: development of dairy cattle breeding, creation of seed selection centers, strengthening of storage infrastructure, improvement of soil fertility, provision of farm producers with machinery and credits. 9 thousand credit agreements all over the country have been included in the list of priority investment projects eligible for subsidizing.

In order to expand marketing of farm products, the creation of wholesale distributional logistical centers (including those on cooperative principles) will be financed as a separate budget item. The Ministry of Agriculture has worked out a departmental target program "Development of agricultural consumer cooperation till 2025" the basic projected instrument of which will be the support of input supply, marketing and processing cooperatives through providing grants for the development of material and technical facilities. But it's not clear whether it will be financed in the conditions of budget deficit.

4.6.5. Ways for Improving Agricultural Policies in the Current Situation

1. Sanctions, retaliatory sanctions, drop of prices for oil and the consequent devaluation of ruble have changed the economic situation in the country, resulted in the surge of prices for imported food items and triggered the rise of prices for domestic foodstuffs. In these conditions the government should refrain from mistakes made during the previous crises (1917-1921, 1929-1930, 1990-1991), namely trying to hold down the purchase prices for farm products bought from domestic producers. Given the new exchange rate of ruble, the world prices for agricultural products have become much higher than those of the domestic market. Any attempts to retain this situation, to make national producers sell their output at the prices far below the world ones have always ended with a total deficit of food and empty shop shelves. In the new conditions only in case domestic producers receive the world or close to them prices, they will have real incentives for increasing production and import substitution.

2. The crisis has already led to and in the following months will further aggravate the drop of personal incomes, with lower decile groups being most affected. The growing prices for food products will inevitably result in shorter consumption, especially of higher quality products. The shrinking of demand may lead to the withdrawal from farm business of those producers who entered it for receiving high profits. The corporate pattern of agricultural production is less sustainable than farmer one – it's not a mere coincidence that family farms are prevailing all over the world. The change of market situation may cause the worsening of financial performance and bankruptcy of agroholdings that in the previous years have already accumulated serious creditor indebtedness. It's necessary to elaborate the policy for restructuring debts of such entities with the ultimate goal of preserving production facilities and their transfer to small businesses working under contracts with large processing and marketing companies.

[1] National report «On the progress and implementation in 2013 of the State program for agricultural development and regulation of agricultural, input and food markets for 2013-2020".
[2] Report of the RF Deputy Minister of Agriculture A.V.Petrikov at the XIX Nikonov's readings in the Free Economic Society of Russia.

3. In the crisis situation the government should by no means promise to feed everybody or strengthen the centralization of food supply. During previous crises prices for and deficit of food products led to the active involvement of all population in farm production. About 36 million families in the country have summer cottages ("dachas") and household plots. In the crisis situations their role in family food supply and incomes immensely grows. At the beginning of 1990s the average share of returns from household farming in incomes of rural families increased from 21.5% (1990) to 41.6% (1992). In recent years the role of these farms notably dropped as it was cheaper to buy everything in a food store or at the market – incomes in kind brought only 7% of family incomes in rural areas. In the changed situation the government should render assistance to such farms for the expansion of their production, help them with provision of seeds (for instance, even less severe crisis of 2008 led to a sharp increase of seed potato purchases by population) and other inputs. Agriculture is a domain of small business. One should support farmers and individual rural entrepreneurs, remove fantastic bureaucratic procedures hindering their access to land and other inputs. Small entrepreneurs are efficient when they are united in cooperatives, are acting in concert with large businesses. The development of cooperation and contract farming policies will help to ensure sustainability of agricultural production.

4. The lion's share of budget funds still goes to large-scale agribusiness. Small- and medium-size farms have far scarcer access to markets of basic inputs, to subsidizing and other forms of state support. At the same time they produce over 50% of agricultural output. In this regard it seems necessary to re-guide agricultural policies so that to enable small farm producers and their cooperatives to participate in the implementation of State Program together with large agroholdings. In order to cut transaction costs we can recommend providing services to rural borrowers primarily through credit cooperatives. Cooperatives may assume all the commitments related to recording, application for and payment of all subsidies that a specific farm producer is eligible for under all measures and programs.

6. The program of sustainable development of rural areas should not be limited to the per capita financing of social and communal infrastructure and providing of young specialists with dwelling. No doubt very important, these two directions of government support fail to encompass the whole range of rural population's needs that differ by regions of the Russian Federation. It's worth using here the experience of the European Union's project "Leader plus" that envisages involvement of rural population in revealing the most urgent problems and distribution of grants on a competitive basis by open voting.

7. The decision of the RF Ministry of Agriculture on the direct reimbursement of a part of investment projects' cost upon their putting in operation instead of subsidizing interest rates of credits and loans taken for these purposes is absolutely correct from the theoretical point of view. First, it's difficult to plan the budget for reimbursing interest rates at the moment of their unpredictable growth. Second, according to Supplement 2 of the WTO Agreement on Agriculture unbound subsidies for the modernization of farms are classified as "green box" support measures while subsidies for the reimbursement of interest rates distort input markets and are included in the "amber box". Still, there is one fact raising concern: farm producers can enter the program of priority investment financing only if they are included in the lists recommended by the regional departments of agriculture. The terms of participating in the program of technical modernization in most cases are not specified thus increasing the risk of corruption.

8. With the creation of Customs Union and the EAEU Russia has ceded a part of its sovereignty. In the new conditions the government has to coordinate its decisions with the alliance partners. The most important issues to be coordinated with members of the EAEU are:

- changing of the Union's customs borders;
- introduction of bans on import or export of basic food products from the selected countries and unions;
- introduction of temporary sanitary and epidemiological restrictions on import of selected agricultural and food items from the selected countries;
- introduction of export duties on selected products and inputs.

When taking foreign policy and economic decisions Russia should bear in mind the risks associated with their impact on the alliance partners.

4.7. Foreign Trade

From the point of view of foreign economic conditions and the world market situation, 2014 was a very hard year for the Russian Federation. The drop of prices for oil, the dramatic devaluation of national currency, the introduction of sanctions by Western economies and the retaliatory sanctions introduced by the RF government have hindered the development of Russian foreign trade. A standstill of basic economic indicators observed in the first half of the year gave way to their sharp drop at the year end. As a result, in 2014 Russia's foreign trade turnover decreased as compared with the previous year (the decrease reaching 6.9%) for the first time since 2009.

4.7.1. World Economic Situation

According to projections of IMF the growth rates of the world economy after the slowdown to 2.7% in the first half of 2014[1] should have increased up to 3.5% in the second half of the year and up to 3.8% in 2015. However, the world economy does not grow evenly and the challenges it faces are not fading away. In developed economies the demand remains weak and in the middle run this can result in the lowering of growth rates all over the world. In China the economic growth is slowing down. The domestic demand in a number of the top economies in Latin America remains sluggish. The geopolitical tensions caused by situation in the Ukraine and the Middle East are hampering economic development not only inside but also outside these regions.

On November 25, 2014 the *US* Bureau of Economic Analysis released its second estimate of GDP growth in the III quarter[2]. Although markets anticipated slower growth, the second estimate was higher than the preliminary one: according to it the annualized increase in the III quarter amounted to 3.9% whereas initially it was estimated at 3.5%. Growth relative to the respective quarter of the previous year reached 2.4% (preliminary estimate – 2.3%).

According to the final data, in the II quarter of 2014 the US economy grew by 4.6% in annual terms. So, in the past two quarters the American economy grew at the highest rate since 2003. The US economic indicators (from production to employment and retail sales) evidence that at the beginning of the IV quarter the economy preserved this impetus. The growth forecasts for the last three months of 2014 are slightly below 3.0%.

[1] http://www.imf.org/external/pubs/ft/weo/2014/02/pdf/c2.pdf
[2] http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm

In December 2014 the Federal Reserve System revised upwards its forecast for the US GDP annual growth – up to 2.3-2.4% (as compared with earlier projected 2-2.2%) and up to 2.6-3% in 2015. According to estimates of the US Central Bank the level of inflation in 2014 will be 1.2-1.3% instead of 1.5-1.7% (the previous estimate) while in 2015 – 1-1.6%. At the same time unemployment rate in 2014 is expected to reach 5.8% instead of 5.9-6% according to September estimates, in 2015 – 5.2-5.3%.

Economic situation in the *EU* countries remains difficult – the latest business reviews show that a noticeable recovery is hardly possible in the coming months. According to the preliminary estimate of Eurostat[1], in the IV quarter of 2014 GDP in Eurozone (EU18[2]) grew by only 0.3% as compared with the previous quarter while that of the European Union at large (EU28) – by 0.4%. In total, GDP of 18 Eurozone countries in 2014 grew by 0.9%, that of 28 countries of the European Union – by 1.4%.

Report of the People's Bank of China[3] says that in 2015 the economic growth in *China* may slow down to 7.1%. According to data of the State Statistical Department of PRC, over 2014 the GDP increased by 7.4%. This annual total is the lowest for the Chinese economy since 1990 (for reference: in 2013 the growth of GDP amounted to 7.7%). Indicators of Chinese economic performance in the past year were close to expectations of the government (the official forecast being "around 7.5%") that in recent months took some steps for encouraging business activity in the country.

In 2015 a further slowdown of economic growth in PRC is projected. For instance, IMF has brought down its estimate of the Chinese economy's growth in 2015 by 0.3 p.p. – down to 6.8%, in 2016 – by 0.5 p.p. down to 6.3%.

In January 2015 a regular IMF Bulletin "World Economic Outlook" (WEO) was released that forecasts the world economic growth in 2015-2016 at the rate of 3.5% and 3.7%, respectively, which is 0.3% below estimates of the October 2014 WEO release. This revision is due to the worsening of outlook for the economies of China, Russia, Eurozone countries and Japan as well as to the fading business activity in some countries – major exporters of oil following the plunging of oil prices. Growth forecasts were improved only for the US economy (*Table 31*).

In October 2014 the World Trade Organization (WTO) published «World Trade Report 2014»[4] that contains basic indicators reflecting the current trends in the development of international trade in commodities and services. In 2013 the growth of the world commodity trade remained moderate – 2.2% (in 2012 – 2.3%). At the beginning of 2014 the slow rates persisted: in the I quarter of 2014 the volumes of international trade in commodities exceeded those of the respective 2013 period by 2.1%.

The sluggish growth of international trade in 2013 was conditioned by the combination of many factors including weaker demand for imported items in the developed countries (-0.3%) and a moderate increase of imports in the developing economies (4.7%). As to exports, their growth both in developed and developing countries was modest (by 1.5 and 3.6%, respectively). The 2013 trade and production indicators were affected by the lingering recession in the EU, the high rate of unemployment in Eurozone countries (except Germany) and the uncer-

[1] http://ec.europa.eu/eurostat
[2] Eurozone (EU-18) includes Belgium, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Luxemburg, Latvia, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia and Finland.
[3] http://www.pbc.gov.cn/publish/english/963/index.html
[4] http://www.wto.org/english/res_e/publications_e/wtr14_e.htm

tainty about time frames of monetary stimulus' curtailment by the US FRS. The latter contributed to financial instability in the developing countries in the second half of 2013, especially in some countries with emerging markets.

Table 31

Dynamics of the world GDP and world trade (increase as % of the previous year)

	2010	2011	2012	2013	2014	Forecast		Difference between forecasts of October 2014 and January 2015	
						2015	2016	2015	2016
World GDP	**5.1**	**3.9**	**3.4**	**3.3**	**3.3**	**3.5**	3.7	**–0.3**	**–0.3**
Countries with developed economies	***3.0***	***1.7***	***1.2***	***1.3***	***1.8***	***2.4***	***2.4***	***0.1***	***0.0***
United States	2.4	1.8	2.3	2.2	2.4	3.6	3.3	0.5	0.3
Eurozone	2.0	1.5	–0.7	-0.5	0.8	1.2	1.4	-0.2	-0.3
Germany	4.0	3.4	0.9	0.2	1.5	1.3	1.5	-0.2	-0.3
France	1.7	2.0	0.3	0.3	0.4	0.9	1.3	-0.1	-0.2
Italy	1.8	0.4	–2.4	-1.9	–0.4	0.4	0.8	-0.5	-0.5
Spain	–0.3	0.1	–1.6	-1.2	1.4	2.0	1.8	0.3	0.0
Japan	4.5	–0.6	1.5	1.6	0.1	0.6	0.8	–0.2	-0.1
Great Britain	1.8	1.1	0.3	1.7	2.6	2.7	2.4	0.0	-0.1
Canada	3.2	2.5	1.7	2.0	2.4	2.3	2.1	-0.1	-0.3
Other countries with developed economies	5.9	3.2	2.0	2.2	2.8	3.0	3.2	-0.2	–0.1
Countries with emerging markets and developing countries	***7.4***	***6.2***	***5.1***	***4.7***	***4.4***	***4.3***	***4.7***	***–0.6***	***–0.5***
Commonwealth of Independent States	4.8	4.8	3.4	2.2	0.9	-1.4	0.8	–2.9	-1.7
Russia	4.3	4.3	3.4	1.3	0.6	-3.0	-1.0	-3.5	–2.5
Less Russia	6.0	6.1	3.6	4.3	1.5	2.4	4.4	-1.6	-0.2
Developing Asian countries	9.5	7.8	6.7	6.6	6.5	6.4	6.2	-0.2	-0.3
China	10.4	9.3	7.7	7.8	7.4	6.8	6.3	-0.3	-0.5
India	10.1	6.3	4.7	5.0	5.8	6.3	6.5	-0.1	0.0
Latin America and Caribbean countries	6.2	4.6	2.9	2.8	1.2	1.3	2.3	–0.9	–0.5
Brazil	7.5	2.7	1.0	2.5	0.1	0.3	1.5	-1.1	–0.7
Mexico	5.6	4.0	4.0	1.4	2.1	3.2	3.5	-0.3	-0.3
World trade in commodities and services	***12.6***	***6.1***	***2.9***	***3.4***		***3.8***	***5.3***	***–1.1***	***–0.2***
Imports									
Countries with developed economies	11.4	4.7	1.2	2.0		3.7	4.8	-0.6	–0.2
Countries with emerging markets and developing countries	14.9	8.8	6.0	5.5		3.2	6.1	–2.9	–0.2

Source: http://www.imf.org/external/pubs/ft/weo/2015/update/01/

In 2013 *China* became the top world trader with foreign trade turnover amounting to $4,159bn (44.6% of GDP) and exceeding the 2012 indicator by 7.5%. The PRC's balance of trade has been positive since 1994 and in 2013 reached $259bn (2.7% of GDP).

The *United States of America* descended to the second place with 2013 foreign trade turnover of $3,909bn (23.4% of GDP). The country preserved quite a sizable deficit of trade balance: in 2013 it amounted to $749.5bn (4.5% of GDP). As compared with 2012, the deficit of US trade balance reduced by 5.4%.

Germany has retained its third place with 2013 foreign trade turnover being $2,642bn (73.5% of GDP). The positive trade balance amounted to $264bn (7.3% of GDP).

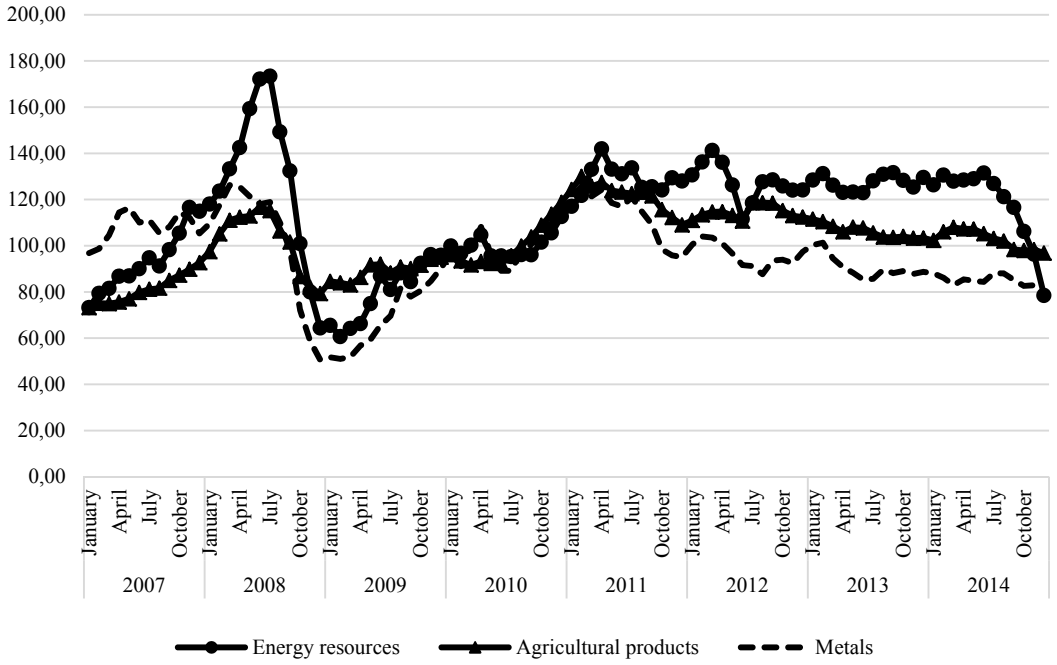
In 2013 the *Russian Federation* descended to the 10th place from the 8th that it occupied in 2012 with exports reaching $523bn (25% of GDP). The share of Russian exports in the total world commodity exports was 2.8%. By the amount of imports Russia remained in the 16th place – its commodity purchases in foreign countries amounted to $343bn (16.4% of GDP).

The share of Russian imports in the world total remained 1.8%. In the aggregate volume of world trade Russia ranked 13th with its share in the world trade turnover being 2.5%. The country's balance of foreign trade was positive and reached $179bn (8.5% of GDP).

4.7.2. Conditions for Russian Foreign Trade: Price Trends for Basic Items of Russian export and import

From the middle of 2014 the expansion of supply on commodity markets coincided with the slowdown of the world economic growth, especially in developing countries that used to account for the major part of demand for raw inputs. As a result, beginning from summer 2014 prices for basic commodities – agricultural products, energy resources and metals – started to steadily decline.

In the III quarter of 2014 the World Bank's price index for energy resources decreased by 6.2% as compared with the previous quarter, that for agricultural products – by 5%; the price index for metals grew by 2.6% but in October-November resumed its falling *Fig. 48*).



Source: http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1304428586133/ Commodity MarketsOutlook_October2014.pdf

Fig. 48. Commodity price index of the World Bank (2010 = 100)

In the first half of 2014 the price situation on the world oil market remained favourable: the price for Brent oil was above $100 per barrel. But after reaching their annual maximum ($111.87 per barrel) in June, oil prices started falling: in the III quarter the price for Brent oil slid down by 5.7% as compared with the previous quarter, that for North American WTI – by 3.9%. Such a decrease superseded the period during which prices for oil fluctuated within quite a narrow band around $105 per barrel that was a "desired price range" for the OPEC countries. In fact, 2011-2013 was one of the least volatile 3-year periods in the recent history of oil market.

In the IV quarter of 2014 the drop of oil prices accelerated. In October 2014 the average monthly price fell down to $87.27 per barrel which was 20.3% below the respective indicator of 2013 and 10.3% below the level of the previous month.

At their meeting on November 27, 2014 the OPEC countries decided to leave unchanged the total amount of quotas for oil production at the level of 30 million barrels a day. As a result, on November 28, 2014 the price for Brent oil fell by 7.1% as compared with the previous day – down to $71.89 per barrel.

After the declaration of UAE that OPEC wouldn't cut quotas for oil production even if prices for oil dropped down to $40 per barrel, on the 16th of December 2014 the price for Brent oil fell below $60 per barrel for the first time since July 2009.

The average price for Brent oil in 2014 was $98.9 per barrel – 9.1% lower than in 2013. Over the year the price for North American WTI fell by 4.9% - down to $93.1 per barrel.

The price for Urals oil followed the world market trend and in the first half of 2014 remained relatively stable fluctuating between $106.4 and $108.9 per barrel. But in the second half of the year it started falling. The average price of Urals oil in 2014 was $97.6 per barrel or 9.5% below the 2013 level.

The drop of oil prices in the second half of 2014 was most remarkable since the 2008 crisis. The key factor of mid-term price trend was the changing of structure of the world oil market due to the shale revolution in the United States. The growth of oil extraction therein produces increasing pressure on the world prices. There were also other factors that influenced the market of oil. First, political tensions in Libya and Nigeria reduced and following that oil production increased by 1.5 million barrels a day. Second, due to the accident at the refinery in Venezuela the demand for crude oil temporarily fell by 0.65 million barrels a day. Third, dollar strengthened relative to other currencies following the curtailment of quantitative easing (QE) program in the US. Of no small importance was the decision of OPEC not to cut production and let the market "search for equilibrium" on its own in the conditions of persisting excessive supply of oil.

The dynamics of prices for gas retains its notable segmentation by regions: there is a great difference between prices for this item at the North American, European and Asian markets.

The lowest prices for gas continue to be observed in the United States, although in 2014 their growth was quite noticeable: according to data of the World Bank, in 2014 the spot price for gas at Henry Hub averaged $4.38 per 1 million British thermal units (BTU) which is 17.5% above the 2013 indicator.

The prices for gas remain the highest in East Asia despite lowering by 0.4% in 2014 as compared with 2013. According to data of the World Bank, in 2014 the price for liquefied natural gas imported by Japan averaged $15.95 per 1 million BTU.

At the European market the price for gas in 2014 fell by 14.7% as compared with 2013 down to $10.1 per 1 million BTU (average spot import price).

The situation on the world market of non-ferrous metals started worsening since the end of 2011 and has not recovered as yet.

In 2013 average prices for aluminium fell down to $1,846 per ton which is 8.6% below the level of 2012. In summer 2014 a slight upward trend was observed and in August the price for this item grew up to $2,030.5 per ton – the maximum level since February 2013. After that the drop of prices resumed and continued in September and October. In November the price for aluminium was up again exceeding $2,000 per ton. However, it failed to maintain this level for a long time and in December fell down to $1,909.5 per ton. According to data of the

World Bureau of Metal Statistics (WBMS)[1], in 2014 the world market of alluminium displayed a deficit of 849 thousand tons. The global stocks of this metal at the end of 2014 totaled 6,397 thousand tons. In January-December the demand amounted to about 50,550 thousand tons.

In 2014 the basic factors of shorter demand for copper were sluggish industry dynamics in Eurozone and the decrease of purchases by China that accounts for 40% of the world consumption of this metal. To a certain extent prices for copper were supported by the recovery observed in the industrial sector and residential property market in the US. Still, in March 2014 the price for copper fell to its minimum since October 2009 – down to $6,650 per ton. In July it rose up to $7,113.38 per ton but afterwards resumed its sliding down.

In the first half of 2014 a stable demand for nickel from producers of stainless steel was observed. As a result in the time span from January to July the price for this item grew by 26.2% - up to $19,117.65 per ton. But at the year end the negative dynamics resumed. However, the average annual price for 2014 exceeded that for 2013.

According to London Metal Exchange, in 2014 prices for aluminium were above the 2013 level by 1.1%, those for nickel – by 12.4%; meantime, the prices for copper fell by 6.4% (*Table 32*).

Table 32

Average annual world prices, 2004–2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Oil (Brent), $/barrel	37.4	54.38	65.15	72.32	97.64	61.86	79.64	110.9	111.97	108.9	98.9
Natural gas (USA), $/million BTU	5.89	8.92	6.72	6.98	8.86	3.95	4.39	4.00	2.75	3.73	4.38
Natural gas (European market), $/million BTU	4.28	6.33	8.47	8.56	13.41	8.71	8.29	10.52	11.47	11.79	10.05
Natural gas (Japan), $/million BTU	5.13	5.99	7.08	7.68	12.55	8.94	10.85	14.66	16.55	15.99	15.95
Copper, $/ton	2866	3679	6722	7118	6956	5149	7534	8828	7962	7342.8	6901.3
Aluminium, $/ton	1715	1898	2570	2638	2573	1665	2173	2401	2023.3	1846.7	1867.4
Nickel, $/ton	13823	14744	24254	37230	21111	14655	21809	22910	17557	15032	16893

Source: calculated using data of the World Bank.

In 2014 the World Bank's index of prices for agricultural products fell by 3% as compared with the previous year due to the lowering of prices for grains (by 1.9%), cocoa, coffee and tea (by 3.9%). Meantime, prices for vegetable oils, meat (primarily beef) and sugar grew.

Average prices received by Russian exporters reduced in line with the global market trends. The reduction concerned average export prices for crude oil, natural gas, mineral fertilizers, ferrous metals and copper.

As to average import prices, their slight growth at the beginning of the year in August was superseded by sliding down. As a result, in 2014 prices for imported commodities fell by 4% as compared with 2013: those for items from the CIS countries were down by 5.1%, from the non-CIS countries – by 1.4% (*Table 33*).

Since in February and from August to December the lowering concerned not only average export prices but also average import prices, in 2014 the worsening of terms of trade for Russia slowed down. While in 2013 the index of terms of trade equaled 93.4 points, in 2014 it was 96 points.

[1] http://www.world-bureau.com/readnews.asp?id=19

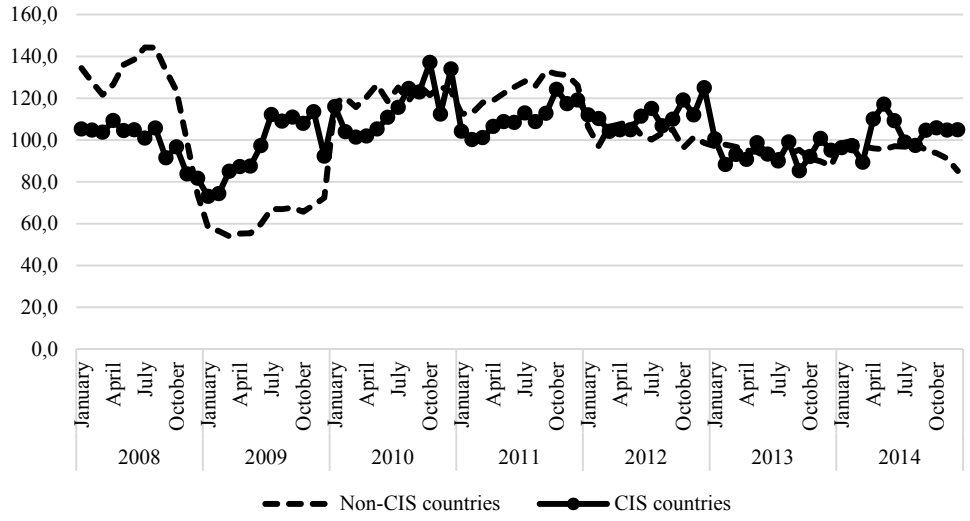
Table 33

Indices of export and import prices in 2014 (as % of the respective month 2013)

	Export			Import		
	Total	**to non-CIS countries**	**to CIS countries**	**Total**	**from non-CIS countries**	**from CIS countries**
January	98.5	98.6	97.8	100.4	100.2	101.6
February	97.6	98.8	91	98.6	99.2	93.6
March	97.3	98.6	89	101.5	101.7	99.7
April	99.2	98.2	106.3	101.7	102.3	96.6
May	99.4	97.3	113.9	101.4	101.8	97.3
June	98.9	97.6	108	100.4	100.6	98.9
July	98.3	98.4	97.5	101.2	101.5	98.5
August	95.6	95.8	94.1	97.3	97.4	96.6
September	92.3	92.4	92.1	94.5	94.7	92.4
October	90.1	90.2	89.7	95.2	96.3	84.8
November	85.3	85.1	86.55	92.2	93.4	82.6
December	80.2	79.6	85.0	92.4	93.4	81.0
2014	**94.3**	**94.1**	**95.7**	**98.2**	**98.6**	**94.9**

Source: RF Ministry for Economic Development.

Meantime terms of trade with the CIS countries slightly improved: the respective index grew from 94.8 to 100.8 points. Terms of trade with the non-CIS countries continued worsening but not as fast as in 2013: the index was up from 94.8 to 95.4 points (*Fig. 49*).



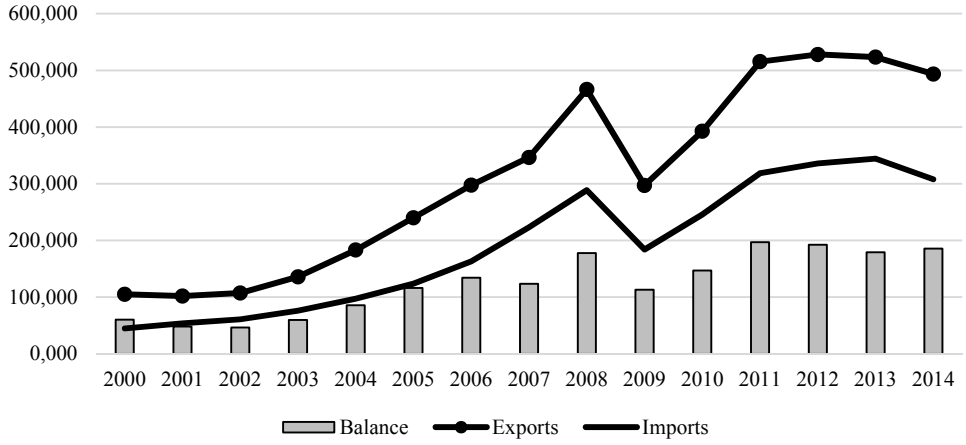
Source: RF Ministry for Economic Development.

Fig. 49. Russian Federation: Index of foreign trade in 2008-2014

4.7.3. Basic Indicators of Russian Foreign Trade in Commodities

In 2014 Russian foreign trade turnover calculated according to the balance of payments' methodology amounted to $804.7bn which was 6.9% below the respective 2013 indicator. Foreign trade turnover with the non-CIS countries fell by 5.4% - down to $700.4bn, that with the CIS countries – by 16.4% down to $104.3bn.

Russian exports in 2014 reduced by 5.1% as compared with 2013 – down to $496.7bn. Russian imports for the first time since 2009 fell by 9.8% - down to $308bn. The balance of foreign trade in 2014 was positive - $188.7bn or 3.7% above the 2013 indicator (*Fig. 50*).



Source: Central Bank of the Russian Federation.

Fig. 50. Basic indicators of Russian foreign trade in 2000–2014, billion dollars

Due to the slowdown of the global economic growth the situation on the world markets of major commodities of Russian export has notably deteriorated. As a result the general price index for items exported from Russia fell by 5.7%. The value of crude oil supplies to foreign consumers dropped by 11.4% as compared with 2013 whiles the average contract price reduced by 6.2%; the respective rates of decrease for natural gas were 18.6% and 7.4%. Prices for other commodities sold to foreign consumers fell by an average 3.5%.

The physical volume of export sales remained at the level of 2013 owing to the growth of supplies to non-CIS countries by 1.6%. The physical volume of exports to CIS countries dropped by 10.1%. The supplies of fuel and energy products in physical terms fell by 3.1%, the decrease for natural gas and oil being even greater – 12.1% and 5.6%, respectively. These were only petroleum products that were exported in bigger physical volumes (up 8.9%). The volumes of supplies of other commodities increased by 2.6%. So, the negative dynamics of Russian exports was primarily conditioned by the price factor given that the physical volumes of export supplies stabilized.

The reduction of import value was driven by both the lowering of average import prices and the decrease of physical volumes of commodities supplied to Russia. Thus, in 2014 import purchases of commodities in physical terms were 7.5% below the level of 2013 (those from the non-CIS countries were down 6.8%, from the CIS countries - down 12.2%). The prices for imported items fell by 1.8% as compared with 2013 (that from the non-CIS countries – by 1.4%, from the CIS countries – by 5.1%). Along with shorter demand (one of the reasons being the depreciation of ruble), the negative dynamics of this indicator is due to the impact of restrictions on import of selected groups of commodities from foreign countries introduced by the Russian Federation in August 2014 (*Table 34*)

Table 34

Indices of Russian foreign trade in 2010–2014 (as % of the previous year)

	2010		2011		2012		2013		2014	
	Physical volumes	Average prices	Physical volumes	Average prices	Physical volumes	Average prices	Physical volumes	Average prices	Physical volumes	Average prices
Export	110.2	116.9	97.3	131.1	99.7	101.7	104.3	95.8	100.0	94.3
Import	130.8	101.2	125.6	109.8	104.8	96.6	99.2	101.4	92.5	98.2

Source: RF Ministry for Economic Development.

The export-import coverage ratio grew from 152% in 2013 up to 160.3% in 2014.

The coefficient of foreign trade imbalances (the ratio of trade balance to trade turnover) was up from 20.6% in 2013 to 23.2% in 2014.

Structure and Dynamics of Commodity Exports

In 2014 Russian commodity exports shrank by 5.1% as compared with 2013 (down to $496.7bn) due to the curtailment of supplies to the CIS (by 12.9%, down to $68.0bn)) and to non-CIS countries (by 3.7%, down to $428.6bn). The share of non-CIS countries in the total exports grew from 84.1% up to 86.3% (*Table 35*).

The structure of Russian exports in 2014 remained basically unchanged as compared with 2013. Mineral items accounted for 70.5% thereof while in 2013 their share was somewhat higher – 71.6%. The share of fuel and energy products reduced from 70.6% in 2013 down to 69.5%.

The value of mineral exports fell by 7.1% both due to the decrease of physical volume of oil exports by 5.6% and to the lowering of oil price by 6.2% as compared with 2013. The physical volume of gas exports shrank by 12.1% while the average export price for this item fell by 7.4%. In 2014 Russian gas exports totaled 172.6 billion m^3. Supplies to the non-CIS countries reduced by 9.7% - down to 124.6 billion m^3, while those to the CIS countries – by 17.8% down to 48 billion m^3.

Table 35

Dynamics of Russian exports in 2004–2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Exports, billion $	183.2	243.8	303.6	354.4	471.6	303.4	400.6	515.4	528.0	523.3	496.7
including:											
Non-CIS countries, billion $	153.0	210.2	260.2	300.6	400.5	255.3	338.0	436.7	445.2	444.9	428.6
Exports as % of GDP	31.0	31.4	30.1	26.7	28.1	24.3	25.8	27.1	26.2	25.0	26.6
Growth rates as % of the previous year											
Volume index	110.7	104.7	105.8	105.0	96.8	97.0	110.0	97.8	99.9	96.3	
Price index	122.7	126.9	119.7	110.9	137.4	76.4	119.8	132.9	101.6	94.7	

Source: the Bank of Russia, RF Ministry for Economic Development.

The drop of crude oil and gas exports was not compensated by higher value of petroleum products' sales the physical volume of which increased by 8.9%. Overall, export supplies of petroleum products in 2014 mounted to the record level of 164.8 million tons. Their exports to non-CIS countries grew by 10% - up to 155.2 million tons while those to the CIS countries dropped by 6% - down to 9.6 million tons. In 2014 average contract prices were 2.7% lower than in 2013.

According to data of the Federal Customs Service, liquid fuel not including biodiesel continued to dominate in the structure of petroleum products' exports but its share therein fell down to 52.9% versus 56% in 2013 basically due to the lowering of average export price (by 5.4%).

The share of metals and metal products grew from 7.8% in 2013 to 8.2% in 2014. This growth was conditioned by the increase of physical volumes of exports of ferrous metals – up by 5.2% (while average contract prices for them fell by 2.7%) and of refined copper – up by 30.5% (contract prices for it being 8.8% below the 2013 average). Physical volume of nickel exports remained at the level of 2013 but owing to the growth of average contract prices for this item by 7.3%, the value of respective exports also increased by 7.3%. The physical volume of aluminium exports notably dropped – by 13.3% as compared with 2013. The growth

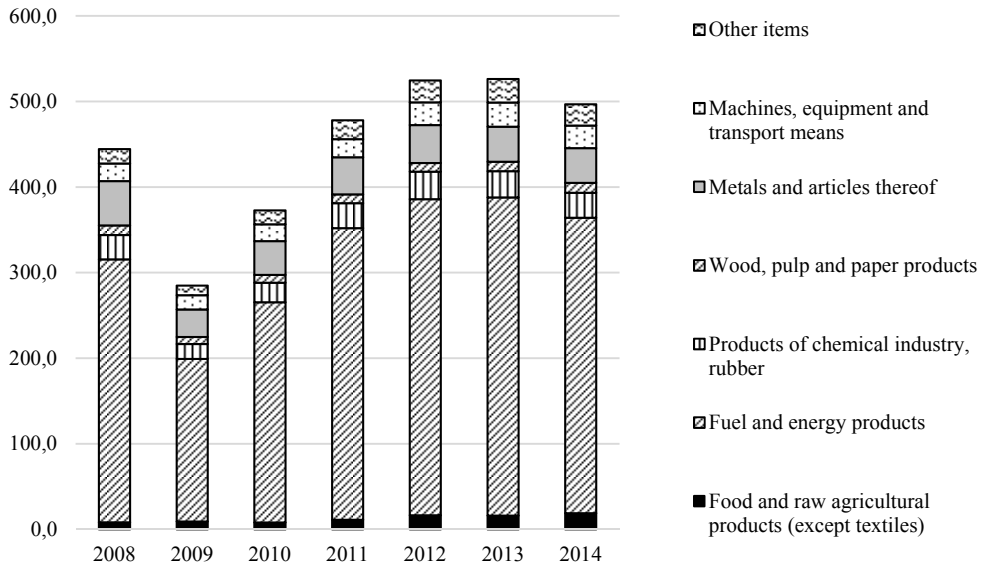
of average contract prices by only 1.4% failed to compensate for such a drop and as a result the value of aluminium exports was down by 12.1%.

Exports of chemical industry's produce continue falling for the second year in turn: in 2014 they amounted to $29.1bn which was 5.2% below the 2013 level. Chemical products accounted for 5.9% of the total exports of most important items. The leading positions in this commodity group belong to fertilizers, inorganic chemical products and organic chemical compounds.

In 2014 the share of machines, equipment and transport vehicles in the structure of exports fell down to 5.3% versus 5.4% in 2013 (in 2012 – 5.1%). Supplies of items belonging to this commodity group to foreign countries reduced by 7.1%. The most seriously affected was the export of trucks – it dropped by 18.5% as compared with 2013.

A notable reduction of exports value was observed in the following groups of the extended commodity classification: "Raw hides and skins, fur skins and articles thereof" (down by 31.9%), "Precious stones, precious metals and articles thereof" (down by 17.6%).

Growth of export supplies was registered in the following commodity groups: "Textiles, textile articles and footwear" (up by 18%), "Wood, pulp and paper products" (up by 6.1%). It's noteworthy that exports of food products increased by 16.7%; the share of this commodity group was up by 0.7 p.p. owing to the growth of wheat exports' value 1.6 fold conditioned by bigger physical volumes of shipments (primarily to the non-CIS countries).



Source: Federal Customs Service.

Fig. 51. Shifts in commodity structure of Russian exports in 2008–2014, billion $

Structure and Dynamics of Imports

The aggravation of geopolitical situation that triggered the introduction of sanctions against the Russian Federation by Western economies, the retaliatory measures of the Russian government limiting supply to the RF territory of selected types of agricultural and food products from the same countries, a sharp devaluation of the national currency at the end of the year and the drop of both consumer and business solvent demand have led to the curtailment of import purchases.

In 2014 Russian imports fell by 9.8% as compared with 2013 – down to $308bn due to the reduction of supplies from both non-CIS countries (imports from which totaled $271.7bn or 7.9% below the respective indicator of 2013) and countries-members of CIS (their supplies amounted to $36.3bn – 21.7% less than in 2013). The share of non-CIS countries in the total imports grew from 85.9% to 88.2%.

Table 36

Russian Imports in 2004–2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Imports, billion $	97.4	125.4	164.3	223.5	291.9	191.8	248.6	318.6	335.8	344.3	308.0
including											
Non-CIS countries, billion $	76.4	103.5	138.6	191.2	253.1	167.7	213.3	275.5	288.5	240.2	271.7
Imports as % of GDP	16.5	16.2	16.5	17.2	17.4	15.0	16.1	16.7	16.6	16.4	16.6
Growth rates as % of the previous year											
Volume index	124.2	122.4	130.1	127.1	113.5	63.3	135.4	122.2	105.1	86.6	88.6
Price index	106.1	106.5	105.5	107.6	117.8	99.1	101.6	109.1	97.3	104.0	101.8

Source: the Bank of Russia, RF Ministry for Economic Development.

The peak of imports' drop was registered in the IV quarter when the volume of commodity supplies from foreign countries fell by 19.4% as compared with the respective period of 2013; in December the drop was already as deep as 24% (as compared with December 2013).

The decrease of imports was observed in actually all commodity groups of the extended commodity classification except for "Mineral products" (up by 5.5%) and "Precious stones, precious metals and articles thereof" (up by 25.8%). A notable reduction of import supplies was registered in the following commodity groups: "Textiles, textile articles and footwear" (down by 12.8%), "Metals and articles thereof" (down by 12.7%), "Machines, equipment and transport means" (down by 11.7%), "Wood, pulp and paper products" (down by 11.3%), "Products of chemical industry" (down by 7.4%). Imports of "Foodstuffs and raw agricultural products" fell by 7.8% due not only to the introduction of food embargo but also to the devaluation of ruble that raised the competitiveness of domestic food products and at the same time limited import potential.

It should be noted that imports of capital goods was falling faster than imports of consumer commodities. For instance, in January-September 2014 import purchases of capital goods decreased by 5.5% as compared with the respective period of 2013 while those of consumer commodities were down by only 2.9%.

Serious problems emerged in the Russian oil and gas sector due the introduction of ban on import supplies of technological equipment for oil and gas companies. According to data of the Center for International Trade[1], in 2013 Russia imported equipment for its oil and gas industries to the amount of $2bn; in 2014 over half of these purchases were subjected to embargo imposed by the EU and US in August 2014. In 2013 the basic suppliers of equipment for oil and gas production were Japan, Canada, the US, Norway, South Korea, China, Belarus and the countries of European Union (Germany and Italy). The share of imports from countries that introduced sanctions against Russia amounted to 56.8% ($1.172bn). These countries primarily supplied tools for drilling hard rocks or rocky soils, pumping equipment, drilling machinery and floating drilling rigs. The most harmful for Russian economy is the ban on supplies of rotary equipment and the equipment for telemetry that is used for field modeling

[1] http://wto.wtcmoscow.ru/novosti/2629

According to the opinion of the RF Ministry of Industry and Trade, in the nearest future it is impossible to substitute many types of equipment with the one produced in Russia. The Ministry expects that China may become their supplier to Russia but admits that the efficiency and quality of Chinese analogues is far below the Western standard.

At the beginning of August Russia banned import of food products from the countries that imposed sanctions against it: the US, countries-members of the European Union, Canada, Australia and Norway. The ban concerns beef, pork, poultry meat, sausages, fish, vegetables, fruit, dairy products and some other items.

As a result in the III quarter of 2014 food imports fell by 5% as compared with the respective period of 2013.

In January-September 2014 the share of imported *meat of bovine animals* (beef) on the Russian market was as high as 72.9%. The CIS countries remained major suppliers of fresh and chilled bovine meat: in the III quarter of 2013 they accounted for 68.4% of the respective imports while in the III quarter of 2014 – for already 78.9%. Bovine meat was primarily supplied from Belarus the share of which grew from 51.7% up to 69.9%. The share of Ukraine in import purchases of fresh and chilled beef fell from 13.7% down to 6.7%, that of the EU countries – from 11.2% down to 7.2%. Imports of bovine meat from Australia in the III quarter of 2014 discontinued and supplies from the US dropped by 37% as compared with the respective quarter of the previous year.

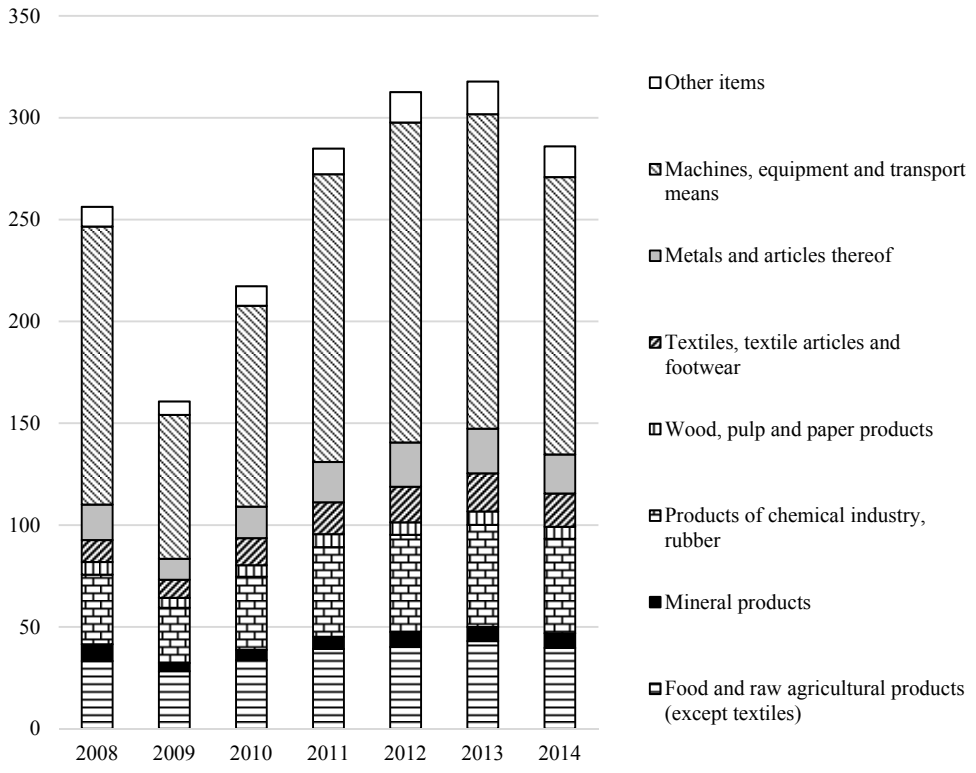


Fig. 52. Shifts in commodity structure of Russian imports in 2008–2014, billion $

At the same time the value of aggregate imports of fresh and chilled bovine meat in the III quarter of 2014 grew by 13.2% as compared with the III quarter of 2013. The growth was

conditioned by larger supplies from Argentine (up 83.9% in physical terms and 4.5 fold – in value terms) and Kazakhstan (up 39.1 and 8.5 fold, respectively). New Zealand and Uruguay have entered the Russian market.

Brazil remained the major supplier of frozen bovine meat to Russia – the country's share grew from 54% in the III quarter of 2013 up to 60% in the III quarter of 2014. A large supplier was Paraguay despite the shrinkage of its share from 28.9% to 22%. In the III quarter of 2014 imports of frozen bovine meat grew by 24.2% as compared with the III quarter of 2013.

In January-September 2014 the share of imported fresh, chilled and frozen *meat of swine* (pork) on the Russian market was 18.7%. As compared with the respective period of 2013, imports of pork in the III quarter of 2014 dropped by 43.5% in physical terms and by 27.1% in value terms. In the III quarter of 2013 pork was primarily supplied from the EU countries the share of which in the total Russian imports of this item amounted to 63.8%. In the III quarter of 2014 supplies from the EU countries actually came to a full stop. At the same time supplies from Serbia notably grew: while in the III quarter of 2013 it sold to the Russian market 40 tons of pork to the amount of $0.181m, in the III quarter of 2014 its supplies increased up to 4,480 tons to the amount of $17.1m. Supplies also grew from such countries as Brazil (by 63.2%), Chile (2 fold), Belarus (3.2 fold) and Kazakhstan (3.4 fold).

Imported *poultry meat and edible offal*, fresh, chilled or frozen, in January-September accounted for 10% of the Russian market. In the III quarter of 2013 47.1% of these items were imported to Russia from the US. The Russian Federation was the second largest market (after Mexico) for the US poultry meat. In the III quarter of 2014 the respective supplies from the US dropped by 64% as compared with the III quarter of 2013 and as a result the country's share fell down to 19.7%. Poultry meat imports from countries of the European Union reduced by 36% while those from Argentine grew by 75.5%, from Brazil – by 58.8%, from Chile – by 30.7%, from Belarus – by 69.4% and from Kazakhstan – 2.7 fold.

In 2014 imports of *fish products* to the Russian Federation amounted to 649.2 thousand tons which is 16.2% less than in the respective period of the previous year. In 2013 the leading suppliers of fish to Russia were Norway (39.9%), Chile (10.4%) and China (9.2%). The major supplier of fresh or chilled fish was Norway that in the III quarter of 2013 accounted for 88.7% of the respective Russian imports. In the III quarter of 2014 the Norwegian fish imports dropped by 63.4% and the share of the country fell down to 57.2%. Meantime, supplies of fresh fish from Morocco grew 2 fold, from Tunisia – by 68.2%, from Turkey – by 97.7% and from Faroe Islands – 6.3 fold.

The bulk of *milk and cream*, concentrated or sweetened, in the III quarter of 2013 was supplied from Belarus (72.4%). The EU countries accounted then for 13.3% of the respective imports. In the III quarter of 2014 their share fell down to 4.1% while the share of Belarus increased up to 91.4%.

The share of imported *cheese and curd* on the Russian market in the III quarter of 2014 amounted to 38.6%. As compared with the III quarter of 2013 imports of these products fell by 41.6%, those from the EU countries – by 42.1%. At the same time imports of cheese and curd from Uruguay grew 11.8 fold, from Argentine – by 17.4%, from Serbia – by 19.8%, from Switzerland – 2.4 fold, from Belarus – by 32.4% and from Kazakhstan – 2 fold.

Import is an important source of *fresh vegetables and fruit* for Russian consumers. The respective supplies largely consist of long-storage items: potatoes, carrots, onions, garlic, cabbages, pumpkins, marrows and apples. Russia imports over one half of consumed apples, pears and salads, from 12% to 15% of onions and carrots and about 25% of fresh tomatoes.

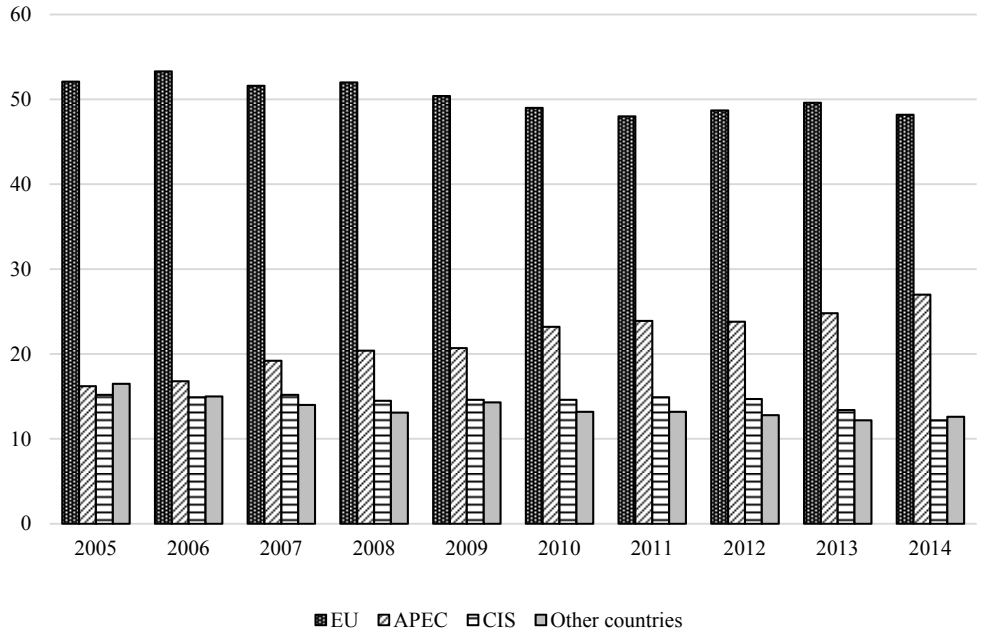
The major suppliers of fresh vegetables to the Russian Federation are Turkey, China and Israel that account for one half of the total vegetable imports in physical terms.

In the III quarter of 2014 the first place among suppliers of potatoes belonged to China (54.9%), the second – to Israel (22.7%), the third – to Egypt (12.9%).

According to data of the RF Ministry for Economic Development, the share of imported products in the structure of retail commodity resources is gradually decreasing. While in the I quarter of 2014 it amounted to 43%, in the II and III quarters it fell down to 41% (in the I, II and III quarters of 2013 – 44%). The share of imports in the volume of food resources in the I quarter of 2014 equaled 38% (in the I quarter of 2013 – 36%), in the II quarter – 37% (35%), in the III quarter – 33% (35%).

4.7.4. Geographic Structure of Russian Foreign Trade

In 2014 the share of EU countries in the geographical structure of Russian foreign trade fell down to 48.2% (from 49.6% in 2013), that of the CIS countries – down to 12.2% (from 13.4% in 2013). At the same time the share of countries-members of Asia-Pacific Economic Cooperation (APEC) increased from 24.8% to 27%.



Source: RF Federal Customs Service.

Fig. 53. Geographical structure of Russian foreign trade in 2005–2014, %

The share of countries-members of the European Union in the Russian foreign trade reduced due to the ban on import of selected food products from the EU, the US, Canada, Australia and Norway introduced by Russia in August 2014. Supplies from the following countries were most affected (2014 annual data): Denmark – down by 26.3%, Greece – down by 18.6%, Slovakia – by 19%, Latvia – by 18.9%, France – by 17.4%, Portugal – by 15.1%, Poland – by 15%.

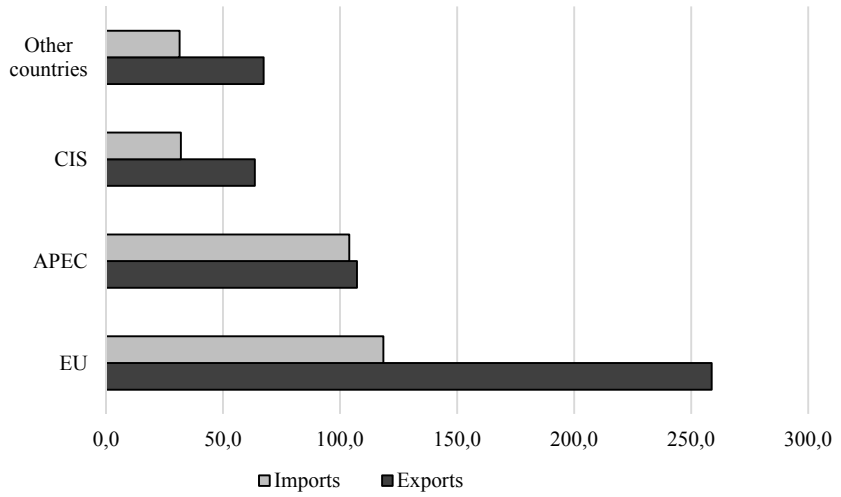
Despite declarations of the Russian government about the necessity to increase imports of food products from the CIS countries, the supply of commodities from the Commonwealth

has fallen as well. In 2014 imports from Kirghizia dropped by 33%, those from Ukraine – by 31.9%, from Uzbekistan – by 30.4%, from Turkmenistan – by 34.8%, from Belarus – by 15.6%, from Armenia – by 11%.

In 2014 a negative balance was registered in trade with 22 countries the share of which in the total Russian foreign trade turnover amounted to 22.3%. It was the biggest in trade with China (–$13.4bn), the US (–$7.8bn), France (–$3.2bn), Austria (–$2.7bn), Brazil (–$1.6bn) and Hong Kong (–$1bn).

Since 2010 the largest trade partner of the Russian Federation is *China*. In 2014 its share in the Russian foreign trade turnover amounted to 11.3% which is 0.8 p.p. more than in 2010. At the same time in 2014 the foreign trade turnover between the two countries fell by 0.5% (down to $88.4bn) after reaching its maximum ($88.8bn) in 2013. The balance of trade is negative for Russia: the supply of goods from PRC is well above the reciprocal commodity flow. For instance, in 2014 Chinese imports to Russia amounted to $50.9bn (4.3% below the 2013 indicator) while Russian exports to China equaled $37.5bn (5.3% above the 2013 indicator). As a result the balance of foreign trade was negative for Russia – -$13.4bn.

The *Netherlands* preserved their second place – in 2014 their share grew up to 9.4% from 9% in 2013 despite the reduction of foreign trade turnover by 3.6% basically due to the drop of supplies to Russia by 10.1%. In 2014 Russian exports to the Netherlands amounted to $68bn while Russian imports from this country – to only $5.3bn. As a result the balance of foreign trade was positive for Russia – $62.7bn.



Source: RF Federal Customs Service.

Fig. 54. Basic indicators of Russian foreign trade by regions in 2014, billion $

Despite the reduction of foreign trade turnover by 6.5% (as compared with 2013) due to the mutually introduced sanctions, *Germany* continued to rank third among the major trade partners of the Russian Federation. In 2014 its share in Russia's foreign trade turnover amounted to 9% (in 2013 – 8.9%). The volume of export supplies from Russia to Germany increased by 0.3% - up to $37.1bn. The volume of imported German commodities fell by 13.1% - down to $33bn. The balance of foreign trade was positive for the Russian Federation - $4.1bn.

4.7.5. Regulation of Russian Foreign Trade[1]

Tariff regulation

Export duties

In compliance with RF Government Resolution No.276[2] of March 29, 2013 in 2014 the RF Ministry for Economic Development on a monthly basis adjusted the rates of export customs duties on crude oil and selected categories of commodities produced thereof.

RF Government Resolution No.2 of January 3, 2014 "On introducing amendments to RF Government Resolution No.276 of March 29, 2013" provides for the reduction of export customs duties on crude oil and diesel fuel. The methodology of calculating export customs duties on crude oil was revised. Amendments are applied in case the average price for Urals crude oil on the world markets of crude oil (Mediterranean and Rotterdam) over the period of monitoring exceeds the level of $182.5 per ton. Before the introduction of amendments the formula for calculating the rate was unified and envisaged the application of coefficient 0.6. In 2014 the coefficient 0.59 was applied; in 2015 it will equal 0.57 and beginning from 2016 – 0.55. The rate of export duty on diesel fuel is cut from 66% down to 65% in 2014, down to 63% in 2015 and down to 61% in 2016.

Table 37

Rates of export duties on crude oil and petroleum products in 2013-2014, $/ton

	Crude oil	Petroleum products	
2013			
January 1	395.6	261.1	
February 1	403.3	266.2	
March 1	420.6	277.6	
April 1	401.5	265.0	
May 1	378.4	249.7	
June 1	359.3	237.1	
July 1	369.2	243.6	
August 1	379.8	250.6	
September 1	400.7	264.4	
October 1	416.4	274.8	
November 1	395.9	261.2	
December 1	385.7	254.5	
2014			
January 1	401.0	264.6	
		Diesel fuel	**Other types of petroleum products except gasoline and diesel fuel**
February 1	386.3	251.0	254.9
March 1	384.4	249.8	253.7
April 1	387.0	251.5	255.4
May 1	376.1	244.4	248.2
June 1	385.0	250.2	254.1
July 1	385.2	250.3	254.2
August 1	388.4	252.4	256.3
September 1	367.6	238.9	242.6

Source: Resolutions of RF Government, information of the RF Ministry for Economic Development.

RF Government Resolution No.705 of July 25, 2014 "On introducing amendments to rates of export customs duties on commodities exported from the Russian Federation outside the

[1] When preparing this section data of the information law portal ГАРАНТ.РУ were used.
[2] RF Government Resolution No.276 of March 29, 2013 "On calculation of export customs duties on crude oil and selected categories of commodities produced thereof and on invalidation of some decisions of the Government of the Russian Federation".

territories of counties-members of the agreement on Customs Union" specifies that due to the Russia's accession to WTO export duties on 210 items of the Foreign Economic Activity Commodity Nomenclature (FEACN) are lowered beginning from September 1, 2014. It applies to sea products, seeds, mineral products, raw hides and skins, wood and articles thereof, precious and semi-precious stones and metals, waste and scrap of ferrous metals, refined copper, copper base alloys, nickel and articles thereof, aluminium and articles thereof, waste and articles of non-precious metals.

Import duties

Under the Protocol of accession to the World Trade Organization (WTO) Russia has undertaken a commitment to gradually lower import customs duties. The first stage of cutting tariffs was carried out right after the accession to WTO, the second – in August 2014. Within 2014 Russia also revised its tariffs (primarily downwards) in order to comply with decisions of the Eurasian Economic Commission.

In compliance with Decision of the Board of Eurasian Economic Commission (EEC) No.9 of January 29, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of paper and paperboard" the rates of import customs duties on these items have been lowered.

The rates of customs duties on selected types of bleached paper and paperboard were cut from 15% to 5%. The duty rate on light-weight coated paper in rolls of width > 15 cm was lowered from 12.5% down to 10%. Let's note that earlier (from 20.04.2013 to 19.01.2014) a reduced temporary rate of 5% was applied for this item. Duty rates on paper and paperboard for writing, printing or other graphic purposes were lowered from 15% to 10% (for the time period from 01.03.2014 to 31.08.2014 inclusive a temporary rate for these items was set at 5%).

Decision of the EEC Board No.3 of January 31, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of AC motors" specifies that until December 31, 2015 inclusive the rate of import customs duty on multi-phase AC motors of an output from 7.5 kW to 37 kW will be raised from 0 to 5% of the customs value.

In compliance with the RF Government Decree No.163-p of February 10, 2014 commodities imported to Russia for the purposes of organizing and holding 2014 Olympic Games in Sochi were subject to a special customs procedure allowing relevant organizations to import the named commodities free of customs duties, VAT and customs fees.

Decision of the EEC Board No.46 of March 25, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of fowl meat and machines for drilling to the depth of 200 m or more and on approval of the draft Decision of the Board of Eurasian Economic Commission" alters the rates of import duties on selected types of fowl meat and drilling machinery.

The alteration also concerned rates of import duties on machines for drilling to the depth of 200 m and more for which combination rates were temporarily applied. The amendments reduced the size of their specific component.

In compliance with Decision of the EEC Board No.13 of March 4, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected

types of motor vehicles for the transport of 10 persons or more including driver" import duties on long-distance buses were raised.

The rate of import customs duty on new buses of emission class 4 and higher with diesel or semi-diesel engine, overall length 11.5 m or more, having 41 or more seats (including driver), luggage space not less than 5 m and designed to transport only seating passengers and their luggage was established at the level of 18% of the customs value (formerly – 0%). A zero rate of customs duty is preserved for buses of emission class 5 with engine power over 308 kW, overall length over 13 m, having over 55 seats (including driver) and luggage space over 12 m.

Decision of the EEC Board No.16 of March 28, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected types of mill rolls" raises the rate of import duty on forged steel rolls for rolling mills up to 8.3% of the customs value (formerly – 0%). A zero rate of customs duty is preserved for hot mill work rolls and backup rolls for hot and cold rolling of net weight over 180,000 kg and containing 4.7% wt or more of chrome as well as for cold mill work rolls containing 4.7% wt or more of chrome.

In compliance with Decision of the EEC Board No.15 of March 28, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of rare-earth metals, scandium and yttrium, whether or not intermixed or inter-alloyed" a zero import duty is applied for these items from May 1, 2014 to April 30, 2015. Otherwise the rate of import duty equals 5% of the customs value.

Decision of the EEC Board No.51 of April 8, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of component parts and movements used in production of clocks and watches" lowers rates of import duties on these items. For the time period from 10.05.2014 to 09.05.2017 inclusive a zero (instead of 9%) import duty is set for cases for wrist-watches and pocket watches of non-precious metals and parts thereof. For the same period import duties on straps, bands and bracelets out of non-precious metals for the named watches are reduced from 15% to 5% of the customs value. On a regular basis duty rates on electrically operated watch movements are lowered from 15% to 5% and those on movements with automatic or other winding – from 15% to 10% (for all watches).

Decision of the EEC Board No.30 of April 16, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of fowl and turkey meat" introduces an ad-valorem import duty on these items at the rate of 80% of the customs value. Earlier a combination rate was in force – 80% but not less than 0.7 euro per 1 kg.

Decision of the EEC Board No.64 of May 13, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of timber out of some kinds of tropical wood" sets a zero rate of import duty for these items. It is to be applied from the date of its enactment till May 31, 2016 inclusive.

Decision of the EEC Board No.63 of March 13, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected types of components for switch gear with SF6 insulation and to Decision of the Board of Eurasian Economic Commission No.91 of April 24, 2013" introduces temporary zero rates of import customs duties on these items (SF6 circuit breakers, disconnecting and grounding switches, grounding switches, through insulators, alluminium alloy cases for the named devices). A zero import

duty will be applied for these items from July 1, 2014 to December 31, 2015. Earlier the duty rate for these components was 13.3% of the customs value, that for the respective cases – 5%.

In order to comply with Russia's tariff commitments to WTO the EEC Board has taken Decision No.77 of May 26, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected commodities in compliance with commitments of the Russian Federation to WTO and on approval of the draft Decision of the Board of Eurasian Economic Commission". According to this Decision beginning from September 1, 2014 a number of sub-items were added to FEACN of the Customs Union, e.g. 4016 10 000 1 – articles of cellular rubber for technical purposes; 4017 00 000 1 – tubes, pipes and hoses with fittings suitable for transportation of gases or liquids; 8411 12 300 3 – turbo-jets of a thrust over 44 kN but below 60 kN. The commodities are intended for civil aircraft. One more item is 8411 12 800 1 – engines of a thrust over 132 kN but below 145 kN that are used for the production thereof.

One more group of commodities in respect of which rates of import duties were lowered is meat. For instance, 15% of customs value but not less than 0.15 euro per 1 kg is to be paid when importing short cut forequarters of fresh or chilled goat meat. The same rate is applied for boneless meat of this animal. The established import duty on whale meat is 16.7% but not less than 0.167 euro per 1 kg. The lowering of import duties also concerned fish including smoked fish (except edible fish sub-products).

In compliance with Decision of the EEC Board No.47 of June 23, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected commodities in compliance with commitments of the Russian Federation to WTO" beginning from September 1, 2014 import duties are reduced down to 6.7% of the customs value for the following commodities: other tubes, pipes and hoses with fittings intended for civil aircraft, fittings and engines for the latter. For other commodities the rate is cut down to 6.5% (except aircraft engines subject to 8% duty).

Import duties on some food products, machinery, equipment, aquatic bioresources, plants, articles of wood and medical products were revised. Beginning from December 31, 2014 the rates are lowered for such items as cherry purees and pastes, some kinds of carpets, absorption heat pumps, coin- or disc-operated record players with laser reading system.

In compliance with Decision of the EEC Board No.103 of July 7, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of retreaded tyres and selected types of footwear in compliance with commitments of the Russian Federation to WTO and on approval of the draft Decision of the Board of Eurasian Economic Commission" the rates of import duties on these items are lowered beginning from September 1, 2014. In particular, this concerns retreaded tyres for motor vehicles (including station wagons and racing cars). The rate of import duty imposed on them is 15% but not less than 2.02 euro per unit (instead of 17.5% but not less than 4.13 euro per unit).

One more category of commodities concerned is selected types of footwear with outer soles and uppers of rubber or plastics. For instance, import duty on ski boots and cross-country ski footwear is established at the rate of 7.4% plus 0.46 euro per 1 pair (earlier – 10% but not less than 1 euro per 1 pair).

In compliance with Decision of the EEC Board No.103 of July 7, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on

terephthalic acid and its salts" a zero import duty is applied for this item from September 2, 2014 to December 31, 2015. Liquid dielectric transformers having a power handling capacity of 148,000 kVA are also eligible for a zero rate during the same period (initially the rate was 5% of the customs value).

Decision of the EEC Board No.110 of July 15, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected parts of gas turbines" provides for a temporary (from September 2, 2014 to September 1, 2016 inclusive) reduction of the rate of import duty on these items from 8 to 0% of the customs value.

In compliance with Decision of the EEC Board No.52 of July 16, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of commodities in compliance with commitments of the Russian Federation to WTO" rates of import duties on some commodities are lowered beginning from September 1, 2014. In particular, it applies to blue whiting, household refrigerators-freezers and freezers, plasma and LCD TV sets, motor vehicles for the transport of goods manufactured more than 5 but less than 7 years ago. The specific component of the combination rate for baby napkins and pumpers and selected types of furniture was reduced. Lower import duty will be temporarily (from September 1, 2014 to August 31, 2015 inclusive) applied for palm oil in containers with net weight 20,000 kg or less.

RF Government Resolution No.736 of July 31, 2014 "On the introduction of import customs duties in respect of commodities the country of origin of which is the Republic of Moldova" on a permanent basis fixes import duties on respective commodities at the rate of the Common Customs Tariff of the Customs Union in accordance with regime of the most favoured nation. Among the commodities concerned are bovine meat (fresh or chilled), vegetables and some edible roots and tubers, wheat and meslin, barley, oats, maize, malt beer, some alcoholic drinks and wines. Let's remind that the Republic of Moldova is a member of the CIS area of free trade. The introduction of duties is due to the need to restrain excessive commodity imports.

Decision of the EEC Board No.160 of September 16, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of component parts for manufacturing electrical products" sets zero rates of import duties on the respective items. In particular, this concerns electronic circuits that earlier were subject to 3.33% and 3.3% import duty.

In compliance with Decision of the EEC Board No.67 of September 18, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected types of diesel engines" a zero rate of import duty will be temporarily (up to September 30, 2017 inclusive) applied for diesel engines used for the production of goods-carrying motor vehicles with cubic capacity of a cylinder 18,500 cm^3 or more and engine power not less that 500 kW. Earlier the rate of import duty on the named engines amounted to 5% of the customs value. To be eligible for the zero import duty, the intended use of this commodity should be certified by an authorized body.

In compliance with Decision of the EEC Board No.65 of September 18, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected types of amino-aldehyde resins" beginning from November 1, 2014 import duty on polymethylene diphenyl isocyanate will be cut from 7.7% of customs value down to zero. The

main application of this substance is the production of rigid polyurethane foams used in construction for heat insulation, in manufacturing of refrigerating equipment, for pipe insulation, etc. It is also used for the production of building sealants and adhesives.

In compliance with Decision of the EEC Board No.64 of September 18, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected types of pressing equipment for aircraft industry" some presses for aircraft industry will be eligible for a zero rate of import duty from the moment of the Decision's enforcement till June 30, 2015 inclusive.

RF Government Resolution No.959 of September 19, 2014 "On the introduction of import customs duties in respect of commodities the country of origin of which is Ukraine" specifies that in case Ukraine proceeds to the implementation of its agreement with the EU, its commodities supplied to Russia will be subject to import duties. In particular, this concerns meat, dairy and confectionary products, fruit, vegetables, cereals, alcoholic drinks, cigarettes, sanitary equipment, furniture, clothes, footwear and passenger cars. The duties will come in force 10 days after the revelation of Ukraine's actions to apply or implement the Association Agreement with the EU. In this case import of Ukrainian commodities will be subject to import duties at the rate of the Common Customs Tariff of the Customs Union in accordance with regime of the most favoured nation.

Decision of the EEC Board No.171 of September 23, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on selected types of watches" provides for a temporary (from November 1, 2014 to August 31, 2015) application of combination import duty on some types of wrist-watches. It amounts to 10% of the customs value but not less than 4 euro per 1 unit. The duty applies to electrically operated wrist-watches with mechanical display only as well as to other wrist-watches without automatic winding. Earlier these items were subject to a zero import duty.

In compliance with Decision of the EEC Board No.97 of October 9, 2014 "On introducing amendments to the Foreign Economic Activity Commodity Nomenclature (FEACN) of the Customs Union and the Common Customs Tariff of the Customs Union in respect of selected types of polyethylene" a temporary zero duty is imposed on import of polyethylene for three-layer anticorrosive coating of large diameter pipes. It will be applied from December 1, 2014 to August 31, 2015 inclusive. Earlier the rate of import duty on this item was 6.5% of the customs value.

Decision of the EEC Board No.221 of December 2, 2014 "On establishing rates of import customs duties under the Common Customs Tariff of the Customs Union on natural calcium phosphates, natural aluminium calcium phosphates and phosphatic chalk, ground" provides for a temporary (from January 5, 2015 to January 4, 2016) application of a zero import duty on these items (earlier – 5% of the customs value).

Non-Tariff Regulation

Bans and restrictions

In compliance with Decree of the RF President No.560 of August 6, 2014 "On application of special economic measures aimed at ensuring the security of the Russian Federation" import to our country of selected types of raw and processed agricultural products and foodstuffs is banned or restricted till August 6, 2015. This refers to commodities from the countries that have introduced economic sanctions against Russian legal and physical bodies or have acced-

ed to this decision. If needed, this term can be altered at the suggestion of the RF Government. The latter should also elaborate a precise list of commodities subject to import bans or restrictions.

Besides, the Cabinet of Ministers is charged with ensuring the balance of commodity flows and with preventing an accelerated growth of prices for agricultural and food products.

One should provide for an operational monitoring of commodity markets and control over situation thereon in coordination with higher regional authorities. A set of measures aimed at expanding the supply of domestic products should be elaborated and implemented.

RF Government Resolution No.778 of August 7, 2014 "On measures for the implementation of Decree of the RF President No.560 of August 6, 2014 "On application of special economic measures aimed at ensuring the security of the Russian Federation"" introduces a one-year ban on import to Russia of selected types of raw and processed agricultural products and foodstuffs. This refers to commodities originating from the US, countries of the European Union, Canada, Australia and Norway. In particular, the ban concerns bovine meat, pork, fish, milk and dairy products, vegetables, fruit, nuts, cheese and curd. Excepted from the list are baby food products.

RF Government Resolution No.830 of August 20, 2014 "On introducing amendments to RF Government Resolution No.778 of August 7, 2014" excludes items having no domestic analogues from the list of agricultural and food products from the EU and the US that are subject to import ban. For instance, the ban is lifted for Atlantic salmon and trout juveniles in order to sustain production capacities of commodity fish farming. The sanctions also do not apply to lactose-free milk and dairy products, seed stock (potatoes, peas, sweet hybrid corn, seed onion), biologically active dietary supplements, vitamin mineral complexes, flavour additives, protein concentrates and their mixes, dietary fibers and additives.

Protective measures

Decision of the EEC Board No.68 of May 13, 2014 "On extending application of the anti-dumping measure established by Decision of the Customs Union Commission No.904 of December 9, 2011" extends the application of anti-dumping duty in respect of forged steel rolls for metal-rolling mills originating from Ukraine up to February 27, 2015 inclusive. Formerly this duty was to be applied till June 26, 2014. It amounts to 26% of the customs value and is levied in addition to import duty.

At present 10 measures for protecting domestic market are in effect in the Customs Union (*Table 38*).

Table 38

Measures for protecting domestic market in the Customs Union

Commodity	Item code in FEACN of the Customs Union	Country-exporter	Type of measure	Short description of the measure
1	2	3	4	5
Some types of steel pipes	7304, 7305, 7306	Ukraine	Anti-dumping duty	Producers OJSC "INTERPIPE NTZ", LLC "INTERPIPE Niko Tube", OJSC "INTERPIPE NMTZ" – 19.4%; others – 37.8%
Roller bearings	8482	PRC	Anti-dumping duty	Producer – Wuxi Roller bearing, Ltd. – 31.3%; others – 41.5%
Forged steel rolls for metal-rolling mills	8455	Ukraine	Anti-dumping duty	26% of the customs value

Cont'd

1	2	3	4	5		
Flat-rolled products of iron, polymer-coated	7210, 7212, 7225	PRC, Taiwan, Hong-Kong, Macao	Anti-dumping duty	Producers – Angang Steel Co, Ltd, PRC – 12.9% Dalian POSCO Co., Ltd, PRC – 11.4%, Shandong Guanzhou Co., Ltd – 8.1%. Others – 22.6%		
Electrodes of graphite	8545	India	Anti-dumping duty	Producers – Graphite India Limited, plant «Durgapur», plant «Nashik», plant «Bangalore» – 32.83%, HEG Limited – 16.04%. Others – 32.83%.		
Cold-reduced seamless tubes and pipes of stainless steel	7304	PRC	Anti-dumping duty	19.15%		
Enameled baths of cast iron	7324	PRC	Anti-dumping duty	51.87%		
Light commercial motor vehicles	8704	Germany, Italy, Turkey	Anti-dumping duty	FRG – 29.6% Italy – 23% Turkey – 11.1%		
Tableware and kitchenware of porcelain	6911	All countries	Special protective	From September 29, 2013 to September 28, 2014 – $1,479 per ton. From September 29, 2014 to September 28, 2015 – $1,035.3 per ton. From September 29, 2015 to September 28, 2016 – $591.6 per ton		
Grain harvesters and their parts	8433	All countries	Special protective (quotas)	Import quota		
				2014	2015	2016
			Republic of Belarus	50	52	34
			Republic of Kazakhstan	300	309	204
			Russian Federation	424	437	288

Source: http://eurasiancommission.org/ru/act/trade/podm/mery/Pages/default.aspx

Section 5. Social Sphere

5.1. The Living Standards of Russia's Population in 2014

Over 2014, the population's real disposable income constituted 99.0% of its 2013 level. However, it posted growth in 2008 recession year. Growth rates of salaries in the budget-funded sphere went down. Over 2014, the level of inequality somewhat declined by comparison with 2013 level. The poverty level over the first 9 months of 2014 remained without change vis-à-vis the corresponding period of 2013. Noticeable reduction of the population's real income and households consumption as well as small-scale of the poverty level is forecasted in 2015.

5.1.1. Population income

The population's average nominal money income went up by 6.9% and constituted on average Rb 27,714 per person in 2014. The Consumer Price Index growth resulted in the fact that the real disposable per capita income[1] over the course of the year dropped to 99.0% versus the same period of 2013, meanwhile in 2013 there was a growth of real disposable per capita income at the amount of 4.0%. Moreover, it should be noted that even in the recession 2008 year real disposable per capita income grew by 2.4% over 2007.

The movement of the real disposable money income in 2013 and 2014 is shown in *Table 1*.

Table 1

Changes in the Real Disposable Money Income, 2013–2014, %

	As percentage of	
	corresponding period of previous year	**previous period**
2013		
Q1	105.9	76.5
Q2	103.8	113.3
H1	104.8	
Q3	103.2	99.5
Q4	103.6	120.2
Annual	104.0	
2014		
Q1	96.6	71.3
Q2	100.7	118.1
H1	98.8	
Q3	102.1	100.9
Q4	96.5	113.5
Annual	99.0	

Source: Rosstat.

[1] Income less mandatory payments and contributions and adjusted to the Consumer Price Index.

The average nominal payable monthly salary amounted to Rb 32,600.00 having risen on 2013 by 9.2% in 2014 (*Table 2*). Inflation consumed practically all incremental salary which resulted in the fact that real monthly salary per employee over 2014 went up solely by 1.3% meanwhile in 2013 it went up by 4.8% against 2012.

Table 2

Change in the average payable monthly salary, 2013–2014, %

	Average payable monthly salary in % to		Real payable monthly salary in % to	
	Corresponding period last year	Corresponding period	Corresponding period last year	Corresponding period
2013				
Q1	111.9	90.4	104.5	88.7
Q2	113.8	110.6	106.2	109.0
H1	112.9		105.4	
Q3	113.2	97.8	106.4	96.4
Q4	110.6	113.2	103.9	111.7
Annual	111.9		104.8	
2014				
Q1	111.1	90.3	104.4	88.6
Q2	110.2	109.7	102.4	107.1
H1	110.6		103.4	
Q3	108.3	96.3	100.6	94.8
Q4	107.4		98.0	
Annual	109.2		101.3	

Source: Rosstat.

Economic crisis resulted in the high rates of salaries paid in the spheres of education, healthcare and social services which were financed in 2013 with the aim of bringing salaries of a number of categories of budget-funded employees to the targets set in the RF President's Executive Order of 7 May 2012 No 597 "On Measures aimed at the Implementation of Government Social Policy" remained in the past.

In 2014 average payable monthly salary (less social contributions) amounted in education Rb 25,855 (79% to the All-Russia level of average monthly salary and 88% to the salary in the manufacturing sectors) and in public healthcare and social services – Rb 27,123 (83% to the all-Russia average monthly salary and 92% to the salary in manufacturing sector).

Over January-September 2014, the salary levels of the relevant categories of employees in the budget-funded sphere of each RF subject shown as a percentage of the average monthly were as follows:

- In public education: from 78.2% of the average monthly salary for teachers in supplementary educational institutions[1] to 93.3% of the average monthly salary for teachers in preschool educational institutions[2], 97.2% of the average monthly salary for teachers in general education institutions and 135.6% of the average monthly salary for the faculty members of higher (vocational) educational establishments ;
- In public healthcare sector: for nurses staff – 49.3% of the average monthly salary index, and for physicians and other healthcare practitioners with higher education diplomas, employed at medical institutions and providing medical care services to the population - 142.5% of the average monthly salary index in a given RF subject.

The RF President's Executive Order of 7 May 2012, No 597 "On Measures Aimed at the Implementation of Government Social Policy" set for the year 2012 that in that year the aver-

[1] Ratio to the average salary of teachers in a given RF subject.
[2] Ratio to the average salary in the sphere of general education in a given RF subject.

age salary level of the secondary school teachers and the tutorial staff of general-education institutions should be brought to match the average salary for a given region. In reality the targeted value was nearly achieved in H1 2014 (the salary level of this category of employees constituted 91% of a given RF subject's average salary) and exceeded it to 107.7% of a given subject's average monthly salary in H1. However, in Q3 the situation was not as good and the average salary of teachers and the tutorial staff of general-education institutions over 9 months 2014 fell to 97.2% of the given region's average salary.

The same Presidential Executive Order envisaged to bring the average monthly salary of the teachers of pre-school educational institutions in line with the level of the average monthly salary in the sphere of general education in a corresponding region in 2013. This target was nearly achieved by the end of 2013: the average monthly salary of tutors employed at pre-school educational institutions in 2013 amounted to 94.9% of the level of the average monthly salary in the sphere of general education of a given region. However, in H1 2014 the situation started to deteriorate: the level of average monthly salary of tutors employed at pre-school educational institutions fell to 90.4% of the average monthly salary in the sphere of general education in a given region. However, in Q3 the situation stabilized and the average monthly salary of tutors employed at the pre-school educational institutions over 9 months 2014 nearly reached 2013 level constituting 93.3% of the average salary in the sphere of general education in a given region.

Nominal average monthly salaries in arrears constituted Rb 2,006m as of 1 January 2015. Real volume of the average monthly salaries in arrears remains still at a low level: as of 1 January 2015, the volume of arrears amounted to less than 1% of companies' total payroll budget. The number of employees whose salaries were is arrears over the year varied between 54 and 82 thousand (49 thousand as of 1 January 2015). Practically all salaries in arrears arose, as a rule, due to lack of companies' own funds: the average monthly share of salaries in arrears arising as a result of delays in money transfers from the budgets of all levels over the entire year varied between 0.1-3.7% of the overall volume of salaries arrears. As of 1 January 2015, the share of arrears in average monthly salaries due as a result of delays in money transfers from the budgets of all levels constituted 0.1%.

Over 2014 the size of pensions were increased this way:

- From 1 February, labour pensions of 37.8m pensioners were indexed by 6.5% due to the consumer price growth in 2013;
- From 1 April, social pensions of 2.9m pensioners went up by 17.1%.

In April 2014, the size of pensions paid under the government pension program went up. Also the monthly federal benefits paid to 16.2m special categories of pensioners were increased by 5.0%.

In august 2014, the size of pensions paid to working pensioners and disability pensioners was adjusted, in accordance with the planned scheduler, by the amount of insurance contributions received in 2013 and/or Q1 2014 from their employers under the mandatory pension insurance program. This adjustment according to the RF Pension Fund data affected almost 14m people or 37% of the labour pensioners. However, according to the Pension Fund assessments, the size of the raise is insignificant.

Also in August 2014, went up pensions of those who receive pension savings in the form of pension payment (by 2.3%) and in the form of savings part of the labour pension (by 2.9%). The system of social payments to the subsistence minimum level is still in force in case the pension is below the subsistence minimum.

As result of all these measures, over the course of 2014 the average size of allotted monthly pension increased by 8.8%, which resulted in the size of the average accrued pension to come to Rb 10,786 in October 2014. Growth of the average real allotted pensions over 10 months 2014 constituted 0.9%.

According to the RF Ministry of Economic Development forecast, real disposable money income of the population over 2015 will fall to 93.7% of their 2014 level.

5.1.2. Socioeconomic differentiation

According to preliminary data, in 2014 the inequality in distribution of the population's money incomes slightly dropped against 2013:

- The Gini coefficient was at the level of 0.416, while during the same period of the last year it was 0.419;
- R/P 10% dropped to 16.0 (in 2013 it constituted 16.3).

Table 3

Distribution of the Overall Volume of the Population Income, %

	2014	2013
Money incomes	**100**	**100**
Including 20% groups of population: first (with least incomes)	5.2	5.2
second	9.9	9.8
third	14.9	14.9
fourth	22.6	22.5
fifth (with least incomes)	47.4	47.6

Source: Rosstat.

The population distribution by average per capita money income level is shown in *Table 4*.

Table 4

The Population Distribution by the Average Per Capita Money Income Level, %

	2014	20
Total population	**100**	**100**
Including with average per capita money monthly under Rb 7,000.0	8.2	9.8
7,000.1–10,000.0	9.4	10.4
10,000.1–14,000.0	13.4	14.2
14,000.1–19,000.0	15.0	15.2
19,000.1–27,000.0	17.8	17.5
27,000.1–45,000.0	20.7	19.3
45,000.1–60,000.0	7.2	6.5
Over 60,000.0	8.3	7.1

Source: Rosstat.

5.1.3. Subsistence level and poverty

In Q3 2014, the subsistence level dropped vis-a-vis Q2. The drop is insignificant and amounts to 1.3% on average for total population, 1.2% for working population, 0.9% for pensioners and 2.3% for children (*Table 5*).

The estimates of the subsistence level in the Russian Federation are done by the Ministry of Labour and Social Security on the basis of the consumer basket determined by the Federal Law of 3 December 2012 "On the Consumer Basket Nationwide the Russian Federation" and the data provided by the Federal Service of State Statistics on the level of consumer prices for food products and consumer price index for food products, non-food products and services. By multiplication of normative amount of food products on prices, we get money estimate of

the food share of the subsistence level. Therefore, if composition and number of food products considered in subsistence level calculation did not change then the reduction of the subsistence level amount can be explained solely by the fall of food prices which comprise the subsistence level.

Table 5

Subsistence Level, Rb.

	Total population	Working population	Pensioners	Children
2013				
Q1	7,095	7,633	5,828	6,859
Q2	7,372	7,941	6,043	7,104
Q3	7,429	8,014	6,097	7,105
Q4	7,326	7,896	6,023	7,021
2014				
Q1	7,688	8,283	6,308	7,452
Q2	8,192	8,834	6,717	7,920
Q3	8,086	8,731	6,656	7,738

Source: Rosstat.

Table 6

Price Indices for Three Quarters of 2014, Rb

	Q1	Q2	Q3	9 months
Consumer price index	101.9	102.4	101.4	105.8
Food price index	103.0	103.5	100.6	107.3
Food price index minus alcoholic drinks	103.7	103.5	100.4	107.8

Source: Rosstat.

Table 6 demonstrates that we clear consumer price index of prices for goods and services which are not considered for price following comprising the subsistence level (alcohol, for example, does not comprise the subsistence level), the higher the subsistence level becomes for three quarters 2014 and smaller for Q3 2014. Of course, we can mention the seasonal factor and the fact that in summer fruits and vegetables are cheaper than in spring. However, in 2013 seasonal factor was applicable but it did not result in the downward trend in the subsistence level neither on average for the whole population not for certain socio demographic groups of population. Moreover, in Q3 2014 price fall on fruits and vegetables practically did not differ from the price fall in Q3 2013.

Situation on the food market in Q3 2014 differed from the same period of 2013 by the fact that sanctions were imposed on imports of food products from the EU countries. It turns out that imposition of sanctions resulted in the price reduction on food products which comprise the subsistence minimum. However, this suppositioncauses very big doubts.

According to Rosstat data, over January-September 2014 in comparison with the same period of 2013 purchasing power of the average per capita money income went up including on such basic food products comprising subsistence minimum as beef (minus boneless meat), frozen and chilled chicken (minus chicken quarters), sunflower seed oil, margarine, rye bread, mixed rye-wheat bread, bread and bakery goods, wheat flour, cereals, vermicelli, carrots and apples.

Using the Rosstat data on the average prices on food products which comprise the subsistence minimum we can verify whether there was a price reduction on those food products which are positively linked with the purchasing power of the average per capita money income of the population.

In Q3 2014 prices went up on such products which comprise the subsistence minimum, as:

- beef (less boneless meat) – by 3.6%;
- mutton (less boneless meat) – by 2.1%;
- frozen and chilled chicken (minus chicken quarters) – by 13.0%;
- table salt (including iodized salt) – by 1.6%;
- margarine – by 1.0%;
- vermicelli – by 0.9%;
- rye bread, mixed rye-wheat bread – by 1.7%;
- bread and bakery goods – by 1.3%;
- wheat flour – by 0.7%;
- cereals: rice white rice – by 0.6%, millet – by 2.2%, semolina – by 0.5% (price on other types of cereals did not change over Q3 2014).

Thus, reduction of the subsistence level index in Q3 2014 and increase of the purchasing power of the money income of the population on given types of food products (first of all, on meat products) which comprise the subsistence minimum cause certain doubts.

In Q3 2014, food products expenses (45.8%) constitute the main share in the structure of the subsistence minimum. Expenses on non-food products constitute 23.5% and on services – 23.6%. Mandatory payments and contributions constitute 7.1% of the subsistence minimum index.

The ratios of the main population income indexes to the subsistence level in Q3 2014 were as follows:

- the ratio of per capita money income to the national average subsistence level – 346.7%;
- the ratio of the average monthly charged wage index to the subsistence level of the working population – 363.4%;
- the ratio of the average monthly charged pension index to the subsistence level of pensioners – 174.1%.

The poverty index for the first 9 months 2014 was at the level 18.0m, or 12.6% of the total population, unchanged vis-à-vis the corresponding period of 2013 (*Table 7*).

Table 7

Number of People with Money Incomes Below Subsistence Level, 2013–2014

	Million people	As % of total population
2013		
Q1	19.7	13.8
Q2	17.3	12.1
H1	18.6	13.0
Q3	17.3	12.1
January-September	18.0	12.6
Q4	12.2	8.5
Year	15.4	10.8
2014		
Q1	19.8	13.8
Q2	17.4	12.1
H1	18.9	13.1
Q3	16.6	11.5
January-September	18.0	12.6

Source: Rosstat.

More than half of the low-income households are households with children. Falling number of the poor in Russia is followed by poverty structural changes: the structure of low-income households comprises fewer households without children and more often households

with children. In 2013 about two thirds of the low-income households were represented by the households with children, and in 2008 only half of the households, which, on the one hand, represents a positive outcome of measures implemented in the sphere of the improvement of the socio economic situation of pensioners and, on the other hand, speaks about insufficient efficiency of the social safety net for households with children in Russia. It should be noted that the structure of low-income households widens at the expense of not only multiple children households but at the expense of households with one or two children (*Table 8*).

Table 8

Distribution of Low-income Households Depending on the Number of Children under 16, 2008-2013, %

	2008	2009	2010	2011	2012	2013
Low-income households, total	100	100	100	100	100	100
Of which:						
Without children	47.7	45.4	42.5	40.3	37.8	36.0
With children	52.3	54.6	57.5	59.7	62.2	64.0
Of which:						
1 child	30.2	30.3	31.2	32.7	33.4	32.7
2 children	17.3	18.6	20.3	20.6	21.3	22.3
3 and more children	4.9	5.7	6.0	6.5	7.5	9.0

Source: Rosstat.

Households with children are poorer than households without children: the deficit of disposable funds in a low-income household with children is by 1.55 times higher than in the low-income household without children. This fact is both due to higher deficit of disposable funds per member of a household and to the high number of members of a household.

One of the main benefits targeted at the support of the poor families with children are monthly child allowances which are financed by the RF subjects.

The number of households receiving monthly child allowance in 2000s went down due to:

- Population's income growth resulted in the fall of the number of families with the average per capita income below the subsistence level;
  - the number of population with average per capita money income below the subsistence level over 2000-2013 fell by 26.6 m people or by 2.7 times (from 42.3 to 15.7m persons), and the poverty level fell by about 18 p.p. (from 29.1% to 11%).[1]
- Insignificance of the allowance in the income of the families with children led to a reduction of calls for allowances;
  - Allowance's amount grew very slowly: even in the end of 2013 there were regions where basic amount of the allowance does not exceed Rb 100 per month per child (Nizhniy Novgorod oblast, Republic of Altai, Kabardino-Balkar Republic). Only in the single RF region, Moscow oblast, the minimum basic allowance exceeded by the end of 2013 RB 1,000 per month per child;[2]
  - Over 2000–2013 the number of those who received allowance went down from 13.8m to 5.3m, the number of children targeted by allowance went down from 19.2m to 8.4m, the share of children targeted by allowance in a corresponding age category went down from 68.8% to 30.8%.

Table 9

[1] Data Released by *Rosstat*.

[2] It should be noted that in several regions the amount of the basic allowance depends on the children's age and the number of children in a family and in some cases can even exceed Rb 1,000.

Number of recipients of monthly child allowance, 2007–2013

	2007	2008	2009	2010	2011	2012	2013
Number of allowance recipients, thousand persons	8,040	7,445	7,285	6,750	6,440	5,761	5,303
Number of children under 16 targeted by allowance, thousand persons	11,312	10,623	10,524	9,943	9,675	8,886	8,423
Share of children under 16 targeted by allowance in the overall number of children (from 0 to 16) , %	44.8	43.0	42.8	40.4	38.7	34.9	30.8[1]

Source: Data released by Rosstat on the basis of the data released by the RF Ministry of Labour

Other types of assistance to low-income people is categorical aid the recipients of which can be both families and single citizens who receive average per capita income below the subsistence level. Provision, size, and types of categorical aid are determined by the subjects of the Russian Federation. They also finance these expenditures. Main forms of such payments can be monthly and quarterly allowance set for small periods (from 2 to 6 months) and lump sum assistance in dire straits (different regions set different criteria for determining dire straits). Data shows that the most widespread, it was received by 4m people, form of this assistance is regular money transfer to low income people. The size of it in 2013 constituted Rb 779 on average (less than 10% of the subsistence level on average per person per month).

Table 10

Provision of Social Assistance within Regional and Municipal Programs in 2013

Categories of citizens	Citizens eligible for social welfare, persons	Citizens regularly receiving money payment, persons	Average size of regular money payment (less social services), Rb per month per a recipient	Number of citizens who received a subsidy, persons	Average size of a subsid y, Rb per a recipient
Citizens in difficult economic situation	686,931	316	742	634,915	15,766
Low-income citizens	3,996,804	1,880,286	779[2]	1,264,316	3,023[3]
Of which receiving social assistance on the basis of social contract	181,952	75,412	498	97,312	11,133
Low-income persons	107,424	84,105	1,314	2,160	1,542

Source: Rosstat.

According the RF Ministry of Economic Development, the poverty level will go up to 12.4% of the total population in 2015. J.P. Morgan experts note that household consumption in 2015 will fall by 5.8%. Plan of principal measures designed to ensure sustainable economic development and social stability in 2015 includes measures aimed at reducing tension on the labour market, to support pensioners (indexing of non-contributory pensions to the consumer price index growth in 2014) and families eligible for multiple-child allowance (allowance in the amount of Rb 20,000). There are also measures in the sphere of healthcare and medicine procurement. The size of assistance by way of multiple-child allowance constitutes less than 10% of the subsistence level for two child family. Regions are unlikely to increase assistance to the poor families. Moreover, those families with children who have already received multiple-child allowance and those who have one child are not illegible for social assistance measures. Indexing of non-contributory pensions and introduction of stabilizing measures on medicine prices and compensation of expenses due to a fluctuation of the exchange rate at

[1] Data released by Rosstat on children under 16.
[2] Per a member of low-income family.
[3] Per a member of low-income family.

purchasing imported medicine most likely will be insufficient as an assistance for pensioners to purchase medicine, especially those pensioners who do not receive state social benefits and are not treated in hospitals.

5.1.4. Socio economic features and important political values of the middle class in the Russian Federation

In order to obtain the size of the middle class in the Russian Federation, its socio economic and political values both Western and Russian methodologies were applied[1].

Analysis of foreign and Russian sources dedicated to the estimation of the size of the middle class demonstrated that for the interstate comparison of scale and dynamics of the middle class single criterion analysis is used. They are based on the criteria of income or self-identification of population. At the same time, multiple-criteria analysis is used for the evaluation of main socio economic and political values of the middle class.

Variance of the size of the middle class estimated by single criterion analysis constitutes from 7.3 to 70.1% of the total adult population of the Russian Federation depending on criterion applied. The highest estimation was received on the self-identification criterion and it is comparable with the size of the middle class obtained on the basis of similar analysis in a number of developed countries.

Multi-criteria analysis in the evaluation of the middle class comprises such criteria, as:

- Income and assets level which is a complex criterion and comprises four properties:
  - Average monthly income per family member at the level no less that median income in a given region;
  - Number of durable goods at the median level of durable goods for a given region;
  - Car (not older than five years) ownership of domestic or foreign make;
  - Property ownership bringing significant income.
- Social and occupational status of an individual:
  - Type of work, first of all, its non-manual character;
  - education (middle class educational criterion is the one starting from vocational secondary education and above).
- Self-identification – individual's evaluation of his/her position in society along a scale of ten (estimates from 4 to 6 define a person as a member of the middle class).

The size of the middle class in Russia one can estimate by applying multi-criteria analysis at the level of 14.3-27.9% depending on the applied educational criteria.

Analysis of the socio economic features and political values of the RF middle class demonstrated that:

- In economic sphere:
  - According to the two thirds of the middle class the price rise on the housing and communal services and food products was significant;
  - Members of the middle class more than total population on average are interested in drawing an officially declared salary;
  - Significant share of the middle class savings is kept in rubles on ruble bank accounts.

[1] Estimates were obtained after processing micro data of the RF representative survey done by 'Evrobarometr' in 2012. The survey is carried out by the Russian Presidential Academy of National Economy and Public Administration and allows to estimate the size of the middle class and describe its features and values including prior unanalyzed. See in detail: http://www.ranepa.ru/about-the-academy/consulting-services/evrobarometr.html.

- In political sphere:
  - According to the middle class, striking relations with the West European countries, the USA and the CIS countries Russia should stick to the policy of developing:
    - 11.3% of the middle class favour priority relations with Western Europe and the USA;
    - 26.2% of the middle class are more for good relations with Western Europe and the USA with good relations with the countries of near abroad;
    - 19.6% of the middle class are for priority relations with the countries of the former USSR;
    - 31.2% of the middle class favour relations with the countries of the former USSR and good relations with Western Europe and the USA;[1]
    - over two fifth of the middle class consider foreign organizations and foundation interfering in Russia's political affairs and negatively affect the Russian economy; less than one third of the respondents think that foreign organizations and foundations bring assistance to our country.
- Information technologies:
  - The middle class by far more actively uses state of the art information technologies compared to the population lower than the middle class.

5.2. Migration Processes

5.2.1. The Effect of Migration on the Number of the Country's Population

For 10 months of 2014, Russia's migration growth[2] in the long-term migration[3] amounted to 227,300 people,[4] having decreased by 10 p.p. as compared to the same period of 2014. The decrease took place primarily due to departures from Russia. In 2013, the "contribution" of Crimea into Russia's migration growth amounted to about 7,000 people;[5] it is to be noted that the exchange with Ukraine accounts for 40% of that growth. However, displaced persons from Ukraine who seek refuge in Russia were not included so far in that statistics.[6]

As in the previous years, at least 90% of migration growth in Russia was ensured by means of migration relations with CIS countries. In 2014, the exchange with those countries fell by about 10 p.p., too, however, that decrease should not be unambiguously attributed to the impact of the economic crisis and changes in the international situation. Such surges (both leaps

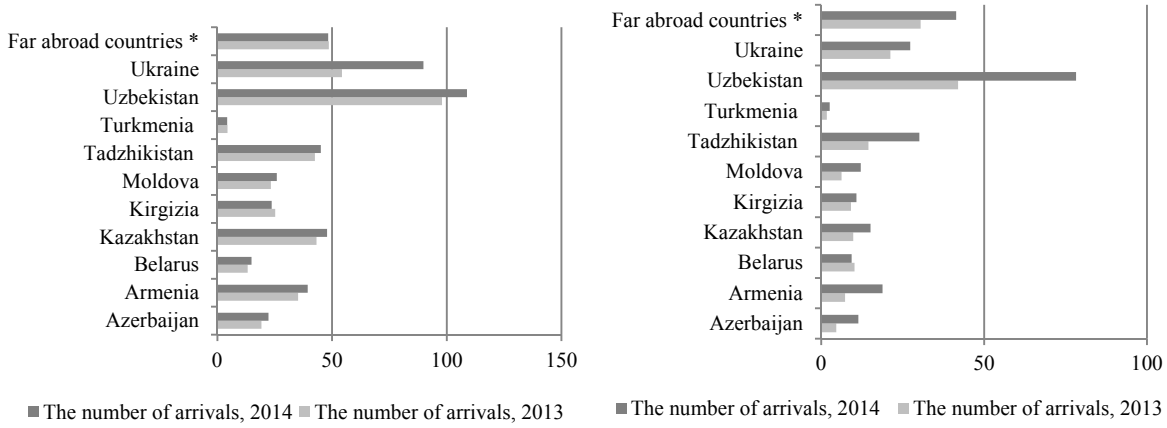
[1] 11.5% of the middle class were undecided.
[2] Together with Crimea.
[3] A long-term migration (resettlement) is an international or internal migration for a long period of time (over 1 year) and is accompanied by a change in the permanent place of residence. See: http://www.fms.gov.ru/documentation/865/details/49505/2/
[4] From 2011, with a change in the procedure for accounting of the long-term migration the number of migrants includes persons registered at the place of temporary residence for the period of 9 months or more. For more detail, see: L. Karachurina. Migration Policy and Migration Processes // Russian Economy in 2013. Trends and Prospects. (Issue 35) – M.: The Gaidar Institute, 2014. Chapter 5.2. pp. 333–349.
[5] Calculated on the basis of comparison of the data for January-October 2013 with Crimea (The Social and Economic Situation of Russia-2014. Rosstat, 2014) and without Crimea (The Social and Economic Situation of Russia-2013. Rosstat, 2013).
[6] Probably, the Rosstat will add them in calculation of the number of the population in 2014.

and ebbs) were observed earlier, as well. The "lag" between the reaction of migrants who intend to move to another country for permanent residence and current political and economic developments in the recipient country is normally rather high (it is smaller if the migration from the country of origin takes place for reasons which force people to leave). In addition to the above, those migrants who came in 2013 could be included the statistics of the long-term migration in 2014.

Though the Ukrainian crisis had an effect on growth in migration from that country (*Fig. 1*), it affected not only the parameters of the long-term migration, but also other migration institutions: issuing of residence permits and execution of patents and work permits. Apart from Ukraine, growth in arrivals from Uzbekistan and Kazakhstan was observed, too.

However, due to growth in departures from Russia over most directions, migration growth increased only in the exchange with Ukraine (1.9 times over) and Belarus (the same value) and fell dramatically with the major migration donors of the past few years, that is, Middle Asian republics, primarily, Uzbekistan (1.8 times over). It is to be noted that generally growth in the number of departures is related to changes (from 2011) in the procedure for accounting of the long-term migration under which persons registered at the place of stay for the period of 9 months or more were included in the number of migrants. As a result, at present, the number of departures includes migrants whose period of stay (on the basis of the expiry of registration in the form of statistical accounting of arrivals) was over.

In 2015, there is a situation which can figuratively be called a "collapsed financial pyramid scheme": a decrease in migration growth registered by the Rosstat is largely related to considerable growth in departures which in its turn took place due to the earlier accumulated number of arrivals for the period of less than 3 years, that is, over 30 p.p. in the 2011–2013 period (*Table 11*). The number of persons registered at the place of residence which can be used as a comparable category as regards the former registration procedure rose by 11.1 p.p. and 6.2 p.p. as compared to 2010 and 2011, respectively.



*FA – far abroad countries, including Georgia and the Baltic states.
Source: The Social and Economic Situation in Russia in January-October 2014. Rosstat, 2014.

Fig. 1. Russia's migration relations with CIS countries and far abroad countries in January-April 2013 and 2014, thousand persons

Table 11

Distribution of the number of arrivals by the type and period of registration, 2010–2013, thousand persons

	2010	2011	2012	2013
Registered at the place of residence	2102.3	2198.4	2367.5	2333.9
Those who arrived to the place of stay	n/a	1205.9	1400.2	1582.7
Including those for the period:				
From 9 months to 1 year	–	215.9	283.5	347.4
1 year	–	387.9	403.8	450.5
2 years	–	209.7	246.9	262.3
3 years	–	192.3	224.2	236.5
4 years	–	83.3	97.2	111.3
5 years and more	–	116.8	144.6	174.7

Source: The Number and Migration of the Population in the Russian Federation in 2010, 2011, 2012 and 2013. The Rosstat, 2011, 2012, 2013 and 2014

In individual parts of the country, that process produced paradoxical results in terms of common sense. In particular, more than a double reduction of the net migration as compared to the previous year was registered in Moscow, St. Petersburg, the Nizhny Novgorod Region, the Khanty-Mansisk Autonomous Region and Yugra, while a 40% reduction, in the Krasnodar Territory, the Tyumen Region and the Novosibirsk Region. For the first time in the post-Soviet period, Moscow's migration growth became equal to that of St. Petersburg. It is to be noted that out of 20 most powerful regions in terms of the migration inflow, in 2014 growth in departures was observed in 18 regions as compared to 2013.

5.2.2. Legislative Innovations

In 2014, the Russian legislation on migration was supplemented with a few new documents, as well as amendments to the existing ones which were aimed at resolving the situation with refugees from Ukraine, toughening of the procedure for deportation and arrival of migrants who violated the rules of stay and employment in Russia, applying of patents to foreign labor migrants working with legal entities and other.

1. Abolition of quotas on migrant workers was a principal change which was approved in 2014 and became effective from 1 January 2015. In its present form, the practice of setting of quotas existed from 2007 and was one of the most criticized aspects of the migration reform of the same year. It lacked flexibility and transparency and was unable to carry out both the function of on-line regulation of the number of migrants on the Russian labor market and that of protection of the labor market itself; it is to be noted that it was characterized by high potential corruptogenicity at different levels[1].

In accordance with amendments to the Federal Law on the Legal Status of Foreign Nationals in the Russian Federation,[2] from 2015 migrants (working both with individuals and legal entities and individual entrepreneurs) will be obligated to buy a permit patent with a period of validity from one month to a year[3] for a fee of Rb 1,568.4 a month or at a surcharge regional

[1] For more detail, see: L. Karachurina. Migration Processes //The Russian Economy in 2007: Trends and Prospects. M.: The IEP, 2008. Section 4.2. pp. 379–394; L.B. Karachurina. Migration Processes //The Russian Economy in 2008. Trends and Prospects. (Issue 30) – M.: The IEP, 2009. Section 4.2. pp. 342–359.

[2] Federal Law No.357-FZ of 24 November 2014 on Amendment of the Federal Law on the Legal Status of Foreign nationals in the Russian Federation and Individual Statutory Acts of the Russian Federation.

[3] Before 2015, the maximum period of validity of the patent for employment with individuals amounted to 3 years.

rate set by the Federal Law[1]. So, the minimum annual price of a patent amounts to Rb 18,820.8 a year. The patent will be in effect strictly in the region where it was executed[2]. In a year, the patent can be extended for another year by way of provision of the same package of documents and the agreement with the employer. Upon the expiry of the second permit, a foreign national has to leave Russia. In order to buy a patent, foreign migrant workers from CIS countries have to specify in the migration card that the purpose of their stay in Russia is work, receive the individual taxpayer number, have their fingerprints made, buy the voluntary medical insurance policy,[3] provide certificates on a medical check-up from psychoneurologic and narcological dispensaries, a medical document certifying the fact that the person is not HIV infected and a certificate on the results of the exams on the Russian language, the main principles of the Russian legislation and Russian history.

Examinational tests are divided by the levels of complexity: with a smaller number of correct answers for migrants buying a patent and with higher requirements for applicants who seek a residence permit or a temporary residence permit A comprehensive exam on history, law and the Russian language will cost a migrant Rb 4,500. It is to be noted that the certificate which is issued to a migrant after he/ she has successful passed the exams will be valid for 5 years; upon the expiry of that period it is to be secured again. Exams can be avoided only by partially incapacitated persons, disabled persons, teen-agers under 18, men over 65 years old, women over 60 years old, participants in state programs on resettlement of compatriots, high-skilled experts and full-time students. Migrant workers had to pass an exam on the Russian language as early as 2014, however, that requirement was mandatory only for those who were employed in housing and public utilities and public amenities sectors[4]. Generally, "burdening" of a patent acquisition with such a large number of additional documents may create a corruptogenic basis for the new mechanism, too, and turn it into an inflexible and semi-forbidding one. In addition to the above, as employers have to pay contribution for migrant workers to the Pension Fund and the Social Insurance Fund, the cost of a migrant worker for the employer will be higher if the latter is hired officially.

2. A significant amendment (which came into effect from 1 January 2015) to the migration legislation of the Russian Federation is introduction of the requirement that for nationals of the CIS states it is mandatory to have an external passport to enter Russia. An exception is made only for Ukrainian nationals.

3. Legislative acts between Russia and individual CIS states have been passed; the above acts are aimed at orienting the migration policy at the "country personification". So, in April 2014 Federal Law No.43-FZ of 2 April 2014 on Ratification of the Protocol on Amendment of the Agreement between the Governments of Tajikistan and Russia on Labor Activities and Protection of the Rights of Nationals of the Republic of Tajikistan in the Russian Federation was signed. Under the above law, nationals of Tajikistan are entitled now to receive a work

[1] For example, in Moscow and the Moscow Region it amounted to Rb 4000, while in the Yamal-Nenets Autonomous Region and the Orel Region to Rb 6629 and Rb 2,038.92, respectively.
[2] In case of moving to another constituent entity of the Russian Federation, all the bureaucratic formalities are to be carried out again.
[3] As applied to Moscow, its cost is estimated by the city hall at Rb 5,500 / / A. Voronov. Migrants Became Legal through a Cash Office // Kommersant daily, 27.11. 2014.
[4] According to the data of the Federal Migration Service of Russia, in 2014 38,300 foreign nationals who provided documents certifying their command of Russian were granted a work permit, including 22,000 foreign nationals who were granted a certificate.

permit in Russia for the term of 3 years. In addition to the above, with Armenia (from January) and Kirgizia (from May) joining the Eurasian Union in 2015 – migrant workers from the above two countries will be granted the right to work officially without any permit documents (the same right is now granted to migrant workers from Belarus and Kazakhstan), the number of CIS countries in respect of which the Russian migration legislation is applied to without any limitations and exceptions has shrunk to Uzbekistan, Moldova and Azerbaijan.

4. The migration policy as regards expulsion and deportation of foreign migrants who violated the rules of stay and employment in Russia was toughened further[1]. The draft law under which migrants who violated the period of their stay may be prohibited from entering the territory of the Russian Federation for the period of up to 10 years was approved by the State Duma in October 2014 and became effective from 10 January 2015. According to the data of the Federal Migration Service (FMS) of the Russian Federation, late in 2014 in the territory of Russia there were over 734,000 foreign nationals with a 270–360 day violation of the period of their stay who were subject to a five-year ban on entry to Russia and 1.28m people with over 360 day violation of their stay (a 10 year ban on entry to Russia is envisaged for such violators).[2]

5. The list of foreign nationals and stateless persons who have the right to receive the Russian citizenship in accordance with a simplified procedure (that is without the condition of the period of residence to be complied with)[3] was expanded. According to Federal Law No. 157-FZ, they include:

- individual entrepreneurs who carry out their activities in Russia for at least 3 years and whose annual revenues amount to at least Rb 10m;
- skilled workers (in accordance with the list of trades, lines of profession and job positions) working in the country for at least 3 years;
- co-owners of a 10% interest in the charter capital of a Russian-based company with assets of at least Rb 100m and payment of at least Rb 6m a year to the budget system of the Russian Federation during the past 3 years (that is a company which is something between the small and mid-sized business), that is, a so-called "investment citizenship" (on the model of some European countries). It is to be noted that in the subsequent Resolution of the Government of the Russian Federation[4] it is specified that simplification of the procedure is not applied to foreign nationals who engage in the most common lines of activities: wholesale and retail trade, hotel, restaurant and advertizing business, real-estate operations, legal advice, accounting, HR recruitment and other;
- foreign students who starting from 1 July 2002 received Russian vocational training and by the time of application for the Russian citizenship worked for at least 3 years in Rus-

[1] Relevant federal laws were passed in 2013.
[2] V. Seregin and M.Solopov. Flight of Migrants: in January Their Inflow Fell By 70% //RBK, 9.01.2015. http://top.rbc.ru/own_business/09/01/2015/549b0d579a79472285e29848
[3] Federal Law No. 157-FZ of 23 June 2014 on Amendment of the Federal law on the Citizenship of the Russian Federation.
[4] Resolution No.994 of 30 September 2014 on Determination of the Types of Economic Activities where a Foreign national or a Stateless Person Who are Individual Entrepreneurs, as well as a Foreign National or Stateless Person Who are Investors are Granted the Right to Apply for the Citizenship of the Russian Federation in Accordance with a Simplified Procedure.

sia.[1] Earlier, they could become nationals of Russia in accordance with a simplified procedure only if they were nationals of the former Soviet republics. Also, the issue of granting of the Russian citizenship in accordance with a simplified procedure to foreign nationals who buy real property of a certain value (at least 10% of the share –from $300,000 – in a condominium[2]) was discussed, but did not receive further development; such a measure is used in a number of European countries.

6. An individual legislative initiative dealt with the internal migration. It is related to development both of the Concept of State Migration Policy in the Russian Federation till 2025 and the idea put forward by the President of the Russian Federation in his Address to the Federal Assembly in December 2013 to establish territories of advanced development (TAD). In 2014, the Government of the Russian Federation submitted to the State Duma a draft law on establishment of TAD in the Far East,[3] in which an effort was made to specify managerial measures aimed at promotion of economic development of those territories. It seems that by analogy with establishment of free economic zones the draft law provides for making the migration regime simpler for those territories (in particular, employers will be able to use foreign workforce without permission of the Federal Migration Service and any quotas[4]). However, the main idea is primarily related to the need to retain Russia's own population, mainly the youth, by means of creation of highly efficient jobs and conditions for self-realization, rather than attract the external labor migration. TADs are to emerge in the Far East in 2015.

5.2.3. Forced Migration

In 2014, another aspect of legislative transformations in the sphere of migration was related to developments in Ukraine. One of the first documents after the beginning of those developments was the law on making simpler the procedure for granting citizenship to foreigners who are carriers of the Russian language.[5] According to the above law, the procedure for receipt of the citizenship, entry to the territory of Russia and receipt of the residence permit is made simpler and the period of consideration of applications for the Russian citizenship is reduced from 6 months to 3 months. Foreign nationals and stateless persons can be recognized by a specially established commission as carriers of the Russian language if they use it on a daily basis "in family, household and cultural spheres provided that those persons or their relatives by a direct line ascending live or used to live on a permanent basis in the territory of the Russian Federation or the territories of the Russian empire or the USSR within the limits of the state border of the Russian Federation."[6] In order to prevent the abuse, a residence

[1] According to the data of the Rosstat, the number of students from CIS countries who took training only in higher vocational education programs at educational establishments in Russia amounted to 133,800 persons as of the beginning of the 2013–2014 academic year. (Russia and CIS countries-2013. The Rosstat, 2014).
[2] G. Tumanov and D. Butrin. What Does Russia Make Profit From // Kommersant. 12.02.2014.
[3] Federal Law on Territories of Advanced Social and Economic Development and Other Measures of State Support of Regions of the Far East.
[4] It is to be noted that the draft law was introduced in May 2014, that is, prior to amendment of the Federal Law on the Legal Status of Foreign Nationals in the Russian Federation as regards cancellation of quotas. A similar approach was used in preparation to APEC summit in Vladivostok in 2012.
[5] Federal Law No.71-FZ of 20.04.2014 on Amendment of the Federal Law on Citizenship of the Russian Federation and Individual Statutory Acts of the Russian Federation.
[6] See ibid.

permit will be canceled if the person who has been granted it fails to apply for the Russian citizenship within two years.

In addition to the above, a condition for the Russian citizenship to be granted is renunciation from the other nationality. According to a number of experts, the above limitation may inhibit those nationals from CIS states who were thinking about getting the Russian citizenship.[1] According to the data of the FMS of the Russian Federation, in 2014 157,800 persons received the Russian citizenship (that is 16 p.p. more than in 2013). Due to developments in Ukraine, much higher growth could have been expected. However, most people who arrive from Ukraine do not seek to receive either the Russian citizenship or a humanitarian status of a refugee in the Russian Federation which impose among other things obligations on them; what matters to them most is an opportunity to have a job in Russia. For Russia, those transformations may be advantageous by virtue of the ethnic and language affinity.

Prior to adoption of a number of decrees as regards displaced persons from Ukraine, those people had a few options to legalize their status. According to Federal Law No.4528 of 19.02.1993 on Refugees, there are two options to secure the status of a refugee (the procedure for receiving it is highly complicated) and that of a person who has a temporary asylum. It is to be noted that the status of a refugee provides certain social guarantees, while that of a temporary asylum only permits a person to work and stay in Russia legally and work without securing special permit documents required from foreigners. Prior to the beginning of 2014 (that is before the developments in Ukraine), the status of a refugee in Russia was granted to less than 1,000 persons, while that of a temporary asylum, to about 3,000 persons. In securing of the status of a refugee or that of a temporary asylum, the obligations imposed, that is, infeasibility to cross the border for a return or temporary return home and other contributed to the fact that after stepping up of hostilities Ukrainian nationals started to apply more actively to offices of the Federal Migration Service of the Russian Federation for other types of the status, primarily, a temporary residence permit, residence permit or Russian citizenship (without taking into account those who receive work permit or a patent).

According to the data of the FMS of the Russian Federation, the pattern of those who applied for various sorts of the status (from April 2014 till January 2015) is as follows: 5,800 nationals of Ukraine sought the status of a refugee, other 277,300 persons applied for the temporary asylum status and 323,500 persons claimed other forms of legalization: 153,700 applied for a temporary residence permit, 63,500 applied for the Russian citizenship and 32,100 for a residence permit. It is to be noted that other 74,200 persons wanted to be participants (together with their family members) in the compatriot resettlement program.[2]

From the end of July 2014, the procedures for securing by Ukrainian nationals of the temporary asylum status have been simplified[3] (the period of consideration of applications for a temporary asylum was reduced from 3 months to 3 days; a temporary asylum is at present granted on the basis of the country principle without examination of the applicant's individual

[1] I. Nagornykh and Z. Kuzmina. The Government Submitted to the State Duma a Draft Law on Citizenship // Kommersant, 13.03.2014.

[2] The FMS of the Russian Federation http://www.fms.gov.ru/about/statistics/info_o_situatsii_v_otnoshenii_ grazhdan_ukrainy/

[3] Resolution No.690 of 22.07.2014 of the Government of the Russian Federation on Provision of Temporary Asylum to Ukrainian Nationals in the Territory of the Russian Federation in Accordance with the Simplified Procedure.

data[1]); for refugees the stay in the Russian Federation will be automatically extended up to 270 days – it is to be noted that before that Ukrainian nationals could stay in Russia without relevant documents maximum for 90 days. Furthermore, additional quotas for receipt of a temporary residence permit, as well as substantial financial and material resources for provision of necessary facilities to people were allocated.[2]

Regional distribution of displaced persons is an important issue. Migrants' requests often disagree with the guidelines of the state which actually imposed a ban on provision of a temporary asylum status in Crimea, Sevastopol, Moscow, the Moscow Region, St. Petersburg, the Rostov Region and Chechnya,[3] thus stimulating resettlement to less attractive regions of Russia and less attractive parts within those regions. It is a serious blow both at displaced persons who are forced to move to problem regional centers of depressed Russian regions and local authorities of those municipal entities which even in conditions of recent economic prosperity did not have sufficient financial resources for exit from the transformation crisis of the 1990s and still experience problems on the local labor market. Also, there is experience of the 1990s which showed that true forced migrants are those refugees who moved to big cities, got employment all alone (notionally – a "for work" model), relied mostly on themselves, rather than the state and eventually happened to be in a more advantageous position as compared to those who preferred a "more affordable housing" model (that is residence in rural areas and small towns) and/or trusteeship of the state.[4] At the same time, distribution of quotas on refugees by Russian regions shows that in a situation of labor shortages and demographic problems some regional leaders welcome a greater number of displaced persons than offered them by the federal authorities, that is, they give preference to the strategy (availability of sufficient workforce) over the tactics (difficulties related to the current admission of displaced persons). Those regions include the Kaluga Region, the Kaliningrad Region, the Nizhny Novgorod Region, the Samara Region, the Saratov Region, the Sverdlov Region, the Novosibirsk Region and Bashkortostan.

5.2.4. External Labor Migration

According to the data of the central database of the FMS of the Russian Federation on accounting of foreign nationals and stateless persons (CDB AFN) who reside on a temporary or permanent basis in the Russian Federation - which data is received by way of registration of departures and arrivals of migrants to/from Russia - in 2014 there were 11.1m foreign nationals and stateless persons in Russia[5]. In accordance with its purpose, the CDB AFN registers

[1] The status of refugees and forced migrants was granted in a similar way early in the 1990s.
[2] Funds allocated from the federal budget amounted to Rb 6bn which was 3 times over the amount allocated on the annual basis during the past few years on implementation of the *Compatriots* program // E. Domcheva and T. Panina House and the Hut // The Rossiiskaya Gazeta, 23.09.2014.
[3] Resolution No.691 of 22 .07.2014 of the Government of the Russian Federation on Approval of Distribution by Constituent Entities of the Russian Federation of Ukrainian Nationals and Stateless Persons who Live on a Permanent Basis in the Territory of Ukraine and Came Emergently on a Mass-Scale to the Russian Federation.
[4] For more detail on that, see: G.S. Vitkovskaya. Forced Migration to Russia: Results of the Decade / Migration Situation in the CIS Countries and Baltic States// Under the editorship of Zh.A. Zaionchkovskoy. M.: Kompleks-Progress, 1999. pp. 159–194.
[5] The official site of the FMS of the Russian Federation. http://www.fms.gov.ru/about/statistics/ data/details/9482/

all the "external migrants" regardless of the period of their stay in Russia[1] and the purpose of their visit (work, tourism, medical treatment, business trips, visits to relatives and other). Proceeding from the above data and possible correlations between the purpose and the period of a stay, experts estimate the average annual number of labor migrants in Russia at 6m people.[2] The share of legalized labor migrants varied in the 2000–2010 period and at present according to the data of K. Romodanovsky, Head of the FMS of the Russian Federation amounts to 50%: 2.7m people is gainfully employed, while 2.9 m people work illegally according to the estimates of the Federal Migration Service".[3]

The legalized component was made up of migrants working on the basis of the so-called "ordinary" work permits (within quotas and beyond the lists of skilled specialists of individual profession); a work permit for high-skilled workers (HSW) and skilled specialists and a patent for employment with individuals. In addition to the above, the official right to work in Russia without additional documents is granted to nationals of member-states of the Eurasian Union (in 2014 – Belarus and Kazakhstan), foreigners staying in Russia on the basis of the temporary residence permit (TRP)[4] or residence permit.

The dynamics of the number of the executed documents for legalization of the status of a labor migrant is shown in *Table 12*.[5] In 2014, the number of the issued work permits did not virtually change as compared to 2013. It is to be noted that substantial growth (over 2m) in the number of patents for employment with individuals was registered. Consequently, budget revenues from sale of patents more than doubled. Growth rates of the flow of skilled specialists and HSW decreased substantially: if in 2013 that category of migrants increased by nearly three times over against 2012, in 2014 it grew by less than 25%. It seems that due to serious limitations, that is, "work experience, skills or achievements in specific lines of activities"[6] and, most importantly, the size of a pay of those workers, it can be asserted that a certain "ceiling" of attraction of such migrants has been achieved.

The monthly data on the issued permit documents (*Fig. 2*) in the 2012–2014 period shows nearly identical pattern with two peaks: for work permits it is December and April-May. For purchasing of patents, the other peak is a more extended one and lasts till July. Due to a lack of special research, it can be suggested that an additional summer "shed" is formed by those migrants who come to do seasonal work with individuals, while the baseline inter-peak level is largely created by migrants who use a patent as a "cover-up" and work for legal entities, rather than households as it should be in accordance with the legislation which was in effect before 2014.

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[1] On the basis of the data of K. Romodanovsky, Head of the FMS of Russia, one-third of foreigners who enter Russia do not stay more than 7 days // RIA Novosti, 02.02.2012.

[2] Such estimates are the outputs of assessment calculations shown in the following papers: O.S. Chudinovsky, M.B. Denisenko and N.B. Mkrtchyan. Temporary labor Migrants in Russia // Demoskop Weekly, 2013. № 579–580. http://demoscope.ru/weekly/2013/0579/tema01.php, as well as Yu.F. Florinskaya, N.B. Mkrtchyan, T.M. Maleva and M.K. Kirillova. Migration and Labor market. The Institute of Social Analysis and Forecasting. M.: Delo Publishing House, the RANEPA, 2015. (Scientific Papers: The Social Policy). pp. 58–59.

[3] M. Gritsyuk. Entering the New Year // The Rossiiskaya Gazeta, 28.12.2014.

[4] From 2013.

[5] It is to be noted that the statistics of the executed patents like any other migration statistics is rather complicated as it reflects the number of the executed patents which can be bought, for example, by one migrant several times during a year, rather than the number of persons working on the basis of a patent.

[6] Article 13.2 of the Federal law No.115-FZ of 25.07.2002 on the Legal Status of Foreign Nationals in the Russian Federation.

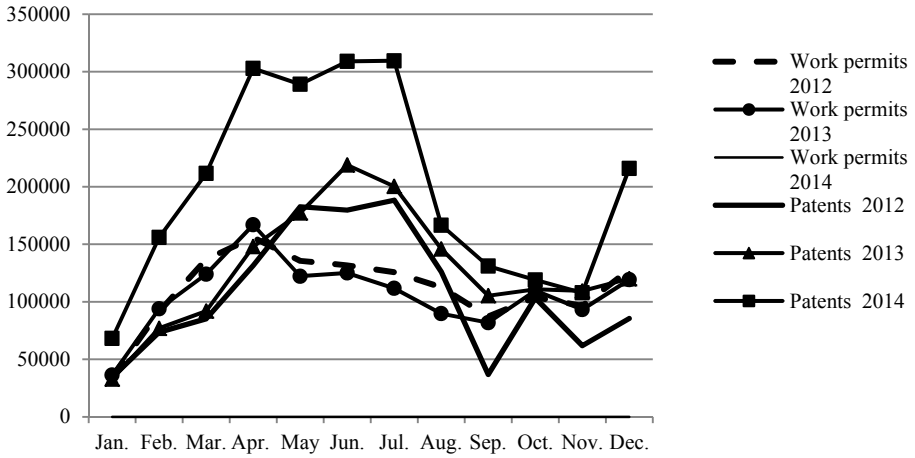
Table 12

The number of documents executed to labor migrants in Russia and budget revenues from the sale of patents, 2011–2014

	2011	2012	2013	2014
Issued work permits, units	1 195 169	1 340 056	1 273 984	1 303 258
Execution of patents, units	865 728	1 289 204	1 537 832	2 386 641
Budget revenues from sale of patents, thousand Rb	3 558 532.4	6 674 916.7	8 395 775.5	18 311 659.7
Execution of work permits for HSW and skilled specialists	54 861	55 848	156 655	194 925

Source: The FMS of the Russian Federation.

In surveying labor migrants by the Levada-Center for the NRU HSE (2011), it was found out that "over «3/5 of patent-holders neither worked with individuals, nor had any such work experience at all"[1] and, consequently, had no legal grounds for carrying out labor activities in Russia. On the contrary, those who work for individuals are not particularly interested at present in buying patents as they feel fairly secured working for households: according to the research carried out by the Migration Research Center (2013), only 20% of migrants who work as domestic servants has got a patent.[2] Substantial growth in the number of the sold patents which was observed in January-July 2014 as compared to the same period of 2014 and a virtually complete lack of growth in subsequent months could have marked an economic crisis, if not two-fold growth in December (as compared to November and December 2013). Such explosive growth is sooner a reaction to reports both on setting of a patent price differentiated by regions and substantial appreciation of that price from 1 January 2015. It is to be noted that a patent bought in December 2014 for the period of three months (the maximum period) on the basis of the previous price is valid till March 2015.



Source: The FMS of the Russian Federation.

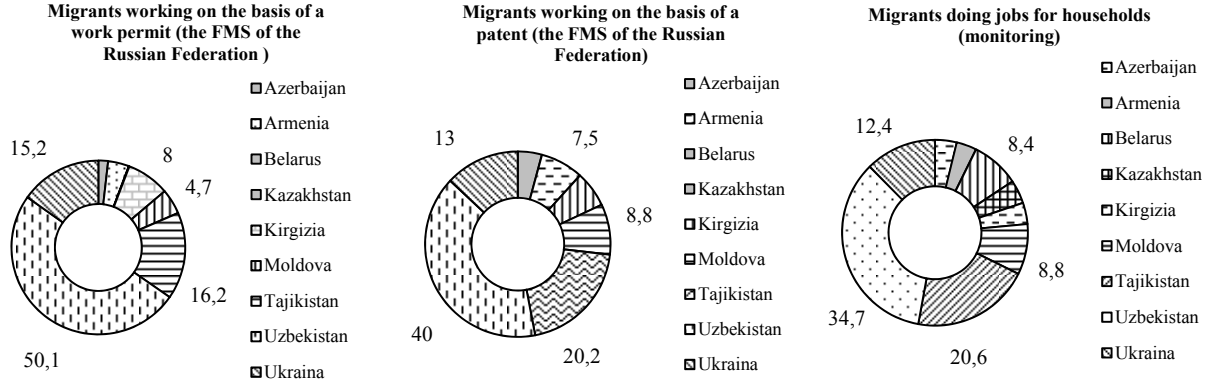
Fig. 2. Execution of work permits and purchasing of patents by foreign workers in Russia, January-December 2012-2014, units

[1] V.I. Mukomel. Transformation of Migration Flows: Rotational Migrations //Migration Law. 2012. No 3. pp. 28–32.

[2] L.B. Karachurina, D.V. Poletaev, Yu.F. Florinskaya, E.S. Vatlina. Household Employees in Russia and Kazakhstan: Assessment of the Situation of Household Employees on Labor Markets of Russia and Kazakhstan / under the editorship of Zh.A. Zaionchkovskaya. UN-Women. Almaty, 2014.

In 2014 (July, August and September), for the first time in Russia the federal statistics monitoring (sample survey)[1] of utilization of migrants' labor by households and individual entrepreneurs was carried out[2]. The outputs of the monitoring permit to assess the extent of the external and domestic labor migration, quantitative distribution of labor migrants by the type of jobs, countries of origin and other. It is to be noted that the data on labor migrants was collected regardless of the legal status of their stay in Russia.

According to the received data, in Q 3 2014 households employed 1,663,400 persons, including 1,340,300 foreign workers. It is 1m (or 1.8 times) more than the number of the executed patents (according to the data of the FMS of the Russian Federation). However, if discrepancies in the number of people working on the basis of a patent are great, the differences regarding countries of origin of workers are insignificant (*Fig. 3*). Migrants from Uzbekistan and Tajikistan account for over 60% of the sold patents[3] or over 55% according to the data of the monitoring. There are virtually no differences between the data on other key donor countries of labor migrants, that is, Ukraine and Moldova.



* for those working on the basis of a work permit or patent – January-September 2014.
Source: Russia and CIS countries 2014. The Rosstat, 2014.

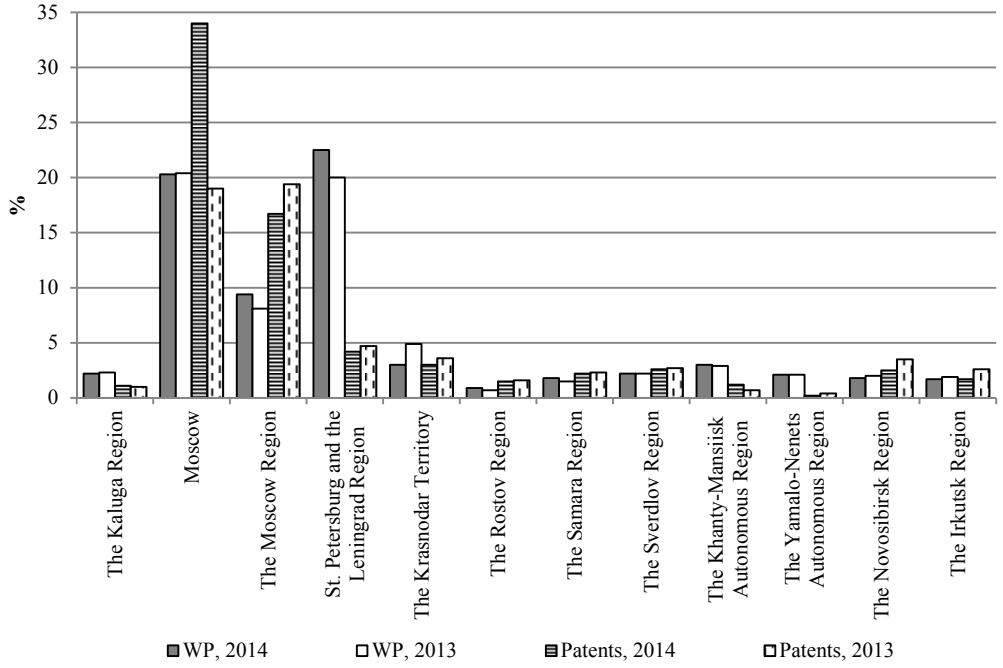
** For those working for households – Q3 2014.
Source: The federal statistics monitoring of utilization of migrants' labor by households and individual entrepreneurs – 2014. The Rosstat, 2015.

Fig. 3. Distribution of labor migrants by CIS countries which they are nationals of, %

According to the regional data of the monitoring, Moscow and the Moscow Region prevail less than it can be seen from the data of the FMS of the Russian Federation: according to the data of the monitoring 40.6% of foreign workers employed by households worked in Moscow and the Moscow Region. According to the data of the FMS of Russia, 50.7% of foreigners who bought a patent worked in the Moscow Region. At the same time, according to the data of the monitoring (10.2%) the role of St. Petersburg and the Leningrad Region is much higher than that according to the data of the FMS of the Russian Federation (4.2%). In analyzing the regional distribution, the attention should be paid to the following few facts (*Fig. 4*):

[1] The survey was carried out by the Rosstat. http://www.gks.ru/free_doc/new_site/imigr/index.html
[2] Within the frameworks of the sample survey carried out in all the constituent entities of the Russian Federation, over 90,000 households with people at the age of 15-72 were surveyed.
[3] On the basis of the data for January-September 2014 //Russia and CIS Countries 2014. The Rosstat, 2015.

– high concentration of migrants (those working both on the basis of a work permit and a patent) in the ten most attractive regions in 2013 became even higher in 2014, that is, 67% and 69% of those working on the basis of a work permit and a patent, respectively, while a year ago it amounted to 65% and 59%, respectively. Even in regions led by cities with a million-plus population the share of patent-holders rarely exceeds 2%. It appears that the above fact is evidence of narrowness of the labor market and low solvent demand in large cities;
– there are only a few cases of leaders' discrepancies as regards the share of executed work permits and bought patents: Russia's oil and gas producing regions (Khanty-Mansiisk Autonomous Region – Yugra and the Yamalo-Nenets Autonomous Region) and the Kaluga Region are among the leaders as regards the number of work permits, but the number of those who bought patents is much smaller there; quite the opposite situation is registered in the Rostov Region and, partially, in the Samara Region. It seems that in regions where the big industrial business is situated the importance of the unofficial sector is lower and the extent of actual documentation of migrants' labor (not a formal one) is higher.

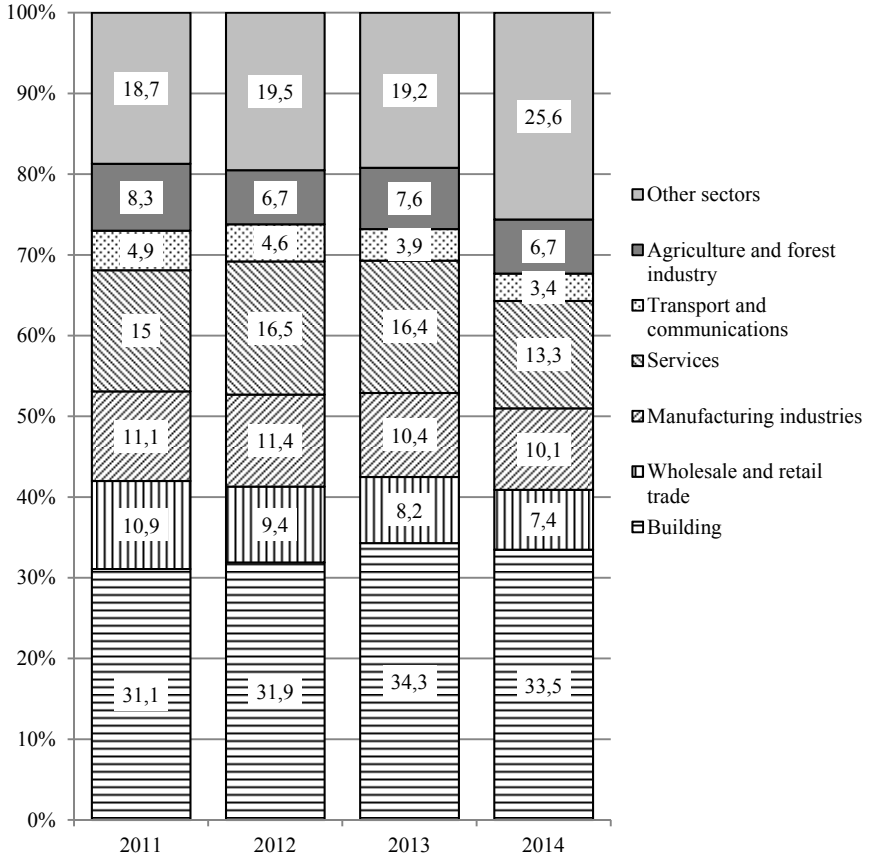


Source: The FMS of the Russian Federation.

Fig. 4. Distribution of the number of the issued work permits (WP) by the region of Russia, % of the respective value of the Russian Federation as a whole, 2013–2014

Sectorial distribution of visa-free workers in respect of whom employers fill in notifications on entering into labor or civil-law contracts (about 70% of the number of work permits in the past few years) shows a trend of gradual growth in differentiation of fields of application of migrant labor (*Fig. 5*). Employment in "other sectors" is growing, while in other in-

dustries changes are insignificant.[1] The share of those employed in the building industry fell slightly as compared to the previous year. One in three gainfully employed migrants from the CIS countries still works in the building industry. A lack of correlation between a decrease in the volume of jobs in the building industry which was registered throughout 2014 (at least by 5 p.p. on the basis of the January-October data) and the portfolio of orders in the industry[2] points probably to a significant share of those who are informally engaged in that industry.



Source: The FMS of the Russian Federation (the 1-RD statistical form).

Fig. 5. Sectorial pattern of employment of foreign visa-free workers in Russia (on the basis of notification on entering into labor or civil law contracts), 2011–2014, %

Sectorial limitations which were in effect in the 2007–2013 period were specific to a few industries (types of activities); it is to be noted that the shares of possible presence of foreign workers in them varied from year to year. The idea of regulation of the presence of foreigners in certain sectorial niches remained in 2014 and consolidated even further in plans for 2015. For example, in the 2008–2011 period the quota on utilization of foreign workers in retail

[1] Unfortunately, the set of industries listed in the 1-RD form of the FMS of the Russian Federation does not comply with the OKVED, nor permits to compare the sectorial pattern of employment of Russian workers and migrants.
[2] The social and economic situation of Russia in January-October 2014 // The Rosstat, 2014.

trade was zero, in the 2012–2013 period a 25% quota on workers in the field of alcohol sales, including beer was introduced, while in 2014 it was reduced to 15%.[1]

Setting of tough quotas in retail trade virtually results in a fight against the small business in that sector, as large retailers know well for long which "schemes" of hiring of workers are more effective for them, while small corner shops do not have such opportunities. In the 2013–2014 period, a zero quota was in effect on hiring of foreigners in retail trade in pharmaceuticals and retail trade at kiosks, markets and outside shops; also there was a 25% quota on hiring of foreigners for "other activities" in sport.[2] In 2015, the list of sectors in which the share of foreign workers is subject to regulation is expanding[3]: a 50% quota has been introduced on vegetable farming, a 15% quota on retail trade in tobacco and a 50% quota on activities in "other land transport".[4] The above parameters, on the one side, are meant to create a situation where preference is given to local workers especially in a situation of the forthcoming economic crisis on the labor market and contribute to reduction of the rate of unemployment among Russian workers, particularly, graduates who lack work experience. On the other side, the new quotas are unlikely to have an effect on the labor market as they only preserve the existing situation there.

According to the data of the Central Bank of the Russian Federation on money transfers by individuals from the Russian Federation to other countries, in Q1-Q3 2014 the volume of money transfers to far abroad countries still exceeded by more than 100% the total volume of individuals' money transfers to CIS countries. However, for the first time in the long period the volume of money transfers in each quarter of 2014 was lower than that in respective quarters of 2013. Starting from 2006, such a situation was observed for the second time in 2014 - the first time was in 2009 as compared to the previous year and was a marker of the crisis (*Fig. 6*). Simultaneously, the average amount of a transaction became the lowest one in the entire period of the monitoring. The factors behind that may be higher affordability for migrants of money transfers from Russia to CIS countries (reduction of the price of money transfers and saturation of the relevant infrastructure), lack of the need for migrants to cooperate with one another in order to make a money transfer, as well as a reduction for migrants of the difference between the amount of their wages and expenditures in Russia (on rent, food and transport) which increased due to the growth in the rate of inflation. Reduction of the volume of money transfers to countries which largely depend on migrants' money transfers from Russia (primarily, the economies of Tajikistan, Moldova, Kirgizia and Uzbekistan) make governments of those countries look for other channels of support of their economies, primarily, by means of China.[5]

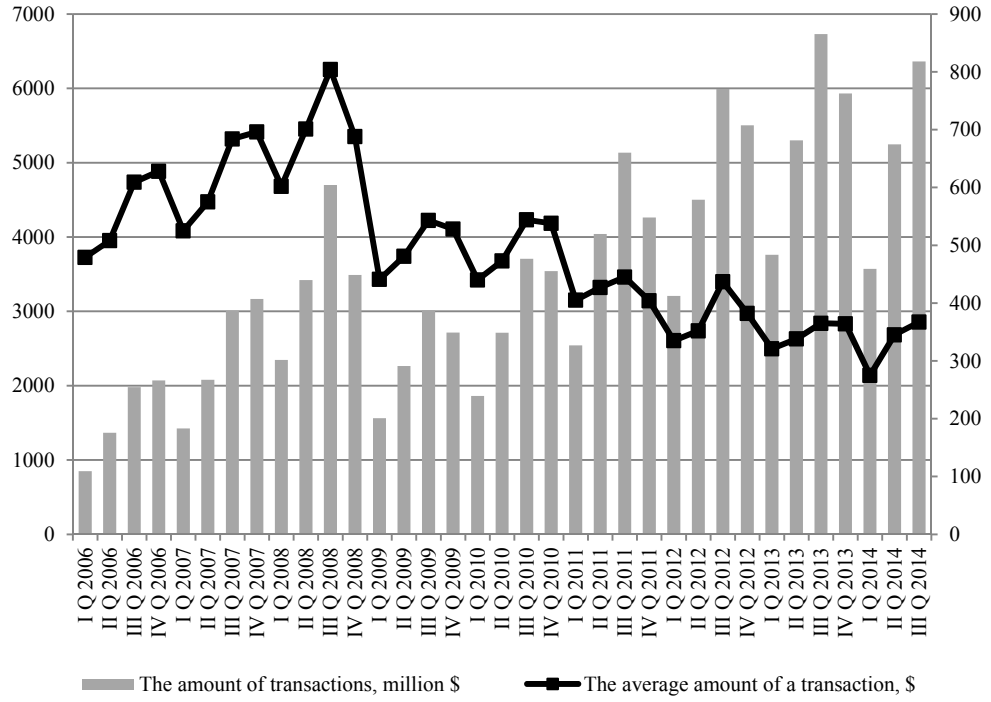
[1] Resolution No.1191 of the Government of the Russian Federation of 19.12.2013 on Setting in 2014 of the Admissible Share of Foreign Workers Used by Economic Entities in Retail Trade and Sport in the Territory of the Russian Federation.

[2] It includes activities on organization and carrying out of various sport events, as well as activities of independent sportsmen and athletes, judges, coaches, instructors and other.

[3] Resolution No.1420 of the Government of the Russian Federation of 19.12.2014 on Setting in 2014 of the Admissible Share of Foreign Workers Used by Economic Entities in Individual Types of Economic Activities in the Territory of the Russian Federation.

[4] However, the proposal on setting quotas on foreign workers in the building industry (50%) put forward by the Ministry of Labor was not supported by the Government / A. Manuilova. Migrants will be Allocated a Share to // The Kommersant daily, 3.12.2014.

[5] D. Farchi. The Flow of Money Transfers from Russia Has Exhausted, Tajikistan Sets Hopes on China // Financial Times. 23.10.2014. Published on the InoPressa.Ru.



Source: the data of the Central Bank of the Russian Federation
http://www.cbr.ru/statistics/print.aspx?file=CrossBorder/C-b_trans_13.htm&pid=svs&sid=TGO_fiz

Fig. 6. Funds transferred from Russia to CIS countries according to the data on trans-border transactions by individuals, Q1 2006 – Q3 2014

* * *

So, a disturbing socio-political and economic situation has not affected greatly migration processes in Russia yet (at least, it is not unambiguously seen from that statistical data which is available for the analysis). Large-scale amendments to the legislation developed throughout 2014 will come into force only in 2015, so, they had no effect on the migration situation in 2014, either, which was generally in the stage of "suspense".

5.3. The Higher Education in 2014: Inconsistency of Reform Measures

In 2014, organizational and economic restructuring of the vocational training system continued along the following main lines:

– restructuring of the system of higher educational establishments on the basis of the monitoring of their condition, identification of educational establishments with evidence of inefficiency and taking of the following three types of decisions in respect of those establishments: liquidation, affiliation with other educational establishment and putting them under control so that to eliminate shortcomings (violations) in their activities. It is to be noted that the following is considered as violations in activities of higher education establishments: enrollment of students with a low grade in the Unified State Exam (USE), lack

of academic and laboratory premises (license index), or low HR potential of the higher education establishment (license index). What is actually meant here is restructuring of the system of higher education establishments by means of administrative methods;
- partial modification of the procedure for and toughening of the control of the USE as a kind of a pass to higher education;
- gradual introduction of unified (single) norms of budget financing (the same set of norms is applied to all the educational establishments, but it is to be noted that the norms are differentiated by 9 groups of lines of training (lines of profession), levels of education and modes of training);
- control over prices on paid education services and prevention of cross-subsidy (however only on the part of budget subsidizing of fee-paying students, while on the part of fee-paying students such subsidizing is admissible);
- raising of wages of educational personnel of vocational education establishments (academic staff (AS) of higher education establishments and teachers and foremen of industrial training at secondary vocational training establishments (SVT)).

All the above reforms have been carried out for a few years. So, as a result of the monitoring of efficiency of higher education establishments - which monitoring has been carried out from 2012 - many nongovernment higher education establishments and branches of nongovernment higher education establishments, as well as branches of state higher education establishments were closed down. In addition to the above, mergers of higher education establishments took place. As a result, in the past few years the total number of higher education establishments has rapidly decreased (*Table 13*).

Table 13

The number of Russian higher education establishment and the number of their students in 2000/01 – 2013/14 academic years

Years	Number of educational establishments	Number of students, total, thousand people
2000/01	965	4,741.4
2005/06	1068	7,064.6
2006/07	1090	7,309.8
2007/08	1108	7,461.3
2008/09	1134	7,513.1
2009/10	1114	7,418.8
2010/11	1115	7,049.8
2011/12	1080	6,490.0
2012/13	1046	6,073.9
2013/14	969	5,646.7

Source: Rosstat, http://www.gks.ru/free_doc/new_site/population/obraz/vp-obr1.htm.

So, after growth in the number of higher education establishments till the 2010/11 academic year, their number started to decrease (before the introduction of the monitoring due to a decrease in the number of students). The highest number of higher education establishments and their students was registered in 2008 (1134 higher education establishments and 7.5m students). Since then, the total number of higher education establishments fell by 14.6%, while the total number of students, by 24.8%. As the rates of decrease in the number of students are higher than those in the number of higher education establishments, further restructuring of the system of higher education establishments is urgently needed.

According to the State Program of Development of Education in 2013–2020, by 2020 the number of state higher education establishments is to fall at least to 500 (at present their num-

ber amounts to 578, while in 2009 it was equal to 662). It does not mean that state higher education establishments were liquidated; the main measure in the public sector was affiliation of weaker higher education establishments with stronger ones. At the same time, there were often instances when the affiliated weaker institution was larger as regards the number of students than the institution it was affiliated with (an explicit example of that may be the affiliation of the Russian University of Trade and Economics with the G.V. Plekhanov Russian University of Economics). As a result, there is a risk that the integrated higher education establishment will be less efficient and, at the same time, too big to fail.

However, it is early to speak about the outputs of the current restructuring: its effect is not quite clear yet. The more so, such factors as introduction of new norms of funding, raising of wages to the academic staff and regulation of an education fee for fee-paying students (see below) will have a great impact in the short-term prospect on the efficiency of higher education establishments.

As regards toughening of control over the USE, the average grade has decreased on all those subjects on which the exam was held. The above situation was discussed earlier.[1] The same material includes the analysis of consequences related to modification of the procedure for passing of the USE, primarily, introduction of an essay as a pass to the USE. It appears that the above measure will not bring about any significant changes, but the public at large and the academic community will be satisfied as their requirement has been met.

At the same time, as regards the following three reform positions - raising of wages to the academic staff of higher education establishments, adoption of the scheme of per capita funding of higher education establishments and regulation of prices (cost) on paid education services on the basis of the norms – the situation is getting more and more controversial which factor has a negative effect on development of the entire system of higher education. For the above reason, the situation in question is discussed in detail.

The above inconsistency is more explicitly seen in comparison of budget funding of a study group of 25 students[2] on the basis of the approved per capita norms and the need in budget funds for remuneration of labor of the academic staff engaged in training of the study group.

In 2014, for lines of training (lines of profession) which do not require utilization of lab equipment the norm of per capita funding was set in the amount of Rb 63,370. It is perfectly clear that it is infeasible to train a student for the above sum of money. But according to calculations, the above sum is insufficient to organize a standard training of a study group of 25 persons, either. Prior to 2014, the guideline number of students per one lecturer amounted to 10:1. In 2014, the Ministry of Finance proposed to increase it to 12:1. In *Table 14*, a calculation of the need in budget funds per a study group carried out on the basis of the guideline value of 12 students per a lecturer is presented.

With expenditures on remuneration of the academic staff at 88.7% of the allocated volume of budget funds, a higher education establishment will not be able to develop properly, nor upgrade the quality of education services, that is, to meet the goal of the reforms.

[1] T. Klyachko. USE-2014: The Main Outputs// Economic Development of Russia. 2014. No.8. pp. 36–37.
[2] 25 students is a guideline number of a study group.

Table 14

Calculation of the need in budget funds for remuneration of lecturers in training of a study group of 25 state-financed students by lines of training (lines of profession) which do not require utilization of a lab equipment (bachelor's and specialist's degree programs)

Norm of per capita financing (NPCF) – **63370**
Group of 25 persons, the number of lecturers with a ratio of 1:12 is equal to 2.1 lecturers
The volume of budget funds allocated to that group a year: 63370 * 25 = Rb **1,584,250**
According to the Rosstat's data, the average annual pay of the academic staff for 9 months of 2014 amounted to Rb 42822. (135.6% nationwide)
Consequently, the annual average pay of 2.1 lecturers with accruals amounts to: 42822 * 2.1 * 12 * 1,302 = Rb **1,405,006.9** or **88.7%** of the volume of the budget funds meant for that study group.

Source: calculated on the basis of the data of the Rosstat and the Ministry of Education and Science (http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/wages/) (http://минобрнауки.рф /документы/ 3927).

It means that in setting of norms of per capita funding higher education establishments of social science, economics and the humanities (as they do not need a lab equipment) will manage to survive if they succeed in attracting fee-paying students and charging a much higher education fee than the amount of the funds provided for by the norms. But it is feasible only if there is sufficient solvent demand on those lines of training in the region. However, for example, as regards training in mathematics which line is also financed on the basis of the norm which is equal to Rb 63370 as it does not require utilization of special equipment such demand is completely nonexistent (*Table 15*).

As seen from *Table 15*, in 2014 a more or less considerable enrollment of state-financed students by the lines of training (lines of profession) at that higher education establishment was only observed in the Fundamental Informatics and Information Technologies line of training (bachelor's degree program) and amounted to 15 persons out of 35 persons enrolled. It is to be noted that such a situation normally prevailed everywhere with Moscow and St. Petersburg being an exception to some extent.

As regards lines of training which require utilization of lab equipment, in 2014 the norm of per capita financing in the amount of Rb 67,060 was set. Naturally, it is believed that the difference between the two norms of per capita financing is justified by expenses on maintenance and service of the lab equipment, that is, for those purposes the amounts of Rb 3,690 and Rb 92,250 are to be spent per student or a study group of 25 students, respectively. But here is the same situation with remuneration of lecturers of the study group which remuneration is equal to 83.7% of budget funds allocated for the above group; it is to be noted that a financial maneuver is feasible only by means of reduction of costs related to maintenance and service of the lab equipment.[1]

[1] It is to be noted that there is no clear justification of expenditures related to maintenance and service of lab equipment. So, for example, at one higher education establishment there are 3 groups of students using the lab equipment (accordingly, expenses on maintenance and service of the equipment amount to Rb 276,750), while at another higher education establishment there 5 groups (the expenses will amount to Rb 461,250). Most probably, the former higher education establishment will lack funds on maintenance and service of that equipment, while the latter one has a surplus of funds; it is to be noted that the optimal number of groups utilizing that equipment for training is 4.

Table 15

The number of state-financed and fee-paying students by some lines of training of first-year students of a state university (National Research University) in a large city in 2014

National Research University in a large city – enrollment for the 2014/15 academic year					
Mode of training	**Line of training (line of profession) by the Federal State Educational Standard**	**The number of applications submitted**	**The number of enrolled first-year students, persons**		**Qualification**
			total	**Including those with the expenses compensated**	
Full time education	010100 - Math	0	0	0	Bachelor
Full time education	010100 - Math	21	20 (20)	0	Master
Full time education	010200 - Math and computer science	437	64 (60)	4	Bachelor
Full time education	010300 – Fundamental informatics and information technologies	370	35 (20)	15	Bachelor
Full time education	010300 - Fundamental informatics and information technologies	25	15 (15)	0	Master
Full time education	010400 – Applied mathematics and informatics	363	50 (15)	5	Bachelor
Full time education	010400 - Applied mathematics and informatics	26	21 (21)	0	Master
Full time education	010500 – Mathematical support and administration of information systems	307	13 (10)	3	Bachelor
Full time education	010800 – Mechanical Science and math modelling	317	25 (20)	5	Bachelor
Full time education	010800 - Mechanical Science and math modelling	11	10 (10)	0	Master

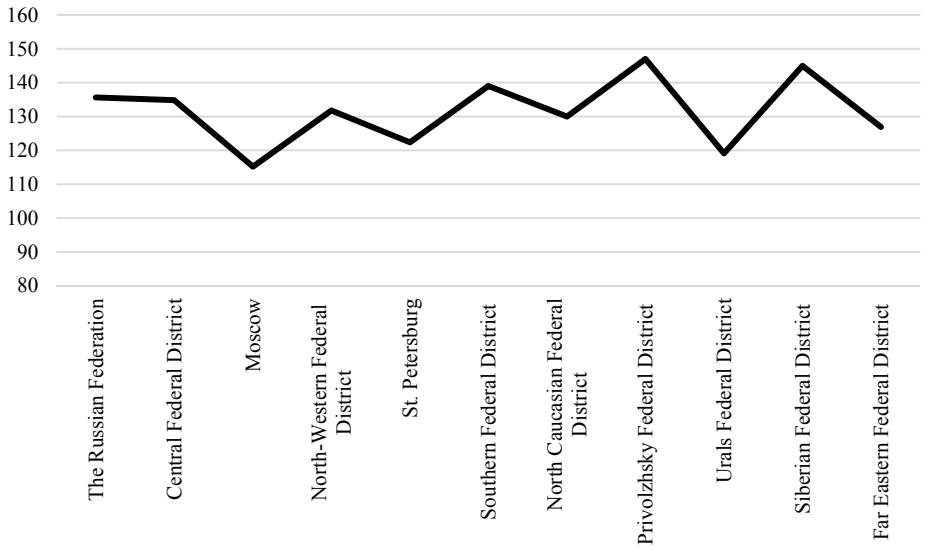
Note: enrollment of state-financed students is specified in brackets.
Source: www.edu.ru

In training of personnel by lines (lines of profession) which require utilization of complex lab equipment, the share of wages in the total volume of budget funds allocated on training of a study group of 25 persons will decrease to 80.7%, but still at a very high level. It will fall to 50.2% only as regards priority lines of training where the norm of per capita financing was set in the amount of Rb 112,000 a year in 2014.

So, it seems higher education establishments are motivated to reorient training of students to priority lines. Such a situation may have an effect to a certain extent on the pattern of training and result in enrollment of a higher number of students for training, for example, in certain engineering professions. But such a policy will become successful only in case those graduates succeed in getting a well-paid job. At present, they generally graduate by the above priority lines from higher education establishments of technology and seek a job not in accordance with their vocation, but at premium sectors of the Russian economy: the information and communication technologies sector, financial sector, oil and gas sector and some segments of the services sector, including business services. Due to the above, the index of employment of graduates which is used in monitoring of efficiency of activities of higher education establishments should be regarded only in general terms without being linked to a line of training (line of profession) of a student. It is to be noted that among graduates of prestigious western universities nearly 40% of graduates do not work within their profession, particularly,

those with a bachelor's degree. It is related to the fact that the higher education at its first stage is becoming more and more a general higher education with some profile training components included.

With preservation of the introduced approach to per capita financing of higher education establishments in accordance with the norms, public higher education establishments of Moscow and St. Petersburg happen to be in a particularly complicated situation as the level of the average labor remuneration in the above cities is much higher than in most Russian regions (*Fig. 7*).



Source: The Rosstat. http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/wages/

Fig. 7. The average pay of the academic staff as compared to the average one in the economy of federal regions, Moscow and St. Petersburg in Q3 2014, %

For 9 months 2014, in Moscow the average pay of the academic staff (the data on the year 2014 was not available as of the date of preparation of the review) amounted to Rb 67,859 or 115.2% of the average one in the economy of the capital city (in St. Petersburg it amounted to Rb 47,845 or 122.4%, respectively). A rather low index is registered in the Urals Federal District which situation can be explained by the fact that in the Yamalo-Nenets Autonomous Region with an average pay of Rb 74514 in that region the average pay of the academic staff of higher education establishments amounted to Rb 73520 or 98.7% of the average level. It is to be noted that in the Sverdlov Region (the Urals Federal District) the average pay of the academic staff of higher education establishments amounted to 155.8% of the average pay in the economy of that constituent entity of the Russian Federation (Rb 45,200 against Rb 29,000). Similarly, in the Vladimir Region (the Central Federal District) the index of the ratio between the average pay of the academic staff of higher education establishments and the average pay in the region was equal to 173.8%; it is to be noted that in absolute terms the average pay of the academic staff of higher education establishments in the Vladimir Region was 1.8 times lower than in Moscow.

At the same time, proper functioning of many Moscow- and St. Petersburg-based higher education establishments of the humanities, economics and management -- which are not in-

cluded in the number of national research universities, but provide high quality of education services that are in demand with students -- is feasible only in case of dramatic expansion of paid education services and setting of a higher fee for education services as the shortage of funds for remuneration of the academic staff is getting more acute there. So, for Moscow the calculation which is similar to the nationwide one (*Table 14*) is presented on the basis of the *Economics* profession line (*Table 16*).

Table 16

The deficit of budget financing of higher education establishments of social sciences, economics and the humanities in Moscow (*Economics* profession line) in 2014 with utilization of the approved model of per capita financing in accordance with the norm (per a study group)

Norm of per capita financing (NPCF) – **63,370**
Group of 25 students, the number of lecturers with a ratio of 1:12 is equal to 2.1 lecturers
The volume of budget funds allocated to that group a year: 63370 * 25 =Rb **1,584,250**
According to the Rosstat's data, in 2014 the average annual pay of the academic staff in Moscow amounted to Rb 67,859 (115.2% of the average pay in Moscow)
Consequently, the annual average pay of 2.1 lecturers with accruals amounts to: 67859 * 2.1 * 12 * 1.302 = Rb **2,226,481** or **88.7%** of the volume of budget funds meant for that study group
So, the deficit of budget funds per a study group at Moscow-based higher education establishments of economics and management amounts on average to Rb 642,231.

Let us consider what fee for education services at higher education establishments of social sciences, economics and/or the humanities in Moscow should be in order to cover at least the deficit of remuneration to the academic staff. Let us assume for the sake of simplicity that in a study group 50% of students are financed out of the state budget, while fee-paying students account for the remaining 50%.

On the basis of our assumptions, the volume of the allocated budget funds per a study group will amount to Rb 792,125 while the need in funds for labor remuneration of the academic staff within a year is equal to Rb 2,226,481. Consequently, the education fee of fee-paying students should cover at least the difference of Rb 1,434,356 or in calculation per one fee-paying student it should amount minimum to Rb 114,748.5, that is, exceed by more than 100% the norm set for the students whose education is financed out of the state budget.

If one proceeds from the fact that labor remuneration of the academic staff should not amount to over 50% of a higher education establishment's expenditures related to fulfillment of education activities,[1] the education fee of fee-paying students is to be increased on average to Rb 292,867 which exceeds 4.6 times over the norm. It is believed that even Moscow-based higher education establishments will be unable to charge such a high *average* fee for education services from all the fee-paying students who study by those lines (lines of profession) which do not require utilization of the lab equipment (training in Bachelor's or specialist's degree programs of economists, managers, lawyers, psychologists, mathematicians and other). In addition to the above, in preservation of the introduced model of per capita financing of higher education establishments for the middle class of Moscow and St. Petersburg – those people are particularly hit by the economic crisis – the extent of availability of quality higher education in social sciences, economics, humanities and other lines may decrease dramatical-

[1] According to the norms of the Soviet period, the fund of labor remuneration of the academic staff with accruals was not to exceed 40% of budgets funds allocated on education activities.

ly. It is to be noted that availability of a quality higher education for that particular social stratum is an important social value that ensures reproduction of that strata.

It is to be noted that as regards lines of training (lines of profession) which require utilization of lab equipment and particularly complex lab equipment the fee for education services at Moscow- and St. Petersburg-based higher education establishments of technology should amount to a higher value than at higher education establishments of social sciences, economics and the humanities of both the capital cities. It is related to the fact that at higher education establishments of technology the share of fee-paying students is normally much lower than at higher education establishments of social sciences, economics and the humanities.

At the same time, in Russia's state-subsidized regions the price (cost) of paid education services which is at the level of the lowest norms of budget financing is often too high for most people. The above results in a situation where by decision of their scientific councils higher education establishments reduce a fee for education services by providing numerous discounts to fee-paying students and, thus bypassing the established requirements. Higher education establishments in those regions take advantage of the fact that in the above regions the average amount of wages and salaries is lower than in Moscow and St. Petersburg, though in that case, too, the low value of the norms will eventually result in degradation of the material and technical base of higher education establishments (*Table 17*).

Table 17

The share of labor remuneration in budget financing of public higher education establishments of social sciences, economics and the humanities in the Tambov Region, %

Norm of per capita financing (NPCF) –Rb **63,370**
Group of 25 persons, the number of lecturers with a ratio of 1:12 is equal to 2.1 lecturers
The volume of budget funds allocated to that group a year: Rb 63,370 * 25 = Rb 1,584,250.
In 2014, the average annual pay of the academic staff in the Tambov Region amounted to Rb 27,100. (136.4% of the Region's average pay)
Consequently, the annual average pay of 2.1 lecturers with accruals amounts to: Rb 27100 * 2.1 * 12 * 1,302 = Rb 889,162 or 56.1% of the volume of budget funds meant for that study group
So, in 2014 the share of labor remuneration in budget financing of a study group amounted to **56.1%**

In state-subsidized constituent entities of the Russian Federation with a low level of an average labor remuneration in the region, the fee for paid education at a higher education establishment may be set both as equal to the norm and that which is several times lower than that norm; it is to be noted that the main strategy of higher education establishments consists in economizing on the extent with simultaneous growth in the burden on the academic staff. So, in 2014 with reduction of the number of state-financed students at public higher education establishments to 1,731,800 people the number of lecturers who train them should have amounted with the ratio of 1:10 to 173,200 people, while with the ratio of 1:12, to 144,300 people, that is a decrease of nearly 17%.[1]

In principle, a decrease in the number of the academic staff takes place at universities of other countries; it is an important measure aimed at reduction of costs which have increased rapidly of late.[2] However, in other countries such a decrease in the number of the academic staff is accompanied by a transfer to new educational technologies, including on-line training,

[1] The calculation is made on the average basis and not on the basis of the number of people specified; in the latter case the reduction of the academic teaching staff would have been even higher.

[2] On that matter, see, for example: The Future of Universities. The Digital Degree. The Staid Higher-Education Business is about to Experience a Welcome Earthquake// The Economics. 2014. Jun 28th.

while in Russia there is no such transformation so far. It is to be noted that a transfer to new technologies of training requires substantial initial inputs for maintaining (supporting) the quality of education services on the same level, including development of university libraries on a principally new basis and only after that cost saving is possible.

As regards higher education establishments of technology, with the approved new model of guideline per capita financing the economic situation, as was stated above, is more complicated than at higher education establishments of social sciences, economics and the humanities as the share of labor remuneration in their budgets is a bit lower than that at higher education establishments of social sciences, economics and the humanities, while the unit weight of fee-paying students is much lower. So, they seek to attract as many state-financed students as possible in order to utilize budget financing completely even if the level of knowledge of applicants – judging by the grade of the USE – is not very high. In other words, those higher education establishments "fight" for budget funds: the higher the amount, the greater the financial maneuver a higher education establishment can ensure for itself.

As seen from the calculation shown in *Table 17*, further growth in labor remuneration of the academic staff is feasible either by means of a dramatic increase in the norm or by way of cutting of all other expenditures on education activities or attracting of the maximum number of fee-paying students (even with reduction of the fee for education services in some regions below the norm of per capita financing, which practice is officially forbidden). At present, due to the fact that the norm of per capita financing is set to higher education establishments from the outside they use a combination of the second and third options. Without development of the effective system of student loans which has nothing to do with that which existed until recently in the Russian Federation, for most students it will be feasible to achieve in the near future the cost of education services which exceeds the norm set for full-time students of higher education establishments only in donor regions, but even there due to worsening of the economic situation it will be quite a problem to ensure that. A small number of fee-paying students will largely concentrate in a limited number of prestigious higher education establishments, while in others it is going to be either reduced or concentrated at correspondence departments of higher education establishments as the per capita norm of financing and, consequently, the fee for education services are in that case much lower than in case of full-time education. So, with the per capita norm of financing set at Rb 63,370 (full-time education), the norm as regards the correspondence mode of education will amount to Rb 12,674 which situation permits a higher education establishment to set the fee for paid education services in the amount of, for example, from Rb 15,000 to Rb 30,000 and gain a tangible economic advantage with a simultaneous decrease in the quality of education. Unfortunately, as regards higher education establishments of technology, such a solution is possible primarily in non-profile lines of training.

So, low (financial) norms of budget financing motivate most higher education establishments to enroll a larger number of fee-paying students for such lines of training as economics, law, management and other because there is explicit demand on them on the part of the population. In the above segment of higher education, there is a trend towards reduction of the quality of training due to adoption of the inefficient model of per capita financing. However, with a reduction of the number of state-financed students in such lines of training as economics, management and law even students with a high USE grade will have to pay in many cases for their higher education, while students with a much lower USE grade who were enrolled

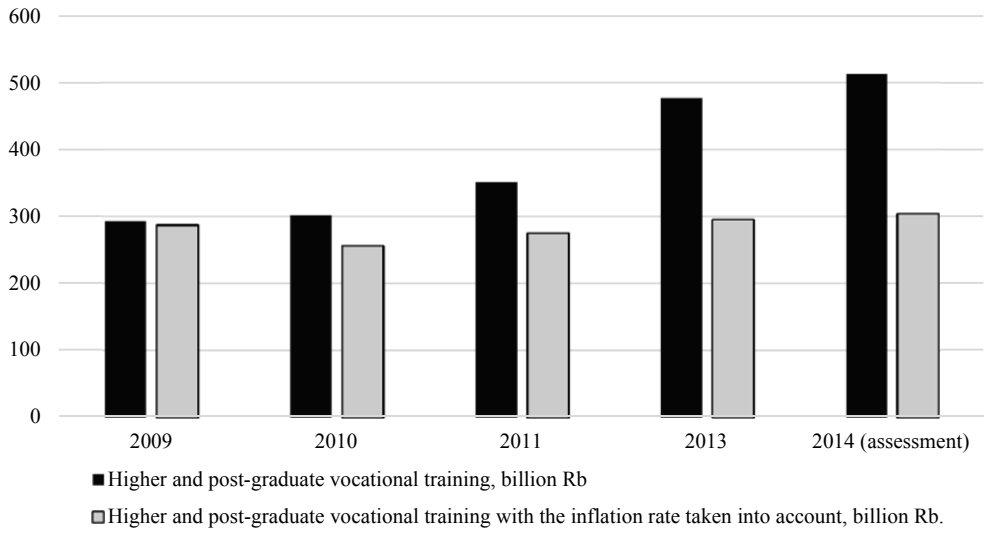
with lines of training (lines of profession) in technology and natural sciences are financed by means of state budget funds.

The situation with many natural science and math lines of training (lines of profession) - where at present there is a drop in demand on educational services on the part of the population, too - is much similar to that in state-subsidized regions: higher education establishments are seeking to reduce prices on paid education services in order to attract the maximum number of students.

As a result, in the system of higher education there is a highly negative motivation which may result in a drop in the quality of the higher education, while introduction of guideline per capita financing was meant to enhance it. In addition to the above, the fight against cross-subsidizing is a phantom: on the one side, fee-paying students subsidize those financed from the state budget, while on the other side many higher education establishments reduce the education fee below the norm fearing loss of hard cash and, thus, wishing it or not, subsidize education of fee-paying students.[1]

Another problem related to introduction of the norm of per capita financing consists both in the approach to formation of the norms and financial replenishment thereof and ensuring of transparency of distribution of budget funds among education establishments on the basis of those norms.

Budget financing of state and municipal higher education establishments has been steadily growing in the past few years (*Fig. 8*).

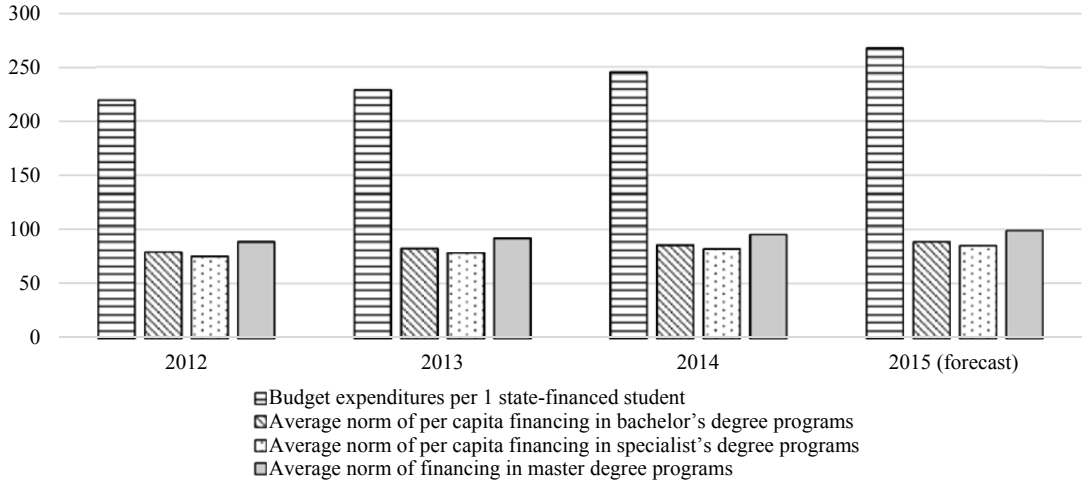


Source: The Ministry of Finance of the Russian Federation, the Federal Treasury and the Rosstat.

Fig. 8. Budget expenditures on higher education in the 2008–2015 period in nominal terms and with the rate of inflation taken into account, billion Rb

[1] Subsidizing by higher education establishments of fee-paying students can also be viewed as follows: state-financed students receive a subsidy which covers completely their expenditures on education, while a reduction of the education fee below the norm is a partial subsidizing by the state of those students who failed to be enrolled to budget-funded places.

Accordingly, budget expenditures per one state-financed student have been growing. At the same time, norms of per capita financing were set at the level which was much lower than unit expenditures. (*Fig. 9*).



Source: The Ministry of Finance of the Russian Federation, the Federal Treasury and the Ministry of Education and Science of the Russian Federation

Fig. 9. Budget expenditures per 1 state-financed student and average norms of financing in bachelor's, specialist's and master degree programs in the 2012–2015 period, thousand Rb (2015 – forecast)

If in 2012 and 2013 the difference between unit expenditures and the norms was explained by existence of adjustment ratios, in 2014 those ratios were set mainly equal to 1. An exception was only regional wages and salaries ratios.

Due to such a gap between the amount of unit expenditures and the values of the average norm of per capita financing, there is a question how they were calculated and what purposes the difference between those values was spent on. At the same time, introduction of the norm of per capita financing was largely justified by the need to enhance transparency of distribution of budget funds between public higher education establishments. But if the norms of financing are much lower than unit expenditures it means that after higher education establishments have received funds as per the norms distribution of budget funds by other criteria and rules begins (or continues). Such rules may be, for example, as follows:

- Allocation of budget financing for support of higher education establishments which participate in the race to win a place in global ratings of universities;
- Ensuring of academic programs of development;
- Provision of subsidies for other purposes and other.

It is to be noted that the ratio between the volumes of budget funds allocated in accordance with the norms and those on the basis of other grounds may vary greatly from one higher education establishment to another which situation results in a loss of the declared transparency and preservation of the "administrative bargaining".

The situation in question is largely related to the fact that at present there are two main differently directed trends in the Russian system of higher education. On the one side, there is

explicit differentiation of higher education establishments and singling out of leader universities or those which are to become leaders (formation of the pool of status higher education establishments). The trend in question emerged in the beginning of the 2000s when an effort was made to determine the leading higher education establishments, while from 2006 after the start-up of the *Education* priority national project it became an important one as within the frameworks of the project two tenders were organized to identify *innovation* universities. Then, from 2008 in each federal district federal universities were established as points of growth in quality of the higher education in regional profile. In addition to that, they started on a tender basis to single out national research universities (NRU) so that those universities could play a key role in development of Russian science, attract foreign students and compete with leading international universities. All those NRU stated to receive higher volume of funding for solution of those tasks.

At the same time, from 2010 with approval of Federal Law No.83-FZ,[1] harmonization of budget financing of higher education establishments on the basis of norms of per capita financing, as was stated above, began. That approach is based on the fact that higher education is regarded as a public *standardized* service which is to be of the same quality at any Russian higher education establishment and, consequently, financed in the same volume. So, the norms are set for 9 groups of training (professions) regardless of the fact at which higher education establishment the training is carried out.

So, differentiation of higher education establishments is carried out on the basis of quality of their education services, while the mechanism of funding is aimed entirely at accounting of the number of students who go to each higher education establishment.

The logic of guideline per capita financing consists in the fact that students seek to get enrolled with higher education establishments which provide high quality education services and, as a result of that, the latter receive a higher volume of budget funding and motivation and potential for development, while inferior ones leave the market. But in practice the above scheme does not work well in Russia. In a situation where higher education has become a social norm, inferior higher education establishments are in a more advantageous position as a larger number of students goes there to receive a diploma with little effort. It is to be noted that an inferior higher education establishment could have received good financing from the budget. So, the principle of guideline per capita financing was combined with a state assignment which is to be distributed on a tender basis with the quality of education services provided by a higher education establishment taken into account. In other words, a tender committee distributes the state assignment between higher education establishments with taking into account the quality of education in each of them. It permits institutions where the quality of education services is higher to have more budget-funded places (that is, to admit a larger number of students) as compared to those with substandard quality of education services. However, there may be a situation where despite the same number of budget-funded places a moderate higher education establishment of technology receives much more budget funds as compared to a well-established university of economics because the norms are calculated with taking into account the need in (special) lab equipment, while a university of economics does not, supposedly, need it.

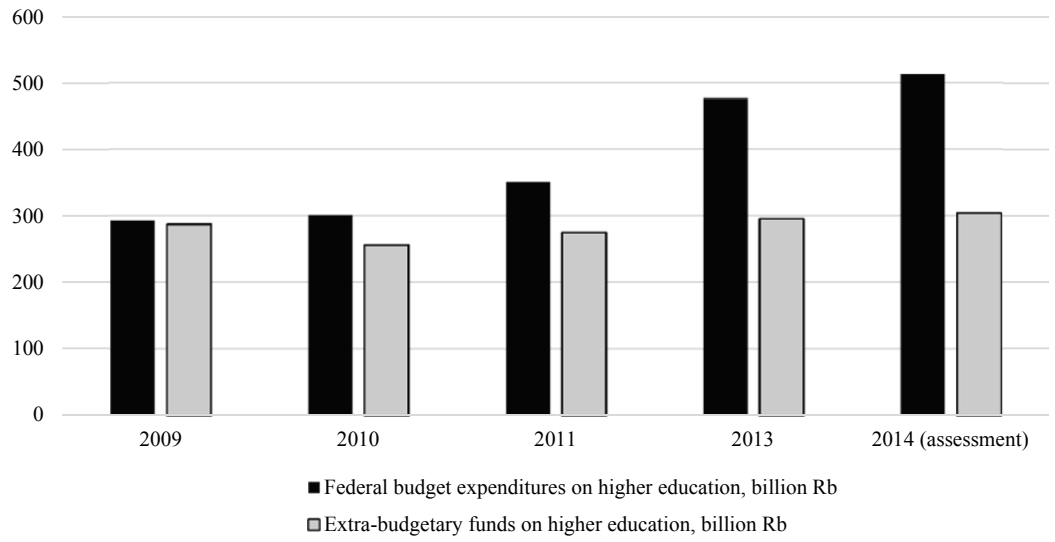
That problem is well known in the economics. In Chile, they introduced a similar scheme of financing in the 80s. As a result, universities of the humanities started to establish depart-

[1]Federal Law No.83-FZ of 8 May 2010 on Amendment of Individual Legislative Acts of the Russian Federation in Connection with Upgrading of the Legal Status of State (Municipal) Entities.

ment of economics and imitated in every possible way universities of technology. In the long run, they had to give up that model of per capita financing because the system of higher education became oriented solely at the value of the norms, and not the requirements of the labor market and people.

So, introduction of guideline per capita funding in the adopted format does not contribute to higher transparency of distribution of budget funds, nor stimulate competition among them for winning over high-grade students. On the contrary, a procedure for distribution of target enrollment figures between higher education establishments (that is, setting to higher education establishments of a state assignment which procedure is followed by allocation of budget funds) takes place first – it is to be noted that the above procedure is not quite a clear one though it is carried out on a tender basis – while after that a distribution of other budget funds is carried out on the basis of various grounds. One may suggest that the actual process of allocation of budget funds may take place in a reverse order: non-normative lines of spending of budget funds are determined first and, then, the norms of per capita financing are calculated on the basis of the remaining volume of budget funds and the state assignment is distributed.

As the main trends for public higher education establishments as regards the influx of funds for paid higher education are concerned, it can be stated that households start to "lag" much behind the state in that respect (*Fig. 10*).



Source: The Rosstat and the Federal Treasury

Fig. 10. Budget and extra-budgetary funds (against the fee for education) in the system of higher education in the 2009–2014 period (2014 – estimate), billion Rb.

In the 2013/14 academic year, the number of fee-paying students of Russian higher education establishments (public and private) amounted to 3.4m people. Consequently, the average fee for higher education of fee-paying students was equal to Rb 85,800 a year. If those expenditures are compared with unit budget expenditures per 1 state-financed student in 2013 (Rb 228,800), the latter was 2.67 times higher. If the average fee for education is compared with the average norms of budget expenditures in bachelor's, specialist's and master degree

programs in 2013 (full time education), it becomes clear that for a fee-paying student it is the maximum fee he/she can afford to pay for full-time education in bachelor's and specialist's degree programs, but he/she already lacks funds to pay for education in master degree programs. As was stated above, it is mainly part-time and correspondence forms of education that are affordable for fee-paying students at nongovernment higher education establishments because prices at those institutions are so far 20%-25% lower than at public higher education establishments.

In final analysis, it can be stated that a small number of fee-paying students study full-time at prestigious higher education establishments where the amount of the fee is 2-3 times higher than the average one in the system of higher education, 26% of students study at private higher education establishments with 80% of them studying by correspondence there, while the rest of fee-paying students study mainly part-time and by correspondence at moderate and low-grade public (municipal) higher education establishments (and their branches).

With increasing of norms of budget financing and preservation of the requirement that a fee for education cannot be lower than the norm, the trend in question will only be getting worse: quality higher education will be far less affordable for those who pay for their education. Consequently, children from worse off families and the lower middle class will be increasingly ousted to the segment of part-time education. Thus, at present the mechanism which prevents the use of higher education as an instrument of vertical social mobility has been established.

So, in 2014 it became clear that the *adopted* model of guideline per capita financing of higher education establishments prevents bringing the pay of the academic staff to 200% as compared to the average pay in the region, motivates higher education establishments to expand in every possible way the number of fee-paying students or – in case of lack of solvent demand – to enroll applicants with the lowest feasible USE grade to budget-funded places.

It became clear long ago (minimum 20 years ago) that simple models of guideline per capita financing do not permit to ensure higher efficiency of budget expenditures. So, a transfer to more complex models of financing which explicitly take into account the quality of educational programs carried out by higher education establishments, as well as growth potential of a university has taken place in different countries. In addition to the above, the general rule consists in harmonization of reform moves and not in a conflict between them. Unfortunately, though there is much talk in Russia about comprehensiveness of the pursued policy it is actually made up of a set of quite rational measures which do not harmonize with one another very well.

5.4. The State of Science and Innovation

In 2014, key events in the field of science were unfolding around the continuing reform of the Russian Academy of Sciences (RAS) and the associated assessment and restructuring of academic institutions, together with the first competitive tenders run by the Russian Science Foundation (RSF) and the creation of a new list of priorities for scientific and technological development in Russia. Thus, last year could be considered transitional, when the new departments responsible for science development were being structured and their activities were adapting to the new system of management. Innovation went into a decline, the rate of which had increased by the end of the year. No new instruments of innovation policy were introduced and the state of innovation was being significantly affected by the general conditions of

economic activity, the business climate and some regulatory measures that were not even directly related to public support for innovation.

5.4.1. Federal budget: change of priorities

The structure of R&D expenditure began to change, such changes being aimed at enhancing support for applied research. The State Programme 'Development of Science and Technology for 2013-2020' envisages a continuous growth in funding for the Federal Target Programme 'Research and Development in the Priority Areas of Development of the Scientific-Technological Complex of Russia for 2014-2020', which was fully re-focused on applied research in the interests of industry. Most of its measures provide for non-budgetary co-funding. Such changes correspond substantially to policies aimed at import substitution. However, in the long run they could have the opposite effect - a dilution of the base for the development of innovative technologies.

Changes have been outlined in the priorities of the programmes which were key recipients of budgetary funds for R&D. By 2017 it is planned to have reduced considerably the funding of the space and aviation programmes that have been the leaders in terms of budgetary spending on R&D for many years. However, it is quite probable that support for them will continue through other budgetary items, including closed ones.

At the same time, the allocation of funds for development of the medical and pharmaceutical sector (which is certainly a positive trend), and for shipbuilding, grew substantially. By 2017 the top five sectors in terms of budgetary allocations for applied research under the heading 'National Economy' will be as follows (in descending order of the funding volumes):

1) the aviation industry;
2) the medical and pharmaceutical sector;
3) the space industry;
4) the electronics industry and radio-frequency engineering;
5) shipbuilding.

Finally, with the creation of the Russian Science Foundation, the grant funding of science has grown significantly, however, after 2016 it is planned to fix this at a predetermined level (*Table 18*). Given inflation, the scales of this are difficult to forecast as yet, but effectively it means a reduction in the grant funding of science, and this corresponds to the tendency towards a reduction in the budget allocations for basic research. If we assume that 1% of the budget allocations for civil science will be, as previously, provided to the Russian Humanitarian Science Foundation (RHSF) and 6% to the Russian Foundation for Basic Research (RFBR), then the share of funding of basic research from the federal budget for civil science will decrease from 54.5% in 2015 to 47.8% in 2017.

Table18

Dynamics of budget appropriations for scientific foundations, billion rubles

Foundation	2015	2016	2017
Russian Science Foundation	17.2	18.8	18.8
RFBR	12.2	14.0	14.0
Foundation for Assistance to Small Innovative Enterprises in Science and Technology	3.9	3.8	3.5
RHSF	2.0	2.3	2.3
Total for foundations	35.3	38.9	38.6
Total for civil science (estimated)	200.0	230.0	230.0

Source: Federal Law of 1 December 2014 No.384-FZ 'On the Federal Budget for 2015 and the Planned Period of 2016 and 2017' http://minfin.ru/common/upload/library/2014/12/main/FZ384-FZ_ot_011214.pdf

It should also be noted that the range of possible sources for research and development funding is narrowing due to a reduction in the number of foreign sources and the low probability of an increase in R&D funding by the business sector (*Table 19*).

Table 19

Sources of R&D funding: types, volumes and conditions of support

Source	2014 budget	Type (conditions) of financial support	Planned budget for 2015-2017
Federal Target Programme 'Research and Development in Priority Areas of Development of the Scientific-Technological Complex of Russia'	Rb 14bn	Contracts, competitive tenders. Large groups of participants are required; is possible in the case of well-developed research infrastructure	Rb 23.7bn for 2015, increase by 5% in 2016, same level in 2017
Russian Science Foundation	Rb 11.4bn	Competitive grants of various types: to scientific groups, existing and new labs, international teams. Ideology: supports the priorities (thematic and organisational); support of global-level projects	Rb 17.2bn in 2015, Rb 18.8bn in 2016-2017
RFBR	Rb 9.2bn in 2014	Competitive grants. Main competition (50% of funding) - for pilot projects, about Rb 500,000 per year. Ideology: wide support of pilot research of small (up to 10 people) scientific groups	Rb 12.2bn in 2015, Rb 14bn - in 2016-2017
Foreign grants: EU programme Horizon 2020	The available funding for Russian participants is about Rb 5bn	Competitive grants, thematic and for certain categories of participants	Russia is included in the third category: of countries which can participate in Horizon 2020 projects but are not eligible for automatic support from the EU budget
Foreign grants: CRDF Global	Grants for the conduct of joint research by Russian and American universities (generally up to $110,000 for 2 years, per project)	Competitive grants in three areas: 1) nanotechnologies; 2) energy saving and energy efficient technologies; 3) rational use of natural resources. Small number of grants. Modest amount of total funding	Unknown
Funding of Russian industry	Rb 400bn in 2012, increasing to Rb 500bn (estimated) by 2020	Contracts for the conduct of R&D	The Government forecasts an increase in companies' spending, but there are no serious grounds for this yet. In practice the opposite trend can be observed
Russian subdivisions of international companies	As estimated, about Rb 3bn	Contracts for the conduct of R&D	R&D spending is decreasing. Key themes are in the ICT industry

Source: prepared by the author on the basis of data from the Foundations, the Ministry of Education and Science of Russia, the Horizon 2020 programme and CRDF Global.

Thus, the state budget remains the key source of R&D funding and its impact will increase in the future. At the same time, the structure of budgetary outlays for R&D will be significantly adjusted compared with previous years as a result of the following two main factors:

1) restructuring of the scientific sector, including eliminating the RAS, the Russian Academy of Medical Science (RAMS) and the Russian Academy of Agricultural Sciences (RAAS) as spending units, the establishment of a new department - the Federal Agency for Scientific Organisations (FASO), inventory inspections and the possible reshaping of scientific organisations that were formerly under the supervision of state academies;

2) a change in the priorities of applied research and development, which is supposed to ensure a transition to new technologies and products, including for expansion and import substitution.

At the same time as the focus on applied research is being increased the types and volumes of possible funding sources for basic research are being reduced. By contrast, at the end of the year, the U.S. published a report ('Restoring the Foundation: The Vital Role of Research in Preserving the American Dream'[1]) prepared by the Academy of Arts and Science. This stated that America had lost its lead in science and the development of new technologies and therefore proposed increases in federal investment in basic research by 4% annually.

5.4.2. Debates around assessments of the performance of scientific organisations

Throughout 2014 the Government continued to work on determining the principles and developing regulations on assessing the effectiveness of the activities of scientific organisations. The justification of the need for this, as well as the basic rules for assessment, are documented in Resolution of the Government of the Russian Federation No. 979 of 1 November 2013 'On Making Amendments to the Resolution of the Government of the Russian Federation of 8 April 2009 No. 312.[2] In accordance with the Resolution, the principles of assessment are as follows:

- the independent nature of assessment;
- combining scientific organisations into reference groups regardless of their affiliation with particular fields of scientific knowledge or the type of scientific research conducted;
- the use of indicators of the type applied by economically developed countries for assessing the effectiveness of the activities of scientific organisations.[3]

The regulations on the conduct of assessment were clarified and adjusted with regard to the opinion of the scientific community, in particular, the directors of the RAS institutes. However, in the middle of the year the FASO returned to the basic questions of the conduct of such assessment and requested commentaries from scientific organisations on such procedural aspects as:

- the frequency of assessment;
- the types of parameters to be used in the assessment - whether it should only consist of quantitative indicators, or of these in combination with expert evaluation;
- the feasibility of also assessing the effectiveness of the scientific teams rather than just the scientific organisations;
- the principles for forming expert commissions.[4]

According to the Government's initial plan, the development of assessment procedures should have been completed by 1 July 2014,[5] but it was not even finished by the end of the year.

The approaches to the assessment of institutes proposed by the FASO were criticised by the scientific community. The main complaints were about the conduct of assessment being at

[1] Restoring the Foundation: 'The Vital Role of Research in Preserving the American Dream', American Academy of Arts and Sciences. Cambridge, MA, 2014. P.16. https://www.aau.edu/WorkArea/DownloadAsset.aspx?id=15491

[2] http://pravo.gov.ru:8080/page.aspx?67047

[3] For more information on these parameters see 'The Condition of Science and Innovation'//Russian Economy in 2013. Trends and Prospects. (Issue 35) - Moscow: Gaidar Institute, 2014. p. 367-369.

[4] Letter to directors of scientific organisations from the FASO of Russia No. 007-181-07, 10 April 2014.

[5] Second letter of the Academician Aleksey Parshin on expert examination of scientific organisations FASO, 27 April 2014 http://www.saveras.ru/archives/9059

the level of organisations rather than individual laboratories, the use of the principle of division into reference groups, and in the reliance on bibliometric indicators, the limitations of which are quite well known. Scientists were almost unanimous in their opinion that assessment at the level of institutes would provide distorted results, particularly because there are many multi-disciplinary institutes in the country in addition to institutes with unique specialisations, which it would be almost impossible to assess correctly using the chosen method. The procedures for conducting the assessment and selecting the experts involved were widely discussed, including the idea of inviting international experts. Opinions were divided, but with a slight bias towards those against the involvement of foreign experts.

The arguments against the extensive use of bibliometric indicators were supported by reference to foreign experience. An especially popular alternative is the UK practice, where the Government has recently introduced new methods for the assessment of scientific achievements (the Research Excellence Framework).[1] Indeed, it took several years to develop this initiative, which is very well-thought-out, with different result measures and assessment regulations being introduced for different fields of science. The key elements of such assessment are its conduct at the level of departments and laboratories, and the recognition of the secondary nature of bibliometric data. Moreover, the impact factors[2] of journals are not taken into account, and neither is the total number of publications of scientific teams being assessed. Bibliometrics may only be used for substantiation and clarification of the expert evaluations. Experts, in turn, assess the publications of scientific laboratories (groups) on the basis of the 4 best publications of the team over the previous 5 years. With the exception of economics and econometrics, citation data and other types of bibliometric analysis are not used at all for assessing the results of research in social sciences and humanities. For economics and econometrics, available data on the citation of publications are taken into account, where necessary, as additional information, but the absence of citation data for a particular piece of research does not affect its assessment. Finally, it is the purpose of this framework which is especially important: the assessment results are used for the redistribution of funding among administrative structures and for determining the number of additional rates to be allocated to certain subdivisions.

The British experience does look convincing, as is confirmed by its pilot testing. Moreover, the experience accumulated in Russia shows that the demand for bibliometrics breeds their supply, leading to a serious skewing. In particular, it provides incentives not only to pay for the publication of a paper in a third-rate journal included in the Scopus database, but also to buy a position as the co-author of an article published in a decent journal.[3] Hence, a reliance on bibliometrics for the short-term assessment of performance could distract from an understanding of the real state of affairs.

The consolidated opinion of the active scientific community was reflected in a letter from the Council of the Society of Scientists to the Chairman of the Government of the Russian Federation 'On Assessing the Effectiveness of Scientific Organisations',[4] which states that

[1] Research Excellence Framework 2014. Panel Criteria and Working Methods. http://www.ref.ac.uk/ media/ref/content/pub/panelcriteriaandworkingmethods/01_12.pdf
[2] Numerical indicator of the importance of a scientific journal (IF).
[3] Sterligov I. Simulation of Science as a Response to Management Primitivism//Slon.ru, 27 August 2014. http://slon.ru/economics/simulyatsiya_nauki_kak_otvet_na_upravlencheskiy_primitivizm-1148735.xhtml
[4] Letter of the Council of the Society of Scientists to the Chairman of the Government of the Russian Federation 'On Assessing the Effectiveness of Scientific Organisations', 28 April 2014 http://www.saveras.ru/archives/9102

'the key object of assessment should not be an institute as a whole, but its laboratories and scientific groups. In essence, assessment should be expert-based and should not focus on numerical performance indicators. The division of scientific organisations into three categories (leading, stable, and those which have lost their prospects for development) on the basis of numerical indicators may not be considered valid.'

By the year end, the preliminary composition of the FASO Commission for Assessing the Performance of Scientific Organisations[1] had been determined, based on the results of internet-voting. This caused a new wave of admonitions, because even before the completion of its selection, the Agency had announced the preliminary results, with certain names being emphasised, and this affected the final structure of distribution of votes. Such a pseudo-populist choice indicated a seeming transparency of the commission formation, but probably damaged its quality.

5.4.3. Approaches to the restructuring of former academic institutions

Throughout the year another important process continued - the development of approaches to the restructuring of the system of former academic institutions that were now under the supervision of the FASO. With the creation of the FASO Scientific Coordination Council, [2] the development of regulations on the participation of the RAS in expert work and the performance of the other functions assigned to it, were expected.

However, the relevant decision-making process dragged on, not least because of difficulties in bringing such decisions in line with the new administrative structure. When the FASO appeared, relationships between departments became more tense and were manifested in publicly-made counter claims. For instance, academics were discontent with the fact that the FASO had seriously delayed the creation of the Scientific Coordination Committee. Moreover, in their opinion, the Agency had increased the bureaucratic burden on institutions, was non-transparent in its activities, and did not know enough about the essence of scientific work.[3] The FASO management accused the RAS of being passive and of not submitting its proposals for reorganisation of the network of scientific institutions,[4] with the RAS management having taken a number of ill-conceived steps. For example, without any consultation with the directors of the relevant institutes, the RAS had given its consent to the transfer of 42 breeding centres, formerly belonging to the RAAS, to the Ministry of Agriculture, and a number of clinics to the Ministry of Healthcare.[5] According to experts, these institutes were

[1] The FASO of Russia announced interim results of the elections to the Commission for Assessment of Performance http://faso.gov.ru/ru/official/news/index.php?id_4=23641

[2] Established on 25 November 2014. Order 'On Scientific Coordination Committee at the Federal Agency of Scientific Organisations', No. 1087 of 25 November 2014 http://faso.gov.ru/common/upload/ library/2014/11/main/prikaz1087.pdf

[3] Russian Academy of Sciences. Minutes of the Resolution of the Bureau of the Board of Directors of Institutes No. 5 of 17 September 2014; Year of Troubles. What did the reform of the Russian Academy of Sciences bring?//Search. No. 27-28. 11 July 2014 http://www.poisknews.ru/theme/ran/11060/

[4] Medvedev Yu. RAS institutes can be united with HEIs and 'industrial organisations'//Russian Gazette, 14 October 2014 http://www.rg.ru/2014/10/14/ran-site-anons.html

[5] Volchkova N. The Blitz is Over. Another Stage of the RAS Reform Starts//Search. No. 42. 17 October 2014 http://www.poisknews.ru/theme/ran/12131/

the best candidates for re-specialisation after the transfer, and that breeding science would be destroyed.[1]

In turn, the management of the Ministry of Education and Science was discontent with the fact that the Academy was not taking any actions or developing new regulations on expert examination, the coordination of basic research in the country and a number of other regulations.[2] Furthermore, the RAS union had accused the RAS management of avoiding making important decisions for science.[3] The scientific community, including public organisations, had also voiced complaints in respect of what had been happening.

All this took place against the backdrop of the expected completion on 15 January 2015 of the Moratorium on property transactions and the resolution of personnel issues in respect of academic institutions. It is evident that the year allocated for carrying out preparatory work on the implementation of the reform was not used in the most rational manner. The evidence for this is the extension of the Moratorium for a further year, which was announced in December 2014 at the meeting of the Presidential Council for Science and Education.[4]

This situation occurred can be explained by a number of objective reasons: the RAS has never been an operational structure, the FASO lacks experience in the field of science, and there are also certain difficulties in the development of an agreed position between the Ministry of Education and Science and the FASO. At the same time, the very idea of extra top-loading the management structure, as demonstrated by the first year of work, has not yet proved productive. However, in the field of management of Russian science, interdepartmental coordination has never yet been efficient.

The biggest concern is that the development of approaches for assessing the performance of scientific organisations does not correspond, in essence, with the procedures for the restructuring of the former academic institutes. Moreover, while the start of performance assessment is planned for the second half of 2015,[5] the restructuring had already started in December 2014, with the approval of the first pilot projects.[6] This is at variance with the normal logic of management actions: first assessing the situation and them attempting to change it.

Indeed, the lengthy development of the assessment procedures contrasts with the speed with which the FASO provided the public with its options for restructuring the scientific organisations under its supervision, proposing four new forms, distinguished by the objectives and nature their work:[7]

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[1] Network Form of Life of Scientific Institutes//Independent Gazette - Science, 22 October 2014 http://www.ng.ru/science/2014-10-22/10_faso.html

[2] Science is the risk zone. Deputy Minister of Education and Science Lyudmila Ogorodova about the RAS Reform, Dissertation Councils, Changes in the Work of Scientists, Etc.//Lenta.ru, 27 October 2014 http://lenta.ru/articles/2014/10/27/ogorodova/

[3] Volchkova N. The Blitz is Over. Another Stage of the RAS Reform Starts//Search. No. 42. 17 October 2014 http://www.poisknews.ru/theme/ran/12131/

[4] Meeting of the Council for Science and Education, 8 December 2014 http://state.kremlin.ru/ council/6/news/47196

[5] Sobolevsky A. FASO of Russia and the RAS Siberian Subdivision Find 'the Happy Medium' in Their Interaction// RIA Siberia, 15 December 2014 http://ria-sibir.ru/viewnews/57366.html

[6] Meeting of the Presidential Council for Science and Education, 8 December 2014 http://state.kremlin.ru/ council/6/news/47196

[7] Proposal for structuring the network of scientific organisations under the supervision of the FASO of Russia, 14 August 2014 https://www.ras.ru/news/shownews.aspx?id=80e8ca07-f737-4699-a91a-8ffe6a3e80df

1) federal research centres (FRC) - to be established by consolidating several institutions, to carry out break-through research and practical developments in the areas of strategic importance for the country; the FRCs being responsible for achieving concrete results in the realisation of national priorities;
2) national research institutes (NRI) - intended to conduct basic research; created on the basis of current academic institutions which are leaders in particular disciplines;
3) federal scientific centres (FSC) - focused mainly on innovation, and almost analogous to technology platforms; the key goal of their activities is the development and scientific support for the implementation of critical technologies for the modernisation of production facilities;
4) regional scientific centres (RSC) - aimed at ensuring the integrated development of the regions, including their various industrial sectors; created by the consolidation of individual scientific institutes located in each region.

As can be seen from the above list, the key area of transformation is the consolidation of organisations and a reduction in the proportion of those conducting mainly basic research. The idea of such a re-orientation of existing organisations for applied research is not indisputable. Given the situation in respect of the personnel available, the creation of new institutes with a focus on applied research is likely to be more effective than re-training those who are unable to perform applied work for a particular customer.

Almost simultaneously fears were dispelled that academic institutions would be amalgamated with higher education institutions (HEIs). This was confirmed by Andrei Fursenko, Assistant to the President of the Russian Federation, who stated that 'for the next 15-20 years there is no alternative to the RAS institutes, and to scatter them between ministries, corporations and universities would mean to destroy and disintegrate Russian science.'[1]

In early 2015, the FASO plans to define the key parameters of the potential FRSs, FSCs, NRCs and RSCs and to prepare pilot integration projects. The FASO had determined the priority areas for these pilot projects in 2014. They are: *medicine, life sciences, agricultural technology and food products*.

It is remarkable that the RAS management quickly 'adapted' to the consolidation idea being implemented prior to the assessment of the institutes. Various organisations, together with subdivisions of the RAS, began proposing specific options for the creation of new structures on the basis of former academic institutions[2], but not always agreeing them with the directors of the institutes which would be included in the composition of the new organisations[3]. In fact, these events could be characterised as attempts by those who had the relevant administrative resources to save 'their own' institutes.

Andrei Fursenko, in his turn, proposed an alternative set of four pilot projects,[4] the themes of which were different from those chosen by the FASO, namely - *molecular genetics and*

[1] On the Prospects of Russian Science: Look from the Old Square. Andrei Fursenko about Reforming the Academy of Sciences and the State's Attitude Towards Scientists//Izvestiya, 25 December 2014 http://izvestia.ru/news/581254

[2] By the end of the year about 100 integration projects were proposed. Source: Meeting of the Council for Science and Education, 8 December 2014 http://state.kremlin.ru/council/6/news/47196

[3] Gelfand M. The First One is Out//Troitsky Variant - Science, No. 162, 9 September 2014 http://trv-science.ru/2014/09/09/pervyjj-poshel/

[4] Letter of Andrei Fursenko to the President of Russia V.V. Putin, Pr-2349 of 01 October 2014 Source: Troitsky Variant - Science, No. 166, 4 November 2014 http://trv-science.ru/2014/11/04/shef-vsjo-propalo-2/

cellular biology, industrial biotechnology, crop farming and plant genetic resources, and information technology and software. It is these projects that have been supported by the Russian President and the concepts of the development programmes for each relevant pilot organisation have already been prepared.[1]

The existence of different lists of priorities evidences the lack of an agreed government position on which areas should be supported initially. Indeed, the list of priority areas for the development of science, technology and engineering in the Russian Federation which was to be approved by the President had yet to been established by the end of the year.[2] At that time, in his Address to the Federal Assembly, the President of the Russian Federation offered to start developing a national technological initiative which would help to determine the development priorities and objectives for the next 10-15-years.[3] Thus, an effectively new task was set, to create a mechanism to ensure the conjunction of global tasks, the technological priorities mandated by these tasks, and the mechanisms for implementing such priorities.

So far, the system of state-level priorities has become more complicated – together with the traditional list of priority areas for the development of science, technology and engineering, several additional lists have appeared.

Firstly, there are the so called 'scientific and technological initiatives' determined as priorities for a number of departments, including the Ministry of Education, the Ministry of Industry and Trade and even the RSF. At present there are three of them – advanced manufacturing technologies, neurotechnologies, together with quantum technologies and photonics. For two of these, manufacturing technologies and photonics, the Chairman of the Government of the Russian Federation assigned elaborate methods of accelerated development. The outlining of these priorities was driven, on the one hand, by global trends in both science and technology and, on the other, because such priorities in manufacturing technologies are important in a transition to new methods of organising production, not just of establishing a different technological base. It should be noted that the classifications of priority areas vary by country: for example, in Russia, manufacturing technologies, photonics and nanotechnologies are three separate areas, while in the US photonics and nanotechnologies are a part of a new initiative the 'Advanced Manufacturing Partnership' representing sub-areas of technology in advanced manufacturing.

Secondly, as was noted above, new thematic priorities have appeared in connection with the restructuring of the former academic complex and approval of the four pilot projects. The priorities of the FASO and Presidential Administration are different, with the exception of agricultural science.

Thirdly, defence research has become a new priority – considerable budgetary funds will be allocated towards supporting it. Moreover, the RAS President noted that the Academy had considerably extended research on defence and had even introduced the position of Vice-President for defence projects.[4]

The hierarchy and compatibility of the different groups of priorities is not yet quite clear, however, the main problem is in the absence of explicit criteria regarding the basis on which

[1] Meeting of the Presidential Council for Science and Education, 8 December 2014 http://state. kremlin.ru/council/6/news/47196
[2] The last (currently effective) list was approved in 2011, and in 2014 it was reworked.
[3] Address of the President to the Federal Assembly, 4 December 2014 http://www.kremlin.ru/news/47173
[4] Speech of the RAS President V.E. Fortov at the meeting of the Council for Science and Education, 8 December 2014 http://state.kremlin.ru/council/6/news/47196

each has been chosen. This is an important question because new lists of priorities require a reconfiguration of the distribution of the financial resources allocated for R&D. Under the general reduction of budgetary expenditure, the focus on particular priorities is justified, but their choice should be well thought through, including assessments of the impact of the chosen areas on adjacent fields of science and other sectors of the economy.

Finally, a separate topic of discussion which arose in the course of the development of measures for restructuring the academic complex was the age restrictions imposed on the heads of scientific organisations and their deputies. The changes were based on the currently effective standards for principals of HEIs, providing for a maximum age of 65 with a possibility to extend the term of office on the basis of a special contract until the age of 70. Estimates for the academic sector showed that, out of more than 800 directors of scientific institutes of the Academy of Sciences, half were over 65. Additionally, between 2,000 and 2,500 of their deputies were older than the maximum permissible age.[1] By the end of the year supplements were made to the Law on science, according to which age restrictions were introduced for the heads of institutes and their deputies, with the possibility to transfer to the position of Scientific Supervisor (but without the rights to dispose of financial funds).[2] The age restriction will be introduced gradually: principals older than 65 will be able to occupy their positions until the expiry of their contracts (but for no longer than three years). Thus, about half of the heads of the former academic NRIs will be likely to change, even though, not long ago, few had even thought of preparing their successors. Such a change in leadership is complicated by a serious 'gap' in the availability of middle-aged personnel, which is why, in a number of cases the effective leaders will be replaced by younger staff lacking appropriate administrative and scientific experience, at least in terms of their age.

It should also be noted that, at the last meeting of the Council for Science and Innovation, Academicians were offered financial compensation for losses incurred by them as a result of changes in the status and role of the RAS. Based on the results of the meeting, the President ordered the preparation, by June 2015, of a legislative act on doubling the bonuses for the title of 'Academician' (up to Rb 100,000 per month) and of a 'Corresponding Member' (up to Rb 50,000 per month).[3] Arguably, this places an increased burden on the Academy. However, the justification for this appears strange, for at least two reasons. The first is that, across the globe, expert review is generally considered an honourable duty of leading scientists. Expert opinions and reports prepared by national academies of sciences (for example, the U.S. National Academy of Sciences) do not involve payments to the academic experts. The second reason is that it is not only Academicians and Corresponding Members who currently do, and will, take part in expert reviews, but it is only they who will be provided with this permanent bonus, while such payments to Doctors and Candidates of Science will be ended. This decision reminds us of the liquidation of the Kazakh Academy of Sciences when academicians

[1] Chukov A.. The Government Has Dismissed the Scientific Elite of the Country//Arguments of the Week, No. 21, 10 June 2014 http://argumenti.ru/politics/n441/344580

[2] Gorbatova A. Competitive Science. 11 December 2014 http://www.strf.ru/material.aspx? CatalogId=358&d_no=91368

[3] List of assignments made, based on the results of the meeting of the Presidential Council for Science and Education. Pr-3011, cl. 2k, 27 December 2014 http://www.kremlin.ru/assignments/47367

were actually provided with life-long benefits for their titles, in exchange for their consent to turning the national academy into a 'club for scientists.'[1]

5.4.4. Science in HEIs: successes of the leading institutions

Last year the state and society paid close attention to the activities of elite HEIs that had received particular status or additional budgetary funds under special development programmes. In terms of the scientific component, the HEIs were assessed on the basis of data on the dynamics of the publication activities of their teaching staff and research assistants, and the frequency of their citations. The available data, which have been collected and analysed by experts from Thomson Reuters during the year, record improvements, but these improvements occur very slowly. This evidences the difficulty of increasing the scientific quality of publications in areas where research activity has not been a priority for a long time.[2] In particular, this can be illustrated using the data for the group of universities which received the most generous funding from the Government - the 15 universities under the '5-100' project. The project assumes that at least 5 out of the15 supported universities will enter the top 100 leading global university rankings by 2020.

Quarterly assessments showed that all leading universities were increasing their number of publications and, what is more important, that by the year end, for 13 of the 15 universities their share of cited articles exceeded the average for Russian HEIs.[3] There are three consistent leaders on almost all the bibliometric indicators - these are the Novosibirsk State University (NSU), the National Research Nuclear University (NRNU), the Moscow Engineering Physics Institute (MEPhI) and the Moscow Institute of Physics and Technology (MIPT). The National Research University Higher School of Economics (NRI-HSE) may be named as a fourth leader because the level of citation in social sciences is generally lower and builds up more slowly than in the natural and technical sciences. From 2009 to 2013 the NRI-HSE increased its scientific productivity by a factor of seven[4], meaning that it developed at the highest rate among the leading HEIs.

The stable composition of the group of leaders is confirmed, to a certain extent, by the December rating of universities QS ranking for 18 counties of Eastern Europe and Central Asia.[5] In terms of the publication activities of its teachers[6] the NSU occupies 14th position out of 100

[1] Interview-conversation of the grandson of the first Kazakh Academician Kanysh Imantaevich Satpaev, with the senior research assistant of the K.I. Satpaev Museum (House of Scientists of the former Academy of Sciences of Kazakh SSR) Nurlan Zharmagambetov, 21 July 2008 http://www.meierhold-poesie.narod.ru/interview_ satpayevs_ansci.htm

[2] Until recently, for HEIs, in contrast to NRIs, the data on publication activities and, more so, in foreign editions have not been included in the list of key indicators for the assessment of the performance of scientific and academic staff. There was a formal requirement to publish 1-2 papers, preferably in journals from the list of the State Commission for Academic Degrees and Titles, and it was sufficient to use an annual report on work performed.

[3] Kasiyanov P. The Ratio of Cited and Non-Cited Works of the Leading Russian Universities , 8 December 2014 http://pavel-kasyanov.blogspot.ru/2014/12/iv.html

[4] Arefiev P. International Publication Activities of the Leading Russian Universities in 2013. Part 1. 26 October 2014 http://www.unkniga.ru/vishee/3588-mezhdunarodnaya-publikatsionnaya-aktivnost-veduschih-rossiyskih-universitetov-v-2013.html

[5] QS University rankings: Emerging Europe and Central Asia 2014/15. 17 December 2014 http://ria.ru/abitura/20141217/1032737392.html

[6] Number of published papers per teacher calculated based on the data of Scopus/Elsevier.

(and is in the first place among the Russian HEIs), while the MSU follows it – but only in 25th position. At the level of citation of its scientific publications the absolute leader is the MEPhI, followed by the NSU.

At the same time, an analysis of the causes of the increase in the number of publications and citations shows that it is partially the result of a particular set of external circumstances. At the request of the management, employees of both the MIPT and NSU working in academic institutions started referencing their university affiliation in articles, which ensured an increase in the number of publications and citations. The MEPhI also demonstrates extremely high indicators due to the participation of its employees in large international joint projects and programmes, such as ATLAS, BELLE and ALICE. Only the NSU publishes more than one paper per employee per year. In general, no more than 10% of the scientific and academic personnel of the 15 leading HEIs publish their papers in international editions, while in foreign HEIs of similar specialisation (in a reference group which includes the HEIs of both Western Europe and Asia) this indicator is three times higher.[1]

Indicators of the citation of works of the leading Russian HEIs remain the lowest – on average for this group, they are 20 times lower than the average for the foreign reference HEIs per scientific and academic employee (for the NSU, MEPhI and MIPT – 13 times lower).[2] This is, in part, due to the fact that the major proportion of the foreign-language publications of Russian HEIs are simply translated domestic editions which, as a rule, have low impact.

Thus, despite the improving quantitative indicators of the publication activities of the leading Russian HEIs, the qualitative results of scientific activity are still far from occupying leading positions. Not many teachers undertake scientific research and they prefer to publish their papers in more accessible journals (with lower ratings). The most cited papers are those that are published with international co-authorship.

5.4.5. First results of the activities of the Russian Science Foundation

Last year saw active work on the part of the country's largest scientific foundation - the Russian Science Foundation. Several funding tenders were held, aimed at supporting both small research groups, including international ones, and existing and newly created laboratories.

The main types of competitive tender and the level of participation in them are shown in *Table 20*. One can particularly notice the very high level of competition among the applicants, especially from international scientific groups. In two other scientific foundations - the RFBR and the RHSF - the typical level of competition is 3–4 applications per grant. Experts believe that impartial selection is possible only if the level of competition does not exceed 8–10 applications per grant. Otherwise, the selection of projects for funding is complicated because the quality of applications is greater than the amount of funding available for supporting them. Then, other selection factors begin to operate in addition to the key criteria - including geographical location and the sex and age of the project managers. Moreover, the risk of arbitrary

[1] Arefiev P. International Publication Activities of the Leading Russian Universities in 2013. Part 1. 26 October 2014 http://www.unkniga.ru/vishee/3588-mezhdunarodnaya-publikatsionnaya-aktivnost-veduschih-rossiyskih-universitetov-v-2013.html

[2] Arefiev P. International Publication Activities of the Leading Russian Universities in 2013. Part 1. 26 October 2014 http://www.unkniga.ru/vishee/3743-mezhdunarodnaya-publikatsionnaya-aktivnost-veduschih-rossiyskih-universitetov-v-2013-okonchanie.html

decisions increases because of intensified lobbying, which can only be kept in check by the smooth-running of expert assessment councils.

Table 20

Types of competitive tender run by the RSF and the activities of applicants in applying for grants

Type of tender	Funding volume, per year	Number of applications	Number of grants	Number of applications per grant
Projects of individual scientific groups	Up to Rb 5m	11,775	876	14:1
Projects of existing scientific labs	Rb 5-20m	1,760	161	11:1
Newly created labs	Rb 10-25m	467	38	12:1
International scientific groups	Rb 5-10m	487	30	16:1

Source: http://www.rscf.ru/

The activities of the new foundation in which, on the one hand, considerable funding is concentrated and which, on the other hand, has initiated mostly large-scale projects with a relatively small number of grants (compared with the levels typical of Russia) aroused the close attention of the scientific community and caused much active discussion within it. Almost every winning project found itself a centre of attention. An analysis of the composition of grant recipients showed that a number of projects lacked impartiality in their support, including several grants received by career-oriented directors. Nevertheless, the overall list of problems and complaints[1] against the Foundation did not contain any which were unique. Almost all of these complaints could be levelled at the tenders run by other scientific foundations: that the work of the experts and expert councils was not always thorough and impartial; that there were some cases of conflicts of interests; of less than optimal expert questionnaires which complicated the project assessments; poor science classificatory. Furthermore, the Foundation initially found itself in the position of being set against others: claims that the funds received by the RSF were not actually additional budgetary investments in science but were simply redistributed from other programmes, including those of the Federal Target Programme 'Scientific and Academic Staff of Innovative Russia', within the framework of which many more researchers had received funding. As a result, the RSF activities were, from the very beginning, compared with this programme which, all in all, was approved by the wider scientific community.

The response of the RSF to such criticism was twofold - on the one hand, the Foundation promptly responded to a number of the observations. In particular, as early as September changes were made to the procedure for the selection of experts, in order to ensure minimisation of any conflicts of interest.[2] On the other hand, the Foundation was sufficiently tough in defending its principal approaches, including its choice in favour of variety of tenders with a limited number of grant recipients. For now the Foundation policy is aimed at continuously initiating new tenders, including those with specific conditions - the support of young scientists, particular regions, selected themes, etc. This means that, unlike the RFBR and RHSF, where almost identical sets of tenders are announced every year, there is no cyclical support from the RSF as yet. Hence, scientific teams which have not received funds for establishing laboratories or support for groups or institutes in a particular year will not simply be able to

[1] Fradkov A. Ideal Expert Review//Troitsky Variant – Science, No. 159, 29 July 2014 http://trv-science.ru/2014/07/29/idealnaya-ehkspertiza/

[2] Ponarina E. Three Plus Two. The New Form of Expert Review Organisation Accelerates the Application Review Process//Search, No. 37, 12 September 2014 http://www.poisknews.ru/theme/science/11775/

repeat the attempt the following year. This contributes to a strengthening of the stratification of scientific teams, which has both positive and negative sides.

Despite the short period of its activity, the data from RSF tenders are already sufficient to allow several meaningful conclusions to be drawn on the current condition of scientific research in Russia.

1) Despite the Foundation's fairly strict formal requirements for the project managers applying to the RSF for funding (in terms of the number of publications, previous grants and other characteristics of scientific merit) it turns out that many scientists actually do meet these criteria. Thus, it appears that at least in a number of areas, Russian science is viable and competitive.

2) The structure of applicants and grant recipients in terms of the place of project execution (scientific organisations, primarily under the supervision of the FASO, or HEIs) evidences that the most active among the applicants for grants were the HEIs - in substantially all the tenders they accounted for more than half of the applications. At the same time, among grant recipients, teams from the FASO institutes are the leaders (*Table 21*), with the exception of competition for the creation of new laboratories. This result can be interpreted both positively and negatively. It evidences either that basic and exploratory research, which the RSF supports in accordance with its mandate, is being performed at a higher level in institutes that formerly belonged to the State Academy of Sciences, or, that the Expert Council of the Foundation, consisting mainly of representatives of academic science, has made the choice on the basis of its own interests.

Table 21

Participation of FASO institutes and HEIs in RSF tenders, as a percentage of the total number of applications and grants

Type of tender	Share of FASO institutes, %		Share of HEIs, %	
	Applications	Grants	Applications	Grants
Projects of individual scientific groups	35.0	59.0	57.0	32.0
Projects of existing scientific labs	41.0	58.0	49.0	34.0
Newly created labs	26.0	34.2	62.0	55.3
International scientific groups	38.0	50.0	55.0	47.0

Source: http://www.rscf.ru/

The level of grant support for basic and exploratory research through the system of scientific funds could increase compared with the current budgetary projects because the Russian President's assignments, based on the results of the December meeting of the Council for Science and Education, include the requirement for removing such types of research from the federal target programmes by the end of April 2015, and to support them instead in the form of grants.[1] It will be important to distribute the released funds among the three state science foundations so that none of them has a monopoly.

5.4.6. Development of a new draft bill on science

Another area of reform, along with the restructuring and introduction of the new research funding programmes was in legislative activity, namely the development of fundamental laws regulating key relations in the science field. Last year it was decided to redraft the Law on Science and Public Scientific and Technical Policy (No. 127-FZ) effective since 1996 and to

[1] List of assignments made based on the results of the meeting of the Presidential Council for Science and Education. Pr-3011, cl. 2z. 27 December 2014 http://www.kremlin.ru/assignments/47367

unite all types of policy in the new version – scientific, technological and innovative.[1] The very formulation of this goal seems inappropriate due to the differences between the subjects being regulated, but the Ministry of Education and Science argued that, in Russia, with the significant role which the state plays, such unification is justified, while a corresponding orientation towards similar regulation abroad, is not.[2] In other words, the proposals are not aimed at overcoming the problem faced by Russian science – of the excessive involvement of the state, but, quite the opposite, it is planned to consolidate this position in the new law.

The 'structure' of the law announced at the year-end does not stand up to scrutiny. Currently it does not have the structure of a draft law, but is an unprofessional guide containing all the currently used terms and definitions without room for any which may appear in the future. A number of key concepts and, more importantly, the scope of the state's functions are not defined. This conflicts with the key intent of the initiators of the new law – not to 'fix' the current situation but to 'design for the future'.[3] For example, the classification of the organisational structure of science is laid out, highlighting areas with special status, but without mentioning the organisations which the FASO plans to create, – the FRCs, RRSs, etc. The list is closed, although such a law should present only a framework, if it is not to require annual updates.

The draft bill has more serious flaws. In the section devoted to planning, the planning tools are mixed up with those of plan implementation (state programmes and even the stimulation of creative scientific work by young people). The same applies to its treatment of funding - grants and agreements are outlined. However, agreements represent the form in which the conditions of a grant or contract should be laid out, but contracts are not even mentioned.

Thus, even at the level of its table of contents, the new draft bill is considerably inferior to the current one, both in terms of the logic of its construction and the professional level of its description of the scope of regulation.

5.4.7. Mobility and the exodus of scientific personnel

The illogical and not fully transparent process of reforming the scientific complex could not but affect the mood in the scientific community, whose active representatives being members of various public organisations and councils tried to participate in the adjustment of managerial decisions. They started to revive the ideas of the strategy realised in the early 1990s, during the biggest and fastest collapse of national science. Repeating this strategy would involve enhancing the independence of scientific subdivision and laboratories within institutions.[4] When everything is unravelling, it is easier for individual groups to survive. By contrast, the more passive portion of the scientific community began to favour the approach widely practised in the early 1990s – to go work abroad.[5] The outflow of personnel from the coun-

[1] https://www.ras.ru/news/shownews.aspx?id=2183e50e-14f1-4fcf-b08a-5b89cac34a64#content
[2] Volchkova N. No patch! The Concept of a New Law on Science is Introduced/Search, No. 48, 28 November 2014 http://www.poisknews.ru/theme/science-politic/12509/
[3] Volchkova N. No patch! The Concept of a New Law on Science is Introduced/Search, No. 48, 28 November 2014 http://www.poisknews.ru/theme/science-politic/12509/
[4] Council for Science: No Positive Changes in FASO Institutes Are Yet Observed, 22 October 2014 http://sovet-po-nauke.ru/info/22102014-decision
[5] It Is Not about Mega-grants. RAS Vice-Presidents about the New Generation of Scientists//Lenta.ru, 30 October 2014 http://age.lenta.ru/generation/articles/2014/10/29/kozlov/

try recorded in just 8 months of 2014 was larger than for any full year in the last 15 years. Those who left were mostly scientific staff and businessmen.[1]

Indeed, as shown by the latest (April 2014) survey conducted by the Russian Venture Company (RVC), Russia does not offer the most favourable conditions for scientific research. Only 6% of respondents thought that the conditions offered in Russia were good enough to encourage scientists to come back.[2] The overwhelming majority – 67% – believes that there are many more opportunities for researchers to realise their aspirations abroad.

Nevertheless, in the last year there has been no discussion of measures for preventing such a 'brain drain'. Some attention was paid to developing measures that could contribute to the enhancement of geographic mobility within the country. Russia is one of the countries with the least mobile scientific and technical staffing infrastructure, inferior even to the 'conservative' countries Japan and China. There are practically no direct measures for stimulating internal mobility, while measures of indirect stimulation that have been widely used in foreign countries for many years are only at the stage of planning - for example, the introduction of post-doctoral positions to encourage young Candidates of Science to seek work in an organisation other than the one where they defended their dissertation. The implementation of this and other measures were postponed due to the reorganisation of the scientific complex of the country, related, among other things, to significant changes in the mechanisms of the budgetary funding of research and development, including the closing of a number of personnel-related programmes. Increased attention to internal mobility can be expected in 2015 when the implementation of a number of new programmes initiated by the Russian Science Foundation will begin. In accordance with the plans of the RSF, two of its new invitations to tender will be aimed at stimulating the internal circulation of personnel. The emphasis will be on geographic mobility.

The first tender envisages the funding of projects led by Russian or foreign scientists, the latter having to come to work in Russia for at least 183 days per year (in order to be considered residents for tax purposes). Russian scientists will also be able to lead laboratories in the regions (Moscow and St. Petersburg are not participating in this tender). The idea is to stimulate the development of science in the regions through an influx of qualified personnel from the largest cities and foreign countries. It is planned to provide grants for 3-5 years and the initiative will be considered a success if between 50 and 100 worthy projects can be identified. The second tender will be for post-doctoral research fellows. The requirement will be, not just to change their place of work (to work in a place other than where their dissertation was defended), but to move to a completely different region. Given the current infrastructure of the country the focus on geographical mobility is not fully justified, taking into account the limited number of advanced scientific centres outside Moscow and St. Petersburg.

Such an approach is different from the practice typical of other countries. In countries with developed scientific infrastructure the focus on mobility is mostly displayed in the context of measures for stimulating connections between universities (scientific organisations) and busi-

[1] Mereminskaya E. Emigrants of a New Wave. More People Have Started Leaving Russia//Gazeta.ru, 01 November 2014 http://www.gazeta.ru/business/2014/10/30/6282685.shtml

[2] 174 respondents took part in the survey, out of which 19% were teachers and researchers, 16% - representatives of government authorities and development institutes, 37% - businessmen and representatives of industry. Source: Russia: Focus on Innovation. Issue II. Moscow: RVC, 2014. p. 44.

ness to accelerate the transfer of knowledge.[1] Moreover, it involves a gradual transition from direct measures (when, for example, target grants are provided, or other tools with a direct influence on mobility are used) to indirect measures relating to regulating the conduct of the consulting and business activities of professors, different types of joint initiatives, the training of personnel, etc.

The level of mobility of scientific personnel, which is vividly evidenced by the examples of the US, France and Japan, is significantly affected by the general economic regulation and associated characteristics of the established systems of innovation. For instance, in the US policy measures for stimulating mobility appeared as a result of an analysis of the effectiveness of governmental tools for supporting partnerships between science and business. This resulted in the implementation of the direct measures that had been most actively used in the 1980s. They have proved to be effective in the context of the current economic conditions that generally encourage workforce movement. However, a major part was played by indirect stimulation of inter-sector mobility. One of the most common tools is built into the programmes of support for small innovative enterprises. In this case, the transfer of professors from universities to companies, and the opportunity for them to open their own small businesses where they then work on a part-time basis, is encouraged.

5.4.8. The impact of sanctions

2014 was marked by a new situation, that of economic sanctions, which have already had some impact on the conditions for scientific research in Russia. Formally, the science sector is excluded from sanctions and, moreover, the goals and objectives of the reform and development of the scientific infrastructure involve an expansion of international cooperation and a reliance on international partnerships. This applied both to the development of science in HEIs and the realisation of priority scientific and technological areas. However, the situation has turned out to be asymmetric - with the Russian scientific sector suffering from the worsening political relations with scientifically and technologically developed countries, both in explicit ways, and other implicit ones which have yet to be fully assessed.

The first reaction appeared in April 2014 on the part of the US that limited, in some cases on a temporary basis, contacts between Russian and American scientists cooperating within the framework of projects implemented in national laboratories of such American departments as NASA and the Department of Energy. It was officially declared that this related only to inter-state interactions but not directly to the cooperating scientists. In practice, the situation turned out to be more complicated, and, on a number of occasions, work under the projects was suspended, the employees of Russian scientific organisations were banned from national laboratories and American scientists were prohibited from even holding teleconferences and electronic correspondence with their Russian colleagues.[2]

Later, in the autumn, the impact of sanctions became more implicit in nature, which made them more painful from a medium-term perspective. For example, problems arose with con-

[1] Dezhina I. Inter-Sector Mobility of Scientific Personnel - World Trends and Peculiarities of Russia//Issues of State and Municipal Administration. 2014. No. 3, pp. 30-48.

[2] Kotlyar P. Bring Our Astronauts Back on Whatever You Want// Gazeta.ru, 04 April 2014 http://www.gazeta.ru/science/2014/04/04_a_5980353.shtml; Chernykh A., Belyaninov K. Sanctions Left Their Trace in Science. Russian Physicists Banned from the U.S.//Kommersant.ru, 11 April 2014 http://www.kommersant.ru/doc/2449664

tracts with Western firms supplying scientific devices and equipment,[1] important foreign companies which could have launched production of component parts in Russia started leaving the technoparks.[2] By November information had appeared on the prohibition of the supply of a number of components required, among other things, for purely academic activities.[3] Thus, the sanctions started affecting not only possible dual-use technologies but also international basic research projects. In prospect, the implications of sanctions will affect the possibilities and speed of development of new technologies in Russia. Virtually all the high technology sectors in Russia depend considerably on imports - from chemical reagents to components of sophisticated machinery.

The development of universities, the realisation of top-priority scientific projects, resolving allied scientific and technological tasks - all these goals have been based on the absorption of foreign experience and encouraging the development of international cooperation. The situation in the field of international cooperation will most probably worsen as the negative impact of sanctions is aggravated by the devaluation of the ruble.

5.4.9. The state of innovation

In the last year innovation activity decreased, not so much because the measures for supporting innovation were insufficient or principally incorrect, but because the new measures were not implemented, while the old ones were still applied by rote. This is why the decline in innovation activity can be primarily related to the worsening overall economic climate in the country, affecting the conditions in which large, small and medium companies operate.

The current situation was accurately and concisely described by the Deputy Minister of Economic Development of Russia, Oleg Fomichev: 'There is a feeling that the innovation economy was built a long time ago, but that Russia still has no innovations.[4]

In large Russian companies one could note the expansion of the 'welfare mentality', a certain Soviet nostalgia. In addition to a supply of sufficient budgetary funds for R&D, such companies seem to be requesting more and more often that the state ensures a demand for their products or becomes their long-term customer. In particular, this was confirmed in a recent survey by the Russian Venture Company.[5] However, a state order which guarantees demand, at the same time sets specific requirements for the results of the work. This can slow down the rate at which companies enter global markets because a total state order decreases the competitiveness of its contractors.

For small companies, in turn, business conditions have worsened substantially in all regions, mainly due to the more complicated conditions of registration of companies (long

[1] Shatalova A. Attendance is Obligatory! Helmholtz followers settle in Russia//Search. No. 41. 11 October 2014 http://www.poisknews.ru/theme/international/12067/

[2] Bolokhova K. House of High Technologies//STRF. Science and Technologies of RF. 14 January 2015 http://www.strf.ru/material.aspx?CatalogId=223&d_no=92801#.VMOP1C4yTGw

[3] Cheberko I. The U.S. Prohibits the Supply to Russia of Devices for Scientific Satellite//Izvestia, 27 November 2014 http://izvestia.ru/news/579970

[4] Expert and analytical report 'Russia: Focus on Innovation' presented on the forum 'Open Innovations', 16 October 2014. http://www.mskit.ru/news/n173581/

[5] Russia: Focus on Innovation. Issue II. Moscow: RVC, 2014, p. 76.

terms, the difficult and multiple stages involved in obtaining permits, licensing, etc.)[1] The high rates of taxation, and predicted further increases, were another factor slowing down the development of small innovative business. At the same time, the mechanisms forcing large companies to cooperate with small ones, through the outsourcing of a proportion of the tasks involved in developing technologies, and through the purchase of products from small companies, have not yet started working. According to the Government's plans, state-owned companies should increase their purchasing from small business, however, the state-owned companies (primarily those engaged in the extraction of natural resources) are resistant to any government quotas in respect of such purchases, justifying this position mostly by claiming that their orders for products are large, and that small businesses are unable to fulfil them.[2] At the same time, while a number of large state-owned companies do cooperate with small firms, they are also against hard-quota purchasing volumes from small companies. Thus, in the current situation, the domination of self-procurement by large companies and their limited interest in cooperation persists.

Furthermore, as shown by surveys of companies and scientific organisations, most Russian entities do not use Russian developments (R&D and technologies), because, on average, 70% of them purchase ready-made technology from outside of Russia (in certain sectors, for example, in machine building, imports account for 95%).[3] Domestically generated innovations are used by only 24% of manufacturing companies, of which 58% note the low level of scientific and technical originality offered by national scientific organisations and HEIs (and the small companies created by them).[4] With the devaluation of the ruble this has become an almost dead-end situation: it is impossible to start quickly creating new technologies from a weak science base.

Thus, the absence of demand on the part of large companies for cooperation with small business can also be explained by the low level of novelty and quality of the products offered by those small companies. There is also a personnel-related aspect: the lack of skills. Despite the various training and retraining programmes that have been implemented over the space of more than 20 years, experts are continuing to name this factor among key obstacles to developing innovation-creating activities in the country. It is remarkable that here we can also observe an alarming trend: the demand for educational programmes related to technological innovations is actually declining both from individual entrepreneurs and from large companies.[5] It is possible that the reason is not that market participants consider themselves sufficiently educated, but rather, the dearth of relevant programmes being proposed. The question of who

[1] Grigorieva E. Little Ones Have Been Cornered. The Conditions for the Conduct of Small and Medium Business in Many Russian Regions Has Worsened Considerably//Novie Iznestiya, 30 July 2014 http://www.newizv.ru/economics/2014-07-30/205499-malyshej-zagnali-v-ugol.html

[2] Titov S., Cheppanova M. The Market Is Not for Small Ones. State-owned Companies Fight Against Quotas Obliging Them to Give 18% of Orders to Small and Medium Business//Vedomosti, 11 November 2014 http://www.vedomosti.ru/newspaper/article/789101/rynok-ne-dlya-melkih

[3] Data of the Ministry of Industry and Trade of the Russian Federation. Dependence of the Industry of Russia on Import Will Decrease 1.5 Times by 2020//RBC, 11 July 2014 http://www.rbc.ru/fnews.open/20140711091003.shtml

[4] Survey conducted by the NRU HSE among 2,000 companies and more than 1,000 scientific organisations. Source: Volkov M. HSE: Russian Enterprises Ignore Innovations. 24 July 2014 http://i.rbc.ru/anons/item/vshe_rossijskie_predpriyatiya_ignoriruyut_innovatsii

[5] Ponomarev I. Stanislav Rozmirovich: the Innovation System in Russia is Being Rebooted//Trade and Industrial News, 1 December 2014 http://www.tpp-inform.ru/analytic_journal/5236.html

teaches and what is being taught becomes more and more topical with the accumulation of experience in the business community and the aging of scientific and educational staff.

Overall, there are varied and ambiguous factors which negatively impact on the formation of added value chains, with not all of the players being ready to cooperate. At the moment companies of all sizes are oriented not towards mutual cooperation but towards support from the state, both financial and in other ways.

Finally, foreign policy and the associated capital outflow also negatively affect the innovation sector. Investment volumes and the likelihood of the owners of foreign capital participating in Russian foundations have both decreased. The volume of private funds in the venture market has decreased by more than a half - from the beginning of the year corporate funds have cut their support for projects by 61%.[1] The importance of broadening the sources of funding for venture investments by permitting the use of pension funds has already been under discussion for several years.[2] However, in the current economic climate the appearance of this source is unlikely radically to change the overall negative trend.

By late November 2014 the exodus of Russian investors from the country to international markets became apparent. The main reason for this was the absence of demand for innovation in Russia, following the failure of both the stimulation of innovation development programmes aimed at state-owned companies and other measures of 'forcing innovation'. Another reason was the increasing problem of innovative business exiting the market (i.e. selling-out to large high-tech companies) as foreign companies left or reduced their presence in the Russian market.[3]

However, despite the generally insignificant number of global-level achievements, one area has continued developing relatively successfully - innovations in the field of information technology.[4] In this field the imposition of sanctions has become an additional incentive for development, due to the sharp rise in prices for imported engineering software.

The economic conditions which have been generally unfavourable for innovation and the necessity for import substitution were the reasons behind the Government's decision to review its basic goal-setting document - the 'Strategy for Innovation-Driven Development of the Russian Federation for the Period until 2020.'[5] The available data indicates that, as of the end of 2014, about one third of its 45 target indicators had not been achieved, while for sections of the Strategy such as 'innovative business', 'effective science' and the 'innovative state', two thirds of the indicators had not been achieved. The best results were achieved in the 'financial support' sector, and the worst - in 'participation in the world system of innova-

[1] RVC Assessment. Source: Edovina T. The Market Model in Real Size. Venture Capitalism is Now Waiting for Orders and Investments from State-Owned Companies//Kommersant, 8 December 2014 http://www.kommersant.ru/doc/2628437

[2] Soloviev A. Why Medvedev is Giving Pension Money to Start-ups. 13 August 2014 http://top.rbc.ru/ economics/13/08/2014/942690.shtml

[3] Turkot A. Why Venture Funds are Leaving Russia, 25 November 2014 http://daily.rbc.ru/opinions/ business/25/11/2014/5473190acbb20f2a143fe496

[4] Igor Agamirzyan: One Has to Run Fast to Stay in the Same Place, 18 December 2014 http://russiancouncil.ru/inner/?id_4=4992#top

[5] Welcoming speech of Dmitry Medvedev at the meeting of the Presidium of the Presidential Council of the Russian Federation for Economy Modernisation and Innovation-Driven Development of Russia 'On the Progress of Implementation of the Strategy of Innovation-Driven Development of Russia for the Period until 2020', 19 December 2014 http://government.ru/news/16196/

tion' (failure against 75% of the indicators).[1] New decisions were announced on 30 December 2014 as a result of the meeting of the Presidium of the Presidential Council of the Russian Federation for Economy Modernisation and the Innovation-Driven Development of Russia, at which issues of adjustment of the Innovation Development Strategy had been considered. By mid-November 2015, an updated draft strategy should have been developed,[2] with the further assurance of annual monitoring of its implementation.

5.4.10. Infrastructure development: technology platforms and innovation clusters

In 2014 the state continued working on forming connections within the system for innovation, including by its support for innovation clusters and increasing the importance of the expert function imposed on technology platforms. Infrastructure projects remain among the most successful support measures for technological information. For instance, in innovation clusters the R&D expenditure of cluster participants increased from Rb 72.9bn in 2012 to Rb 85.4bn in 2014 (expressed at 2012 prices).[3]

Technology platforms and clusters therefore received a new impetus for development but it has not been fully realised as yet. As a result of new industrialisation, the importance of localisation (ensured by clusters) and network interactions (the function of technology platforms) have increased. In late 2014 clusters received additional funds for their development from the federal budget - the amount of distributed funds was increased to Rb 2.5bn (against Rb 1.3bn in 2013), and all 25 clusters supported by the Government could apply for it. However, the budgetary funds can only be spent on a limited number of activities (maintenance of the specialised cluster organisations, personnel training and retraining, exhibitions and trade fairs, support of the work of engineering centres and other infrastructure objects). Typically, most requests were received for the support of engineering centres and specialised cluster organisations,[4] which indicates a better understanding of the purpose of clusters as systemic entities rather than just a set of facilities located in the same area. It should be noted that, in 2014, the activities of engineering centres were evaluated by the Government as 'absolutely effective' because each of the supported centres earned revenues that were greater than the amount of their state subsidy.[5]

It should also be noted that, in terms of funding priorities, Russian clusters are supported by the Government in a different manner from that in other countries. In Europe much more attention is paid to the funding of joint research and development projects, which contributes

[1] On Implementation of the Strategy for he Innovation-Driven Development of the Russian Federation for the Period until 2020. Presentation. by the Ministry of Economic Development of the Russian Federation. Moscow, 19 December 2014 http://government.ru/media/files/A6DTgyvkUo8.pdf

[2] Decisions made based on the results of at the meeting of the Presidium of the Presidential Council of the Russian Federation for Economy Modernisation and Innovation-Driven Development of Russia, 30 December 2014 http://government.ru/orders/16381/

[3] According to data from the constituent entities of the Russian Federation as of September 2014. Source: On Implementation of the Strategy for Innovation-Driven Development of the Russian Federation for the Period until 2020. Presentation by the Ministry of Economic Development of the Russian Federation. Moscow, 19 December 2014 http://government.ru/media/files/A6DTgyvkUo8.pdf

[4] Ministry of Economic Development Distributed 2014 Subsidies for Support of Pilot Clusters//Russian Cluster Observatory, 19 November 2014 http://cluster.hse.ru/news/1574/

[5] Ministers discussed the development of engineering centres in Polytechnic University, 23 January 2015 https://www.spbstu.ru/news/2015_01_23/2015_01_23.asp

to the technological development and expansion of added value chains. In Russia this aspect is, as yet, missing, with clusters being interpreted simply as infrastructure projects.

What also stands out is that the development of clusters reflects many of the systemic problems of the Russian innovation sector that are difficult to resolve at a local level. For instance, experts at the Russian Cluster Observatory note that Russian clusters include only a small proportion of private organisations, small and medium enterprises, and exhibit weak competition within the cluster.[1] Thus, experience of cluster development suggests that the primary task of innovation policy should be to change the business climate and to create favourable conditions for the development of small and medium enterprises, and connections within the innovation system. Clusters may have a small effect on adjusting and accelerating technological development, but as tools, they are secondary and can hardly change the innovation environment as a whole.

Technology platforms, as opposed to clusters, have never received targeted budgetary funding for their development and preparation of strategic documents. However, their access to budgetary funds from federal target programmes was facilitated because the platforms, de-facto, began to play the part of collectives of experts for conducting the preliminary selection and assessment of relevance of particular projects within individual FTPs. For example, in some of the competitive tenders for the Federal Target Programme 'Research and Development in Priority Areas for the Development of the Scientific-Technological Complex of Russia for 2014-2020' applications have only been accepted where documentation is available confirming that they are supported by technology platforms. This means that the subject of the application has to be within the strategic programme of research of a particular platform.[2] On the one hand, such pre-selection is important and links the interests of different stakeholders. On the other hand, as with any formal requirement, it distorts the demand for funding. For example, organisations which had not previously participated in platforms have sought to become members, not for the purposes of enhancing their interactions and clarifying development strategies, but simply to facilitate the process of obtaining the documents that are important for successful participation in tenders for budgetary funds.

The aspect of the quality of expert review should also be noted. Since the platforms have developed without state support, they have yet to become serious collectives of experts and, hence, their evaluations of particular areas of technology should be looked at critically. In particular, at a meeting of the Foresight Session in the NRU-HSE it was noted that the platforms do not yet represent the consolidated opinion of science and business in the field of technological development.[3] Out of 35 technology platforms, no more than 20% can justify their proposals on areas of strategic development. Platforms still contribute very little to changing the educational environment, namely to creating training courses, laboratories or departments for developing fields of new technology.

In part, the weakness of the platforms' potential is confirmed by their insignificant involvement in international networks and partnerships (*Table 22*). The extent of the international connections of platforms can be assessed on the basis of two parameters: a) their degree

[1] Kutsenko E. Areas for Increasing the Effectiveness of Cluster Policy in Russia. Presentation during Russian Cluster Week. Moscow, 27-28 November 2014 http://www.slideshare.net/evgenykutsenko/kutsenko-27112014

[2] Shatalova N. Pluses of the New Formats. Changes in FTP Did It Good//Search. No. 29-30. 25 July 2014 http://www.poisknews.ru/theme/science-politic/11182/

[3] Foresight as a platform for resolving development problems, 2 April 2014 http://conf.hse.ru/2014/news/120086267.html

of activity in developing partner relationships and of participation in international conferences and exhibitions, and b) the presence of foreign organisations in the composition of platform participants. The first indicator is the more objective because foreign members in the composition of platforms may perform only a nominal representative function and do not necessarily contribute to internationalisation.

Table 22

Technology platforms: degree of international involvement connections

Platform	Active in development of international connections	Foreign organisations in the composition of platform members
Medical Science of the Future	+	+
Bioindustry and Bioresources - Biotech 2030	+	-
Bioenergy	+	+
Innovative laser, optical and optoelectronic technologies - photonics	+	-
Radiation technology	+	-
Ocean exploration	+	-
Textile and consumer goods industry	+	+
3 platforms in the field of extraction and processing of hydrocarbons	-	+
Environmentally friendly transport 'Green Car'	-	+
Construction and architecture	-	+

Source: prepared by the author on the basis of data from: 'Russian Technology Platforms'; the Moscow International Forum 'Open Innovations'; the Ministry of Education and Science of Russia and the Ministry of Economic Development of Russia, RFTD, Moscow, 2014.

As can be seen from *Table 22*, only three platforms successfully combine both the parameters of international activity, and in two of them the coordinating organisations had developed such international connections before they became members of the platforms.

* * *

Thus, 2014 was characterised by a slow implementation of scientific and innovation policy under increasingly complicated external conditions and economic problems. The development of further steps for reforming scientific infrastructure was not adequately coordinated, and resulted in poor coupling and insufficient development of key measures, as well as a year's extension of the moratorium for dealing with the issues of property and personnel changes in the institutes that had previously been included in the RAS, RAMS and RAAS. The emergence of a new management structure - the FASO - did not optimise, but rather complicated, and muddied the waters for the distribution of functions between the key departments responsible for the development of science in Russia. By the year-end, signs of an increased exodus of scientists to other countries started to become more and more apparent.

Budgetary projects evidence that the state funding of R&D will not be growing in the way that it used to do, and from 2016 it is planned to fix the amount of allocations. Taking into account inflation, this effectively means a reduction in budgetary expenditure. At the same time, foreign policy problems have started to affect international scientific and technological cooperation, forcing a transition to a mobilisation-oriented model of science. However, this is

difficult to realise due to the weakness of the scientific infrastructure in a whole range of otherwise promising scientific and technological areas.

The innovation sector has seen an outflow of Russian and foreign capital, especially visible in the field of venture capital investment in innovation, due to the reduction in the number of possible options to exit high-tech businesses. At the same time, the state's focus on policy measures aimed at strengthening relationships between key players in the innovation system has increased noticeably.

Section 6. Institutional Changes

6.1. The Situation in the Public Sector and Privatization

The main developments over the past year in the sphere under consideration were the launch of the second three-year privatization program for the years 2014–2016; the approval of the new government program *Federal Property Management until 2018*; the transfer, by a court ruling, of JSC *Bashneft* back to Russian Federation ownership; the continuation of the active process of creation of integrated structures in the defense industry and related sectors; absence of any significant deals completed on the corporate control market with the participation of state companies; and the expansion, at the level of approved model documents, of the set of available instruments to be applied in the management of entities belonging to the public sector of the national economy.

6.1.1. The Dynamics of the Public Sector in the Russian Economy

Last year, the RF government did not approve any new privatization program (which contrasted with its policy during the implementation of the first three-year privatization program for the period 2011–2013) because in mid-2013 it had approved the *Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016*. Meanwhile, it was the government privatization programs that provided us with statistics concerning the number of federal state unitary enterprises (FSUE) and joint-stock companies with RF stakes in their capital as of the beginning of each calendar year. Now, the specific information on the movement of each component of the public sector for the year 2014 can be derived from data released by the RF Ministry of Economic Development, the RF Federal Agency for State Property Management (*Rosimushchestvo*), and the Federal State Statistics Service (*Rosstat*).

According to the Federal Property Register, the movement, over the period 2013–2014, of the number of organizations registered as holders of ownership rights and economic societies with state stakes appears to be as follows (*Table 1*).

There is an obvious downward trend in the number of organizations involved (in any way) in the use of federal property.

Over the year-and-a-half period (from early 2013 to mid 2014), the number of JSCs with state stakes (including those where the State held the special right to participate in a company's management granted by 'golden share') shrank by 14% (or by 342 units), including 4.7% (or by 103 units) over the first half-year of 2014. The reduction scale (by 14.3%, including

2.2% over the first half-year of 2014) was approximately the same for federal state institutions (FSI), although the resulting number was much more impressive when taken in absolute terms (by 2921 units, including 393 units over the first half-year of 2014). The number of federal state unitary enterprises (FSUE) operated by right of economic jurisdiction shrank by 5.3% (including 1.3% over the first half-year of 2014), amounting in absolute terms to 96 units (including 23 units over the first half-year of 2014). The only (and smallest) group of holders of ownership right to federal property which increased in number (however slightly) over the period under consideration (by 5 units - to a total of 77 units) is represented by federal treasury enterprises (FTE) or federal state unitary enterprises endowed with the right of operative management. In general, the lion's share in the structure of federal property held by entities other than economic societies or partnerships belongs to FSIs (approximately 91%, or 17,537 units as of mid-2014). FSUEs, whose number over the entire year-and-a-half period was persistently lower than that of JSCs with state stakes, account for only 8.8% (or 1,704 units as of mid-2014).

Table 1

The Number of Organizations - Users of Federal Property, in 2010 and the Period 2013–2014

Date	Number of joint-stock companies with federal stakes (including by special right), units	Number of holders of ownership rights to registered federal property entities other than economic societies or partnerships, units			
		total	including		
			FSUE	FTE	FSI
as of 1 January 2010[a]	2,950	…	3,517[b]	…	…
as of 1 January 2013	2,442/2,337[c]	22,330	1,800/1,795[d]	72	20,458
as of 1 April 2013	2,412	21,459	1,775	73	19,611
as of 1 October 2013	2,281	20,175	1,742	73	18,360
as of 1 January 2014	2,203[e]	19,733	1,727/1,181[f]*	76	17,930
as of 1 April 2014	2,142	19,603	1,789	78	17,736
as of 1 July 2014	2,100	19,318	1,704	77	17,537

[a] – as stated in the first 3-year privatization program (for 2010–2013);
[b] – the grounds for the inclusion of data for federal treasury enterprises (FTE) into this category are not quite clear;
[c] – as stated in the current privatization program for 2013–2016; besides, according to the Federal Property Register as of 31 December 2012, in addition to shares in 2,442 JSCs, there were also data on shares in 19 limited liability companies (LLC), which makes a total of 2,461 units;
[d] – as stated in the current privatization program for 2013–2016;
[e] – as stated in the Annual Report on Alterations to the Federal Property Register Resulting from the Arising and Termination of Russian Federation Ownership Right to Immovable and Movable Property for 2013, this figure (2,203 units) includes those 17 LLCs and 90 JSCs where the RF holds the special right to participate in their management without holding any shares;
[f] – according to the Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016, by early 2014 the RF had been the owner of property of 1,181 FSUEs, which is nearly by 1/3 less than the figure reported in the Federal Property Register.
Source: Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2011–2013; Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016; www.economy.gov.ru, 23 April 2013, 17 January 2014, 18 April 2014, 7 August 2014; 2013 Annual Report on Alterations to the Federal Property Register Resulting from the Arising and Termination of Russian Federation Ownership Right to Immovable and Movable Property; 2014 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016, www.rosim.ru, 19 February 2015.

According to data released by *Rosimushchestvo*, by late 2013, information on shares (or stakes) in a total of 2,113 economic societies had been entered in the Federal Property Regis-

ter, including 17 LLC (the rest being represented by joint-stock companies (JSC), excluding those 90 JSC where the RF holds the special right to participate in their management without holding any shares).

According to data released elsewhere by the same government department, as of 7 July 2014 the Federal Property Register contained information on a total of 2,096 JSCs with federal stakes.

However, *Rosimushchestvo* could not fully exercise its shareholder rights in a total of 1,147 JSCs (or less than 55% of JSCs belonging to that category).

The composition of the remaining group of 949 companies was as follows:

- societies with state stakes amounting to less than 2% of their charter capital, where, in accordance with Item 1 of Article 53 of Federal Law, of 26 December 12 1995, No 208-FZ 'On Joint-stock Companies' (hereinafter Federal Law No 208-FZ), no proposals put forth by shareholders can be entered on the agenda of a general shareholder meeting) (436 units,[1] or approximately 21% of all JSCs);
- economic societies where the ownership rights to state stakes are delegated to other federal bodies of executive authority (FBEA) and state corporations (for example, the RF Ministry of Defense, *Rostec* Corporation (formerly *Rostekhnologii*), *ROSATOM* Corporation), or JSC operated under a trust management agreement) (302 JSCs, or 14.4% of all JSCs);[2]
- economic societies undergoing a proceeding in bankruptcy (146 JSC, or 7% of all JSCs);
- economic societies undergoing a liquidation procedure (57 JSC, or 2.7% of all JSCs);
- economic societies currently with no stakes effectively in the ownership by the Russian Federation (for example if an entity has been privatized, or transferred as a contribution to the charter capital of a vertically integrated structure (hereinafter – VIS)) (8 JSCs, or 0.4% of all JSCs).

In this connection it should be noted that the number of JSCs, with regard to which *Rosimushchestvo* can exercise only a limited shareholder right, has declined on 2012 by 4% (or by nearly 40 units) - these being economic societies with state stakes amounting to less than 2% of their capital (by 29 units, or by 6.2%) and the societies shareholder right to which have been transferred to other subjects (by 14 units, or by 4.4%). The number of JSCs undergoing a proceeding in bankruptcy or a liquidation procedure has changed insignificantly (by 1-2 units).[3] In principle, this is also true for the group of JSCs with no stakes effectively in the ownership by the Russian Federation (an increase by 5 units); however, in view of the fact that the process of keeping federal property records has become a major focus of attention,

[1] Including those 78 JSCs where the State held the special right to participate in a company's management granted by 'golden share'.

[2] It does not seem to be quite correct to place in one and the same group those JSCs where the ownership rights to state stakes are delegated to federal bodies of executive authority other than *Rosimushchestvo*, state corporations, and companies operated under a trust management agreement - because one of the basic features of a state corporation (SC) as a legal entity (defined by Russian legislation as a non-profit organization) is the right of ownership to its property, and, generally speaking, that right should also be exercised with regard to those state stakes that have been transferred to other entities as property contributions to their charter capital.

[3] In this connection it should also be added that another 137 JSCs whose financial and economic operations have not been conducted on a stable and constant basis (because they are not engaged in a financial and economic activity or are entering the initial phase of bankruptcy procedures (have filed a petition in bankruptcy, undergoing the phase of supervision or external management)) belong to the category of JSC in regard to which *Rosimushchestvo* has been exercising an unrestricted shareholder right.

and that this process is now based on a hi-tech methodology, this modest result can certainly give rise to many questions.

From the point of view of the size of the stake held by the State in the charter capital of an economic society, this category of entities in early 2014 (*Table 2*) was dominated by companies in full state ownership (where the state stake amounted to 100% of their charter capital) and companies with minority state stakes (amounting to less than 25%). These accounted for 47.3% (1,000 units, including 1 LLC) and 37.6% of all economic societies (794 units, including 8 LLCs) respectively. The share of blocking stakes (amounting to between 25% and 50% of the charter capital) was 10.6% (224 units, including 1 LLC), and that of majority stakes (amounting to between 50% and 100%) – 4.5% (95 units, including 7 LLC).

Table 2

The Movement and Structure of the Group of Economic Societies with State Stakes (less those JSCs where the State Holds the Special Right Granted by 'Golden Share' without Holding Any Stake) in 2010–2014

Date	Economic societies (JSC and LLC) where RF is shareholder (or participant)									
	total, units	share, %	Of these, with RF stake in charter capital amounting to							
			100%		50–100%		25–50%		less than 25%	
			units	%	units	%	units	%	units	%
as of 1 January 2010	2,950[a]	100.0	1,757	59.6	138	4.7	358	12.1	697	23.6
as of 1 January 2011	2,957	100.0	1,840	62.2	136	4.6	336	11.4	645	21.8
as of 28 December 2011	2,819	100.0	1,617	57.4	112	4.0	272	9.6	818	29.0
as of 1 January 2013	2,337[b]	100.0	1,256	53.7	100	4.3	227	9.7	754	32.3
as of 31 December 2013	2,113	100.0	1,000	47.3	95	4.5	224	10.6	794	37.6
as of 7 July 2014 - JSCs where *Rosimushchestvo* is not restricted in its shareholder rights[c]	1147	100.0	709	61.8	66	5.8	171	14.9	201[d]	17.5
- same JSCs, plus JSCs where state stake is less than 2%[e]	1,583 (1,147 + 436)	100.0	709	44.8	66	4.2	171	10.8	637 (201 + 436)	40.2
- JSCs included in forecast privatization plans for 2010 and 2013[f]	842	100.0	596	70.8	36	4.3	113	13.4	97	11.5
- same JSCs, plus JSCs where where state stake is less than 2%[g]	1,278 (842 + 436)	100.0	596	46.65	36	2.8	113	8.85	533 (97 + 436)	41.7

[a] – number of JSC according to the privatization program for 2011–2013;
[b] – number of JSC according to the privatization program for 2014–2016;
[c] – less the following entities: (1) JSCs with state stakes less than 2%; (2) JSCs where the shareholder rights on behalf of the RF are exercised by other subjects (other bodies of executive authority, state corporations, or subjects appointed under trust management agreements); (3) JSC undergoing bankruptcy procedures (in the phase of a bankruptcy proceeding); (4) JSCs undergoing a liquidation procedure, (5) JSCs with state stakes that are de facto not registered as federal property (previously privatized or transferred to the charter capital of a vertically integrated structure);
[d] – only JSC with state stakes between 2% and 25%;
[e] – on condition that, with regard to all JSCs with state stakes less than 2%, the relevant shareholder rights belong to Rosimushchestvo;

[f] – only those JSCs where Rosimushchestvo is not restricted in its shareholder rights;
[g] – on condition that all the JSCs with state stakes less than 2% are included in a privatization program.
Source: Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2011–2013; information based on data entered in the Federal Property Register, released by the RF Ministry of Economic Development Russia as of 17 February 2012; Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014-2016; 2013 Annual Report on Alterations to the Federal Property Register Resulting from the Arising and Termination of Russian Federation Ownership Right to Immovable and Movable Property; Year-end 2013 Report on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC 's Management ('Golden Share'); authors' calculations.

As follows from *Table 2*, the principal change in the structure of economic societies with state stakes observed after 2010 was the declining share of those companies in respect of which the State could exert a dominating influence due to participation in their capital. The upshot of this trend was that, in late 2013, the State enjoyed the right of corporate control at the level of a 100 percent stake or majority stake (or share) in approximately 52% of all companies vs. more than 61% by early 2012 and nearly 2/3 by early 2011.

Of course, the distribution of the bulk of JSCs where *Rosimushchestvo* as of mid-2014 was exercising its shareholder rights without any restrictions in accordance with this presentation appears to be more rational. Here, the aggregate share of companies where the State owned 100 percent stakes and majority stakes amounted to approximately 68%, which is roughly equal to the corresponding index for all companies with state stakes recorded in early 2011. At the same time, if we add here economic societies with state stakes in their charter capital amounting to less than 2% (436 units), the State will appear to exercise corporate control over less than half of all the companies.

The distribution of the JSCs included in the privatization program seems to be rather dubious because, among the 842 companies where Rosimushchestvo is not restricted in its shareholder rights, approximately 3/4 appear to be those fully owned by the State (70.8%) or those where the State holds a majority stake (4.3%). As follows from the Report on the Management of Federal Stakes in OJSC and the Use of the RF Special Right to Participate in an OJSC 's Management ('Golden Share') prepared by *Rosimushchestvo*, the forecast privatization plan lists more than 84% of all 100% stakes, approximately 2/3 of all blocking stakes, approximately 55% of all controlling stakes, but only 48% of all minority stakes (between 2% and 5%) in those companies where *Rosimushchestvo* can exercise its shareholder rights on behalf of the State without any restrictions.

As a result of the inclusion of all state stakes amounting to less than 2% of a company's charter capital (436 units) (based on the assumption that all such companies are included in the privatization program), the structure of all the assets belonging to that category and earmarked for privatization becomes more similar to the picture that emerges when we add up all state stakes amounting to less than 2% and all those JSCs where *Rosimushchestvo* is not restricted in exercising its shareholder rights (1,147 units). However, even so, the number of minority state stake earmarked for privatization is smaller than the corresponding number of stakes enabling the State to exercise full corporate control over a company (100 percent stakes and majority stakes, even if the latter are not taken into consideration).

In addition to shares (or stakes) in economic societies owned by the RF, another major component of the public property complex is immovable and movable property held by various categories of right holders by right of economic jurisdiction (unitary enterprises), by right of operative management (state institutions and treasury enterprises), or entities that are part

of the RF treasury. In this connection, the total number of entities entered into the Federal Property Register in 2013 increased by 116,794 units (1,588,576 units as of 1 January 2014 vs. 1,471,782 units as of 1 January 2013), or by 7.9%. Over the first half-year of 2014, this index gained another 3.8%, the total number amounting to 1,648,404 units.[1]

According to the public sector monitoring results released by *Rosstat*, the movement of economic subjects over the period from mid-2012 through mid-2014 appears to be as follows (*Table 3*).

Table 3

The Number of Organizations in the Public Sector of the Economy on the Records of Territorial Branches of *Rosimushchestvo* and the Bodies Responsible for the Management of State Property Held by RF Subjects in 2012-2014

Date	Total*	FSUEs, including treasury enterprises	State institutions	Economic societies where shares (or stakes) amounting to more than 50% of charter capital are owned by	
				State	economic societies operating in public sector
as of 1 July 2012[a]	69,251[b]	5,282	58,049	3,593	2,327
as of 1 January 2013	67,003[b]*	4,891	56,247	3,501	2,364
as of 1 July 2013	66,131[b]	4,589	56,100	3,201	2,241
as of 1 January 2014	64,616[b]	4,408	54,699	3,097	2,412
as of 1 July 2014	63,635[b]	4,236	54,173	2,988	2,238

[a] – federal property records are kept in accordance with Decree of the RF Governmenta of 16 July 2007, No 447 'On Improving Federal Property Record-keeping';

[b] – including those organizations whose charter documents, after their State registration, do not specify property types, but less those joint-stock companies where more than of 50% shares (or stake) are in joint RF and foreign ownership.

Source: On the Development of the Public Sector of the Economy of the Russian Federation in the First Half-year of 2012 (pp. 7–11), in 2012 (pp. 7–11), in the First Half-year of 2013 (pp. 7–11), in 2013 (pp. 7–11), in the First Half-year of 2014 (pp. 7–11), M., *Rosstat*, 2012–2014.

As follows from *Table 3*, the total number of organizations belonging to the public sector dropped in the course of two years (between 1 July 2012 and 1 July 2014) by 8.1% (or by more than 5.6 thousand units), amounting as of 1 July 2014 to approximately 63.6 thousand units.

The most impressive decline was demonstrated by the number of unitary enterprises (by 19.8%, or by nearly 1,050 units). In per cent terms, the drop in the number of state institutions was far more modest (by 6.7%), but in absolute terms it was even more impressive (nearly by 3.9 thousand units). By 1 July 2014, the drop in the number of economic societies where the State held a stake amounting to more than 50% of their charter capital had been even more dramatic – by 16.8% (or approximately by 600 units). At the same time, the number of economic societies with stakes greater than 50% held by entities belonging to the public sector shrank by 3.8% (or by nearly 90 units). As a result, the number of economic subjects in this category as of mid-2013 exceeded 2.2 thousand units, thus roughly corresponding to the level recorded in mid-2010.

Meanwhile, over the next year from mid-2013 onwards, the total number of organizations operating in the public sector dropped by 3.8% (or approximately by 2.5 thousand units). The number of unitary enterprises shrank by 7.7% (or by 350 more than units). The corresponding

[1] RF Ministry of Economic Development. See www.economy.gov.ru, 23 April 2013, 17 January 2014, 18 April 2014, 7 August 2014.

index for the number of state institutions was significantly lower (by only 3.4%), although the corresponding value in absolute terms was much higher - in excess of 1,900 units. The number of economic societies where the State held a stake amounting to more than 50% of their charter capital shrank by 6.7% (or by more than 200 units). At the same time, the number of economic societies where stakes greater than 50% were held by entities belonging to the public sector remained practically unchanged, while in the second half-year of 2013 it began to grow (increasing by more than 170 units), growth once again giving way to decline in the first half-year of 2014.

Our analysis of the changes in the number of state unitary enterprises, state institutions, and economic societies operating in the public sector of the national economy is based on available data reported as of specific dates.[1] However, we have been able to identify only some more general trends. The available statistics does not allow us to trace the 'demographic developments' in each category of economic subjects, namely the specific data as to their creation, liquidation, reorganization into other organizational-legal forms - in short, the movement of that index that produces the specific figure as of a given date.

When speaking of the presence of the State in the economy in the capacity of a producer of goods (or work, or services), we can note as follows. The monitoring conducted by *Rosstat* has in part confirmed the assumption that the share of the public sector, as demonstrated by various indices of the scale of economic activity, is on the rise. However, as demonstrated by the majority of indices for 2013 and the first half-year of 2014, the relative share of the public sector over that period never exceeded 15-25%, the only exception being the investment and employment indices (*Table 4*).

Table 4

The Public Sector's Share, by Index, in 2011–2014, as %

	2011	2012	2013	1st half-year of 2014
Volume of delivered goods, work and services (produced by companies on their own):				
- extraction of mineral resources	16.5	16.5	21.6	22.4
- extraction of fuel and energy mineral resources	16.7	16.6	22.1	22.5
- processing industries	9.9	9.8	12.0	12.5
- production and distribution of electric energy, natural gas and water	24.0	25.7	25.0	19.2
Volume of construction work (performed by companies on their own)	4.0	3.8	3.9	3.7
Passenger turnover of transport organizations [a]	65.3	64.5	62.7	60.4
Commercial cargo transportation turnover (freight dispatch) of transport organizations (less pipeline transport turnover)	38.1[b]	76.0	75.3	78.8
Commercial freight turnover of transport organizations (less pipeline transport turnover)	36.4[b]	92.9	93.4	94.6
Communications services[c]	13.4	14.2	13.7	13.2
Internal expenditures on scientific research and development	73.8	75.4	74.1	70.8
Volume of commercial services delivered to population	18.8	18.9	19.1	17.0
Investment in fixed assets from all sources of funding[d]	28.8/ 21.3	28.8/ 20.9	30.3/ 21.0	25.6/ 19.2
Net proceeds from sales of goods, products, work, services (less VAT, excises and other mandatory payments)	11.6	12.6	12.7	13.2
Average number of employees	24.9	25.8	26.7	28.0

[a] – less urban passenger electric transportation organizations;
[b] – it may be assumed that the low figures reported for 2011 with regard to the share of the public sector in the total volume of cargo transportation and commercial freight turnover represent a statistical anomaly, because over the course of the previous year (2010) and several earlier years these indices had never been below 70% and 90%; the same is true with regard to the following period 2012–2014;

[1] Since 2003, the number of FSUEs and JSCs with federal stakes has been regularly reported in the framework of forecast plans (programs) of federal property privatization, but not the number of FSIs.

[c] – net proceeds from sales of goods, products, work, or services (less VAT, excises and other mandatory payments);
[d] – the denominator here does not include the number of small-sized entrepreneurs and the volume of investment - the indices that cannot be estimated directly on the basis of available statistical reports.
Source: On the Development of the Public Sector of the Economy of the Russian Federation in the First Half-year of 2011 (pp. 13, 35, 37–38, 39, 42, 50–51, 52, 56–57, 77), in 2012 (pp. 13, 35, 37–38, 39, 42, 50–51, 52, 56–57, 77), in 2013 (pp. 13, 35, 37–38, 39, 42, 50–51, 52, 56–57, 77), in the First Half-year of 2014 (pp. 13, 33, 35–36, 37, 40, 42–43, 44, 46–47, 67). M., *Rosstat*, 2012–2014.

Nevertheless, the official statistics did reflect a noticeable increase, in the period 2013–2014 on the period 2011–2012, in the public sector's share in the extraction of mineral resources (including fuel and energy mineral resources), the processing industries, and the employment rate.

The public sector's share increased most impressively in the extraction of mineral resources (including fuel and energy mineral resources) - to 21–22% vs. approximately 16.5% in 2011–2012, or by more than 5 percent points (pp.). In the processing industries the share of the public sector increased by more than 2 pp. - to 12%. A stable rate of growth (approximately by 1 pp. per annum) was displayed by the public sector's share in the structure of employment (derived on the basis of the average number of employees), amounting in the first half-year of 2014 to 28%.

As far as investment in fixed assets is concerned, the share of the public sector displayed growth (to more than 30%) only with regard to the year-end results of 2013, and only for the index that did not take into account the number of small-sized companies and the volume of investment (the indices that cannot be estimated directly on the basis of available statistical reports). If we look at the period-end results of the first half-year of 2014, the public sector's share will display an opposite trend - its index turned out to be the lowest by comparison with the three preceding years (2011–2013).

As for the corresponding indices with regard to production and distribution of electric energy, natural gas and water; passenger turnover of transport organizations; communications services; and internal expenditures on scientific research and development, these are more likely to point to shrinking shares of the public sector, especially if we look at the period-end results of the first half-year of 2014.[1]

A more detailed study of the situation reveals that, judging by the year-end results of 2013 and the period-end results of the first half-year of 2014, the public sector prevailed only within a rather limited range of economic activities (cargo and passenger rail transportation; reforestation; internal expenditures on scientific research and development). In most of the other sectors its share was less than 20%, the only exception being oil extraction, including natural-gas condensate (where the share of the public sector over the first half-year of 2014 amounted to approximately 22%), as well as passenger turnover of air transport (transport aviation) and automobile transport (less the data reported by economic subjects belonging to the category of small-sized companies), and all the types of commercial services recorded in official statistics,[2] where the share of the public sector was still below 50%.

All these indices should probably be treated as minimum estimates, because it is very difficult to assess correctly the actual relative share of the public sector - first of all because in

[1] It should be noted that as far as these indices are concerned, this trend needs to be properly ascertained on the basis of the year-end results.
[2] In this context, the statistical reports subdivide services into the categories of transport, medical, health resort and education services.

many public companies the bulk of economic activity is concentrated at the lower levels of their hierarchical structures which are, most likely, overlooked by official statistics. Another obvious fact is that the privatization of unitary enterprises - which most often are reorganized into economic societies (as a rule, in the form of joint-stock companies), where initially (until their full or partial sale) all the shares (or stakes) belong to the State, as well as the transfer of shares to the charter capital of one or other holding company, by no means implies that the size of the public sector in the national economy taken as a whole will be diminished as a result.

6.1.2. Privatization Policy[1]

The past year was the first year of the implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016, approved by Directive of the RF Government of 1 July 2013, No 1111-r. This is already the second 3-year privatization program developed with a view towards a longer planning period established for a forecast plan (or program) of federal property privatization (extended from one to three years) on the basis of the alterations introduced into the prevailing legislation on privatization in the spring of 2010. On the whole, that program was moderate, establishing that the State should retain its corporate control over many companies operating as components of natural monopolies and the existing infrastructure, involved in capital intensive activities or activities associated with long payback periods, or playing important roles in the implementation of government structural and industrial policies; besides, this rule was applied to those entities that had acted, over the acute-phase crisis period 2008–2009, as government agents responsible for the successful implementation of government anti-crisis measures.[2]

As it had been the case with the previous privatization program, numerous adjustments and alterations soon began to be introduced into the new document as well.

Since the moment of approval of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016 and until early 2015, a total of 25 normative legal acts pertaining to these issues were adopted, three of which had been issued as early as December 2013. The most relevant alterations were introduced by the directives of the RF Government issued in March and August 2014. By the first directive, the privatization program was augmented by another 431 joint-stock companies that had not been privatized in the period 2011–2013; by the second one, 426 (mostly) immovable property entities in federal ownership (previously non-privatized) were also added to the list of entities earmarked for privatization.[3]

As a result, the list of assets earmarked for privatization in an ordinary procedure in the framework of the privatization program was noticeably increased by comparison with its initial version. Thus, the number of entities to be privatized in the category of ‘other property’

[1] For a more detailed discussion of the theoretical aspects and core problems of the privatization process in the present conditions, see Radygin A., Entov R. M. “Fundamental” Privatization Theorem: the Ideology, Evolution, Practice // Economic Policy, 2013, No 6, December, pp. 7–45.

[2] The specificities of the new phase of privatizationи in Russia evolving in conditions of economic recovery after the 2008–2009 crisis are dealt with in more detail in Radygin A. D., Simachev Yu. V., Entov R. M. State and Denationalization: Risks and Limitations of the ‘New Privatization Policy’ // *Voprosy Ekonomiki* [Issues of Economics], 2011, No 9, pp. 4–26.

[3] www.economy.gov.ru, 31 March 2014, 21 August 2014.

held by the RF treasury increased from 94 units to 294 units (or more than tripled), that of economic societies with stakes earmarked for privatization – from 440 units to 981 units (or 2.2 times), while the number of federal state unitary enterprises (FSUEs) earmarked for privatization increased only slightly - from 514 units to 535 units (or by only 4%).

In view of the new economic and political background emerging in Q1 2014, from the very first days of January it became evident that the process of implementing the forecast privatization plan was very strongly influenced by the current macroeconomic situation (the probability of recession) and the situation in the stock market.

For obvious reasons, the deals that had been planned and thoroughly prepared back in the period 2012–2013 became the focus of attention. In January 2014, the RF Government made the relevant decisions concerning the sale of its stakes in OJSC *Inter* RAO EES (13.76% of shares) and OJSC in *Arkhangelsk Trawl Fleet* (ATF) (100% of shares) to the total value of more than Rb 21bn.

The buyer in the first deal (to the value of Rb 18.8bn) was OJSC *Rosneftegaz* which was allowed, in accordance with the norms stipulated in the previous and current privatization programs, to act until 2015 as an investor in those companies in the fuel and energy complex, whose blocks of shares have been earmarked for privatization, on condition that OJSC *Rosneftegaz* supplied a proper program for the financial backing of such transactions provided by dividends paid on the shares in commercial companies held by OJSC *Rosneftegaz*. Of course, it would be more correct to treat this one as a quasi-privatization deal, because it represents a direct transfer by the State, for a compensation, of its shareholder right to these assets to a state-controlled structure, which thus has achieved a diversification of its economic activity by acquiring a stake in the power engineering industry (as it had happened to *Gazprom* during the imlementation of reform in that industry, and also after its completion).

The second deal, which was to be prepared and effectuated by OJSC *Gazprombank* (this task having been assigned to it in late 2011), may serve as the first example of a non-standard approach realized in the framework of the privatization process in its contemporary phase.

Its distinctive feature is the special format of interaction between the new owner (LLC *Virma*) and regional authorities on the basis of a shareholder agreement whereby a gratis transfer of 1 share in *Arkhangelsk Trawl Fleet* into the ownership of Arkhangelsk Oblast is envisaged. All key decisions, including the preservation of existing jobs, the OJSC's registration in the region's territory in order to maintain the inflow of tax-generated revenues into the regional budget, are to be coordinated with the Archangelsk Oblast's government, whose representative will be assigned a seat in the OJSC's board of directors. In addition to social liabilities and the preservation of existing jobs, the shareholder agreement also stipulates the development of seaport infrastructure in the region. To ensure that the new owners properly fulfill their obligations concerning employment and control over the assets, a big fine is envisaged for their failure to do so.

Although this deal is a unique example of the post-privatization control mechanism in operation, whereby it becomes possible, among other things, to ensure a proper balance of interests between the State represented by Arkhangelsk Oblast, on the one hand, and the new asset owner on the other, in the field of social liabilities and business promotion, this situation has inevitably given rise to questions as to the possible incompatibility of such instruments with the existing broader legal norms, in particular with corporate legislation (the role of the single share transferred to the oblast's government in comparison with the powers embodied in the special right to participate in a company's management granted by 'golden share'); or the suf-

ficiency of the existing agreement for avoiding possible conflicts in the future (after the expiry of the term of the agreement with regional authorities); or, for example, in the event of resale, by LLC *Virma,* of its stake in *Arkhangelsk Trawl Fleet,* in full or in part to a third party.

For the example of the deal with *Arkhangelsk Trawl Fleet* to be recommended as best practices to be implemented further across Russia's territories, the company's further progress should be monitored for a certain period of time.

The biggest deals concluded without the aid of investment consultants were the sales of stakes in OJSC *Opytno-proizcodstvennoe khoziaistvo plemennoi zavod 'Leninskii put''* [Experimental Horse Breeding Farm 'Lenin Way'] (Krasnodar Krai, 100%, to the value of Rb 1,563m), *Ufimskii teplovozoremontnyi zavod* [Ufa Diesel Locomotive Works] (100%, Rb 478m), Yenisei River Shipping Company (Krasnoyarsk, 25.5%, Rb 469m), *Turovskiy* (Moscow Oblast, 100%, Rb 445m), *Centrodorstroy* (Moscow, 25%, Rb 429m), *Tulamashzavod* (Tula, 74,8%, Rb 400.1m.), Electroshield Samara Group (Samara, 25,5%, Rb 281.5m.), *TEPLOOBMENNIK* JSC PDC (Nizhny Novgorod, 25%, Rb 276m), *SLOVO* Publishers (Saratov, 100%, Rb 256.5m), as well as a stake in LLC TM Baikal (Irkutsk Oblast, 51%, Rb 269.2m).

The latter represents a rather rare example of a deal where the priority right of a shareholder (or participant) in a close-end joint-stock company (CJSC) or limited liability company (LLC) is realized; as a result, the former state stake in LLC TM Baikal (51%) was transferred to Japanese company Tajima Lumber Co Ltd, which prior to the deal had been the sole holder of the remaining stake (49%).[1] Among the other deals, the sale at an auction, by *Rosimushchestvo*, of its 100% stake in OJSC *Opytno-proizcodstvennoe khoziaistvo plemennoi zavod 'Leninskii put''* [Experimental Horse Breeding Farm 'Lenin Way'] for Rb 1,563bn clearly stands out. This was the first deal in 2 years (2013–2014) completed by applying the traditional privatization instruments (without the aid of investment consultants) where the total value was above Rb 1bn, thus more than doubling the initial bidding price.[2] For reference: the 100% stake in *Ufimskii teplovozoremontnyi zavod* [Ufa Diesel Locomotive Works] was sold at a price that exceeded the initial bidding price by more than 67%.[3]

As for the activity of non-governmental sellers, OJSC 'Auction House of the Russian Federation' (OJSC *RAD*) continued its operations. Over the past year, this company sold 6 stakes to the total value of Rb 923.3m,[4] which is less than half of the corresponding index for 2013 (15 sales to the total value of Rb 1.97bn). Among the big chunks of assets sold by OJSC *RAD* we may point to the sale at an auction, in Q1 2014, of a stake in OJSC *Centrodorstroy* (25% of shares, to the value of Rb 429m, the selling price exceeding the initial bidding price by approximately 16%) and Anapa International Airport (25.5% of the charter capital, to the value of Rb 153.6m the selling price being 2.2 times higher than the initial bidding price).[5] However, these deals took place before the launch of sales in the framework of the forecast plan of privatization for 2014–2016, the first announcement of which being released by *Rosimushchestvo* only in early summer.[6]

In 2014, the stakes (or shares in charter capital) in a total of 108 economic societies were sold, while in respect of 33 federal state unitary enterprises (FSUE) the relevant decisions

[1] www.rosim.ru, 18 March 2014. In 2014, two such deals took place, and in 2013 – three deals.
[2] www.rosim.ru, 7 March 2014.
[3] www.rosim.ru, 26 February 2014.
[4] www.rosim.ru, 24 December 2014.
[5] www.rosim.ru, 31 January 2014, 27 February 2014.
[6] www.rosim.ru, 9 June 2014.

concerning the terms of their privatization were taken. Besides, *Rosimushchestvo* effectuated the registration of 16 joint-stock companies created as a result of privatization of those FSUEs in respect of which the relevant decisions had been taken over the previous years.

In this connection, when comparing these data with those obtained for the period shortly preceding the period under consideration, as well as with the data for the period of implementation of the first 3-year privatization program (*Table 5*), it can be noted that on the whole, the year-end results of 2014 follow the overall trend of recent years - the constant reduction in the number of sold stakes (or participatory shares) and the number of unitary enterprises subject to specially issued directives concerning the terms of their privatization. The value of the sold stakes (or participatory shares) is lower than the corresponding indices for all previous years, the one exception being the crisis year 2009 (52 units), while the number of privatized FSUEs exceeds only the corresponding index for 2013.[1]

Table 5

The Comparative Movement of the Number of Privatization Deals Involving Federal State Unitary Enterprises and the Number of Sales of Federal Stakes in 2009–2014

Period	Number of privatized enterprises (entities) formerly in federal ownership (data released by *Rosimushchestvo*)	
	privatized FSUEs[a], units	sold stakes in JSCs, units
2009	316+256[b]	52[c]
2010	62	134[c]
2011	143	317[a]/359[c]
2012	47[d]	265[e]
2013	26	148[e]
2014	33	108

[a] – all preparatory work is completed, and the relevant decisions concerning the terms of privatization are issued;
[b] – the number of FSUEs in respect of which the decisions concerning their reorganization into JSC were made by the RF Ministry of Defense in addition to those cases where a similar decision was made by Rosimushchestvo;
[c] – including those stakes which were put up for sale in a previous year;
[d] – estimated value based on data on the total number of FSUEs in respect of which directives concerning the terms of their privatization in the form of reorganization into OJSC (216 units) were issued, taken from Rosimushchestvo's Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2011–2013, and the year-end results of 2011 and 2013;
[e] – less sales of shares with the participation of investment consultants.
Source: Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2009, M., 2010; Report of the RF Ministry of Economic Development on the Results of Federal Property Privatization in 2010; Report of The RF Ministry of Economic Development on the Results of Federal Property Privatization in 2011; Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2011–2013; 2014 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization in 2014–2016, www.rosim.ru, 19 February 2015.

In 2014, stakes (or shares in charter capital) in 252 economic societies were put up for sale, of which stakes (or shares in charter capital) in 108 economic societies were actually sold,[2]

[1] For the sake of objectivity it must be added that the number of FSUE privatized in 2014 is also higher than the corresponding indices for the early 2000s, while the number of sold stakes is comparable to the year-end result of 2002.
[2] Of these, 30 stakes to the value of Rb 326.6m were sold by *Rosimushchestvo*'s territorial agencies, to which the relevant rights had been delegated by the central apparatus of that government department. On the whole, for the purpose of successful implementation of the privatization program, 64 territorial agencies were assigned the task of selling a total of 200 state stakes. See www.rosim.ru, 26 February 2015.

which amounts to approximately 41% of the total number of economic societies whose shares were available to potential buyers in accordance with the relevant directives concerning the terms of their privatization (266 units). Shares in 110 economic societies were put up for sale repeatedly, of which shares in 23% economic societies were offered more than 2 times (in the form of repeat auctions, public offers and sale without declaring bidding price). The completion of sale deals involving another 47 economic societies was planned to take place in Q1 2015.

As before, by no means all the assets included in the forecast plan of federal property privatization could be actually put up for sale due to the fact that many economic societies and unitary enterprises were then undergoing bankruptcy, peorganization, or liquidation procedures, were not engaged in any economic activity, or for other reasons (preparations for making a contribution to the charter capital of an integrated structure; restrictions of the privatization procedure, or special privatization procedure; execution of the ownership rights to state stakes by bodies of executive authority other than *Rosimushchestvo*, etc.). In some cases, privatization did not take place due to lack of sufficient interest on the part of potential buyers.

Similar problems arose in connection with the sale of other property entities. Thus, in 2014, out of a total of 48 immovable property entities, less than 1/4 were actually sold – 11 units (in 2011 – 3 units; in 2012 – 40 units; in 2013 – 22 units). The results of sale of 17 property entities belonging to that category are to be put on records in Q1 2015. As for the sales of such property entities completed in 2014, a total of Rb 47.5m is earmarked for transfer to the federal budget.

In 2014, in the framework of execution of 17 presidential executive orders and 3 government decisions concerning the creation/expansion of vertically integrated structures (VIS), *Rosimushchestvo* implemented the relevant measures and established 16 VIS. This part of the privatization program includes 26 FSUEs and state stakes in 86 open-end joint-stock companies (OJSC). The relevant decisions concerning the terms of their privatization were formalized with regard to 11 FSUEs and state stakes in 47 OJSCs. Besides, last year, in the framework of creation of one of VIS, decisions were also issued with regard to the terms of privatization of state stakes in 2 OJSCs created on the basis of reorganized FSUEs included in the previous privatization program (for 2011–2013).

According to *Rosimushchestvo*'s estimates, last year saw an improvement in the quality of information backing for the privatization and sale procedures, so that these procedures could become open to the public, and a system of public control over their implementation could be formed.

Rosimushchestvo opened a special section on its official website www.rosim.ru titled 'Soon to Be Put up for Sale' where, prior to asset valuation and issuance of directives, the relevant information and documents concerning properties to be privatized will be posted, thus enabling the potential investors to assess on their own the value of assets and their investment opportunities.

When a relevant directive on the terms of privatization is issued, *Rosimushchestvo* will prepare and post to its official website, for potential investors, the relevant presentation materials with key information on the assets to be privatized, and simultaneously with an information release it will also post more detailed information on the properties earmarked for privatization.

The practice of targeted publication of information on planned biddings and properties to be privatized for the attention of sectoral and strategic investors, professional, sectoral and

entrepreneurial associations and groups, and the publication of relevant information on specialized websites is also becoming more widespread.

With the introduction of a mandatory procedure of posting the information on planned property sales to the official website of the Government of the Russian Federation (torgi.gov.ru) the bidding procedure became more transparent, and the information on assets offered for sale - more readily available. The creation of a single information space has boosted the interest of potential buyers in the state assets put up for sale.

In order to ensure proper regulation and unification of the privatization procedure, detailed methodological recommendations were elaborated and distributed among the territorial agencies changes with the task of sale of properties earmarked for privatization, complete with a set of standardized forms and model documents, so that the process of sale could be conducted in a uniform and transparent format.

The upshot of all the measures implemented by *Rosimushchestvo* and its territorial agencies in 2014, including the preparation for privatization of new property entities, improvement of the sale procedure, interaction with potential investors, provision of a more in-depth information backing, was the marked improvement in the quality of bids put up for sale, with all the relevant information being more readily available.

In spite of the already mentioned decline in the number of sold stakes (or shares in charter capital) in response to the worsening economic situation and plummeting investment activity, the more than usually careful preparation and marketing of assets earmarked for privatization still produced some additional privatization-generated revenue.

The total sum generated by the sale of stakes (or shares in charter capital) in economic societies amounted to Rb 8.05bn (including the revenue to be transferred in Q1 2015). Thus, the planed target has been exceeded 2.7 times (less the proceeds from biggest sales), if we base our estimate on the forecasted revenue target stipulated in the privatization program (Rb 3bn per annum over the period 2014–2016).

The Federal Law on the Federal Budget for 2015 and Planning Period 2016 and 2017 (No 384-FZ) adopted in early December 2014, similarly to the corresponding law approved a year earlier, contains no specific information as to the amount of revenue to be generated by privatization deals neither in the main body of the document, not in the annexes. Only in the explanatory note attached to the text of the draft law submitted to parliament it was stated that the revenue generated by privatization of federal properties was to be treated, alongside government borrowings, as an independent source of funding to cover federal budget deficit.

In this context is it further stated that, in accordance with the forecast plan (program) of federal property privatization for 2014–2016 (hereinafter – privatization program), approved by Directive of the Government of the Russian Federation of 1 July 2013, No 1111-r, it is planned to continue, over the course of the period 2015–2016, to privatize the stakes held by the State in some of the biggest companies that enjoy leading positions in their sectors. These deals will be concluded on the basis of special decisions issued by the RF President and the RF Government. The timelines of these deals and specific privatization methods to be applied to such companies will be determined by the RF Government with due regard for the current market situation, as well as the recommendations of eminent investment consultants.

The amount of federal budget revenue generated by privatization of federal property is forecasted to be, in 2015, at the level of Rb 158.5bn, and in 2016 – Rb 99.9bn, which corresponds to the values stipulated in the explanatory note attached to the text of the draft of the

previous law on the federal budget for the period 2014–2016,[1] submitted to parliament the autumn of 2013.

In this connection it is worthwhile to note the secondary role assigned to the revenue generated by privatization as a source of funding to cover federal budget deficit. Thus, in 2015, the expected privatization- generated revenue will amount to approximately 40% of the total sum of government borrowing, and in 2016 – to approximately 19%.

The target figure for 2017 is Rb 3.0bn, derived on the basis of assumption that, over that period, no decisions will be taken by the RF President or the RF Government concerning sales of the federal stakes in biggest companies, as well as a result of extrapolation of the target for federal budget revenue to be generated by federal property privatization, which is set in the current privatization program (less the value of stakes in biggest companies) at the level of Rb 3.0bn per annum. Of course, after the development of the new privatization program for 2017 and the next few years based on the results of the implementation of the current privatization program (which will happen no earlier than 2016 in accordance with the current wording of the 2001 law on privatization, which incorporates the alterations introduced in 2010, including the norms determining the timelines for a forecast plan (program) of federal property privatization), the privatization-generated revenue target may be significantly adjusted.

It is rather difficult to speak as yet of the revenue targets as real figures (meaning the exact amount of revenue to be generated by privatization deals for the federal budget), because it will actually depend both on the selection of assets earmarked for sale and on their value. The success of the implementation of the forecast plan of federal property privatization will strongly depend on the macroeconomic situation, which in its turn will determine the current situation in the stock market - and consequently, the estimated value of the assets offered for sale. The economic and political background in early 2014 (massive capital outflow, the introduction of various economic sanctions, the plummeting exchange rate of the ruble, the high probability of recession in the Russian economy) was an evident factor that pushed down the asset price.

The negative effect on the privatization program of the potential entry of the Russian economy into recession is obvious. As before, there exist a number of strong risks associated with lack of transparency in the approaches to privatization of big companies and failures to provide the public with proper substantiation of the motives behind one or other government decision, lack of proper analysis of the potential effects of privatization with due regard for its feasibility and the costs associated with alternative solutions, or an analysis of its potential influence on the development of different markets, sectors, regions, and the national economy as a whole.

Besides, it should also be borne in mind that no target has been set in the current privatization program for 2014–2016 for the amount of revenue to be generated by the privatization of state stakes in biggest companies with very high investment attractiveness effectuated by special decisions of the RF Government, whereas in the previous privatization program the target had been Rb 1 trillion for the period 2011–2013.

[1] The available text of Federal Law 'On the Federal Budget for 2014 and Planning Period 2015 and 2016' of 2 December 2013, No 349-FZ (with the alterations and additions introduced by Federal Law of 28 June 2014, No 201-FZ) contains no information as to the amount of proceeds generated by sales of shares and other forms of participation in capital constituting federal property, and it is not separated from the other sources of funding to cover deficit budget, either.

However, the mechanism currently applied in the budgetary process, when the approved text of a budget law contains no stipulations concerning the effect of privatization in the context of budget revenue, opens up unlimited opportunities for any decision-making with regard to privatized assets and the timelines and format for their sale.

Thus, in the current privatization program for 2014–2016, in the framework of privatization of biggest Russian companies, it is mentioned that, before 2016, the share of OJSC *Rosneftegaz* in the charter capital of *Rosneft* is to be reduced to 50% + 1 share.

In this connection, the materials submitted in the course of preparation of the government draft law on the federal budget contain no mention of the size of stake in OJSC *Oil Company Rosneft* that can be sold in 2015. However, the receipt of dividends on shares in OJSC *Rosneftegaz* resulting from the sale of the aforesaid stake in *Rosneft* (Rb 100bn) is stipulated as one of the sources of federal budget revenue - a rather surprising fact. It must be explained that in the materials attached to the draft of federal budget for 2014–2016 submitted last autumn to parliament a much higher (by 4.2 times) figure was to be generated in 2016 for the federal budget in the form of dividends on shares in OJSC *Rosneftegaz* resulting from the sale of a minority stake in *Rosneft* that was, nevertheless, sufficiently big (19.5% minus 1 share, or Rb 423.5bn).

Rosneft's CEOs, as early as last autumn, already spoke of the possibility of selling some of their company's securities at the price of $ 8.1 per share, so that the resulting price of the entire stake would amount to $ 16.8bn. At the same time, such estimates were noticeably higher than the current (for that period) market quotations of shares in *Rosneft*, which had been consistently declining on 2012, when some of its shares had been purchased by the UK oil company *BP* in the framework of a complex deal finally completed only as late as March 2013.[1] It should be reminded that *Rosneft* was taken over by *TNK-BP*, which was owned in equal shares by *BP* and AAR Consortium. One of the transactions in the course of that deal, in addition to the cash payment in the amount of $ 16.65bn, was the transfer to *BP* of 12.84% of shares in *Rosneft* (entered on *Rosneft*'s balance sheet) and the purchase, for $ 4.87bn, of another 5.66% of its shares from *Rosneftegaz*, with the result that the British oil company acquired a nearly 20% stake in *Rosneft*.[2]

Another factor exerting a strong influence on the quotations of shares in *Rosneft* have been the plummeting world prices for oil and the worsening financial situation faced by Russian companies as a result of sanctions that restricted their access to foreign capital markets. *Rosneft*'s claims to a big chunk of the National Welfare Fund (which the oil company said it needed for refinancing its debt and maintaining its usual oil extraction rate) resonated nationwide. According to the RF Minister of Economic Development, the preparations for the sale of a stake in *Rosneft* are nearly over, while the RF Minister of Finance spoke of an early sale of these assets.

By its Directive of 27 November 2014, No 2358-r the RF Government agreed to alienate its shares in OJSC *Oil Company Rosneft* at a price no lower than their market price determined on the basis of a report on their market valuation prepared by an independent expert, and no lower than the price of the first public offer of shares in *Rosneft* 2006.[3]

[1] Sechin estimated the price of the stake in *Rosneft* offered for privatization to be $ 16.8bn. RBC, 23 October 2014.
[2] AAR Consortium's share in *TNK-BP* was bought for $ 27.73bn.
[3] The document stipulates the ceiling for the number of shares to be thus alienated, but not their relative share in the company's capital.

The preparatory work for the privatization deals involving the assets of the other biggest companies included in the current privatization program is currently underway, at different stages of completion, while the basic contours of most of these deals are not quite clear.

Among the 7 companies earmarked for a complete withdrawal of the State from their capital over the period 2014–2016, the entities to be responsible for the execution of the government order for the organization and effectuation, on behalf of the RF, of the alienation of shares in federal ownership have been contracted with regard for 4 companies.

For OJSC *Vnukovo Airport* (up to 74.74% of shares) and *Vnukovo International Airport* (up to 25% + 1 share), this will be *Renaissance Broker LLC* - appointed in late 2013; for OJSC *Rostelecom* (up to 43.07% of shares) – CJSC *Sberbank CIB* (appointed in February 2014); for OJSC *Sheremetyevo International Airport* (SIA) (up to 83.04% of shares) – Deutsche Bank LLC (appointed in mid-2014). In this connection, the plans for these three airports must take into account the decisions of the RF President and the Government concerning the strategic development of Moscow's airport system.

Meanwhile, according to information released to the mass media, it is planned to establish an asset manager for *Sheremetyevo International Airport* (SIA), which will be responsible, in addition to the stake in SIA (more than 83%) and some other related assets, also for the contribution made by one of Arkady Rotenberg 's companies - TPS *Avia* Holding Ltd, which in the autumn of 2013 was been chosen as an investor in the construction of the new terminal in the northern zone and an underpass between the terminals, which will connect the northern and southern zones. The share of *TPS Avia* in the consolidated SIA may exceed 50% of ordinary shares, on condition that the company guarantees the fulfillment of its obligations relating to the construction of Terminal B, the underpass between the terminals, the cargo complex and the new aircraft fueling complex. The State will hold a stake of 25% - at least until all the obligations with the regard to the airport reconstruction are fulfilled. Possibly, private shareholders will have the option of buying out the state stake, but with a premium of 10–35%, which will be increased to 50% if they fail to fulfill any of their obligations.[1]

The creation of a new legal entity has opened the way towards consolidating the airport assets of *Sheremetyevo International Airport,* with a potential for a joint shareholder agreement between the State and a private shareholder. In principle, the same scheme can be applied to both *Vnukovo* airports.

As for OJSC *Rostelecom*, the issues as to the structure and methods of alienation of its shares currently in federal ownership can be resolved after the completion of the phase of creation of an integrated communications network project.

As for OJSC *Sovkomflot* [Modern Commercial Fleet], where the state can be reduced to 25% minus 1 share, this company in collaboration with Deutsche Bank LLC, which had been appointed in 2012 for the organization of the relevant deal and alienation of the shares currently in federal ownership, is carrying out the preparatory work and determining the best timelines for the placement of these shares, with due regard for the current situation in the market.

The situation around the state stake in OJSC *Novorossiysk Commercial Sea Port* (NCSP) (20%) is also rather complicated. The task of organizing the deal was assigned, also in 2012, to UBS Bank LLC. In the autumn of 2014, *Transneft* (which then had under its control 10.5% of shares in *Novorossiysk Commercial Sea Port* and had become manager of the stake held by

[1] Kommersant: *Gosudarstvo khochet sokhranit' 25% v budushchei UK 'Sheremetievo'* [The State Wants to Retain a Stake of *25%* in the Future Asset Manager Company Sheremetyevo]. 28 October 2014, RIA Novosti.

Russian Railways (5.3%)), came forth with the initiative that it should also take over the management of the state stake. Meanwhile, the controlling stake (50.1%) is held by *Transneft* jointly on a parity basis with «Сумма» Group. [1]

After the successful placement on the stock exchange market of 16% shares in *Alrosa* (two stakes, 7% each, in federal and republican ownership, and 2% of quasi-treasury shares controlled by *Alrosa* itself) and the conclusion of a shareholder corporation agreement between the Russian Federation and the Republic of Sakha (Yakutia), the next step in the evolution of the company's corporate management, in the autumn of 2013, was the signing of a special agreement on the consolidated sale with the participation of an independent seller, in the second half-year of 2015, of the stakes in OJSC Diamond World held by the Russian Federation (52.4%) and *Alrosa* (47.4%). Meanwhile, the company replaced its CEOs, and under their management the company considerably increased its proceeds, net profit, and dividends paid to the federal budget.[2]

In view of the experience already accumulated in the course of implementing the privatization program and the ongoing activity aimed at devising new approaches to the system of asset sales, this year we can expect an even greater effect of the involvement in this activity of private sellers and organizers of federal property sale deals.

In 2014, *Rosimushchestvo* signed an agency agreement with OJSC 'Auction House of the Russian Federation' (OJSC *RAD*), which had already participated in federal property privatization deals in the framework of the forecast plan (program) of federal property privatization for 2011–2013, and with Limited Liability Company Investment Company of Vnesheconombank (VEB Capital). To these two companies, the right to effectuate the sale of a total of approximately 200 stakes was transferred, and they began the preparation of the relevant assets for sale.

The privatization process should be boosted by the alterations introduced last year into Russia's legislation on privatization.

First, by the alterations introduced in the 2001 Law on privatization, the list of property categories to which that law was not applicable was expanded (to 18 categories).

The following property categories were added to the list: (1) movable property (except shares in charter (or share) capital of economic societies and partnerships) transferred into state ownership in accordance with RF legislation or in the inheritance procedure, and (2) federal property in the event of its exchange for Olympic facilities of federal importance in private ownership, to be determined in accordance with Federal Law Federal Law 'On Amendments to Certain Legislative Acts of the Russian Federation in connection with Organizing and Holding the 22nd Winter Olympic Games and 11th Winter Paralympic Games in 2014 in Sochi and the Development of the City of Sochi as an Alpine Resort', or for property entities created under the agreements on the construction of Olympic facilities of federal importance concluded with the State Corporation for Constructing Olympic Facilities and Developing the City of Sochi as an Alpine Resort. Besides, a more detailed definition of the category of property used for promoting housing construction projects in the framework of the specially created federal fund – the Russian Housing Development Foundation (RHDF).

[1] *Transneft prosil Putina otdat' ei v upravlenie gospaket NMTP* [*Transneft* Asks Putin to Let it Manage the State Stake in NCSP]. RIA Novosti, 15 October 2014.
[2] www.rosim.ru, 14 October 2014, 22 September 2014.

Secondly, the 2001 Law on privatization was augmented by a new article (Article 30.2), whereby the procedure for privatization of property entities under concession agreements is regulated.

In accordance with the general norms, the privatization of property that is part of a property entity subject to a concession agreement is effectuated after the expiry of such an agreement in the procedure and by methods envisaged by the RF Law on Privatization.

However, if a property entity listed as is part of property subject to a concession agreement is included in the privatization program in all the tiers of public authority for the period corresponding to the period of the concession agreement's expiry, the concessioner enjoys a priority right to buy out the said property entity.

If the concessioner consents to take advantage of that opportunity, the purchase and sale contract concerning the said property entity would be concluded no later than within 60 calendar days from the date of receipt of the proposal that such a contract should be concluded, and (or) a draft of the purchase and sale contract; or no later than within 30 calendar days after the expiry of the said concession agreement, depending on which date occurs later. Prior to that, the concessioner should receive copies of the decision concerning the terms of privatization of the said property entity, the proposal concerning the conclusion of the purchase and sale contract, and the draft of the contract.

The value of a property entity is to be understood as its market value determined in accordance with prevailing RF legislation on property valuation procedures; no transfer of the priority right to purchase a property entity in this instance is allowed.

Thirdly, the privatization mechanism to be applied to cultural heritage properties (CHP) is now described in detail. The specific features of this type of deals are stipulated in Article 29 of the Law on privatization, which has now been approved in a new wording.

The cultural heritage properties (CHP), listed in the Single State Register of Cultural Heritage Properties (Historic and Cultural Monuments) of the Peoples of the Russian Federation, have now been added to the category of assets that can be privatized in the framework of a tender (previously these could only be shares (or stakes) amounting to more than half of an OJSC's (or LLC's) capital).

In addition to the tender procedure, CHPs may be privatized as part of a property complex held by a unitary enterprise reorganized into an OJSC or LLC, or by way of transfer of a CHP as a contribution to the charter capital of an OJSC, on condition of an encumbrance on its title, whereby its upkeep and use should be subject to regulations applied to all listed cultural heritage properties, so that they be properly preserved, and also accessible to the public. In the previous wording of the law it had been stipulated that any methods could be applied in the course of privatization of such assets.

The decision concerning privatization of a CHP listed in the register of cultural heritage properties must contain information concerning its status as a listed CHP.

To the document formalizing that decision, the following documents must be attached: a copy of the deed for preservation of historic property for the CHP approved in the procedure established by Article 47.6 of the Federal Law of 25 June 2002, No 73-FZ 'On Cultural Heritage Property Entities (Historic and Cultural Monuments) of the Peoples of the Russian Federation', and the passport of a cultural heritage property entity as envisaged in Article 21 of the Federal Law; and until the approval of the deed for preservation of historic property (Item 8

of Article 48) – a copy of another protection document,[1] as well as the passport of a cultural heritage property entity (if applicable).

In the agreement concerning the alienation, during a privatization procedure, of a CHP listed in the register of cultural heritage properties it must be stipulated, as an important encumbrance, that the new holder of the title to the entity being privatized must comply with the requirements stipulated in the relevant deed for preservation of historic property, and in absence of such a deed – to comply with the requirements stipulated in another protection document, as envisaged in the Federal Law 'On Cultural Heritage Property Entities…'.

If the aforesaid agreement does not contain any such stipulations, the privatization deal involving a CHP listed in the register of cultural heritage properties is to be deemed to be null and void.

In the event of privatization of a CHP by way of sale in the framework of a tender, the conditions of that tender must envisage the buyer's obligation to preserve the property entity in accordance with a relevant deed for preservation of historic property, and in absence of such a deed – in accordance with another protection document, as envisaged in the Federal Law 'On Cultural Heritage Property Entities…'.

As for those property entities listed in the register of cultural heritage properties that have been recognized to be in an unsatisfactory condition in accordance with the Federal Law 'On Cultural Heritage Property Entities…', which are being privatized by way of sale in the framework of a tender by an empowered body of state authority, the related parties must submit to the relevant property management body the business blueprints for the cultural heritage property entity preservation project, approved in accordance with the aforesaid Federal Law (at the stage of blueprints for restoration work on the site); these blueprints are included into the tender documentation package.

In the event of only one application being submitted in response to the tender offer for the acquisition of a cultural heritage property entity in an unsatisfactory condition, the purchase and sale contract may be concluded with that bidder.

The initial (minimum) selling price of a cultural heritage property entity in an unsatisfactory condition is to be established in the amount of Rb 1, and the transfer of that property entity to the tender bid winner and the formalization of the title thereto are to be effectuated in the procedure established by prevailing RF legislation and the relevant purchase and sale contract, after the tender bid winner has complied with the terms of the tender.

That contract, in addition to the requirement that the terms stipulated in the relevant historic preservation deed or another historic preservation should be complied with, must also stipulate the following important conditions: (1) the responsibility of the new owner of the CHP in an unsatisfactory condition to fulfill, in full and in due time, the terms of the tender and (2) the annulment of the purchase and sale contract in the event of violation, by the new owner of the CHP, of the relevant terms stipulated in the contract.

In the latter case, the CHP must be returned to the public entity that had initiated its sale without reimbursing its value to the said owner, including the cost of inalienable improvements made to it, and without any compensation for the costs associated with the execution of the purchase and sale contract.

The period of fulfilling the terms of a tender should not be longer than seven years.

[1] These can be: a preservation lease agreement; a preservation agreement or preservation deed for a historic or cultural monument; a preservation deed signed by the holder of title to a cultural heritage property entity or a preservation deed signed by the user of such an entity.

Given the fact that these alterations to legislation focus on sale of a CHP in the framework of a tender, the mechanism envisaged for this method of privatization has been adjusted as follows: the provision concerning the instances when only one bidder applies for participation in a tender has been introduced (the general norm stipulates that in such an instance the tender should be canceled), the timelines for the transfer of title to property to the tender bid winner have been changed (the general norm stipulates that this should be done no later than within 30 days), as well as the timelines for fulfilling with the terms of the tender (the general norm stipulates that this period should not exceed 1 year). All these instances are now subject to the stipulation 'unless otherwise stipulated by law.'

The list of conditions applicable to such a tender has been extended and now includes the accomplishment of work associated with the preservation of a CHP listed in the register of cultural heritage properties, in the procedure established by the Federal Law of 25 June 2002, No 73-FZ 'On Cultural Heritage Property Entities (Historic and Cultural Monuments) of the Peoples of the Russian Federation'. The definition of the terms of a tender for the implementation of projects designed to involving property entities for social and cultural use and housing-and-utilities property entities: these no longer include any mention of restoration projects or cultural heritage properties.

It is evident that these adjustments are oriented to lifting the existing restrictions on privatization. However, their potential consequences appear to be dubious.

On the one hand, the privatization procedure to be applied to cultural heritage properties (CHP) is defined in sufficient detail. For the first time, privatization legislation has been augmented by a norm whereby a sale 'for Rb 1' is envisaged – which is usually applied to sale of assets with low liquidity. In this case, this is the initial (or minimum) selling price of a CHP deemed to be in an unsatisfactory condition. In principle, such cases could be observed in recent years in actual practice - for example, in Moscow and Moscow Oblast, but that was the lease of premises at as symbolic rate (Rb 1 per m² of floor area) after the completion of a certain amount of repair and restoration work.

On the other hand, the basic norms of privatization legislation applicable to such assets have been significantly revised in the part relating to the terms of a tender (the possibility of a tender with the participation if only one bidder, the transfer of property to the tender bid winner prior to the fulfillment of the relevant conditions, and manifold extension of the period established for the fulfillment of these conditions). We find the following innovations to be rather alarming: the presence of numerous reference norms (reference to the stipulations in the Federal Law 'On Cultural Heritage Property Entities…'); the criteria for estimating the current condition of a CHP; the less detailed description (by comparison with the norms determining the instance of sale in the framework of a tender) of the requirements to be presented in an event of CHP being privatized as part of a property complex held by a unitary enterprise being reorganized into an OJSC (LLC), or a CHP being transferred as a contribution to the charter capital of an OJSC; and the absence of any direct norms concerning historic preservation deeds (which had been stipulated in the previously applied wording of the Law).

At present, *Rosimushchestvo* is accomplishing the registration of RF titles to cultural heritage properties (CHP) transferred to federal ownership as a result of delineation of the rights to CHPs representing historic and cultural monuments of national (nationwide and republican) importance as of 27 December 1991.

This rather intricate and time consuming task was carried out by *Rosimushchestvo* in cooperation with regional and municipal authorities over the period from 2007 through 2014. On

the basis of applications submitted by 169 RF subjects and municipal formations, *Rosimushchestvo* drew up the lists of those entities that were to remain federal property, and the lists of properties to be transferred to other level of public ownership, which were then approved by the RF Government. In April 2014, the delineation of ownership rights was completed, as a result of which 1,123 CHPs were transferred to regional and municipal ownership, while 619 CHPs remained in federal ownership; of these, 330 CHPs had been registered by the end of 2013. The process of registration of RF titles to the aforesaid properties is to be completed by 2018.[1]

In 2014, *Rosimushchestvo* also completed the inventory records of CHPs consolidated by right of operative management to a budget-funded federal state institution, *The Agency for the Management and Use of Historic and Cultural Monuments* (AUPIK), which is subordinated to the RF Ministry of Culture. On the basis of their revision, after their total number (2,100 units) has been determined, as well as their current condition and degree of involvement in economic turnover, a single register of historic and cultural monuments will be compiled, which will contain all the necessary information on each of the registered CHP. The newly identified properties held by the RF treasury will be transferred to the AUPIK .[2]

As for privatization of property entities under a concession agreement, the suggested mechanism is in many ways similar to that applied with regard to the execution of the priority right of shareholders (or participants) in economic societies to acquire additional shares (or stakes), and it does not give rise to serious objections. In actual practice, some grounds for a collision may arise in an event of participation of several concessioners in one project.

Any further alterations to privatization legislation may occur as a result of the approval, by parliament, of the recently submitted draft law, which was elaborated in cooperation with the RF Investigative Committee to reflect the declared official course towards de-offshorization of the Russian economy.

This draft law envisages a ban on participation in privatization for the citizens of countries situated in offshore zones, for the organizations registered there, and for Russian legal entities controlled by these entities, in order to ensure a transparent privatization process and eliminate any possibilities for concealing the beneficiaries of privatized properties. Besides, the new draft law is designed to introduce criminal responsibility for unlawful control exercised by a foreign investor over a Russian enterprise, if the latter is of strategic importance for this country.[3]

For its part, the RF Ministry of Economic Development has voiced some concerns as to the possibility of narrowing the range of potential participants in the privatization process and thus limiting the opportunities for competition. There also exists the risk of subsequent resale of the assets thus purchased to an offshore entity. In this connection it should be noted the draft law lacks the previously proposed norms concerning criminal responsibility of property valuators for issuing property value reports based on falsified data, or criminal responsibility for issuing false expert's estimations of such reports, or criminal responsibility for conspiracy of the organizers of bidding. However, there is still one new norm whereby law enforcement

[1] www.rosim.ru, 6 May 2014.
[2] www.rosim.ru, 31 July 2014, 5 March 2015.
[3] *Prichiny i sledstvie. Interv'iu s predsedatelem SK RF A. Bastrykinym* [Causes and effect. An Interview with Chairman of the RF Investigative Committee A. Bastrykin]. // *Rossiiskaia gazeta* [The Russian Newspaper], 15 January 2015, No 4 (6575), pp. 1, 6.

agencies are to be endowed with additional powers to exercise control over the process of privatization during its preparatory phase.[1]

6.1.3. The Presence of the State in the Economy and Structural Policy[2]

Last year's major development in this sphere probably was the court ruling that the major stake in JSC *Bashneft* (71.6%), previously held by SSA *SISTEMA* JSFC, should be transferred back to Russian Federation ownership. According to the most widespread view of the situation around *Bashneft,* this happened because of malpractice and the violations of the law committed in the course of its privatization.[3]

The known circumstances of this case are as follows: (1) lack of any violations from the point of view of tax legislation, (2) the use as relevant arguments, in addition to the accusation that this in fact had been legalization of property obtained by applying criminal methods, the rather vague stipulations as to the delineation of ownership rights between the federal center and RF subjects in the initial phase of peform in the ownership system and the resulting division of powers, (3) the transfer of the stake in *Bashneft* directly to the State (represented by *Rosimushchestvo*), (4) there is a chance that the losses incurred by the party believed to be an honest buyer will be compensated.

Some of the Russian government officials (for example, the RF Minister of Energy) have already voiced an opinion that *Bashneft* can be included in the privatization program (while the State will retain a controlling stake). This would effectively mean re-privatization, which fits into the formula 'renationalization and subsequent privatization by a transparent method'. Some experience in this direction has been accumulated in Russia's domestic practice over the past one-and-a-half decade in connection with the revision and cancellation of several privatization deals - as a rule, due to failure, on the part of the new property owners to properly fulfill their investment liabilities and other assumed responsibilities. One such example can be the stake in OJSC *Apatit,* Russia's biggest producer of chemical raw materials (20% of charter capital), which in 2008 was transferred back to the State. In 2012, that asset was purchased by PHOSAGRO for Rb 11.1bn.

At the same time, it is still too early to speculate about the future prospects of *Bashneft*, which over the entire period of its functioning has remained an oil company of regional importance, in view of the not-too-bright prospects of the national fuel and energy complex and Russia's economy as a whole. Besides, the State has only recently assumed the role of the principal shareholder in joint-stock companies. A distant echo of the transfer of ownership rights to the major stake in *Bashneft* was the suit filed by *SISTEMA* against OJSC *Ural Invest*, from which that stake had been bought in 2009. The first instance court ruled that *Ural Invest*

[1] *FSB khotiat nadelit' pravom proveriat' uchastnikov privatizatsii* [They Want to Endow the FSS with the Right to Verify the Participants in Privatization], RBC.Daily, 11 November 2014.

[2] The issue of the place and role of state entrepreneurship in the framework of different approaches to regulation and development of the economy at the macro and micro levels is dealt with in Radygin A. D., Entov R. M. Government Failures: Theory and Policy // *Voprosy Ekonomiki* [Issues of Economics], 2012, No 12, pp. 4–30; Radygin A. D., Simachev Yu. V., Entov R. M. State-owned Company: Who Is to Blame When It Fails - the State or the Market? // *Voprosy Ekonomiki* [Issues of Economics], 2015, No 1, pp. 45–79.

[3] The example of Bashkortostan was already used to study at length the legal issues arising in connection with privatization deals about a decade ago. See Migranov S.D. *Nedeistvitelnost sdelok privatizatsii gosudarstvennogo i munitsipalnogo imushchestva* [Annulment of Privatization Deals Involving State and Municipal Property. – M.: Logos, 2005. – 240 p.

must pay the enormous sum of Rb 70.7bn, although it is very likely that the court proceedings will be continued.[1]

Some changes in the past year were also demonstrated by the list of strategic enterprises and joint-stock companies.

In 2014, this list was augmented by one unitary enterprise (International Information agency *Russia Today*) and one open-end joint-stock company (*United Aerospace Corporation* (UAC)), the latter representing a big vertically integrated structure (VIS) (that had been put together since the previous year), similar to the nationwide holding companies in the aircraft industry (UAC) and the shipbuilding industry (*United Shipbuilding Corporation*). Meanwhile, 4 FSUEs (including *Moscow Canal* and *GOZNAK*) and 4 OJSCs were struck off the list of strategic organizations.

The latter are those big, previously established VIS which are transferred into 100% ownership of State Corporation (SC) *Rostechnologies* [Russian Technologies] (in late July 2014 renamed *Rostec* Corporation) as the Russian Federation's property contribution alongside with Kaliningrad Amber Combine (reorganized into OJSC Kaliningrad Amber Company) and one research institute, the latter, after its reorganization and subsequent transfer to *Rostec* Corporation*,* is earmarked for transfer, as a 100% stake, to the charter capital of OJSC *Sistemy upravleniia* [Management Systems][2] as payment for the placement of additional shares by that joint-stock company by way of increasing its charter capital.

Besides, *Rostec* Corporation transfers stakes in another 65 OJSCs, of which 53 stakes are to become contributions to the charter capital of 4 VISs, which have been struck off the list of strategic organizations, as a form of payment for the placement of additional shares by those joint-stock companies by way of increasing their charter capital. Most of the state stakes being transferred to *Rostec* Corporation can be described as minority stakes: only in 17 out of these 65 OJSCs the State held stakes amounting to between 25% and 50%, and only in 3 companies the state stakes amounted to more than half of their charter capital.

Since the decision concerning the establishment of State Corporation *Rostechnologies* in mid-2008, it received shares in 225 JSCs (out of a total of 227 JSCs earmarked for such transfers) and in another 155 JSCs created as a result of reorganization of unitary enterprises (from among those JSCs that had been created by way of privatizing 181 FSUEs).[3]

One more alteration to the list of strategic organizations consists in the permission issued to *Aeroflot* that it may increase its charter capital by placing an additional issue of shares on condition that the stake held by the Russian Federation remains no less than 50% of votes plus one voting share. However, no big shifts will occur in the capital structure of Russia's national airline because previously the amount of the state stake was determined to be 51.17%. At present, OJSC *Aeroflot - Russian Airlines,* in cooperation with specially selected investment banks, is implementing preparatory measures before placing its shares on the MICEX - with due regard, among other things, for the current situation on the stock market and the best time for such a placement.

[1] By this court ruling, the sellers of *Bashneft* were to pay Rb 70m to *SISTEMA*, see www.m.lenta.ru, 16 February 2015.

[2] OJSC *Sistemy upravleniia* [Management Systems] is one of the 4 vertically integrated structures to be transferred to *Rostec* Corporation after having struck off the list of strategic organizations.

[3] 2014 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016, www.rosim.ru, 19 February 2015.

It should be reminded that this denationalization scheme is based on the norms introduced into the law on privatization in the summer of 2006, and it has already been applied to a number of companies. Thus, in 2013, permission was granted to OJSC *ROSSETI*, or Russian Grids, to apply a similar method - although with a higher government corporate control threshold (61.7%).

Another company allowed to reduce the state stake in its charter capital by means of an additional issue of shares will be OJSC Roskartografia (Russian Federal Service of Geodesy and Cartography).[1] *Rosimushchestvo* suggests that strategic investors should acquire up to 49% of shares in that VIS by purchasing shares of the new issue, which will be placed, by closed subscription, with the possibility of using the proceeds for investing in the company's development.

In 2014, in the framework of creation of vertically integrated structures (VIS), the measures mapped in four Presidential Executive Orders concerning 4 VIS were fully implemented (OJSC Concern *Granit-Electron*, *Rosgeo* [Russian Geology], Tactical Missiles Corporation JSK, and *Rosatom State Nuclear Energy Corporation*). Besides, another 13 Presidential Executive Orders and 3 directives of the RF Government were implemented in the same field.

In many of these cases this was the implementation of relevant corporate governance decisions made not in 2014, but in earlier periods. This is true for the *United Shipbuilding Corporation* (USC) (2010), OJSC *Rosspirtprom* and *Russian Hippodromes* JSC (2011), *TsSKB Progress* [State Research and Production Space Centre 'Progress'], *OPK Oboronprom*, FSUE Moscow Institute of Thermal Technology and *Russian Railways* (2012), RSK MiG (Russian Aircraft Corporation MiG**)**, JSC Research and Production Corporation *UralVagonZavod*, *United Aerospace Corporation* (2013).[2]

As demonstrated by these examples, the creation of a VIS is by no means a one-time event, the length of the process depending first of all on the volume of assets to be pooled.

One vivid illustration is the prompt implementation of Presidential Executive Order of 21 February 2014, No 103 on the transfer of 100% stake minus 1 share in JSC *Zarubezhgeologia* to *Rosgeo*'s charter capital, the result of which was the emergence of a holding company comprising 38 enterprises, and the example of *Rosatom State Nuclear Energy Corporation*; in the latter case, the previous year's decision on the reorganization of one FSUE into an OJSC with the subsequent transfer of the entire 100% stake was implemented simultaneously with the similar decisions adopted in 2013 concerning 4 other enterprises.[3]

As for the decisions made in 2014 with regard to development of other integrated structure, in this connection it should be noted that, in addition to the expansion of *Rostec* Corporation described above, some complicated property integration schemes were suggested for OJSC Concern *VKO Almaz–Antey* and the *United Shipbuilding Corporation* (USC).

[1] *Roskartografia* is a vertically integrated structure which unites 32 affiliated OJSCs and holds stakes of 100% minus 1 share each in their charter capital, thus ensuring its presence on all the markets for geodesic and cartographic products across Russia.

[2] For a more detailed discussion of issues involved in the creation of *United Aerospace Corporation*, see Malginov G., Radygin A. Public sector and privatization (Section 6) // Russian Economy in 2013. Trends and Outlooks (Issue 35). Moscow, IEP. 2014, pp. 404–408, pp. 385–417.

[3] Since the moment of its creation, *Rosatom State Nuclear Energy Corporation*'s capital has many times been augmented by various assets. Thus, last year the procedure of transfer to *Rosatom*, by way of property contributions, of the stakes in JSCs created as a result of reorganization of 6 FSUEs was completed, the actual decision concerning these transfers having been made as early as 2012.

The state stakes in 15 OJSCs (of which two are blocking stakes, and the remaining ones are minority stakes) will be transferred to the charter capital of OJSC Concern *VKO Almaz–Antey*. In addition, 1 share of each of 30 OJSCs will be transferred to the charter capital of OJSC *Zavod Navigator*, while one its own shares will go to the charter capital of the Russian Institute of Radionavigation and Time (RIRT).

The plan of transferring to the charter capital of OJSC Concern *VKO Almaz–Antey* of the 100% stakes in OJSC *Zavod Navigator* and the Russian Institute of Radionavigation and Time was abolished after the issuance of Executive Order of the RF President of 5 February 2015, No 56 to the effect that OJSC Concern *VKO Almaz–Antey*, where all 100% of shares are in federal ownership, should be renamed as Aerospace Defense Concern *Almaz–Antey*.

In this connection, to its charter capital a 100% stake minus one share in OJSC Space Special-Purpose Systems Corporation *Kometa* will be transferred to the charter capital of Aerospace Defense Concern *Almaz–Antey*, while the charter capital of *Kometa*, in its turn, will be augmented by a 100% stake minus one share in the JSC created after the reorganization into a joint-stock company of one FSUE - research institute; by a blocking stake in one OJSC; and by one share in another OJSC.

Another asset transferred to *Almaz–Antey* (in its new format) will be 74.5% of shares in OJSC *Zavod Navigator*, whose charter capital will include one share in *Kometa* and 1 share in the aforesaid JSC to be created as a result of reorganization of the FSUE - research institute. The shares in OJSC Russian Institute of Radionavigation and Time, similarly to shares in OJSC *Zavod Navigator*, are earmarked for transfer to the charter capital of *Almaz–Antey* after the completion of the procedures described above.

In order to promote of the shipbuilding industry in the Far East and boost the development of the continental shelf of the Russian Federation in the Far East and the Arctic region, the RF Government has undertaken the sale of a majority stake (75% minus two shares) in OJSC Far Eastern Shipbuilding and Ship Repair Center (Vladivostok) and the 100% stake minus one share in OJSC *30 sudoremontnyi zavod* [Ship Repair Works No 30] (Primorsky Krai) (previously transferred to the charter capital of the *United Shipbuilding Corporation* (USC)). These assets are to be sold to CJSC *Sovremennye tekhnologii sudostroeniia* [Modern Shipbuilding Technologies] (Moscow) at a price no lower than their market price determined on the basis of a report prepared by an independent valuator, while the USC will keep a blocking stake (25% plus one share) in OJSC Far Eastern Shipbuilding and Ship Repair Center. At the same time, the USC's charter capital, by way of payment for the additional shares placed by that OJSC by way of increasing its charter capital, will be augmented by big stakes in OJSC *Dal'nevostochnyi zavod Zverda* (*Zverda* Shipyard) (Primorsky Krai, 53.5%) and Khabarovsk Shipbuilding Plant Company» (approximately 43%).

6.1.4. The Issues of Management of Economic Subjects Operating in the Public Sector of the National Economy

Unitary Enterprises

These economic subjects are regulated by the norm (introduced in late 2012) applied to JSCs with state stakes, whereby their profits should be transferred to the state.

By Decree of the RF Government of 17 April 2014, No 351 alterations were introduced into the current Rules for the development and approval of economic activity programs and for determining the part of profits generated by federal state unitary enterprises (FSUE) that

should be earmarked for transfer to the federal budget (approved by RF Government Decree of 10 April 2002, No 228).

The previous definition of the procedure of determining the amount of profit generated by a FSUE and earmarked for transfer to the federal budget, as well as the amount of profit to remain at the disposal of the enterprise after the deduction of taxes and other mandatory payments (reduced by the amount needed to cover the costs associated with the implementation of measures designed to ensure the enterprise's development and approved as part of its economic activity program for a current financial year (which are funded by net profits), was augmented by the stipulation that this amount should be no less than 25% of the amount of profits to remain at the disposal of the enterprise after it has paid taxes and other mandatory payments, if not otherwise specified by acts issued by the RF Government. The corresponding alterations were also made to the wording of Decree of the RF Government of 3 December 2004, No 739, whereby the powers of federal bodies of executive authority with regard to their ownership rights to property held by FSUEs are regulated.

Some alterations were also made to Articles 113 and 114 of the RF Civil Code (which regulate unitary enterprises) without altering the basic features of that organizational legal form of an enterprise.

These alterations can mostly be boiled down to the introduction, into the RF Civil Code, of direct references to the special Federal Law On State and Municipal Unitary Enterprises of 14 November 2002, No 161-FZ, designed to regulate the grounds for and procedure of their creation and reorganization, their rights to property consolidated to them, their charter, and their legal status. With regard to the procedure of creating a unitary enterprise, the new stipulation appeared to the effect that this should be done on behalf of a public legal entity. At the same time, the RF Civil Code now does not contain any mention of the absence of responsibility, in a general case, of the owner of property held by a unitary enterprise by right of economic jurisdiction for the liabilities assumed by that enterprise; and Article 115 regulating unitary enterprises operating by right of operative management was altogether abolished from 1 September 2014.

Economic Societies with State Participation

When speaking of the issues involved in the management of economic societies with state stakes, we can point to the following main trends.

As demonstrated by the outcome of the annual general shareholder meeting 'campaign' of the corporate year 2014, by the end of summer the compliance discipline had been at a high level, the rate of meetings actually conducted amounting to 94.33%, including 92.16% among the total number of JSCs entered in the Special List approved by directive of the Government of the Russian Federation of 23 January 2003, No 91-r (where the standpoint of the State as a shareholder on a number of the most important issues is to be determined at the government level), 98.34% among the JSCs off the Special List (where the RF is the sole shareholder), and 93.75% among those JSC that are not included in the Special List and with state stakes amounting to more than 2% but less than 100% of their charter capital.

Judging by the results of the general shareholder meetings, they dealt with the issue of establishing the managerial bodies of companies with state participation. In this connection it should be reminded that, according to the existing corporate management tradition in joint-stock companies with state stakes, all the members of a board of directors elected by votes based on stakes held by the State by shareholder right can be divided into several groups:

(1) representatives of the interests of the State, who are civil servants obliged to vote in accordance with the stakeholder's directives, (2) representatives of the interests of the State, who are not civil servants (professional attorneys), act on the basis of a contract and are obliged to vote in accordance with the stakeholder's directives only on a limited range of issues, voting as they themselves see fit on all the other issues, (3) independent directors voting on the basis of their own professional experience and judgment, who have been appointed by applying the established personnel selection criteria. For the sake of simplicity all the persons belonging to the second and third groups are called 'professional directors'.

In accordance with the decisions of the RF Government issued with regard to general shareholder meeting, in the course of the corporate year 2014 a total of 391 candidates to the boards of directors (supervisory boards) of JSCs entered in the Special List were approved, including 197 professional attorneys (out of a total of 206 persons recommended by the special Commission (attached to *Rosimushchestvo*) assigned the task of selection of independent directors, representatives of the shareholder interests of the RF, and independent experts to be elected to the managerial and control bodies of joint-stock companies), 90 independent directors (out of a total of 93 recommended persons) and 104 civil servants (although only 101 persons had been recommended by the Commission).[1]

Over the last 5 years, the structure of state participation in the managerial bodies of JSCs entered in the Special List has undergone noticeable changes *(Table 6*).

Table 6

The Movement and Structure of State Representatives in the Managerial and Control Bodies of JSCs Entered in the Special List, in 2010–2014

Year	JSC, units	State representatives in boards of directors (supervisory boards)								In audit commissions: independent experts, number
		total		Civil servants		Professional attorneys		Independent directors		
		number	%	number	%	number	%	number	%	
2010	49	386	100.0	193	50.0	117	30.3	76	19.7	…
2011	51	416	100.0	181	43.5	150	36.1	85	20.4	…
2012	57	434	100.0	141	32.5	205	47.2	88	20.3	15
2013[a]	63	452	100.0	127	28.1	228	50.4	97	21.5	27
2014[b]	51	391	100.0	104	26.6	197	50.4	90	23.0	45

[a] – including OJSC *Novorossiysk Commercial Sea Port*, where only civil servants were elected to the board of directors and audit commissions;

[b] – less those 4 JSCs entered in the Special List, for which no relevant decisions had yet been approved by the RF Government.

Source: Year-end 2013 Report on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC 's Management ('Golden Share'); authors' calculations .

While in 2010 civil servants constituted half of the total number of state representatives in boards of directors, in the corporate year 2014 their share was only about 27%. Their place had been taken by professional attorneys, whose share in 2013–2014 was above 50% (vs. 30% in 2010), while in absolute terms their number increased 1.7–1.9 times. The growth of the share of independent directors was more modest: from less than 20% in 2010 to 23% in 2014, while in absolute terms their number increased 1.2–1.3 times. On the whole, over the

[1] The final decisions concerning the appointment of candidates to the managerial and control bodies of JSCs entered in the Special List are approved by the RF Government. By the end of summer, no such decisions had yet been approved for 4 companies.

period 2010–2014, the group of JSCs included in the Special List demonstrated stable growth in the number of professional directors, as a result of which their number per company increased from 3.94 to 5.63, while the number of civil servants dropped from 3.94 to 2.04. In the structure of audit boards in 2014 civil servants prevailed, amounting to approximately 3/4 (or 133 vs. 45 independent experts). However, the total number of the latter over the past 3 years tripled, while their number per company increased from 0.26 in 2012 to 0.9 in 2014.

As for the structure of the managerial bodies of companies not included in the Special List, it should be said that in 842 JSC, where the possession of right to a controlling or blocking stake ensured that state representatives took up a total of 3,920 positions in the boards of directors (or supervisory boards) of JSCs,[1] more than half of them were professional directors (2,094 or 53.4%), while the share of civil servants (1,826) was 46.6%. However, in another 219 JSC with the RF stakes in their charter capital amounting to less than 25%, 100% of the representatives of government interests in the boards of directors (or supervisory boards) were civil servants (approximately 300 positions). Thus, the total number of civil servants participating in the boards of directors (or supervisory boards) of the JSC off the Special List was 2,126 (vs. 3,045 in 2013), which is somewhat higher than the number of professional directors but is indicative shrinkage (by more than 30%) of the share of civil servants.

Table 7

The Movement and Structure of State Representatives in the Managerial and Control Bodies of JSCs off the Special List, in 2010–2014

Year	JSC, units	State representatives in boards of directors (supervisory boards) (other than civil servants)						In audit commissions: independent experts, number
		total		Professional attorneys		Independent directors		
		number	%	number	%	number	%	
2010	389	707	100.0	493	69.7	214	30.3	…
2011	512	1,109	100.0	830	74.8	279	25.2	…
2012	822	1,860[a]	100.0	1350	72.6	510	27.4	…
2013	637	1,715	100.0	1092	63.7	623	36.3	335
2014	683[b]	2,094	100.0	1382	66.0	712	34.0	498

[a] – data are also available on the election of 1,869 professional directors;
[b] – in addition to those 683 JSC where professional directors were elected to the managerial bodies, there were another 159 JSCs with a controlling or blocking stake held by the State, where decisions concerning their approval had not been passed for various objective reasons.
Source: Year-end 2013 Report on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC 's Management ('Golden Share'); authors' calculations

As follows from data presented in *Table 7*, the changes in the structure of professional directors were moderate. The relative share of independent directors increased from 30% in 2010 to 34–36% in 2013–2014, while the share of professional attorneys, on the contrary, slightly declined in spite of the increase in their number by 2.8 times. The number of professional directors sitting on boards of directors (supervisory boards) per company increased from 1.82 to 3.07, while the number per company of independent experts in audit commissions – from 0.53 to 0.73 (over the period 2013–2014).

Thus, these data provide ample proof of the fact that the course (announced back in 2008) towards increasing the participation of professional directors (including independent directors) in the managerial bodies of JSC with state stakes, so that they would gradually replace

[1] Including those 159 JSC where the State holds a controlling or blocking stake, but the decisions concerning their approval had not been passed for various objective reasons.

civil servants, has been implemented rather successfully. At the same time, the emergence of crisis phenomena in the economy resulted in the government's declaration that civil servants would be temporarily returned to the managerial bodies of state companies in order to ensure stricter and more rigorous control (while the scale and timelines for such measures were not specified).[1]

In 2014, *Rosimushchestvo* developed a program for the interaction with the communities of professional directors and independent expert elected as representatives of government interests to the managerial and control bodies of joint-stock companies with federal stakes, which were not included in the Special List. In the framework of implementation of that program, the text of *Rosimushchestvo*'s Order of 11 October 2013, No 316 'On Approving the Goals and Tasks Associated with Involving Professional Directors and Independent Experts Elected to the Managerial and Control Bodies of Joint-stock Companies with Shares in Federal Ownership, Which Are not Included in the Special List, Approved by Directive of the Government of the Russian Federation of 23 January 2003, No 91-r, in the capacity of Representatives of the Interests of the Russian Federation' was distributed among organizations belonging to the professional business community.

Another innovation introduced into the management of JSC with state participation has been the outsourcing of functions of single executive bodies in a company to asset managers (AM). Four asset managers are now providing these services to 29 joint-stock companies. In order to toughen control over the activity of AM, the Methodological Recommendations for quarterly monitoring of the activity of asset managers, to which the functions of single executive bodies of joint-stock companies with shares in federal ownership (off the Special List) have been delegated, were elaborated and approved in late 2014 by *Rosimushchestvo*'s order.

On the whole it can be said that the past year saw some serious progress in the development of model documents designed to standardize the management procedures applied by state-owned companies.

Among the documents approved by *Rosimushchestvo* and applicable to JSC with state participation, we should mention the Methodology for Corporate Governance Quality Self-assessment in Companies with State Participation; the Methodology for Individual Performance Assessment for Members of Boards of Directors; the Methodological Recommendations for Organizing the Work of Corporate Secretary of a Joint-stock Company with State Participation; the Methodological Recommendations for Organizing the Work of Committees for Auditing the Boards of Directors of Joint-stock Companies with the Russian Federation's Participation; the Methodological Recommendations for Drawing up the Provision on Rewards and Compensations for the Members of Audit Commissions; the Methodological Recommendations for Drawing up the Provision on an Audit Commission; the Methodological Recommendations for the Organizing Internal Audits; and the Methodological Recommendations for Determining the Functions of Internal Audit in Holding Companies with the Russian Federation's Participation.

The investment attractiveness and performance of the organizations operating in the public sector of Russia's economy should be boosted by the introduction of the Methodological Recommendations for applying the key performance indicators (KPI) for state corporations, state companies, state unitary enterprises, as well as economic societies with the aggregate state stakes, including the regional level, in excess of 50% of their charter capital; the Methodolog-

[1] *V tochke krizisa, no bez strakha* [In the Center of Crisis, but without Fear] // *Rossiiskaia gazeta* [The Russian Newspaper], 15 January 2015, No 4 (6575), pp. 1, 4.

ical Recommendations for the development of Long-term Strategic Development Programs of OJSC and FSUE, as well as OJSC with the Russian Federation's stakes in excess of 50% of their charter capital; Model Standards for Audits of the Implementation of Long-term Development Programs of OJSC entered on the Special List, with a sample technical assignment for the conduct of such an audit. The Methodological Guidelines for determining the specific categories of assets owned by state-owned companies depending on their core types of activity were introduced in a new wording.

At the very end of the year 2014, the Methodological Recommendations for the procedure of alienation of assets unrelated to the core types of activity of federal treasury enterprises and federal state institutions; the Model Provision on the procedures of purchases for the needs of JSCs with state participation; and the Methodological Recommendations for the development of dividend policy in such companies were approved.

The following draft documents have been prepared: the Methodological Recommendations for assessing the personal performance levels of internal auditors; and the model charter of a joint-stock company with a single 100% stake held by the Russian Federation, whose shares are to be alienated from federal ownership in the framework of a forecast plan (program) of federal property privatization. The latter is designed to restrict the powers of the managerial bodies of those JSCs to dispose of corporate property and to increase the responsibility of their single executive bodies during the pre-privatization period, including the issues of disclosure of information that must be published in a mandatory procedure in sources freely accessible to the public, and the submission, in response to *Rosimushchestvo*'s requests, of documents and information necessary for valuating the assets held by a JSC and their pre-sale preparation.

An analysis of the year-end results of 2013, which was the first significantly long period for the renewed dividend policy mechanism being applied by companies with state participation (after the introduction of the norm stipulating that no less than 25% of net profit was to be earmarked for the payment of dividends), revealed an improvement in the 'dividend discipline'.

The total volume of federal budget revenue administered by *Rosimushchestvo*, in the form of charged dividends on shares held by the State, with due regard for the decisions approved by annual general shareholder meetings as of the end of summer 2014, amounted to more than Rb 220bn.

In full compliance with the forecast of dividend receipts in the federal budget, the year end results of 2013 showed that approximately 2/3 of the total amount of dividends charged on the shares held by the RF was paid by JSC on the Special List. The group of 9 biggest payers of dividends to the federal budget (in amounts in excess of Rb 1bn) consists of OJSC *Gazprom*, *ROSNEFTEGAZ*, VTB Bank, JSC *Transneft*, OJSC *Alrosa*, OJSC *Rostelecom*, *Rusgidro*, JSC *Zarubezhneft*, and the Agency for Housing Mortgage Lending (AHML).

More than 2/3 companies on the Special List (or 34 JSCs) earmarked for the payment of dividends no less than 25% of their net profit, as determined on the basis of their year-end reports of 2013. The main reason for the downward deviation of the amount of dividends from the target norm established by RF Government Directive No 774-r of 29 May 2006, introduced in the wording approved as of the end of 2012, was the loss incurred by state-owned companies by the end of a reporting period. Out of the 12 JSCs on the Special List with regard to which the RF Government issued decisions that they were not to pay dividends on the basis of their year-end reports for 2013, 10 companies were allowed not to pay dividends due

to their losses. For another 8 JSCs, as of the end of summer of 2014 no decisions concerning their payment of dividends were issued.

As seen by the year-end results of 2013, for 5 JSCs on the Special List (*Aeroflot – Russian Airlines*, *Alrosa*, *Rusgidro*, *Rostelecom*, *Transneft*) the amount of dividends to be paid to the federal budget was charged on the basis of financial reports drawn up in accordance with the International Financial Reporting Standards (IFRS), while the aggregate amount of dividends charged by these companies for the year 2013 increased on the corresponding index for the same period of the previous year (calculated in accordance with the Russian Accounting System (RAS)) by more than 30%.[1]

In this connection it should be noted that, judging by the materials attached to the new draft of the federal budget for the next 3-year period drawn up by the government, the dividends on federal stakes are treated as a very important source of revenue generated by the use of state property. Thus, the dividend target for the 2015 federal budget is Rb 251.5bn, for 2016 – Rb 162.5bn, and for 2017 – Rb 221.7bn.

These target figures vary so greatly due to the planned one-time transfer to the federal budget of revenue in the form of dividends on shares in OJSC *Rosneftegaz* as a result of sale of a stake in OJSC *Oil Company Rosneft* (Rb 100bn) planned for in 2015 (alongside the payment of dividends in the amount of Rb 29bn on the basis of the year-end results of 2014); so, the aggregate amount of dividends to be transferred to the budget in the next 2016 will be inevitably smaller. In 2017, the bulk of the amount of dividends on shares held by the State will be constituted by the increased dividends on shares in OJSC *Gazprom* (by Rb 48.1bn) resulting from the proposal put forth by that company that it would earmark as dividends a certain part of its net profits determined on the basis of a consolidated financial report. At the same time, the potential effect of applying that measure to other companies remains unspecified.

As for the other types of federal budget revenues from the use of state property in the form of tangible assets (lease payments for land and property, transfer of profits generated by unitary enterprises), these are only supplementary.

However, on the whole the amount of revenues from the use of state property, similarly to revenues generated by privatization, will be strongly influenced by the macroeconomic situation; this is especially true for the revenues generated by the government's activity in the capacity of an economic subject (dividends and transfer of profits received by unitary enterprises). Besides, we must point to the effects of the economic sanctions imposed against Russia, which could be felt first of all by state-owned companies; to the necessity to launch the big investment project in the fuel and energy complex (the development of new oil fields, the construction of the *Sila Sibiri* [The Strength of Siberia] gas pipeline, and re-formatting of the South Stream Pipeline Project); the possible effect of de-offshorization and implementation of measures necessary for the adaptation to the new economic situation and announced by this country's top political leadership (centralization of control over the settlements across big state-owned companies, which have an intricate network of affiliations and dependent entities; orientation to cost reduction; import substitution; attraction of small and medium-sized businesses as subcontractors).

An important goal for the managerial bodies of all the companies with state participation for the next few years will be the implementation of the norms stipulated in the new Corporate Governance Code.

[1] Year-end 2013 Report on the Management of Federal Stakes in OJSC and the Use of the Russian Federation's Special Right to Participate in an OJSC 's Management ('Golden Share').

Its draft was on the whole approved by the Russian Government as of 13 February 2014, and then approved as of 21 March 2014 by the Board of Directors of the Bank of Russia, which performs the functions of a megaregulator of the Russian financial market. The Code is recommendatory, the RF Central Bank has suggested that its norms should be applied by those joint-stock companies whose securities are listed in an organized bidding or are being prepared for listing therein. The use of the norm stipulated in the Corporate Governance Code will make it possible for Russian JSCs, including state corporations and joint-stock companies with state participation, to get basic targets necessary for the implementation of state-of-the-art corporate governance standards adjusted to the specificities of Russian legislation and the Russian market practices of interaction between shareholders, members of boards of directors (or supervisory boards), executive bodies, employees and other related parties involved in the economicой activity of joint-stock companies.

In spite of its recommendatory nature, the Corporate Governance Code is already applied by 13 biggest state-owned companies, while *Rosimushchestvo* is preparing a methodology for assessing the effect of its implementation.[1]

Last year also saw a continuation of the theme of the so-called 'golden parachutes' for CEOs of state-owned companies.

When in 2013, by a court ruling, the decision of the board of directors of *Rostelecom* (the state stake in its capital amounting to approximately 47%) that its former CEO should receive, after the early termination of his contract, an employment termination payment amounting to more than Rb 200m was deemed to be null and void, the State Duma on the crest of a wave of negative response in society approved the government draft law whereby the amount of such compensations for CEOs was restricted.

The corresponding amendments to the RF Labor Code (LC) were introduced by Federal Law No 56-FZ of 2 April 2014. These restrictions are applied to heads of companies (directors), their deputies, head accountants and members of the collegial executive bodies (employed in the framework of labor contracts) of state corporations, state-owned companies, as well as economic societies with state or municipal stakes amounting to more than 50% of their charter capital; and to heads (directors), their deputies, head accountants of government off-budget funds, state or municipal institutions, and state or municipal unitary enterprises.

All these categories of CEOs are now granted the right to a compensation, to be paid in an event of transfer of the title to property formerly held by their employer, or in an event of termination of their labor contract on the initiative of the owner of property held by a given organization, in the absence of culpable actions (of failure to act), only in the amount of their 3-fold average monthly salary, although the compensation proposed in the initial version of the government draft law corresponded to the amount of their 6-fold average monthly salary.

However, in the autumn of 2014, the court of cassation recognized the decision of *Rostelecom*'s board of directors concerning the employment termination payment to its former CEO Alexander Provotorov in the amount of Rb 200.88m to be lawful. The arbitration court of Moscow's North-Western District annulled the previously issued rulings of the two lower instances, and fully considered and formally rejected the plaintiffs' claims; whereas the court of first instance had agreed that *Rostelecom*'s board of directors had calculated the said 'golden parachute' 'on the basis of the highest premium without proper substantiation,[2] and on the

[1] www.rosim.ru, 30 October 2014, 3 December 2014.

[2] According to pure general logic, the payment of bonuses for future periods as part of a compensatory payment appears to be rather dubious, because the amount of a bonus depends on the company's future performance level.

basis of 'a fixed income unrelated to the previously paid salary'. By doing so, 'the board of directors significantly violated the rights of shareholders to governance and the receipt of dividends.'[1] Nevertheless, in the end the conflict was resolved, in early 2015, by the repayment of the money in question back to OJSC *Rostelecom*.[2]

To a certain extent, it can be believed that the authorities' response to these issues was Executive Order of the RF President of 12 December 2014, No 778, whereby alterations were introduced to the similar Executive Order as of 10 June 1994, No 1200. In particular, it abolished the list of mandatory terms to be stipulated in the labor contracts concluded with heads of federal state-owned enterprises (the period of contract; the minimum amount of reimbursement; the amount of share in a company's profits; the amount of compensation to be paid in an event of early termination of the labor contract on the initiative of their employer or resettlement in another locality; social guarantees to heads of companies and their families in an event of death or disability; the rights and responsibilities associated with corporate governance; reporting procedures; the procedure and conditions of early termination of the labor contract; the responsibility for violation of the terms stipulated in the labor contract and for the company's performance).

The other norms of the 20-year-old presidential Executive Order that should be deemed to be null and void are as follows: the requirements to government representatives in those JSCs whose shares are consolidated in federal ownership, in the part relating to the content of contracts envisaging that government interests are to be represented by persons other than civil servants; and the procedure of coordinating draft decisions and the voting procedure with the relevant bodies of authority.[3]

Early in 2015, the Provision on the terms of reimbursement of heads of state-owned enterprises established at the moment of concluding their labor contracts, which had been in force since 1994, was also made null and void.

By Decree of the RF Government of 2 January 2015, No 2 the new Provision on the amount of reimbursement of heads of FSUEs was approved. In accordance with this document, the reimbursement to be paid to heads of enterprises will consist of: (1) salary corresponding to their job description, (2) compensation payments, and (3) benefits (incentives).

The first component is to be determined by the company's founder represented by a federal body of executive authority or an organization performing its functions and executing its powers relating to the conclusion and termination of labor contract with the head of an enterprise, depending on the complexity of duties associated with the job, the scale of governance and the specificity of the enterprise's activity and its importance.

The second component is based on references to the norms stipulated in the RF Labor Code and other normative legal acts addressing labor law issues. As for the payments classified as perks, their amount and frequency are determined by the founder with due regard for the economic performance indices, achieved by a given enterprise and approved by the founder, over a relevant period as a result of personal efforts contributed by the head of enter-

[1] *Sud priznal zakonnym 'zolotoi parashut' eks-glavy Rostelekoma Provotorova v 200 mln rub*. [The Court Recognized to Be Lawful the 'Golden Parachute' of *Rostelecom'*s Ex-head Provotorov in the Amount of Rb 200m]. 29 October 2014, ITAR-TASS.

[2] *Provotorov otstegnul parashut* [Provotorov Unlatched His Parachute] , www.comnews.ru, 13 January 2015.

[3] it may be assumed that these provisions are no longer relevant due to the emergence of a robust normative-legal base regulating corporate governance issues in companies with state participation, which was gradually evolving in the course of the 2000s, after the elaboration of the 1999 Concept of State Property Management and Privatization in the Russian Federation.

prise in order to achieve the main goals and perform the main functions as defined in the enterprise's charter.

However, the main innovation in the regulation of the procedure of reimbursement of heads of enterprise is probably the ceiling on the ratio of the average monthly salary of heads (directors), their deputies, and head accountants to the average monthly salary in a given enterprise (less the salaries paid to its head (director), deputy directors, and the head accountant), which is to be established by the founder in the interval between 1 and 8. This index may be different for the enterprises entered on the list approved by the RF Government and those subordinated to the Executive Office of the RF President.

6.1.5. State Property Management and the Program and Targets of the New Three-year Budget

Further prospects with regard to the management of the entire state property complex should be viewed through the prism of the new Government Program (GP) *Federal Property Management*, approved by Decree of the RF Government of 15 April 2014, No 327, which has replaced the previous GP with the same title that was applied as a guideline for a period of approximately 14 months.[1] The reasons for such a replacement are not quite clear. At the official level the adoption of the new document is explained by the latest alterations to Article 179 of the RF Budget Code and the need to bring the existing normative base in conformity with Decree of the RF Government of 17 October 2013, No 931, whereby numerous alterations were made to the Procedure for the Development, Implementation and Performance Assessment of the Government Programs of the Russian Federation, approved by the RF Government's Decree as early as the summer of 2010.

The numerical targets stipulated in the new Government Program (GP) *Federal Property Management,* to be in force until 2018, are generally compatible with the corresponding targets in the 2013 Program. It should be reminded that these are targets like, for example, the relative shares of federal property entities (by category) with their specifically determined target functions (unitary enterprises, economic societies with state stakes, state institutions, entities held by the RF Treasury); the rates of decline in the number of entities (by main category) (for enterprises and JSC – per cent per annum, for property entities and land plots held by the RF Treasury and not involved in economic turnover – per cent change on 2012 (with the exception of entities whose turnover is restricted, or entities withdrawn from turnover)); indicators of changes in the technological evolution of the processes of federal property management; and some other targets. At the same time, the newly adopted document, in contrast to the 2013 Program, lacks the targets achievable in the event of allocation of additional resources.

The new Government Program will be implemented under rather difficult conditions associated with budget constraints. In the new 2014 GP, the targets stipulated in the previously introduced federal budget for the period 2014–2016 are applied as a basis for estimating the volumes of budget allocations.

In the newly adopted Law on Federal Budget for the Period 2015–2017, budget expenditure, in addition the funding of all the other government programs, also includes budget allocations to the implementation of the Government Program *Federal Property Management*,

[1] For a more detailed discussion of the 2013 government program, see Malginov G., Radygin A. Public sector and privatization (Section 6) // Russian Economy in 2012. Trends and Outlooks (Issue 34). Moscow, IEP. 2013, pp. 433–475.

approved by Decree of the RF Government of 15 April 2014, No 327 in the amount of Rb 27.9 bn in 2015, Rb 25.4bn in 2016, and Rb 26.2bn in 2017. Approximately 80% of these monies is to be spent on the subprogram *Management of State-owned Material Reserve*.

The allocations to another subprogram titled *Improvement of Federal Property Management and Privatization Efficiency* amount to Rb 5,408.5m in 2015, Rb 5,124.1m in 2016, Rb 4,953.9m in 2017. Meanwhile, the Government Program offers the following expenditure targets: Rb 5,298.9m, Rb 5,138.9m, and Rb 5,158.6m respectively. Thus, the amount of budget allocations for 2015 as stipulated in the Law on Federal Budget is increased (by comparison with that stipulated in the GP's passport) by Rb 109.6m; however, for 2016 it is reduced by Rb 14.8m, and for 2017 – by Rb 204.7m.

As follows from the explanatory note attached to the Federal Law on Federal Budget for the Period 2015–2017, in 2015 the amount of budget allocations to the RF Federal Agency for State Property Management *(Rosimushchestvo)* earmarked for the subprogram *Improvement of Federal Property Management and Privatization Efficiency* is to be increased (by Rb 87.0m) in the main to cover the cost of legal services needed to protect the property interests of the Russian Federation in accordance with the decisions and recommendations of the Russo-Indian Intergovernmental Commission (IGC) on trade, economic, scientific, technical, and cultural cooperation.

The most substantial reduction in the amount of allocations is planned for 2017 when, as a result of the delegation to the Federal Alcohol Market Regulation Service, in accordance with Decree of the RF Government of 22 May 2013, No 430 'On Reprocessing or Destruction of Ethyl Alcohol, Alcoholic Beverages and Alcohol-containing Products Withdrawn from Unlawful Turnover, and on Destruction Thereof in the Event of Their Confiscation' of the functions of a state customer associated with the placement of government orders for services involving the transportation, storage, reprocessing and destruction of confiscated alcoholic beverages and alcohol-containing products, the amount of budget allocations to *Rosimushchestvo* planned for 2017 in the amount of Rb 50.0m will be redistributed in favor of the government program *Government Finance Management and Financial Market Regulation*.

In general, over the period after 2015, in the framework of the subprogram *Improvement of Federal Property Management and Privatization Efficiency*, gradual reduction in the amount of expenditure is planned in per annum terms, by 5.3% (Rb 284.4m) in 2016 and by 3.3% (Rb 170.2m) in 2017. However, it should be borne in mind that the overall situation in which the budget will be executed this year may necessitate some new adjustments to the volume of budget allocations to the Government Program *Federal Property Management* as a whole.

In this connection it should be noted that the switchover, in the sphere of state property management, to budget expenditure planning based primarily on target programs has obviously resulted - rather paradoxically - in lower transparency of the procedures of budget allocation distribution.

The expenditure targets stipulated in Annexes 18 and 20 to the Federal Law on Federal Budget for the Period 2015–2017 (of 1 December 2014, No 384-FZ) for the Government Program *Federal Property Management* in the framework of the subprogram *Improvement of Federal Property Management and Privatization Efficiency* with regard to more general goals (expenditures on personnel reimbursement, purchased of goods, work and services for government needs, other budget allocations) make it impossible to accurately estimate the amounts allocated to specific directions of government property policies.

Meanwhile, in the Law on Execution of the Federal Budget in 2013, in the framework of by-department expenditure structure, *Rosimushchestvo* was allocated budget funding with regard to items like 'Provision for and Execution of Pre-sale Preparation and Sale of Federal Property, and Reorganization of FSUEs' (Rb 449.8m); 'Upkeep and Servicing of the RF Treasury' (Rb 233.9m); Valuation of Immovables, Recognition of Rights and Regulation of State Ownership Relations' (Rb 64.85m); and Management Federal Shares (or Stakes) in Economic Societies' (Rb 17.5m). However, no data is available with regard to the actual execution of the Government Program *Federal Property Management* for 2013.

6.1.6. The Budgetary Effect of Government Property Policy

In 2014, in contrast to the situation in 2013, the movement of budget revenues associated in one or other way with state property was bi-directional. The revenues generated by the use of state property (renewable sources) increased alongside the declining revenues from privatization and sale of property (non-renewable sources).

Below (in *Tables 8* and *9*) were present the data on revenues taken from the laws on federal budget execution for 2000–2014 (with the exception of last year's data) generated by the use and sale of state property belonging to specified categories of tangible property entities.[1]

[1] We do not consider here the federal budget revenues generated by payments for the use of natural resources (including biological water resources, revenues from the use of forest fund, and the extraction of mineral resources); compensation of losses incurred by agricultural production sector; revenues from the confiscation of agricultural land; revenues generated by financial operations (revenues from placement of budget funds (revenues from federal budget residuals and their investment; from 2006 onwards these include the revenues from the management of the RF Stabilization Fund (from 2009 onwards – the Reserve Fund and the National Welfare Fund); revenues from investment of monies accumulated in the course of trading RF stocks in the auction market); interest on budget-funded domestic loans, interest on government loans (monies received from the governments of foreign countries and foreign legal entities as interest payments on RF government loans; money transfers from legal entities (enterprises and organizations), RF subjects, municipal formations received as interest and guarantee payments on loans received by the RF from foreign governments and international financial organizations)); revenues from paid services rendered to the population or monies received by way of compensation of government expenditures; transfers of the RF Central Bank's profits; certain categories of payments from state and municipal enterprises and organizations (patent duties and registration fees for official registration of software, databases, integral microcircuit topologies; and other revenues which until 2004 were part of mandatory payments of state organizations (except revenues generated by the operations of Joint Venture *Vietsovpetro* (from 2001) and transfers of part of profits generated by FSUEs (from 2002)); revenues from the implementation of product share agreements (PSA); revenues from the disposal of confiscated and other property earmarked as government revenue (including property transferred to state ownership in the procedure of inheritance or gift, or treasure trove appropriation); revenues generated by lotteries; other revenues from the use of property and rights in federal ownership (revenues from the execution of rights to the results of intellectual activity (R&D and technologies) intended for military, special or dual use; revenues generated by the execution of rights to the results of scientific and technological research held by the RF; revenues generated by the exploitation and use of property relating to motor roads, motor road levies imposed on transport vehicles registered in the territories of other states; execution of the Russian Federation's exclusive right to the results of intellectual activity in the field of geodesy and cartography; and other revenues from the use of property in the ownership of the Russian Federation); revenues generated by organizations from the permitted types of economic activity and earmarked for transfer to the federal budget; revenues from realization of government reserves of precious metals and precious stones.

Table 8

Federal Budget Revenues Generated by Use of State Property (Renewable Sources) in 2000–2014, Rb million

Year	Total	Dividends on shares (2000–2014) and revenues generated by other forms of participation in capital (2005–2014)	Payment for lease of land in state ownership	Revenues generated by lease of property in state ownership	Revenues for transfer of part of net profits of FSUEs after taxes and other mandatory payments	Revenues generated by Joint Venture *Vietsovpetro*
2000	23,244.5	5,676.5	-	5,880.7	-	11,687.3[a]
2001	29,241.9	6,478.0	3,916.7[b]	5,015.7[c]	209.6[d]	13,621.9
2002	36,362.4	10,402.3	3,588.1	8,073.2	910.0	13,388.8
2003	41,261.1	12,395.8	10,276.8[e]		2,387.6	16,200.9
2004	50,249.9	17,228.2	908.1[f]	12,374.5[g]	2,539.6	17,199.5
2005	56,103.2	19,291.9	1,769.2[h]	14,521.2[i]	2,445.9	18,075.0
2006	69,173.4	25,181.8	3,508.0[h]	16,809.9[i]	2,556.0	21,117.7
2007	80,331.85	43,542.7	4,841.4[h]	18,195.2[i]	3,231.7	10,520.85
2008	76,266.7	53,155.9	6,042.8[h]	14,587.7[i]	2,480.3	-
2009	31,849.6	10,114.2	6,470.5[h]	13,507.6[i]	1,757.3	-
2010	69,728.8	45,163.8	7,451.7[h]	12,349.2[j]	4,764.1	-
2011	104,304.0	79,441.0	8,210.5[h]	11,241.25[j]	4,637.85	773.4
2012	228,964.5	212,571.5	7,660.7[k]	3,730.3[l]	5,002.0	-
2013	153,826.25	134,832.0	7,739.7[k]	4,042.7[l] +1,015.75[m]	6,196.1	-
2014	241,169.45	220,204.8	7,838.7[k]	3,961.65[l] +1,348.5[m]	7,815.8	-

[a] – according to data released by the RF Ministry of Property Relations, in the Law of Federal Budget Execution in 2000 this item was not specified separately, instead the amount of payment received from state-owned enterprises was entered (Rb 9,887.1m) (without any components being specified);

[b] – the amount of lease payments (i) for the use of agricultural land and (ii) for the use of land plots in the territories of towns and settlements;

[c] – the amount of revenues from the lease of property consolidated to (i) scientific research organizations, (ii) educational establishments, (iii) healthcare institutions, (iiii) state museums, state cultural and arts institutions, (iiiii) archival institutions, (iiiiii) the RF Ministry of Defense, (iiiiiii) organizations subordinated to the RF Ministry of Railways, (iiiiiiii) organizations providing research-related services to the academies of sciences with the status of a state entity, and (iiiiiiiii) other revenues from the lease of property in state ownership;

[d] – according to data released by the RF Ministry of Property Relations, in the Law of Federal Budget Execution in 2001 this item was not specified separately, this value turned out to be the same as the amount of other revenues received as part of payments transferred by state and municipal organizations;

[e] – total amount of revenues generated by the lease of property entities in state ownership (without specifying the amount of lease payments for land);

[f] – the amount of lease payments (i) for the use of land plots in the territories of towns and settlements (ii) for the use of land plots in federal ownership after the delineation of titles to land plots between different tiers of government;

[g] – the amount of revenues from the lease of property consolidated to (i) scientific research organizations, (ii) educational establishments, (iii) healthcare institutions, (iiii) state cultural and arts institutions, (iiiii) state archival institutions, (iiiiii) institutions of the federal postal service of the RF Ministry of Communications and Informatization, (iiiiiii) organizations providing research-related services to the academies of sciences with the status of a state entity, and (iiiiiiii) other revenues generated by the lease of property in federal ownership;

[h] – the amount of lease payments after the delineation of titles to land plots between different tiers of government and revenues generated by the sale of right to conclude lease agreements in respect of land plots in federal ownership (with the exception of land plots held by federal autonomous institutions (2008–2011) and budget-funded institutions (2011));

[i] – the amount of revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them, and property held by right of economic jurisdiction by FSUEs: properties transferred for operative management to organizations with the status of a state entity (i) scientific research institutions, (ii) organizations providing research-related services to the Russian Academy of Sciences and to sectoral academies of sciences, (iii) educational establishments, (iiii) healthcare institutions,

(iiiii) federal postal service institutions of the Federal Communications Agency (*Rossvyaz*), (iiiiii) state cultural and arts institutions, (iiiiiii) state archival institutions, and (iiiiiiii) the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them, and property held by right of economic jurisdiction by FSUEs[l] (for the period 2006–2009 - less revenues from the permitted types of economic activity and revenues from the use of federal properties situated outside of RF territory, which are received abroad and were not listed as a separate item in the в previous years);

[j] – the amount of revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them ((with the exception federal autonomous institutions and budget-funded institutions): properties transferred for operative management to organizations with the status of a state entity (i) scientific research institutions, (ii) organizations providing research-related services to the Russian Academy of Sciences and to the 'branch' academies of sciences, e.g. the Russian Academy of Medical Sciences, etc., (iii) educational establishments, (iiii) healthcare institutions, (iiiii) state cultural and arts institutions, (iiiiii) state archival institutions, (iiiiiii) properties held by right of operative management by the RF Ministry of Defense its subordinated institutions (2010), (iiiiiiii) properties in federal ownership disposed of by the Executive Office of the RF President (2010), and (iiiiiiiii) revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them (less revenues from the permitted types of economic activity and revenues from the use of federal properties situated outside of RF territory, which are received abroad);

[k] – the amount of lease payments after the delineation of titles to land plots between different tiers of government and revenues generated by the sale of right to conclude lease agreements in respect of land plots in federal ownership (with the exception of land plots held by federal autonomous institutions and budget-funded institutions), and (i) lease payments received for the lease of land plots in federal ownership, situated in public motor road precincts of federal importance (2012–2013.), and (ii) payments for the execution of agreements on the establishment of servitude with regard to land plots situated within public motor road precincts of federal importance for the purposes of construction (or reconstruction), capital repairs and exploitation of road service entities, installation and exploitation of utility networks, installation and exploitation of elevated advertizing structures (only for 2012 and 2014);

[l] – the amount of revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them (with the exception of autonomous and budget-funded institutions): properties transferred for operative management to organizations with the status of a state entity (i) scientific research institutions, (ii) educational establishments, (iii) healthcare institutions, (iiii) state cultural and arts institutions, (iiiii) state archival institutions, (iiiiii) othere revenues from the lease of property held by right of operative management by federal treasury institutions, (iiiiiii) federal bodies of state authority, the Bank of Russia, and the managerial bodies of government off-budget funds (less revenues from the use of federal properties situated outside of RF territory, which are received abroad);

[m] the amount of revenues from the lease of RF treasury property (with the exception of land plots).

Source: Law of Federal Budget Execution for the period 2000–2013.; Report on Federal Budget Execution as of 1 January 2015 (monthly report), www.roskazna.ru; authors' calculations.

In 2014, the aggregate revenue generated by renewable sources increased on the previous year by nearly 57%.

In connection with our analysis of the preliminary data on the budgetary effects of government property policies in 2014, it should be noted that, first of all, there occurred a increase on 2013 (by more than 1.6 times) of the amount of dividend receipts in absolute terms (Rb 220.2bn), representing a record high for the entire period since the early 2000s, which is above the peak value of this index for 2012 (Rb 212.6bn). The index of the part of net profits transferred by unitary enterprises rose by more than 1/4 to a level above Rb 7.8bn.

[1] For the period 2008–2009, there is no mention of FSUEs as sources of revenues generated by the lease of property consolidated to them by right of economic jurisdiction, while the revenues from the lease of property held by right of operative management by federal bodies of state authority and by the state institutions established by them does not include revenues generated by property held by autonomous institutions.

The amount of budget revenues generated by lease of land increased only slightly (by 1.3%), amounting to more than Rb 7.8bn.[1] Somewhat higher growth (by approximately 5%) was demonstrated by the aggregate revenues from lease of federal property (Rb 5.3bn). These results were achieved due to growth (by nearly 1/3) in the amount of revenues generated by lease of RF treasury property (with the exception of land plots) (approximately Rb 1.35bn), which began to be entered as a separate item into budget reports from 2013 onwards, whereas revenues from the lease of other property declined.

As a result, dividends accounted for the bulk of federalo budget revenue received from renewable sources (more than 91% vs. less than 88% a year earlier). The relative shares of the other sources were almost negligible: lease of land – 3.3%; profits transferred by FSUEs – 3.2%; lease of property – 2.2%.

While proceeding to an analysis of federal budget revenues generated by privatization and sale of state property (*Table 9*), it should be noted that, from 1999 onwards, the revenues from sales of such assets (state stakes, and over the period 2003–2007 - also land plots[2]) have been treated as a source of funding to cover budget deficit.

Table 9

Federal Budget Revenues Generated by Privatization and Sale of Property (Non-renewable Sources) in 2000–2014, Rb million

Year	Total	Sale of shares in federal ownership (2000–2014) and other forms of participation in capital (2005–2014)[a]	Sale of land plots	Sale of miscellaneous properties
2000	27,167.8	26,983.5	-	184,3[b]
2001	10,307.9	9,583.9	119.6[c]	217.5+ 386.5+0.4 (ITA)[d]
2002	10,448.9	8,255.9[e]	1,967.0[f]	226.0[g]
2003	94,077.6	89,758.6	3,992.3[h]	316.2+10.5[i]
2004	70,548.1	65,726.9	3,259.3[j]	197.3+1,364.6+0.04 (ITA)[k]
2005	41,254.2	34,987.6	5,285.7[l]	980.9[m]
2006	24,726.4	17,567.9	5,874.2[l]	1,284.3[n]
2007	25,429.4	19,274.3	959.6[o]	5,195.5[p]
2008	12,395.0	6,665.2+29.6	1,202.0[q]	4,498.2+0.025 (ITA)[r]
2009	4,544.1	1,952.9	1,152.5[q]	1,438.7[r]
2010	18,677.6	14,914.4	1,376.2[q]	2,387.0+0.039 (ITA)[r]
2011	136,660.1	126,207.5	2,425.2[q]	8,027.4[r]
2012	80,978.7	43,862.9	16,443.8[q]	20,671.7+0.338 (ITA)[r]
2013	55,288.6	41,633.3	1,212.75	12,442.2+0.310 (ITA)[r]
2014	41,154.65	29,724.0	1,912.6	9,517.0+1.048(ITA)[r]

[a] – treated as an internal source of funding to cover federal budget deficit, amount to Rb 29.6m for 2008 (as stated in the Report on Federal Budget Execution as of 1 January 2009); this is a federal budget revenue item, but it is absent in the Law of Federal Budget Execution in 2008;

[b] – revenues generated by privatization of entities in state ownership and treated as an internal source of funding to cover federal budget deficit;

[c] – revenues generated by sale of land plots and the right to lease land plots in state ownership (with special entry concerning those land plots in which privatized enterprises are situated), treated as federal budget revenues;

[d] – the amount of revenues generated by (1) sale of property in federal ownership, treated as an internal source of funding to cover federal budget deficit, (2) revenues generated by (i) sale of apartments, (ii) sale of state produc-

[1] The amount of lease payments for land plots, just as a year earlier, includes lease payment received for the lease of land plots in federal ownership situated in public motor road precincts of federal importance, payments for the execution of agreements on the establishment of servitude with regard to land plots covered by the right-of-way for general-use motorways of federal importance for the purposes of construction (or reconstruction), capital repairs and exploitation of road service entities, installation and exploitation of utility networks, and installation and exploitation of elevated advertizing structures, which are not specified as a separate item in the budget reports for 2013.

[2] Data for the period 2003–2004 include revenues generated by sale of leasing rights.

tion and non-production assets, transport vehicles, other equipment and tangible assets, and (3) revenues generated by sale of intangible assets (ITA), treated as federal budget revenues;
[e] – including Rb 6m generated by sale of shares held by RF subjects;
[f] – revenues generated by sale of land and intangible assets, their amount not specified as a separate entry, treated as federal budget revenues;
[g] – revenues generated by sale of property in state ownership (including Rb 1.5m generated by the sale of properties held by RF subjects), treated as an internal source of funding to cover federal budget deficit;
[h] – this figure includes revenues generated by: (1) sale of land plots in which immovable property entities are situated, which prior to their alienation were federal property, the proceeds being transferred to the federal budget, (2) sale of other land plots, as well as sale of the right to conclude lease agreements in respect of those land plots, (3) sale of land plots after delineation of titles to land plots, as well as sale of the right to conclude lease agreements in respect of those land plots, the proceeds being transferred to the federal budget; these are treated as an internal source of funding to cover federal budget deficit;
[i] – the sum of (1) revenues generated by sale of properties in federal ownership, treated as an internal source of funding to cover federal budget deficit, and (2) revenues generated by sale of intangible assets, treated as federal budget revenues;
[j] – this figure includes the revenues generated by: (1) sale of land plots after delineation of titles to land plots, in which immovable property entities are situated, which prior to their alienation were federal property, the proceeds being transferred to the federal budget, (2) sale of other land plots, as well as sale of the right to conclude lease agreements in respect of those land plots, (3) sale of land plots after delineation of titles to land plots, as well as sale of the right to conclude lease agreements in respect of those land plots, the proceeds being transferred to the federal budget; these are treated as an internal source of funding to cover federal budget deficit;
[k] – the sum of (1) revenues generated by sale of properties in federal ownership, treated as an internal source of funding to cover federal budget deficit, (2) revenues generated by (i) sale of apartments, (ii) sale of equipment, transport vehicles and other tangible assets, the proceeds being transferred to the federal budget, (iii) sale of the products of ships recycling industry, (iiii) sale of property held by state unitary enterprises and state institutions, as well as sale of military property, (iiiii) sale of the products of recycled armaments, military technologies and ammunition, (3) revenues generated by sale of intangible assets (ITA); these are treated as federal budget revenues;
[l] – this figure includes the revenues generated by: (1) sale of land plots after delineation of titles to land plots, in which immovable property entities are situated, which prior to their alienation were federal property, (2) sale of land plots after delineation of titles to land plots, the proceeds being transferred to the federal budget, (3) sale of other land plots, which prior to the delineation of titles to land plots between different tiers of government were state property, and which are not earmarked for housing construction (this subdivision is true only with regard to data for 2006), treated as sources of funding to cover federal budget deficit;
[m] – revenues generated by sale of tangible and intangible assets (less federal budget revenues generated by disposal and sale of confiscated property and other property treated as government revenue), this figure includes revenues generated by (i) sale of apartments, (ii) sale of property held by FSUEs, (iii) sale of property held by right of operative management by federal institutions, (iiii) sale of military property, (iiiii) sale of the products of recycled armaments, military technologies and ammunition, (iiiiii) sale of other properties in federal ownership, (iiiiiii) sale of intangible assets; these are treated as federal budget revenues;
[n] – revenues generated by sale of tangible and intangible assets (less revenues received as profit share in the framework of product share agreements (PSA) and federal budget revenue generated by the disposal and sale of heirless property, confiscated property, or other property earmarked as government revenue), this figure includes revenues generated by (i) sale of apartments, (ii) sale of property held by FSUEs, (iii) sale of property held by right of operative management by federal institutions, (iiii) sale of military property, (iiiii) sale of scrapped armaments, military equipment and ammunition, (iiiiii) sale of other properties in federal ownership; these are treated as federal budget revenues;
[o] – revenues generated by sale of land plots after delineation of titles to land plots formerly in federal ownership, treated as sources of funding to cover federal budget deficit;
[p] – revenues generated by sale of tangible and intangible assets (less revenues received as profit share in the framework of product share agreements (PSA) and federal budget revenue generated by the disposal and sale of heirless property, confiscated property, or other property earmarked as government revenue, and revenues from sale of timber confiscated from timber poachers), this figure includes revenues generated by (i) sale of apartments, (ii) sale of property held by FSUEs, (iii) sale of property held by right of operative management by federal institutions, (iiii) sale of redundant movable and immovable military properties and other properties held by

federal bodies of executive authority that are equated to military service, (iiiii) sale of military-purpose products from the stores of federal bodies of executive authority within the framework of cooperation in the field of military technologies, (iiiiii revenues generated by sale of other properties in federal ownership; these are treated as federal budget revenues;

[q] – revenues generated by sale of land plots in federal ownership (less land plots held by federal autonomous and budget-funded institutions (data for 2011–2012)), treated as federal budget revenues;

[r] – revenues generated by sale of tangible and intangible assets (less revenues received as profit share in the framework of product share agreements (PSA), and federal budget revenue generated by the disposal and sale of heirless property, confiscated property, or other property earmarked as government revenue, and revenues from sale of timber confiscated from timber poachers) (data for 2008–2011), revenues generated by the release of tangible assets from the state reserve of special raw materials and divisible materials (in the part of revenues generated by sale, temporary lending, and other uses); and with regard to data for 2012, 2013, and 2014 - also revenues generated by sale of timber produced as a result of measures designed to safeguard, protect, reproduce forests in the framework of government order for the implementation of such measures without sale of forest plantations for timber production, and timber produced as a result of use of forests situated in the lands belonging to the Forest Fund of the Russian Federation, in accordance with Articles 43–46 of the RF Forest Code; revenues generated by commodity intervention from the reserve stocks held in the federal intervention fund of agricultural products, raw materials and foodstuffs, revenues generated by the release of tangible assets from the state reserve, revenues generated by the involvement of convicts in reimbursable labor (in the part of sales of finished product), revenues generated by sale of products requiring special storage conditions)), this figure includes revenues generated by (i) sale of apartments, (ii) sale of property held by right of operative management by federal institutions (with the exception of autonomous and budget-funded institutions (data for 2011–2014), (iii) sale of redundant movable and immovable military properties and other properties held by federal bodies of executive authority that are equated to military service, (iiii) sale of the products of recycled armaments, military equipment and ammunition, (iiiii) sale of products intended for military use on the list of properties held by federal bodies of executive authority in the framework of cooperation in the field of military technologies (data for 2008 and the period 2010–2014.), (iiiiii) sale of scrapped armaments and other military hardware in the framework of Federal Target Program of Industrial Recycling of Armaments and Military Equipment (2005–2010), (iiiiiii) revenues generated by sale of immovable property held by budget-funded and autonomous institutions (2014), (iiiiiiii) revenues generated by sale other properties in federal ownership and revenues generated by sale of intangible assets (ITA); these are treated as federal budget revenues.

Source: Laws on Federal Budget Execution for the period 2000–2013; Report on Federal Budget Execution as of 1 January 2015 (monthly report), www.roskazna.ru; authors' calculations.

When taken in absolute terms, the amount of property-generated federal budget revenue from non-renewable source in 2014 shrank by more than 1/4, thus roughly corresponding to its 2005 level.

The main cause of this decline was the shrinkage (by nearly 29%) of the revenues generated by sale of shares. Nevertheless, budget targets were exceeded by more than 14%. The amount of revenues from sale of miscellaneous properties dropped by 23.5%. At the same time, noticeable growth (by nearly 58%) was demonstrated by revenues generated by sale of land plots, which rose above Rb 1.9bn. vs. Rb 1.2bn a year earlier, which is higher than the corresponding indices for the period 2008–2010, but lower than the year-end index for 2011. In this connection it should be noted that, for the first time, the amount of revenues from sale of intangible assets entered in budget statistics rose above Rb 1m.

On the whole, the most prominent role was played by revenues generated by sales of shares (Rb 29.7bn) which, in spite of their decline, still accounted for more than 72% of the aggregate revenues from non-renewable sources (in 2013 – more than 3/4). The share of revenues from sale of land more than doubled (increasing from 2.2% to 4.6%), while the corresponding index for sale of different properties remained nearly at the same level (approximately 23%).

The aggregate federal budget revenue generated by privatization (or sale) and use of state property in 2013 (*Table 10*) increased on the previous year by 35%. Its amount in absolute terms (Rb 282.3bn) comes second after the record high achieved in 2012, rising 17% above the corresponding index for 2011.

Table 10

The Structure of Property-Generated Federal Budget Revenues from Miscellaneous Sources, 2000–2014

Year	Aggregate revenue generated by privatization (or sale) and use of state property		Privatization-generated revenues (non-renewable sources))		Revenues generated by use of state property (renewable sources))	
	millions of rubles	% of total	millions of rubles	% of total	millions of rubles	% of total
2000	50,412.3	100.0	27,167.8	53.9	23,244.5	46.1
2001	39,549.8	100.0	10,307.9	26.1	29,241.9	73.9
2002	46,811.3	100.0	10,448.9	22.3	36,362.4	77.7
2003	135,338.7	100.0	94,077.6	69.5	41,261.1	30.5
2004	120,798.0	100.0	70,548.1	58.4	50,249.9	41.6
2005	97,357.4	100.0	41,254.2	42.4	56,103.2	57.6
2006	93,899.8	100.0	24,726.4	26.3	69,173.4	73.7
2007	105,761.25	100.0	25,429.4	24.0	80,331.85	76.0
2008	88,661.7	100.0	12,395.0	14.0	76,266.7	86.0
2009	36,393.7	100.0	4,544.1	12.5	31,849.6	87.5
2010	88,406.4	100.0	18,677.6	21.1	69,728.8	78.9
2011	240,964.1	100.0	136,660.1	56.7	104,304.0	43.3
2012	309,943.2/ 469,243.2*	100.0	80,978.7/ 240,278.7*	26.1/ 51.2*	228,964.5	73.9/ 48.8*
2013	209,114.85	100.0	55,288.6	26.4	153,826.25	73.6
2014	282,324.1	100.0	41,154.65	14.6	241,169.45	85.4

* – including the proceeds received by the RF Central Bank as a result of sale of a stake in *Sberbank* (Rb 159.3bn), which is probably an overestimation of the actual aggregate share of non-renewable sources, as the budget did not receive that sum in full but minus those sources' balance sheet value and the costs of the sale of that stake. Consequently, the share of renewable sources is, on the contrary, somewhat underestimated

Source: Laws on Federal Budget Execution for the period 2000–2013; Report on Federal Budget Execution as of 1 January 2015 (monthly report), www.roskazna.ru; authors' calculations.

The ratio between non-renewable and renewable sources in the structure of aggregate revenues generated by privatization (or sale) and use of state property in 2014 is roughly comparable with the corresponding indices for the crisis period 2008–2009, when the privatization process noticeably slowed down for objective reasons, and so no big privatization deals took place.

The share of non-renewable sources in the structure of aggregate revenues yielded by privatization (or sale) and use of state property in 2014 halved on 2013, to 14.6%. The share of revenues generated by the use of state property, on the contrary, increased from nearly 73.6% to 85.4% in 2014. In absolute terms this result represents a record high for the entire period since the early 2000s, while the amount of revenues from property privatization (or sale) turned out to be approximately by 1/4 lower than in 2013, which is still somewhat above the indices for the period 2006–2010.

So, the situation in the sphere of ownership relations in 2014 has revealed the following basic trends.

Judging by the number of legal entities operating in the public sector of the economy, we can come to the obvious conclusion that it will continue to shrink. At the same time, the downward movement of the number of state institutions, unitary enterprises and economic societies with state participation is by no means the same as shrinkage of the public sector's share in the national economy, first of all due to the creation of vertically integrated structures - an activity

that was also continued over the past year. Another contribution to the movement in this direction has been made by major one-time transactions like the reestablishment, by a court ruling, of government control over *Bashneft*.

The first phase of the implementation of the three-year privatization program for 2014–2016 was characterized by an unfavorable economic and political background. As seen by the year-end results of 2014, the number of privatized assets dropped on 2013 with regard to all property categories, the one exception being the number of unitary enterprises, which were subject to specifically issued directives concerning the terms of their privatization. As far as the two deals involving shares in biggest companies (completed early this year) are concerned, they had been planned and thoroughly prepared back in the period 2012–2013. Nevertheless, thanks to *Rosimushchestvo*'s efforts aimed at improving the system of sales and the information backing for privatization deals, the federal budget was augmented by revenues in an amount that exceeds manifold the forecasted revenue figure stipulated in the privatization program (less biggest sale deals), and also exceeds the overall budget target for revenue to be generated by sale of shares.

The structure of federal budget revenues generated by privatization (or sale) and use of state property, just as a year earlier, was dominated by revenues from renewable sources, and their share actually increased. Growth in absolute terms was demonstrated with regard to all types of renewable sources, the highest increase being noted in the amount of dividends transferred to the budget. As for non-renewable sources, growth was observed only with regard to revenues generated by sales of land plots.

The most important development that determined the horizon for ownership relations in the medium term was the approval of the new government program *Federal Property Management until 2018*.

Besides, the year 2014 saw a big step forward in organization and methodology, as an impressive body of applied normative legal acts was issued that address privatization policy issues, as well as issues of performance improvement in the public sector of the national economy. However, their true value can be ascertained only in the course of practical implementation of the new government program, which will inevitably be influenced by the effects of worsening economic situation, dwindling investment activity, and hard budget constraints.

`6.2. Issues of RF State Treasury Property Management

Due to the radical character of market transformations that took place in the Russian economy in the 1990s, including reform of the ownership relations oriented to prompt privatization, for a long time there was no interest in the issues of public property management in Russia. Some progress in that sphere occurred after the crisis period of 1997–1998, when a certain shift in the government property policy priorities could be seen.[1]

[1] For a more detailed discussion of these issues see Radygin A. D., Entov R. M., Malginov G. N. et al. Privatization in the Modern World: Theory, Empirical Research, "New Dimension" for Russia. In 2 vol. *Delo* Publishing House, 2014; Radygin A. D., Simachev Yu. V., Entov R. M. State and Denationalization: Risks and Limitations of the 'New Privatization Policy'. *Voprosy Ekonomiki* [Issues of Economics], 2011, No 9, p. 4–26; Radygin A. D., Entov R. M. Government Failures: Theory and Policy. *Voprosy Ekonomiki* [Issues of Economics], 2012, No 12, pp. 4–30; Radygin A., Entov R. M. "Fundamental" Privatization Theorem: the Ideology, Evolution, Practice. Economic Policy, 2013, No 6, December, pp. 7–45; Radygin A. D., Simachev Yu. V., Entov R. M. State-owned Company: Who Is to Blame When It Fails - the State or the Market? *Voprosy Ekonomiki* [Issues of Economics], 2015, No 1, pp. 45–79.

The onset of a new phase in the ownership relations reform in Russia was triggered by the approval, by Decree of the RF Government No 1024 of 9 September 1999, of the *Concept of State Property Management and Privatization in the Russian Federation* (hereinafter – Concept). It was probably a symbolic event, in that for the first time since 1992 the issues of state property management were given priority over formal alterations to ownership forms.

The Concept defined the main goals and principles of government policy with regard to public sector management, understood as the system of economic relations associated with the use of public property consolidated to federal state unitary enterprises by right of economic jurisdiction or by right of operative management (hereinafter – unitary enterprises, FSUE), state institutions (hereinafter – institutions) and property comprising the state treasury of the Russian Federation, as well as with the RF ownership rights arising as a result of RF participation in commercial organizations (with the exception of state property involved in the budget process in accordance with existing legislation). This definition does not apply to land, mineral resources, forests and other natural resources owned by the RF, intellectual property entities and the rights to those entities.

In spite of the use of the term 'public sector' in the text of that document, it was *de facto* more likely to be oriented to the management of the various types of property held by the State. Such a conclusion is inevitable if we look at the subdivision (into separate paragraphs) of distinctive government policy directions aimed at the following property entities: (1) unitary enterprises and institutions, (2) shares and stakes held by the Russian Federation in the charter capital of economic societies or partnerships, (3) federal immovable property.

However, among all these categories, the 1999 Concept (paradoxically) overlooked the issue of federal treasury property, which was mentioned only once in the very beginning in the context of the definition of the public sector of the national economy on the basis of the complex of economic relations associated with the use of public property. Meanwhile, by the moment of approval of the Concept, the notion itself of treasury property had existed in Russian legislation for more than 4 years.

Part One of the RF Civil Code (Article 214), which came into force in early 1995, defines federal property as property owned by the right of ownership by the Russian Federation. Property owned by the State (including federal property) is consolidated, for the purpose of possession, use and disposal of, in accordance with the RF Civil Code, to state-owned enterprises and institutions by right of economic jurisdiction (to federal state unitary enterprises (FSUEs)) or by right of operative management (to treasury enterprises and institutions). The funds of a relevant budget and other state property that is not consolidated to state-owned enterprises and institutions shall constitute the state treasury of the Russian Federation or the treasury of a RF subject' (Article 215 of the RF CC).

Thus, the following three main components can be distinguished within the structure of the RF treasury: (1) budget funds (for a reporting period or as of a given date); (2) stakes (shares or units) in economic societies (predominantly open-end joint-stock companies (OJSC)) in federal ownership; (3) all the other movable and immovable property, from which land plots are distinguished depending on the degree of inventory detailization. In this connection it should be noted that over nearly the entire period of market reform in Russia, the treasury-owned property complex, which is actually represented by the third component alone, has never been treated as an object in its own right within the framework of the state property management process.

When starting a discussion of the issues of treasury-owned property in a narrow sense (that is, less the budget, securities portfolio and land), it is necessary first to properly understand the basic principles of its formation.

The grounds for assigning property to the RF treasury can be divided into the following four groups:

- distribution of property in accordance with relevant legislation (Decree of the RF Supreme Court (RF SC) No 3020-1 (approved in 1991) and Federal Law No 122-FZ (approved in 2004), which regulate property redistribution issues that may arise in connection with the division of powers between different tiers of public authority, etc.);
- receipt of property that was not entered in the charter capital of newly created joint-stock companies during the corporatization of unitary enterprises (due in the main to the legal constraints on privatization);
- receipt of property by the State in the capacity of owner and investor (as a result of bankruptcy of federal state unitary enterprises (FSUEs); voluntary alienation by the holders of property of their the ownership right; confiscation of inefficiently used property from federal state institutions (FSIs); property received after the implementation of federal target programs (FTPs) and investment projects);
- receipt of property by the State for other reasons (on the basis of a court ruling, heirless property, and property received as a gift).

The grounds for alienating property from the RF treasury can also be divided into four groups:

- consolidation of property to various right holders (federal bodies of authority, as a rule, federal bodies of executive authority (FBEA, FSIs, FSUEs), while the property itself remains in federal ownership;
- privatization (entry in the charter capital of joint-stock companies and sale);
- other form of alienation from federal ownership (transfer of the ownership right to another tier of public authority and transfer into the ownership by religious organizations in accordance with Federal Law No 327-FZ (2010));
- ultimate disposal (by means of writing property off the State register).

6.2.1. The Place of Treasury-owned Property with Regard to the Structure of Federal Ownership in the 2000s

One obvious negative outcome of the loss of manageability of the national economy as a result of the rapid enforced privatization in the first half of the 1990s was the absence of reliable information as to the basic parameters of the property complex that remained in federal ownership. This fact in itself is by no means surprising, because the goal of compiling a complete federal property register was for the first time set only by the turn of the century. Systematic work in this direction was started after the approval of the Provision on Federal Property Record-keeping and the Federal Property Register by Decree of the RF Government of 3 July 1998, No 696, which was to replace the Temporary Provision on the Property Register of the Russian Federation, introduced by the RF State Committee for State Property Management (*Goskomimushchestvo*) back in 1992.

As the federal property inventory process progressed, the number of properties officially entered in the register was gradually increasing.

By early 2003, a body of detailed information had already become available on the bulk of immovable property in federal ownership. At that time, it consisted of more than 1,150.5

thousand entities, mostly consolidated to unitary enterprises (approximately 73%). The role of the treasury as the user of federal property entities was almost negligible (less than 5% of all entities). All the other property entities were consolidated to state institutions.

Let us take a closer look at the structure of federal property entities as it was at that time, by type of property user and type of property entity (*Tables 11* and *12*).

Table 11

The Structure of Federal Immovable Property Based on Its Purpose (or Use) As of 1 January 2003

Property type	Properties consolidated to SUE		Properties consolidated to FSI		Properties held by treasury		Total, entered in Federal Property Register	
	units	%	units	%	units	%	units	%
Industrial and administrative property entities	98,501	73.22	35,300	26.25	723	0.53	134,524	100.0
Residential premises	67,919	47.9	54,503	38.5	19,246	13.6	141,668	100.0
Social, cultural and household services	46,643	75.0	14,205	22.8	1,373	2.2	62,221	100.0
Other	623,196	76.7	155,798	19.2	33,131	4.1	812,125	100.0
Total	836,259	72.7	259,806	22.6	54,473	4.7	1,150,538	100.0

Source: Braverman A.A. O merakh po povysheniiu effektivnosti upravleniia federal'noi sobstvennost'iu i kriteriiakh ee otsenki [On Measures Designed to Increase the Effectiveness of Federal Property Management and on the Criteria for its Assessment] // *Vestnik Minimushchestva Rossii* [The Herald of Russia's Ministry of State Property], 2003, No 1, p. 19; authors' calculations.

As follows from data presented in *Table 11*, approximately 3/4 of all industrial and administrative entities, entities used to provide social, cultural and household services to the population, and other types of entities, and almost 48% of residential premises were consolidated to SUEs. Nevertheless, unitary enterprises comprised the majority of property users even in the latter category, their share being greater than that of state institutions.

Among all these categories, the share of the treasury was relatively significant only with regard to residential premises (13.6% vs. 2.2% of entities used to provide social, cultural and household services to the population, and approximately 0.5% of industrial and administrative entities).

Table 12

The Structure of Federal Immovable Property, by User Category, As of 1 January 2003

User category	Industrial and administrative		Residential premises		Social, cultural and household services		Other		Total	
	units	%	units	%	units	%	units	%	units	%
FSUE	98,501	11.8	67,919	8.1	46,643	5.6	623,196	74.5	836,259	100.0
FSI	35,300	13.6	54,503	21.0	14,205	5.45	155,798	59.95	259,806	100.0
Treasury	723	1.33	19,246	35.33	1,373	2.52	33,131	60.82	54,473	100.0
Total	134,524	11.7	141,668	12.3	62,221	5.4	812,125	70.6	1,150,538	100.0

Source: Braverman A.A. O merakh po povysheniiu effektivnosti upravleniia federal'noi sobstvennost'iu i kriteriiakh ee otsenki [On Measures Designed to Increase the Effectiveness of Federal Property Management and on the Criteria for its Assessment]. *Vestnik Minimushchestva Rossii* [The Herald of Russia's Ministry of State Property], 2003, No 1, pp. 19; authors' calculations.

If we look at the structure of federal property entities distributed by user category (*Table 12*), in all the user groups the dominant role belonged to entities of the category described as 'other', but their relative shares varied, amounting for both the treasury and state institutions to approximately 60%. Second came residential premises (35.3%), while the shares of entities with the targeted function of providing social, cultural and household services to the popula-

tion, and that of industrial and administrative entities were very small (2.5% and approximately 1.3% respectively).

More detailed information concerning the various targeted functions of federal immovable property entities held by the treasury became available only as late as 2005. The previously released data as of early 2003 were fragmentary, thus making a comparative analysis very difficult (*Table 13*).

Table 13

The Structure of Federal Immovable Property Held by the Treasury, by Its Targeted Function (or Use) As of Early 2003 and 2005

Targeted function	as of 1 January 2003		as of 1 January 2005	
	units	%	units	%
Residential buildings	19,246	35.33	22,518[a]	30.1
Social, cultural and household services	1,373	2.52	2,549	3.4
Civil defense facilities	1,110	2.05	2,190[b]	2.9
Wharfs	480	0.9	…	…
Runways	54	0.1	…	…
Structures	…	…	10,258	13.7
Industrial buildings	…[c]	…	3,089	4.1
Warehouses	…	…	2,814	3.8
Auxiliary structures	…	…	2,710	3.6
Engineering structures	…	…	2,304	3.1
Administrative buildings	…[c]	…	1,704	2.3
Cultural and educational services	…	…	1,325	1.8
Garages	…	…	1,274	1.7
Agricultural buildings	…	…	450	0.6
Public healthcare entities	…	…	440	0.6
Public buildings	…	…	402	0.5
Industrial laboratory buildings	…	…	305	0.4
Public education entities	…	…	271	0.4
Science and technology	…	…	36	0.0
Building complexes	…	…	18	0.0
Other immovable property entities	32,210	59.1	20,065	26.9
Total	54,473	100.0	74,722	100.0

[a] – residential buildings / premises;
[b] – civil defense and protection facilities;
[c] – the total number of industrial and administrative property entities as of 1 January 2003 was 723 units.
Source: Braverman A.A. O merakh po povysheniiu effektivnosti upravleniia federal'noi sobstvennost'iu i kriteriiakh ee otsenki [On Measures Designed to Increase the Effectiveness of Federal Property Management and on the Criteria for its Assessment]. *Vestnik Minimushchestva Rossii* [The Herald of Russia's Ministry of State Property], 2003, No 1, p. 13; Materials for the RF Government's meeting on 17 March 2005 On Measures Designed to Increase the Effectiveness of Federal Property Management'; authors' calculations.

In early 2005, the by-type structure of federal immovable property entities held by the treasury was dominated by residential buildings (or residential premises) (approximately 22.5 thousand units, or more than 30% of the total number of property entities) and structures (more than 10 thousand units, or 13.7%). In 9 categories, the number of entities held by the treasury was in the interval between 1.2 and 3.1 thousand units (the share of each being between 1.7% and 4.1%), in another 7 categories it was less than 500 units (the share of each being less than 0.6%).

By comparison with the situation in early 2003, the total number of federal immovable property entities rose nearly 1.4 times (or by more than 20 thousand units). Among the categories of entities for which sufficient comparative data is available, we can note a significant growth in the number of entities used for civil defense purposes (which nearly doubled) and that of the entities used to provide social, cultural and household services to the population

(by 86%). The growth in the number of residential buildings (or residential premises) was less impressive (by 17%), although in absolute terms (more than 3 thousand units) it was higher that the number of entities used for civil defense purposes and that of entities used to provide social, cultural and household services to the population.

On the whole it took approximately 12 years to compile a state property register; the efforts in that direction continued throughout the 2000s. In March 2010, *Rosimushchestvo* announced that, for the first time since 1991, it could be stated that the register of state property had indeed been created. In this connection it should be noted that this activity, in its later phase, was subject to regulation by the Provision on Federal Property Record-keeping elaborated in accordance with Decree of the RF Government of 16 July 2007, No 447 'On Improving Federal Property Record-keeping', when the previously applied document (adopted in 1998) was declared to be null and void.

The revision of printed federal property records entered into the government federal property database as of the moment of enactment of RF Government Decree No 447 had been completed by the early summer of 2010. Over the period 2010–2011, practically the entire body of data in electronic form was entered into the Automated Federal Property Records System (ASUFI). In this connection it may also be noted that, in contrast to the data for 2003–2005 cited above, these records contained information not only on immovable property, but on movable property and land plots as well.

According to data presented in the Report of the Implementation of the Government Program *Federal Property Management* in 2013 released by the RF Ministry of Economic Development,[1] the structure of property types based on their functional use entered into the Federal Property Register as of 15 April 2014 was as follows:

- buildings, structures, unfinished construction entities (642,069 entities);
- movable property to the value of more than Rb 500,000 (491,494 entities);
- land plots (269,689 entities);
- residential, non-residential premises (183,892 entities);
- miscellaneous movable property to the value of less than Rb 500,000 (17,049 entities);
- aircraft, seagoing vessels, inland boats (9,962 entities);
- shares in ownership rights (1,850 entities);
- spacecraft (13 entities).

The main changes in the structure of entities entered into the Federal Property Register (according to data released by the Automated Federal Property Records System) can be followed on the basis of data presented in *Tables 14* and *15*.

The bulk of federal property entities as of mid-2014 (more than 69%) were consolidated to right holders by right of operative management (this right being executed in the main by state institutions), which is the same level as recorded in late 2009 and more than 11 pp. above the level of late 2008. The downward trend displayed by the number of unitary enterprises is also reflected by the structure of federal property, where the share of entities consolidated to right holders by right of economic jurisdiction was palpably shrinking (approximately 14% in mid-2014 vs. more than 24% at the end of 2008).

The relative share of entities belonging to the federal treasury has remained approximately at the same level since early 2013, amounting by mid-2014 to 16.6% (vs. 11–12% in 2009–

[1] Considered at the meeting of the Civic Council under the RF Ministry of Economic Development on 23 April 2014.

2010, although in 2008 that category accounted for 17.6% of all registered entities). Thus, in the period 2013–2014 the treasury became the second largest federal property right holder among all the categories thereof, getting slightly ahead of entities held by right of economic jurisdiction by enterprises.

Table 14

The Dynamics and Structure of Federal Property Entities Entered in the Federal Property Register, by Right Holder Category, in 2008–2014

Date	Total number of immovable and movable property entities, total		of these, by property right category					
			consolidated to right holders by right of economic jurisdiction		consolidated to right holders by right of operative management		part of RF state treasury [a]	
	units	%	units	%	units	%	units	%
31 December 2008	14,096	100.0	3,418	24.2	8202	58.2	2476	17.6
31 December 2009	1,193,201	100.0	226,818	19.0	827,234	69.3	139,149	11.7
31 December 2010	1,552,121	100.0	279,402	18.0	1,096,547	70.6	176,172	11.4
31 December 2011	1,367,975	100.0	245,060	17.9	921,252	67.35	201,663	14.75
1 January 2013	1,471,282	100.0	223,725	15.2	1,003,690	68.2	244,367	16.6
1 April 2013	1,495,784	100.0	223,459	14.95	1,020,384	68.2	251,941	16.85
1 July 2013	1,521,181	100.0	223,871	14.7	1,042,214	68.5	255,096	16.8
1 October 2013	1,555,788	100.0	225,315	14.5	1,068,688	68.7	261,785	16.8
1 January 2014	1,588,576	100.0	227,208	14.3	1,095,016	68.9	266,352	16.8
1 April 2014	1,609,067	100.0	229,576	14.3	1,110,800	69.0	268,691	16.7
1 July 2014	1,648,404/ 1,648,126[b]	100.0	232967	14.1	1,142,103	69.3	273,056	16.6

[a] – including land plots, but less blocks of shares (stakes, contributions) in economic societies;
[b] – the value obtained by adding up the total number entities in all three categories (in the denominator) somewhat differs from the official data (in the numerator).
Source: information based on data entered in the Federal Property Register, released by the RF Ministry of Economic Development Russia as of 17 February 2012, and the corresponding data entered in the Federal Property Register as of 23 April 2013, 13 November 2013, 17 January 2014, 18 April 2014, 7 August 2014 (see www.economy.gov.ru); authors' calculations.

As for the structure of treasury-owned property (*Table 15*), the biggest share was taken up by land plots (more than 68%), while the share of immovable property entities was approximately 30%, and that of movable property – approximately 2%; in other words, the share of entities held by the treasury (less land plots), amounted to 5.3% of all entities entered into the Federal Property Register.

Throughout the course of 2013 and H1 2014, the aggregate number of entities comprising the treasury increased by 11.7%, or by 28.7 thousand units. The share of land plots in the overall structure of entities held by the treasury increased by more than 3.5 pp., while their number in absolute terms increased by 18.3% (or by 28.8 thousand units). This growth was the result of an accelerating process of delineation of state ownership rights to land between different tiers of public authority and State registration of the Russian Federation's ownership rights to land plots. The number of movable property entities rose by 26.7%, or to more than 1.2 thousand units in absolute terms, while that of other miscellaneous immovable property entities, on the contrary, dropped by 1.5% (or by nearly 1.3 thousand units).

Table 15

The Dynamics and Typological Structure of the Federal Property Entities Which Comprised the State Treasury of the Russian Federation in 2013 and 2014

Date	Aggregate number of property entities comprising RF state treasury, total		out of that number, by type					
			immovable property (less land plots)		land plots		movable property	
	units	%	units	%	units	%	units	%
1 January 2013	244,367	100.0	82,809	33.9	157,039	64.3	4,519	1.8
1 April 2013	251,941	100.0	83,724	33.25	163,351	64.8	4,866	1.95
1 October 2013	261,785	100.0	82,580	31.5	173,799	66.4	5,406	2.1
1 January 2014	266,352	100.0	81,918	30.8	178,709	67.1	5,725	2.1
1 April 2014	268,691	100.0	81,034	30.2	181,955	67.7	5,702	2.1
1 July 2014	273,056	100.0	81,536	29.9	185,792	68.0	5,728	2.1

Source: information based on data entered in the Federal Property Register, released by the RF Ministry of Economic Development Russia as of 23 April 2013, 17 January 2014, 7 August 2014 (see www.economy.gov.ru); authors' calculations.

As far as the size of the property complex comprising the treasury is concerned, there is no reason for viewing it as a serious burden imposed on the federal budget. This assumption is confirmed by the amount of budget allocations earmarked in the three-year federal budget for 2013–2015 for the upkeep and servicing of the RF treasury - approximately Rb 181.6m per annum.[1]

At the same time, the specificity of some of the categories of property held by the RF treasury is fraught with the risk of manmade disaster, which may require the allocation of some additional budget expenditures to the liquidation of such emergency situations. A more general issue associated with treasury property management, which is common to all the components of the public property complex, is the shortage of funding needed for the upkeep and maintenance of these properties.

Of course, treasury property can also be treated as a source of revenue. In the year-end report on the execution of the federal budget in 2013, the revenues generated by the lease of property comprising the RF treasury (Rb 1,015.75m) were for the first time entered as a separate unit. According to preliminary data, in 2014 the amount of revenue received from that source rose by nearly 1/3 - to approximately Rb 1,348.5m, while the budget revenues generated by the lease of other property declined.[2] As a result, the relative share of the revenues generated by the lease of property comprising the RF treasury increased to more than 1/4 of the total amount of revenue generated by property lease (with the exception of land plots) vs. approximately 1/5 a year earlier.

[1] Federal Law of 3 December 2012, No 216-FZ 'On the Federal Budget for 2013 and Planning Period 2014 and 2015'.
[2] Law of Federal Budget Execution for the year 2013; Report on Federal Budget Execution as of 1 January 2015 (monthly report), www.roskazna.ru.

6.2.2. State Treasury Property in Privatization Programs [1]

The properties without targeted government functions held by the Treasury of the Russian Federation began to be mentioned as a separate category of entities that can be earmarked for privatization in annual privatization programs from the Forecast Plan of Federal Property Privatization for 2007 onwards.

Thus, in *Rosimushchestvo'*s Report for 2008 it was stated that, in November – December 2008, a total of 58 directives concerning the terms of privatization of inland boats and seagoing vessels, and 58 announcements concerning their sale were issued, while the total number of seagoing vessels and inland boats entered in the privatization program for 2008 was 223 units. The deadline for summing up the results of sales of inland boats and seagoing vessels was set for 2009, but no further information was available as to the implementation of that part of the privatization program.

The initial forecast privatization plan for 2010 (approved in late November 2009) listed 56 miscellaneous property entities held by the Treasury of the Russian Federation, including immovable property entities, seagoing vessels and inland boats. In mid-March 2010 the privatization program was considerably expanded, due in the main to the drastically altered plans for privatization of unitary enterprises and state stakes in joint-stock companies, while the number of treasury-owned entities earmarked for planned privatization was increased to only 74 units. However, in the course of further alterations, the total number of entities to be privatized gradually rose to 291 units (mostly in the form of property earmarked as contribution to the charter capital of OJSC *Rosspirtprom*).

In 2010, the directives concerning the privatization of such assets (a total of 10 entities) and the announcements concerning their sale were issued only towards the year's end, while the results of bidding were reported in early 2011: out of a total of 8 entities, 6 entities were sold to the total value of Rb 196.91m. No directives concerning the terms of their privatization were issued with regard to 52 out of the 62 treasury-owned entities earmarked for sale in 2010. This happened due to failure to comply with the requirements stipulated in the Land Code of the Russian Federation, whereby it is forbidden to privatize industrial buildings and structures without a simultaneous privatization of the land plots in which these entities are situated, and also due to the lack of proper backing for the deals (availability of reliable databases and registers, including discrepancies between the name and location of a given property entity).[2]

The first three-year privatization program for 2011–2013, approved by Directive of the RF Government of 27 November 2010, No 2102-r, in its initial version had envisaged the privatization of 73 miscellaneous property entities held by the RF Treasury. However later on, with due regard to the subsequent adjustments and addition, it ended up to include 734 miscellaneous property entities, of which a total of 462 entities (or slightly less than 2/3) were to be transferred as contributions to the charter capital of integrated structures. Thus, for example, by Directive of the RF Government of 18 April 2013, No 627-r alterations were introduced into the privatization program for 2011–2013 whereby it was augmented by 149 miscellaneous treasury-owned immovable property entities (mostly land plots with the buildings and structures situated therein).

[1] This paragraph is based on data taken from *Rosimushchestvo'*s Report for 2013; see www.rosim.ru.
[2] Report on federal property privatization in 2010.

The scale on which miscellaneous property entities were used as contributions to the charter capital of the already existing and newly created holding companies is impressive.

In the framework of creation of integrated structures over the period 2011–2013, the directives concerning the terms of their privatization were issued with regard to a total of 457 miscellaneous property entities (or 98.9% of the number of properties listed in this part of the privatization program). These were to be transferred as contributions to the charter capital of OJSC *Rosspirtprom*, *Russian Hippodromes* JSC, OJSC *Russian Railways*, JSC United Aircraft Corporation (UAC) and OAO *Federal Hydro-generating Company*. No decisions as to the terms of their privatization were made with regard to a total of 5 miscellaneous property entities, including 1 unfinished construction entity (OJSC *Russian Railways*), and 2 land plots (one of JSC UAC's affiliated companies) and 2 other property entities (*Russian Hippodromes* JSC).

The latter was the biggest recipient of miscellaneous property entities among all integrated structures.

In accordance with Executive Order of the President of the Russian Federation of 8 August 2011, No 1058 'On the Open-ended Joint-stock Company Uniting the Hippodromes of the Russian Federation', FSUE Central Moscow Hippodrome must be reorganized into an open-ended joint-stock company and comprise all the hippodromes in the Russian Federation, with the transfer into the newly created company's charter capital of the properties formerly held by the 27 now liquidated federal state institutions – *State Equine Stables* (FSI *GZK*), by way of payment for the additional shares to be placed by the new OJSC in the framework of increasing its charter capital.

Rosimushchestvo issued its Directive of 13 April 2012, No 558-r 'On the Terms of Privatization of FSUE Central Moscow Hippodrome; effectuated the State registration of *Russian Hippodromes* JSC; and handled the issuance of its shares. Over the period 2011–2013, the relevant directives were issued with regard to a total of 441 property entities formerly held by FSI *GZK*, which were to be transferred into the charter capital of *Russian Hippodromes* JSC; as well as the directives concerning the terms of privatization of another 434 miscellaneous property entities, which accounts for 95% of all the property entities subject to relevant decisions concerning their transfer into the charter capital of integrated structures.

Against this background the attempted launch of massive sales of other miscellaneous property entities comprising the RF state treasury over the period 2011–2013 evidently resulted in a failure. Out of the 272 property entities earmarked for sale in accordance with the privatization program for 2011–2013, only 65 units were actually privatized: in 2011 – 3 units; in 2012 – 40 units; in 2013 – 22 units. Thus, as far as this part of it is concerned, only less than one-fourth of the privatization program was implemented.

However, the final year of the privatization program produced somewhat better results in other planned directions, in spite of the reduction in the number of sold properties nearly by half. Thus, out of a total of 99 property entities offered for sale in 2013, 22 units were sold, while no bidding actually took place with regard to another 8 entities (and for 69 property entities the results of sales were to be reported in Q1 2014). For reference: in 2011, the results of sales were reported only with regard to 16 property entities, of which only 3 entities were sold for the symbolic sum of Rb 5.0m, and 13 entities were never put up for bidding. So, the privatization prospects of miscellaneous property entities belonging to 'other' category radically improved, as nearly 3/4 of those property entities that were offered for sale over the course of

the relevant calendar year eventually found their buyers, whereas in 2011 this had happened to less than 1/5 of such properties.

The financial outcome of this shift in attitudes was the transfer, to the federal budget, of Rb 166.8m (or more than half of the aggregate proceeds reported for the three-year period (Rb 327.3m), as shown by the year-end privatization results of 2013.

As far as the current privatization program is concerned, we may note that Section Two of the *Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016*, approved by Directive of the RF Government of 1 July 2013, No 1111-r, where the assets earmarked for privatization in an ordinary procedure are listed, had initially contained, alongside SUEs and JSC, also 94 miscellaneous property entities held by the RF treasury. However, as it had also been the case with the previous privatization program, by early autumn of 2014 their number tripled, thus amounting to 294 units

The relevant powers to carry out the privatization procedures involving nearly 3/4 of those miscellaneous property entities (or a total of 219 units), in accordance with *Rosimushchestvo*'s Order of 2 October 2014, No 382 'On Organizing the Activity of Territorial Administrations of the RF Federal Agency for State Property Management (*Rosimushchestvo*) Relating to Privatization of Other Property Included in the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016', were delegated to its 37 territorial agencies.

According to preliminary data, in 2014, out of the total number of 48 immovable property entities offered for sale, 11 units were actually sold (with the transfer of proceeds to the budget in the amount of Rb 47.46m); and for another 17 property entities the results of sales were to be reported in Q1 2015.[1]

In February 2015, *Rosimushchestvo* released the information that, early in 2015, 6 property entities to the total value of Rb 19m were sold, and another 22 sales were announced at the initial price of Rb 35.61m.

The transfer, by *Rosimushchestvo*, of its powers to privatize (or alienate) federal property to its territorial agencies has made it possible to simplify the relevant procedures and to shorten the pre-sale preparation period, as well as to tighten the responsibility for the quality of these procedures. The transfer of privatization procedures to the exact locality where the relevant properties are situated can conduce to greater interest in property bidding on the part of regional investors, including small businesses and individual entrepreneurs.[2]

6.2.3. Treasury-owned Property in the Framework of the Government Program *Federal Property Management*[3]

The landmark development, which was to influence the entire system of ownership relations in this country, was the approval of the Government Program (GP) *Federal Property Management* by Directive of the RF Government of 16 February 2013, No 191-r.

The document's core theme was the definition of and consolidation to each federal property entity federal property its targeted function - the task that expected to be accomplished in 2018 also with regard to 30% of treasury-owned entities alongside other types of assets (or to

[1] 2014 Report on the Implementation of the Forecast Plan (Program) of Federal Property Privatization and the Main Directions of Federal Property Privatization for 2014–2016, www.rosim.ru, 19 February 2015.
[2] www.rosim.ru, 26 February 2015.
[3] This paragraph is based on data taken from *Rosimushchestvo*'s Report for 2013; see www.rosim.ru.

90% of such entities on condition that relevant additional resources should be made available). This goal was further supported by the plans for annual reduction, on 2012, of the total number of other miscellaneous property entities (beside land plots) comprising the treasury (less those entities that were to be received by the Treasury of the Russian Federation as a result of privatization of FSUEs over the period 2013–2018). So, by 2018, the number of treasury-owned property entities (with the exception of land plots) must shrink by 90%, while the total area of land plots held by the RF treasury and not involved in economic turnover – by 35% (on condition that additional resources be allocated, as well as financial backing provided for their subdivision and entry in the cadastre, in accordance with the expenditure items earmarked for covering the activity of the Federal Service for State Registration, Cadastre and Cartography (*Rosreestr*)).

One of the key goals outlined in the Government Program is the execution of ownership powers over property comprising the state treasury of the Russian Federation. Its targeted function will be that of efficient management over the period while it will be held by the treasury, as well as minimization of the number of treasury-owned property entities, so that in the end the treasury will retain only the property assigned to it by normative documents issued by the RF Government and deemed to be necessary for federal bodies of state authority to perform their essential functions and to protect the strategic interests of the Russian Federation.

The key targets involved in the achievement of this goal are as follows:

- categorization of treasury-owned property entities depending on their targeted function;
- disposal of current assets;
- use of efficient mechanisms for involving relevant properties in economic turnover;
- allocation of sufficient funding for the upkeep of properties during the period while it will be held by the treasury;
- greater transparency of treasury property management.

The Government Program envisages the following key measures designed to ensure the achievement of its declared goal:

- development of an action plan for optimizing the list of properties to comprise the RF treasury; and ensuring interaction between the parties involved in the process through a government (interdepartmental) portal;
- development and approval of the drafts of necessary normative legal acts and the corresponding alterations to existing legislation whereby the procedures of transfer of properties from the treasury of the Russian Federation into the public ownership of RF subjects, municipal ownership, and the procedures designed to simplify the involvement of property comprising the RF treasury in economic turnover are to be regulated;
- conduct of general building repairs and formalization of the necessary technical documentation required for the transfer of property entities to another tier of public ownership;
- recycling of treasury-owned property entities.

In 2013, in the course of implementation of these plans, the following measures were carried out:

- categorization of treasury-owned property entities;
- development of roadmaps for each category;
- on the basis of available information on the number of entities in each category, technical assignments were prepared and approved for each territorial administration to minimize

the number of treasury-owned property entities in accordance with their targeted functions;
- elaboration of the Treasury Information System (IS) on the basis of the a government (interdepartmental) portal, which will pool all information on the composition of the RF treasury;
- a proposal was submitted to the RF Ministry of Finance as to the allocation of additional funding to the treasury for the period 2014–2016.

The Government Program also envisages the development of a treasury property classification, which will be broken up into 13 categories, and each relevant property entity will be assigned to a certain category depending on its targeted function. After the launch of the Treasury Information System all the property entities entered into the Federal Property Register will be automatically assigned to one of the categories, thus making much easier the interaction of the related parties via the interdepartmental portal. This software in now undergoing its final phase of development.

For each category, the main channels of property withdrawal and receipt are established.

In 2013, the number of property entities comprising the treasury was reduced as a result of the following acts:
- privatization (including free-of-charge privatization of apartments by RF citizens);
- transfer of property to another tier of public ownership;
- consolidation of property to enterprises and institutions;
- recycling of treasury-owned property entities.

Thus, as a result of all these developments, the total number of immovable property entities held by the treasury (less movable property) declined for the first time. It became less by a total of 2,136 units (or by 2.54%). It should be noted that the index of movable property entities is prone to considerable fluctuations, so it inevitably has a strong influence on the general picture emerging as a result of efforts aimed at minimizing the property complex belonging to the treasury. With due regard for changes in this category, the total number of treasury-owned property entities in the RF over the course of 2013 declined by 0.8% (or by more than 700 units).

Among the reasons why the volume of property comprising the RF treasury could not be reduced at a faster rate, we should note the following ones:
- shortage of funding needed for recycling, repairs, upkeep and protection of property entities, and for formalization of relevant technical documentation;
- lengthy and complicated procedures involved in the alienation of property entities from the treasury;
- refusal of bodies of federal authority, RF subjects, or municipal formations to receive property entities from the treasury;
- imperfections of the existing normative legal base;
- concentration of all the relevant powers at the level of *Rosimushchestvo*'s central apparatus;[1]
- valuation of the immovable property entities being alienated without taking into account the value of relevant land plots.

[1] The alterations to the Model Provision on a Territorial Agency of *Rosimushchestvo*, whereby the powers of its territorial administrations are to be expanded, came into force only as late as February 2014.

In order to increase transparency and improve the quality of treasury property management, comprehensive efforts have been made to elaborate the relevant strategies and approve the program aimed at reducing the volume of property held by the treasury. In particular, methodological recommendations (roadmaps) for the following key directions were developed:

- transfer of federal property comprising the state treasury of the Russian Federation, to be used on a gratis basis;
- consolidation, by assigning a relevant type of right, of property comprising the state treasury of the Russian Federation to federal bodies of authority or their subordinated federal state institutions and enterprises;
- preparation of relevant decisions concerning gratis transfer of property into federal ownership, of transfer of federal property into the public ownership of subjects of the Russian Federation and municipal ownership;
- the procedure for recycling federal property comprising the state treasury of the Russian Federation.

In this connection it should be noted that writing-off as a methods for disposing of property has almost never been used with regard to properties comprising the RF treasury. *Rosimushchestvo* considered 38 applications submitted by its territorial administrations concerning the possibility of writing-off certain property entities, and issued the corresponding assignments for their recycling only in response to 3 applications, all the other applications having been rejected. The reason for a rejection in the majority of cases was the applicants' failure to provide the necessary documents, including properly formalized rights to the land plots in which the relevant buildings were situated, which could result in a loss of the rights of the Russian Federation to those land plots.

By way of improving the normative legal regulation in the sphere of treasury property management, *Rosimushchestvo*'s territorial administrations were delegated the relevant powers to carry out the privatization of property entities comprising the housing fund, as well as their transfer to another tier of public ownership.

In this connection, it is necessary to make a special mention of the enactment of Federal Law of 28 December 2013, No 408-FZ, whereby Article 22 of the Law of the Russian Federation of 21 February 1992, No 2395-1 'On Mineral Resources' was augmented by Paragraph 8.1, in accordance with which the users of mineral resources should be responsible for ensuring safety of the mining shafts, oil and gas wells and other facilities associated with the use of mineral resources and situated within the boundaries of the relevant land plots assigned to them.

The introduction of these alterations into Russian legislation will make the users of mineral resources for the conservation and liquidation of the oil and gas wells situated in relevant land plots, thus creating the necessary prerequisites for reducing the number of property entities associated with mineral resources extraction and comprising the state treasury of the Russian Federation, which is now one of the most problematic property categories. By way of example, we may point to the situation that arose in connection with the condensate wells situated within the boundaries of Astrakhan Gas Condensate Oilfield. In 2010, *Rosimushchestvo*'s territorial administration for Astrakhan Oblast was required, by a court ruling, to organize the liquidation of the oil and gas wells in question, an activity associated with high costs and availability of the necessary resources. According to approximate estimations, the cost of dismantling one well was Rb 1.5bn.

Further improvements of the normative legal regulation procedures will be made along the following lines:

- preparation of the RF Government's Decree 'On the Management of Federal Property Entities Comprising the Treasury of the Russian Federation', designed to lay down the basic principles of regulating the management of this type of public assets (proposal submitted by *Rosimushchestvo* that the relevant draft document be developed);
- preparation of alterations to Federal Law No 122-FZ (2004) and the RF Government's Decree No 374 (2006) designed to simplify the procedures for transfer of certain property categories to another tier of public ownership (the relevant proposals were submitted by *Rosimushchestvo* to the RF Ministry of Economic Development);
- preparation of the RF Government's Decree 'On Measures Designed to Ensure the Upkeep and Safety of Potentially Hazardous Property Entities Comprising the Treasury of the Russian Federation', whereby the procedures for their proper upkeep, safety and liquidation are to be envisaged (the draft has been coordinated and submitted to the RF Ministry of Economic Development);
- preparation of relevant normative legal acts designed to optimize the list of comprising the RF treasury, including simplification of the procedures for its involvement in economic turnover (public-private partnership, sale).

As noted earlier, efficient treasury property management implies the allocation of sufficient funding to its upkeep and proper use. Meanwhile, the total allocations earmarked in 2013 for *Rosimushchestvo*, to be used for the upkeep and servicing of the RF treasury-owned property in accordance with the Law on Federal Budget for 2013 and Planning Period 2014 and 2015, amount to a total of Rb 181.6m, while Rosimushchestvo's territorial agencies had submitted requests for funding in the amount of more than Rb 1.2bn (or 6.7 times higher than the amount actually allocated).

In accordance with the law on federal budget execution for 2013, the amount of budget expenditure broken up by government department, and in particular that allocated to *Rosimushchestvo* (Item 'Upkeep and Servicing of RF Treasury') was Rb 233.9m (increased by the RF Ministry of Finance to Rb 242.5m as of the end of the year 2013).[1] This is actually higher than the amount of allocations to the other items in the framework of government property policy (e.g.'Valuation of Immovable Property, Recognition of Rights and Regulation of Public Ownership Relations' (Rb 64.85m)) and 'Management of Federal Stakes (or Shares) in Economic Societies' (Rb 17.5m)), but much lower than the amount of expenditure allocated to 'Provision for and Conduct of Pre-sale Preparation and Sale of Federal Property, and reorganization of FSUEs (Rb 449.8m).

The top priority areas of spending in the framework of the budget expenditures on the upkeep and servicing of property entities comprising the RF treasury are as follows: their protection; utilities; repair of entities in unsatisfactory condition; and drawing-up of technical passports for property entities comprising the RF treasury, because this will improve the quality of property management and facilitate its involvement in economic turnover.

The allocated monies were distributed between *Rosimushchestvo*'s territorial administrations and spent on their most urgent needs, e.g. the introduction of safety measures in respect

[1] The increase (on the initial budget targets) of the amount of allocations to the upkeep and servicing of property entities comprising the RF treasury was made possible by the approval, by the RF Ministry of Finance, of the allocations to cover the costs associated with writs of execution (issued in the main in the framework of claims for recovery of unjust enrichment resulting from the storage of seagoing vessels).

of hazard-prone entities (Altai Krai), the drawing-up of technical passports for hydro-technical facilities (Krasnodar Krai), recycling of explosives (the Republic of Sakha (Yakutia)).

Evidently, the amount of current allocations to the upkeep and servicing of property entities comprising the RF treasury is insufficient. According to the RF Ministry of Finance's estimations based on the results of lengthy studies, in 2014 as total of Rb 615m was needed for this type of activity, which is 2.5 times higher than the amount of corresponding allocations for 2013.

Active measures are being implemented with regard to formalization of the ownership rights of the Russian Federation and the necessary documentations for the immovable property entities comprising the RF treasury. In 2013, technical passports were drawn up for a total of 1.503 treasury-owned entities. The allocations for 2014 to the drawing-up of technical passports for property entities comprising the RF treasury amount to approximately Rb 400m, which is expected to yield much better indices of ownership right formalization, and so to facilitate the involvement of these property entities in economic turnover.

By way of getting back to the discussion of the targets set in the Government Program *Federal Property Management* with regard to treasury-owned property entities, we can comment as follows.

As the methodology for determining the targeted function of federal property entities belonging to this category is still being developed,[1] the only real index for 2013 is that describing the reduction in the number of treasury property entities (less land plots) in comparison with 2012. It can be noted that the actually reported resulting figure of 0.8%, when set against the planned target of 1%, reveals a slight deviation by 0.2 pp. However, this value is far less than the deviation displayed by the downward movement of the indexes describing the number of FSUEs and the total area of land plots held by the treasury and not involved in economic turnover.

6.2.4. Changes in the Treasury-owned Property Complex of the Russian Federation Since the Beginning of the State Program's Implementation

As seen from *Rosimushchestvo*'s report on its activity in 2013, the structure of RF treasury-owned property (less land plots) appeared to be as follows (*Table 16*).

As of 1 February 2013, out of the total amount of property entities belonging to the RF treasury (88,250 units) and grouped into 13 categories, nearly 2/3 was taken up by the following 4 categories: administrative buildings and structures (20.9%), civil defense and protection facilities (approximately 20.5%), housing fund entities (13.6%), and housing and utilities entities (approximately 10.7%). The relative shares of mineral resources extraction facilities, transport infrastructure and communications facilities, and cultural facilities amounted to approximately 7–8% each.

These were followed by movable property entities (4.8%), social sphere facilities (3.1%), production entities (2%), and air and water transport facilities (approximately 1.3%). The smallest shares (less than 1% in each category) in the structure of treasury property belonged to hydro-technical facilities and unfinished construction entities.

[1] According to the State Program, in 2013, the targeted function should have been defined for 5% of property entities owned by the treasury.

Table 16

The Structure of RF Treasury Property

Categories of treasury-owned property	Number of units, their share			
	By early 2013		By early 2014	
	units	%	units	%
Administrative buildings and structures	18,464	20.9	16,990	19.4
Civil defense and protection facilities	18,045	20.45	16,978	19.4
Housing fund	12,015	13.6	10,511	12.0
Housing and utilities	9,391	10.65	7,903	9.0
Mineral resources extraction facilities	6,962	7.9	6,993	8.0
Transport infrastructure and communications facilities	6,324	7.2	5,862	6.7
Cultural, ritual and religious facilities	6,130	6.95	7,030	8.0
Social sphere facilities	2,755	3.1	2,343	2.7
Production entities	1,758	2.0	4,598	5.25
Air and water transport facilities	1,102	1.25	1,122	1.3
Hydro-technical facilities	739	0.8	1,215	1.4
Unfinished construction entities	369	0.4	373	0.4
Movable property entities	4,196	4.8	5,624	6.45
Total	88,250	100.0	87,542	100.0

A year later, in early 2014, there were the same top 4 categories, but their aggregate share had shrunk to approximately 60% due to the shrinkage of the shares of each of these groups: administrative buildings and structures – from 20.9% to 19.4%, civil defense and protection facilities – approximately from 20.5% to 19.4%, housing fund entities – from 13.6% to 12%, housing and utilities entities – approximately from 10.7% to 9%. A similar trend could be observed in regard of transport infrastructure and communications facilities (decline from 7.2% to 6.7%), and social sphere facilities (decline from 3.1% to 2.7%).

Meanwhile, the relative share of production entities more than doubled (increasing from 2% to approximately 5.3%); the relative share of movable property entities increased by more than 1 percent point (from 4.8% to approximately 6.5%), the same was of true of cultural, ritual and religious facilities (which increased approximately from 7% to 8%); the growth of the share of hydro-technical facilities was slightly less (from 0.8% to 1.4%). At the same time, the shares of mineral resources extraction facilities, air and water transport facilities, and unfinished construction entities remained approximately at the same level.

Thus, over the course of 2013, the total number of treasury-owned property entities in the Russian Federation declined by 0.8% (or by more than 700 units).

The leaders in the downward trend group were housing and utilities entities (shrinkage by almost 16%), housing fund entities (by 12.5%), administrative buildings and structures (by 8%), and civil defense and protection facilities (by nearly 6%) (see *Table 17*).

Table 17

Categories of Property Owned by the RF Treasury, with Major Changes Occurring in 2013

Downward trend			Upward trend		
Property category	units	%	Property category	units	%
Housing fund	1,504	12.5	Production entities	2,840	2.6 times
Housing and utilities	1,488	15.8	Movable property	1,428	34.0
Administrative building and structures	1,474	8.0	Cultural, ritual and religious facilities	900	14.7
Civil defense and protection facilities	1,067	5.9	Hydro-technical facilities	476	64.4

In absolute terms, the most impressive decline was demonstrated by housing fund entities, whose number was reduced by more than 1.5 thousand units. Slightly less was the decline in the number of housing and utilities entities, and that of administrative buildings and struc-

tures. The number of civil defense and protection facilities dwindled by more than 1 thousand units.

The decline in the number of housing fund entities occurred due to the ongoing privatization process (according to data released by *Rosimushchestvo*'s territorial agencies, in 2013 a total of 187 apartments were privatized) and to the transfer of these property entities from federal ownership to another public ownership tier (ownership by RF subjects and municipal formations). The last factor was in the main responsible also for the shrinkage of housing and utilities entities and social sphere facilities held by the treasury.

The number of administrative buildings and structures declined as a result of privatization (transfer into the ownership by third parties), and consolidation of buildings to institutions and enterprises; while that of civil defense and protection facilities declined as a result of inventory revision, which involved altering the status of some of the relevant facilities.[1]

The shrinkage of the number of transport infrastructure and communications facilities was achieved as a result of their sale, consolidation to other organizations, or transfer to another public ownership tier.

As seen by these results, in 2013 a total of 1,587 immovable property entities comprising the RF treasury were transferred to another tier of public ownership; an overwhelming majority of these (1,137 units) were transferred into municipal ownership.

The other pole was represented by production entities, whose number increased by 2,840 units (or more than 2.6 times), and movable property entities (increased by nearly 1,430 units, or more than by 1/3). The same trend was displayed by cultural, ritual and religious facilities (growth by 900 units, or by nearly 15%) and hydro-technical facilities (growth by nearly 480 units, or by slightly less than 2/3).

The increase in the number of property entities in these categories occurred as a result of privatization (mainly in the form of corporatization of FSUEs) and bankruptcy of federal organizations, because the outcome of such procedures – due to their targeted use and the constraints imposed on their turnover – is their transfer to the RF treasury. First of all, this is true of those property entities that cannot be privatized. Besides, cultural, ritual and religious facilities can be transferred to the treasury in the framework of judicial division of property rights.

As for religious facilities, it is necessary to note that, judging by the results of the selection, analysis and verification of such entities among the properties comprising the RF treasury (accomplished in 2013, by way of preparing them for 'an open offer' to representatives of various religious confessions), it has become evident that, among the selected 2,499 entities which are not consolidated to federal bodies of authority or organizations, 1,536 entities (or 61%) have already been transferred to religious organizations to be used on a gratis basis; 347 entities (or 14%) are being used *de facto* (that is, without proper formalization of their status); while 616 entities (or 25%) are 'free' (or currently unused). The religious organizations, for their part, clearly prefer to conclude user agreements on a gratis basis instead of assuming ownership rights to the relevant properties, because thus they can avoid the associated considerable expenditures.

[1] By the year-end of 2014, according to data released by the RF Ministry of Emergency Situations, the investigation of the state of civil defense and protection facilities (CDPF) has been completed. *Rosimushchestvo* is waiting for the Civil Defense and Population Protection Department of the RF Ministry of Emergency Situations to release the relevant information concerning the needs of regions in such facilities, after which it will coordinate with the FR subjects the specific lists of CDPF. See www.rosim.ru, 29 December 2014.

6.2.5. Possible Approaches to Implementing the Government Policy on Treasury-owned Property Entities

The government policy designed to optimize the structure of treasury-owned property could be successful in the medium term perspective if the following principles are observed.

The possible benefits and costs should be brought into a proper balance: the federal budget expenditures under the article 'Maintenance and Support of the RF Treasury' should never be considered a serious financial reserve of the budget system, because even if all these costs are reduced to zero, the total amount of the resulting savings will be incomparable with the amount of financing necessary for resolving some or other socio-economic issues.

Moreover, the current state of many property entities owned by the treasury necessitates a considerable increase in their financing, because they represent a potential source of manmade risks and hazards.

Adequate costs to potential ratio: The optimization of the list of property entities comprising the RF treasury was been necessitated by the awareness of the fact that the federal budget represents the most robust link in the entire budgetary system in Russia. The limited potential of the budgets of RF subjects and municipalities coupled with their dependence on transfers from the upper tiers of the budgetary system imposes significant constraints on this process, making it not worthwhile to redistribute treasury-owned property in favor of regions and municipalities.

Another aspect of the principle of costs being adequate to the existing potential is the necessity to preliminarily discuss the feasibility of transfer of public property comprising the RF treasury to institutions and enterprises in federal ownership, with due regard for issues like its proper upkeep, targeted use, and the resulting changes in the burden on the budget нагрузке.

Multi-sector approach: the miscellaneous nature of treasury-owned property entities belonging to different categories is an objective factor that determines the necessity of differentiated approaches to their management.

Pragmatic and gradual approach: due to the scale of the property complex currently comprising the RF treasury and its specific features, a simple quantitative reduction in the number of such property entities can hardly be regarded as a successful solution. It can be reduced, and its management quality improved, only after the implementation of comprehensive preparatory measures.

The strategic core model: the theoretic approaches based on the principle of social welfare being generated by the public sector of the national economy, the existence of legal certain constraints on privatization and the evident specificity of Russia's economy in transition are considered to be weighty arguments in favor of keeping a substantial number of properties in public ownership, namely property comprising the RF treasury which can be regarded, to a certain extent, as an analogue of the public land reserves and public material reserves, thus necessitating a certain turnoverость of the entities comprising those reserves.

So, with due regard for the currently existing normative legal base, we may speak of a state treasury in the broad and narrow sense.

The notion of a state treasury in the broad sense essentially means the management of a large part of the entire public property complex (less property consolidated to unitary enterprises and state institutions) and implies the existence of at least four components: 1) management of the budget process (with the sovereign funds); 2) management of the securities portfolio directly held by the State, including stakes in the capital of economic societies (treasury-owned stocks); 3) management of the land resources in public ownership (treasury-

owned land); 4) management of all the other movable and immovable property (treasury-owned property).

If we refer to the property comprising the RF treasury in the narrow sense, that is less budget funds, securities and land resources, the fact the bulk of it is represented by properties other than those contributed to the charter capital of JSC created as a result of corporatization of unitary enterprises (mainly due to ban on privatization) restricts the spectrum of available managerial solutions.

The main type of activity involving such property will be the transfer of relevant property entities to the corresponding bodies of authority, with their subsequent consolidation to institutions and enterprises subordinated to those bodies of authority.

In this connection, the following measures are suggested:

(1) reliance on the principle of targeted transfer of property entities to those bodies of authority that previously supervised the enterprises reorganized into JSC, as a result of which the relevant property entity was transferred to the treasury in the first place;

(2) establishment, by a special normative legal act, issued at the level of the RF President or RF Government, of the continuity of the activity of the currently existing bodies of authority with regard to that of the previously existing ones (bearing in mind their continual reorganization since the early 1990s); the existence of such a document will make it possible to avoid a long chain of unnecessary coordination between multiple government departments;

(3) the receipt, by relevant bodies of authority, of a small amount of budget funding previously allocated to *Rosimushchestvo* under specific items should not be used as the grounds for denying them any further budget allocations, if the necessary substantiation for such funding is provided (for example, if they are involved in the implementation of a federal target program aimed at hazard-prone production entities, including classified entities).

The transfer of property to another tier of public authority represents a special case, when it is necessary to improve the existing normative regulation (to alter the list of documents required for the transfer to another tier of public authority of administrative buildings and structures, social sphere facilities, or unfinished construction entities), implement some preparatory measures (develop a simplified procedure for the transfer to regions and municipalities of housing and utilities property entities). The first steps in this direction (as far as entities comprising the RF housing fund are concerned) have already been taken.

As for the other types of property comprising the RF treasury and available for privatization, it will be necessary to consider the feasibility of their alienation, select the methods of alienation, and set the timelines for its effectuation.

Among the proposals aimed at minimizing the volume of property comprising the RF state treasury (by category), *Rosimushchestvo* is currently considering:

- the legislative initiative designed to simplify the procedures of sale of administrative buildings and structures, housing and utilities entities, social sphere facilities, unfinished construction entities, air and water transport facilities, and movable property entities (for the last two categories - without including them in the forecast plan (or program) of federal property privatization, on the basis of a single procedure synchronized with the sale of property transferred into public ownership);
- the proposal concerning the possibility of outsourcing the function of selecting properties suitable for sale in the category of administrative buildings and structures, social sphere facilities, unfinished construction entities, air and water transport facilities, and movable

property (for the last two categories - for the purpose of electronic bidding), as well as the function of drawing up a complete inventory of civil defense and protection facilities);

- the proposal concerning the allocation of sufficient funding to cover the costs involved in housing fund repairs, with the subsequent transfer of the relevant entities to another tier of public ownership; recycling of oil and gas wells; the upkeep of hazard-prone production entities; the upkeep and storage of arrested vessels; the repair of cultural, ritual and religious facilities for their subsequent transfer to religious organizations; hydro-technical facilities (for the last category – with the drawing-up of their technical passports) for their subsequent transfer to another tier of public ownership;
- the proposal concerning the allocation of funding to the formalization of documents for the subsequent sale of social sphere facilities; the drawing-up of technical passports for cultural heritage properties (CHP) for the subsequent registration of RF ownership rights to them and their involvement into economic turnover; and the drawing-up of technical passports and registration of RF ownership rights to property entities and land plots belonging to the category of unfinished construction entities (for the last category, also a recycling procedure funded by monies attracted in the course of transfer, on preferential terms, of the land plots in which the entities to be recycled are situated is envisaged);
- the proposal concerning the attraction of off-budget investment in the framework of public-private partnerships (PPP) (concession agreements, investment contracts) involving transport infrastructure and communications entities, and unfinished construction entities;
- the transfer of movable property entities together with immovable property being transferred, or as a property complex (furniture, equipment).

As is evident from the suggested list of measures, the implementation of most of them implies the necessity of adjusting the existing normative regulation of the privatization procedures and providing an adequate financial backing, these two issues being largely interdependent. In principle, the availability of budget allocations can well enable *Rosimushchestvo* to implement all these measures.

At the same time, it is necessary to point to the costs associated with the repeated valuations of treasury-owned entities, as the relevant documents are acceptable only within six months from the moment of the last valuation; the lengthy procedures involved in the inclusion of a property entity into a forecast plan (or program) of federal property privatization; and the lengthy procedure of its sale.

The potential for improving the normative legal base in this direction may be aimed at simplifying the procedures of sale for some property categories without including them in the privatization program and extending the periods during which the property valuation reports will remain valid. However, it is obvious that these innovations will by no means be applicable to all the property entities comprising the RF treasury; so, it will be necessary to determine the set of their qualitative and quantitative features.

Besides, it may be possible to reestablish the institution of normative prices, which were stipulated in privatization legislation over the period 2001–2010.[1] The use of a normative price instead of the mechanism stipulated in the law on property valuation will have the following advantages: (1) the possibility to save the money that would otherwise be spent on the valuation procedure, (2) the possibility to apply the available estimates based on a property

[1] The normative price was defined in the law on privatization (Article 12) as the minimum price determined in the procedure established by the government, at which the alienation of a given property entity can be possible.

entity's residual or near-zero value as the initial price in the framework of an auction or tender procedure. The indispensable condition for the reintroduction of normative price, beside the entry of the relevant stipulation into existing legislation, must be the delineation of the sphere of its application and its testing in a pilot mode, especially if this service is to be outsourced.

A more general approach to resolving these issues may be the performance of the multiple procedures involved in the preparation of the necessary documentation, the drawing-up of technical passports for property entities earmarked for privatization and their involvement in economic turnover, the gratis involvement of other FBEAs (first of all, the Federal Registration Service (*Rosregistratsia*) through the imposition of these responsibilities on them by the adoption of special normative legal acts and administrative regulations in the framework of currently allocated budget funding. In a certain sense, this will mean the launch of a national project aimed at drawing up a comprehensive public property inventory, similar to a census conducted by the statistics service.

As for the PPP mechanisms, the actual potential for their more widespread use will probably depend on the country's general business environment and investment climate. The high degree of wear and tear of many of the property entities comprising the RF treasury will only make the situation all the more difficult. Al these circumstances will have to be taken into consideration also in the context of possible improvement of privatization mechanisms, especially if low-liquidity properties are to be realized, which will require some non-standard privatization methods like tenders and sale in the framework of trust management.

However, if the issues of treasury-owned property management are to be looked at outside of the context of privatization, it will be necessary to carefully consider all the specific features of the miscellaneous properties comprising the public property complex.

In this connection, we may point to the specificities involved in the optimization of some of the categories of property entities comprising the RF treasury.

Thus, the orientation towards minimizing the number of mineral resources extraction facilities, transport infrastructure and communications facilities, hazard-prone production entities, and hydro-technical facilities appears to be disputable. If such property entities are transferred to new user, be it another tier of public authority or an institution or enterprise in federal ownership, the issues of their safety and targeted use will still remain important, including also the issue of the potential use of such properties by their new owners as a security, including the possibility of their transfer as a contribution to the charter capital of an economic society.

For example, the consolidation to the enterprises subordinated to branch FBEAs of transport infrastructure facilities (railway tracks, airfields, runways, helipads, harborages, wharfs, motor roads, bus stands) can make them subject to creditor claims presented to the organizations in charge of these facilities, which is fraught with the risk of disruption of transport routes. This is also true for some other categories of property comprising the RF treasury, such as civil defense and protection facilities, mineral resources extraction facilities, production entities, air and water transport facilities, hydro-technical facilities.

Besides, in this connection it will be worthwhile to initially adopt the relevant legal norms oriented to the treatment of such property entities as especially valuable assets that cannot be used as a pledge to secure the liabilities assumed by their holders (similar to autonomous institutions).

In addition, it will be necessary to compare the aggregate burden on the budget with the tax regime applied in connection with the transfer of property entities comprising the RF treasury

(on which no tax is levied) to institutions and enterprises in federal ownership, and to take into consideration the evident scarcity of the revenue base available to RF subjects and municipalities, which are dependent on transfers from the upper tiers of the budgetary system.

Thus, in view of the allocation of special funding to cover the cost of drawing-up technical passports and preparation of the normative documentation for hydro-technical facilities necessary for their subsequent transfer to another tier of public ownership, it is unlikely that these facilities can be maintained in proper condition after their transfer to regional or municipal ownership. Meanwhile, hydro-technical facilities are fraught with high manmade risks. In this connection, it appears more appropriate to consolidate them to specialized organizations subordinated to branch FBEAs, with due regard for the experiences of the recent large-scale natural and manmade disasters (floods in Krasnodar Krai (in 2012) and in the Russian Far East (in 2013)).

6.2.6. Property Comprising the RF Treasury and the New Government Program *Federal Property Management*

The year 2013 was marked by the launch of the Government Program (GP) *Federal Property Management*, approved by Directive of the RF Government of 16 February 2013, No 191-r. We have already discussed its results relative to property comprising the RF treasury. However, 14 months later, a new Government Program with the same title was approved by the RF Government Decree of 15 April 2014, No 327.

In this document, among the key goals in the sphere of federal property management, the minimization of the number of entities comprising the RF state treasury is pointed out, to be achieved by applying the following methods:

- to ensure sufficient funding for the upkeep of federal property comprising the treasury and to implement the rule whereby funding should follow a given property entity in the event of its transfer to a federal organization or alienation for the benefit of another public legal entity, including transfer or alienation for the purpose of ensuring its targeted use;
- to involve the properties comprising the RF treasury, including unfinished construction entities, in economic turnover by means of their transfer into public ownership of RF subjects or municipal ownership in order to create an economic foundation for their activity, or to sell properties in the framework of a bidding.

Similarly to the previously adopted document, the new Government Program sets the task of determining for each federal property entity its targeted function, which must also be done with regard to entities held by the treasury (alongside other types of assets) in the volume of 30% in 2018.[1] The numerical targets for reducing the volume of property comprising the RF treasury in 2012 are as follows: for land plots uninvolved in economic turnover – by 30% (in terms of area, less the land plots withdrawn from economic turnover and restricted in their turnover); for property entities (less land plots) – by 11% (less property entities restricted in their turnover). The intermediate targets for the implementation of the government program for the period until 2018 are the same as the corresponding targets set in the 2013 government program. The creation of a legal backing for the implementation of the government program in the part relating to property held by the treasury will involve the introduction of amendments to various existing legislative and normative acts with the purpose of creating adequate

[1] In this connection in the text of the program for 2018 it is stated that management goals must be determined with regard to each of the property entities comprising the state treasury of the Russian Federation.

conditions for more proficient sale of the watercraft that have been confiscated or alienated after being intercepted with illegal catch of biological resources.

The financial backing for the new government program for 2014 will entirely depend on the actual potential of the federal budget, because no other sources of funding are stipulated in its passport. The budget allocation targets set in the federal budget for 2014–2016 are somewhat higher than those set in the previous (for 2013) government program's passport, with the exception of the targets for 2016.

In the approved law on the federal budget for 2015–2017 (of 1 December 2014, No 384-FZ) a slight increase in the volume of budget allocations on the targets set in the government program's passport is envisaged only for the year 2015, whereas over the next two years these indices will decline, and especially impressively in 2016 alongside the decline, in absolute terms, of the per annum expenditure volume. However, the budget allocation targets cited in the annexes to the budget law with regard to the Government Program *Federal Property Management* (in the framework of the subprogram 'Improving the Efficiency of Public Property Management and Privatization') are too general for any specific estimations to be made on their basis as to the amount of budget expenditure earmarked for each of the directions of government property policy, including the cost of the upkeep and servicing of the RF treasury (in contrast to the figures stipulated in the budget for the period 2013–2015 and in the corresponding law on budget execution).

* * *

1. The management of property comprising the RF treasury is an important component of government property policy, although its definition in Russian legislation is rather sketchy. In addition to budget funds, it also consists of public property other than that consolidated to state-owned enterprises and state institutions by right of economic jurisdiction or operative management. From this it follows that the treasury comprises at least another two types of property, or property components: securities (including those that secure state participation in the capital of economic societies) and other miscellaneous movable and immovable property, including land plots.

2. Prior to the approval of the Government Program *Federal Property Management* in early 2013 the property complex held by the federal treasury was not treated as an object of property management in its own right, although the comprehensive Concept of State Property Management and Privatization in the Russian Federation had been adopted as early as the autumn of 1999. One not very important exception was the separation in the annual privatization programs, beginning from the forecast plan (or program) of federal property privatization for 2007, as a distinctive category of property earmarked for privatization, of the property entities held by the RF treasury and uninvolved in the execution of government functions.

3. The understanding of the place and role of propertya held by the treasury relative to the other property categories and property right holders was improving as the Federal Property Register was gradually taking shape. By late 2013, the bulk of registered entities (approximately 69%) was consolidated by right of operative management (granted in the main to state institutions), which is much greater than the share of property entities consolidated by right of economic jurisdiction (approximately 14%), which is granted to unitary enterprises. At the same time, the relative share of entities comprising the federal treasury by early 2014 had amounted to approximately 17% (vs. 11–12% in 2009–2010).

Thus, in the period 2013–2014, the treasury came to be the second largest federal property right holder among all the categories thereof, getting slightly ahead of the enterprises operating by right of economic jurisdiction. This circumstance has secured a more prominent role of the issues of treasury property management in the framework of government property policy.

4. The financial burden of the corresponding budget expenditures is relatively small, but due to the specific features of some of the property categories comprising the RF treasury they are fraught with risks of manmade disasters, and the liquidation of their consequences may be associated with certain costs. A more general (background) issue typical not only of treasury property management, but also of the management of all the other components of the public property complex, is the shortage of funding needed for property upkeep.

5. The by-type structure of property comprising the RF treasury is clearly dominated by land plots (approximately 2/3 of all entities), slightly more than 30% is taken up by other immovable property entities, while the rest (about 2%) are movable property entities.

If we look at property (other than land plots) held by the treasury, we will see that in early 2013, out of the total number of property entities comprising the RF treasury (approximately 88,3 thousand units, grouped into 13 categories), nearly 2/3 was taken up by 4 categories: administrative buildings and structures (20.9%); civil defense and protection facilities (approximately 20.5%); entities comprising the RF housing fund (13.6%); and housing and utilities (approximately 10,7%). The shares of mineral resources extraction facilities, transport infrastructure and communications facilities, and cultural heritage properties amounted approximately to 7–8% each.

6. The property comprising the RF treasury was for the first time treated as a separate government property policy target in the Government Program *Federal Property Management* approved in February 2013.

The core idea of that document was the necessity of defining and consolidating to each entity in federal ownership its targeted function; this was planned to do (alongside other types of assets) also with regard to property entities held by the treasury (with land plots being treated as a separate property category).

The targeted function associated with the execution of ownership rights to these assets is its proficient management whilst it is being held by the treasury, the ultimate goal being to bring the volume of such entities to a minimum, so that the treasury should ultimately retain only those property entities that have been deemed, by the normative acts issued by the RF Government, to be necessary for the execution by federal state bodies of authority of their proper functions and for securing the strategic interests of the Russian Federation. This standpoint was further confirmed by the fixed targets for annual planned reduction, on 2012, of the number of property entities comprising the RF treasury.

The main tasks to be accomplished towards achieving these ultimate goals were defined as follows:

- distribution of treasury-owned property entities depending on their targeted function;
- disposal of current assets;
- use of efficient mechanisms for involving relevant properties in economic turnover;
- allocation of sufficient funding for the upkeep of properties during the period while it is being held by the treasury;
- greater transparency of treasury property management.

Among the most significant measures implemented within the Government Program's framework, we should like to point out the following ones:

- categorization of property entities comprising the RF treasury;
- development of roadmaps for each category;
- elaboration of the Treasury Information System (IS), which will ensure an automatic coordination of each property entity entered into the Federal Property Register with the relevant property category;
- improvement of normative legal regulation of the management of property entities comprising the RF treasury (housing fund, mineral resources extraction facilities, etc.);
- the allocation of funding, in addition to the running costs of the upkeep of property entities (their protection, utilities and repairs), also to cover the cost of drawing up their technical passports, thus making it easier to proficiently manage the treasury and involve the relevant property entities in economic turnover.

7. As the methodology for determining the targeted function for this category of federal property was still being developed, the only real year-end results for the implementation of the GP in 2013 were the numerical indices pointing to a decline in the number of entities comprising the treasury.

In 2013, the number of property entities comprising the treasury was reduced as a result of the following acts:

- privatization (including free-of-charge privatization of apartments by RF citizens);
- transfer of property to another tier of public ownership;
- consolidation of property to enterprises and institutions.

As a result, the total number of immovable property entities held by the treasury declined for the first time, which in numerical terms amounted to more than 2.1 thousand units (or 2.5%). The aggregate number of property entities comprising the RF treasury (including movable property entities, but less land plots) over the course of 2013 declined by 0.8% (or by more than 700 units). Thus, given the planned target of 1%, we may note the slight deviation by 0.2 pp., which nevertheless represents a much less figure by comparison with the deviation demonstrated by the number of FSUEs and the area of treasury-owned land plots uninvolved in economic turnover.

In the structure of property comprising the RF treasury, alongside the shrinkage of the share of the 4 biggest property categories (administrative buildings and structures, civil defense and protection facilities, entities comprising the RF housing fund, and housing and utilities), the share of production entities increased by more than 60% (from 2% to approximately 5.3%); growth was also displayed by the shares of movable property entities, cultural, ritual and religious facilities, and hydro-technical facilities.

8. The miscellaneous nature of the property complex comprising the RF treasury (other than budget funds, securities and land resourcesв), the prevalence of properties that cannot be privatized, the existence of other normative restriction on the disposal of such properties, and their low liquidity that became evident in the course of the attempts at their privatization over recent years have narrowed the spectrum of possible managerial solutions and emphasized the importance of an ‘evolutionary’ approach to the development of the system of measures designed to make their use more productive.

9. Further key improvements in the system of management of property comprising the RF treasury can involve the following measures:

- transfer of the properties subject to restrictions on its privatization, with due regard for targeted function, to relevant bodies of public authority with subsequent consolidation of these properties to their subordinated federal state institutions and enterprises;

- transfer of property to another tier of public authority alongside the improvement of the procedures of its normative regulation and only after the implementation of relevant preparatory measures;
- as for all the other propertya comprising the RF treasury, with no ban on its privatization, it is necessary to consider the feasibility of its alienation, or to choose the specific method and timing of its sale.

With regard to the first option, it is feasible to rely on the principle of targeted transfer of property entities to those bodies of authority that previously supervised the enterprises reorganized into JSC, as a result of which the relevant property entity was transferred to the treasury in the first place.

When attempting the optimization of the list of property entities to comprise the RF treasury in accordance with the second option, the significant factor to consider will be the limited potential of regional and local budgets coupled with their dependence on transfers from the upper tiers of the budgetary system.

In the context of the third option, the most important issues will be those of property valuation, simplification of the sale procedure for some property categories (without including the relevant property entities in the privatization program), and reliance on non-standard methods of privatization, concession mechanisms and public-private partnerships.

10. The newly adopted Government Program *Federal Property Management*, approved in April 2014 to replace the previous GP with the same title, the implementation of which had lasted for slightly longer than a year, on the whole reproduces the same targets, and this is also true for the propertyy comprising the RF treasury. The budget allocation targets set in the new 2014 GP are oriented to the then approved federal budget for 2014–2016. Meanwhile, the implementation of the Government Program will take place under new conditions associated with the imposition of наличием harder budget constraints, a fact that has also been reflected in the law on federal budget for 2015–2017.

6.3. Innovations of corporate legislation and regulation: changes in the Civil Code and the new Code of Corporate Governance

6.3.1. Civil legislation reform; legal entities

The reform of civil legislation started in the summer of 2008, with the signing of the Presidential Decree of the Russian Federation of 18 July 2008 No. 1108 “On the improvement of the Civil Code of the Russian Federation”. The objectives of the changes in the Civil Code (*hereinafter referred to as the “CC”*) were declared as:

a) the further development of the basic principles of the civil legislation of the Russian Federation, to match the new level of development of market relations;

b) to reflect the experience of the use of the CC and its interpretation by the courts;

c) rapprochement of the CC provisions with the rules regulating relations in the relevant laws of the European Union;

d) the use in Russian civil legislation of the newest positive experiences of the modernisation of the civil codes of a number of European countries;

e) to maintain the uniformity of regulation of civil-law matters in the member states of the CIS;

f) to ensure the stability of civil legislation.

Significant changes in the Civil Code of the Russian Federation, including with regard to the Chapter "Legal Entities", were considered within the framework of the Civil Legislation Development Concept, and these included several draft laws. This Concept was approved in October 2009.[1] In 2010–2011 the first versions of the draft laws were publicly presented.[2] The scale of the changes and additions to the Civil Code was even compared with that of 1995, when the First Part of the Civil Code, which then came into force, changed the Fundamentals of the Civil Legislation of the Union of Soviet Socialist Republics and of the Republics.[3] In May 2014 Federal Law No. 99-FZ of 05 May 2014 was adopted, providing for the changes in the "Legal Entities" Chapter of the Civil Code.

According to the opinions of some authors, the revision of the rules relating to the legal entities was, on the whole, motivated by[4] the need to simplify and unify legal regulation, to eliminate the multiplicity of active laws and their mutual contradictions, and to increase the role of the Civil Code in the regulation of the status of legal entities.

It is important to note, that in relation to a whole range of legal entities, such as the State Atomic Energy Corporation (Rosatom), the State Corporation for the Promotion of Development, Manufacture and Export of High-Technology Products (Rostechnologies), the Deposit Insurance Agency, the state corporation - The Support Fund for the Reform of the Housing and Utilities Sector, the state corporation - the Bank for Development and Foreign Economic Affairs (Vnesheconombank), the State Corporation for the Building of Olympic Objects and the Development of the City of Sochi as a Mountain Resort, the state company - Russian Highways, and also in relation to other legal entities created by the Russian Federation on the basis of special federal laws, the provisions of the Civil Code of the Russian Federation on legal entities are applied only to the extent that there is no other provision under a special federal law with regard to the corresponding legal entity.[5]

General Provisions

The changes in the corporate legislation[6] first of all, affected the term *"legal entity"*. Beside the fact, that "an organisation that has separate assets, and is liable for its obligations with such assets, may on its own behalf acquire and exercise civil rights and have civil obligations, to act as a plaintiff and defendant in court is recognised to be a legal entity", it is now stipulated that the founders, holding proprietary rights for the assets of such a legal entity, should be state and municipal unitary enterprises or institutions. The participants of a legal entity that has corporate rights, should be corporate organisations. So, aside from the division of the rights of the participants in a legal entity into different types, the strengthening of the rights

[1] For more details, refer to: Apevalova E. A. Corporate legislation 2006–2010: some results and innovations.- // The Russian economy in 2010: the trends and prospects. - Moscow, the Gaidar Economic Policy Institute, 2011, pages 459–474

[2] For more details, refer to: The civil legislation reform./ Analytic information - www.consultant.ru

[3] For instance, Turbanov A. V. The civil legislation reform: new approaches and mechanisms. //Banking Law, 2012 No., pages 3–7.

[4] Soifer T. V. Topical directions of the development of the civil legislation on non-profit organisations. // Russian Justice 2014, No.3, page 8.

[5] P.6 of Article 3 of the Federal Law of 05 May 2014 No. 99-FZ "On the Introduction of Changes in Chapter 4 of the First Part of the Civil Code of the Russian Federation and on the Recognition as Invalid Certain Provisions of the Legislative Acts of the Russian Federation".

[6] All changes in the Civil Code, considered below, are based on the "Changes in the Provisions of the Civil Code of the Russian Federation with regard to Legal Entities (Federal Law of 05 May 2014 No. 99-FZ)".

(for instance, of the corporate rights) has been provided for, and without these, a legal entity cannot exist as such.

Earlier, in 2009,[1] the protection of corporate rights had been introduced in the Arbitration Code. Previously, corporate rights, as an institution in law, did not exist in the legislation, and the shareholders, for example, were considered to be endowed with the rights of obligation. i.e. with the rights to claim. Corporate rights are understood as a right to claim, on behalf of a corporation, for the compensation of damages inflicted on such a corporation; or, acting on behalf of a corporation, to challenge the transactions carried out by that corporation and to demand the enforcement of the consequences of such invalidated transactions, as well as the enforcement of the consequences of the invalidity of void transactions, in addition to some others. It is significant that the law and the constituent documents of a corporation may contain other rights as well.

Additionally, an *extension of the legal capacity of a legal entity has been secured*, already established in the field of legislation on self-regulation and practice, from now on a legal entity may engage in certain types of activity, not only on the basis of a licence, but also on the basis of its membership in a self-regulated organisation, or through a certificate issued by a self-regulated organisation on admission to certain types of works.

A broad list of types of non-profit organisations was provided, which included, for instance, partnership of property owners, Cossack associations, autonomous non-profit organisations, public companies, etc.[2] These will be considered in detail below.

Furthermore, *the preparation of the constituent documents of legal entities has been simplified.* All legal entities, other than commercial businesses, may now act only on the basis of their articles of association, approved by their respective founders (participants). The commercial business entities may now act on the basis of their memorandums of association. The possibility of using standard articles of association, approved by a corresponding state authority, has been provided for. The founders may now choose to adopt internal rules governing their corporate documents.

The obligation of members of the collegial bodies of a legal entity to act in the interests of such a legal entity, reasonably and in good faith, has been fixed (in a similar way to how a person, may be authorised to act on behalf of a legal entity). On the practical side, the principle of good faith means that the above-mentioned participants in civil law relations shall respect the rights and interests of counter parties, not abuse or misuse their rights, not perform any actions, aimed at the evasion of law, and not artificially create conditions for the non-performance of obligations or the unfounded acquisition of rights. In practice, the civil legislation is not able to spell out and prohibit all possible violations of the interests of other parties, and this is why it is important for the courts to have the possibility, based on the principle of good faith, to declare one or another person as dishonest, and the actions of such persons - as an abuse of rights.

From our point of view, the introduction of such a principle brings the Russian legal system closer to the Anglo-Saxon one (the possibility of making a decision, not only on the basis of specific rules, but also on general principles). This is undoubtedly a step forward; however,

[1] Federal Law of 19 July 2009 No. 205-FZ "On the Introduction of Changes to Certain Legislative Acts of the Russian Federation".

[2] For more details, refer to Article 50 of the CC of the Russian Federation, as amended and supplemented, entered into force since 01 September 2014.

in practice, mistakes and abuses may occur during the assessment of business risk and integrity.

Further, the legal responsibility of a person, authorised to act on his/her own behalf, as well as of the members of the collegial bodies of a legal entity has been fixed[1] (but excluding any who voted against a decision which resulted in damages, or who, acting in good faith, did not participate in such voting). Upon the request of a legal entity, the above-mentioned persons are obliged to compensate its founders (participants), for the damages, caused to the legal entity through their fault. In the case of the mutual infliction of damages, joint liability is provided for. Agreements on the limitation or elimination of such liability are null. In reality, this has introduced a mechanism for the protection of owners' interests against abuse and misuse on the part of management, which is already widespread in Russian practice.

On the whole, the innovations in this block should be considered as positive ones, aimed at developing legal regulation and a better level of protection for owners.

Reorganisation of legal entities

The law has fixed the possibility of complex ***reorganisation***, i.e. the reorganisation of legal entities with the simultaneous combination of different forms of reorganisation, including that involving the participation of more than two legal entities, even if they are subject to different legal forms of organisation. It appears that such wide possibilities of reorganisation will hinder the definition of legal succession and will contribute to abuses on the part of the enterprises subject to reorganisation.

The key document in the reorganisation of legal entities is now only the Deed of Transfer (previously the separation balance sheet was also applicable), which, in addition to the original requirements, will now have to contain "the procedure for the definition of legal succession in connection with the change of type, composition and value of the assets, with the creation, change and termination of the rights and obligations of a legal entity, which may take place *after* the date of the corresponding Deed of Transfer" (Part 1 of Article 59 of the Civil Code of the Russian Federation).

If a Deed of Transfer does not allow for a successor to be defined, or implies that during the reorganisation the assets and obligations of the legal entities were not divided in good faith, and that this resulted in significant violations of the creditors' rights, such a reorganised legal entity and the legal entities, created as a result of the reorganisation, shall be jointly liable for such obligations.

The regulation of the guarantees of creditors' rights during reorganisation have undergone significant changes. Previously, a creditor of a legal entity was entitled to demand the early performance of the corresponding liability by the debtor if such a creditor's rights to claim had appeared before the publication of the reorganisation of the legal entity. Additionally, in the case of such early performance not being possible, to demand the termination of the liability and compensation for any damages, related thereto (with the exclusion of certain cases, established by law). Now all creditors are governed by the conditions, which previously applied to joint-stock companies, related to the demand for the early performance of liabilities; and moreover, through court procedures, to a 30 day term of submission of such demands, etc. An exception has been made for any creditors, who were provided with security for the

[1] The details of the compensation for losses by persons, included into the bodies of a legal entity, refer to the Ruling of the Plenum of the Supreme Arbitration Court of 30 July 2013 No. 62 "On Certain Matters, Related to the Compensation for Losses by Persons, Included into the Bodies of a Legal Entity".

fulfilment of obligations. In reality, a narrowing of creditors' rights during reorganisation is taking place.

Furthermore, it is now not only legal entities created through the reorganisation procedure that are responsible to their creditors for the non-performance of the corresponding obligations, but also "*persons, having the authority to define the actions of the reorganised legal entities, members of their collegial bodies, or a person, authorised to act on the behalf of a reorganised entity*", provided that they, by their actions, contributed to the non-compensation of losses, or the early non-performance of obligations, or the non-provision of sufficient security.

The law has directly established that the recognition by a court of the invalidity of a decision on reorganisation does not entail the liquidation of the legal entity formed as a result of that reorganisation, and nor does it constitute grounds for transactions, made by such a legal entity, to be considered invalid. It appears that such a situation will ensure immutability in the distribution of the assets of state companies and corporations that have undergone multiple reorganisations.

A special regulation applies where a reorganisation is recognised as void. It may be executed upon the request of a corporate member, who voted against a decision on the reorganisation or who did not participate in the voting on such a matter, provided that the decision on the reorganisation was not taken by the members of the reorganised corporation, or was established with the use of deliberately false information about the reorganisation.

The consequences through the court taking such a decision are:

- the reinstatement of the legal entities, which existed prior to the reorganisation,
- the transactions of the legal entities, created as a result of the reorganisation, with persons, who, in good faith, relied upon the legal succession, remain in force for the restored legal entities, which are the joint debtors and joint creditors in relation to such transactions;
- the participants of a previously existing legal entity are recognised as the owners of the participation shares in that legal entity to the extent of the shares that they owned prior to the reorganisation.

There are also some additional consequences not listed here.

A prohibition has also been introduced on the reorganisation of business partnerships and companies into non-profit organisations or into unitary commercial organisations.

From our point of view it appears that, in general, the rules which have been introduced on reorganisation provide particularly for the interests of large state companies and corporations, while they also narrow the rights of creditors during reorganisations.

Liquidation of a legal entity

With regard to the norms on liquidation, it is firstly worth noting the introduction of the definition of an "*inactive legal entity*", which means a legal entity, which, during the previous 12 months has not presented the accounting documents stipulated by the Tax and Levy Legislation and has not made transactions using at least one bank account. Such an entity is deemed to have actually terminated its activity and is subject to exclusion from the Unified State Register of Legal Entities, but this does not prevent persons from the governing bodies of such an entity being held liable, determining its actions, or representing its interests, in accordance with the liability discussed above. The introduction of such a procedure is positive, and will contribute to the "clearance" from the market of abandoned companies and fly-by-night companies.

In addition, a new basis for the liquidation of a legal entity by the courts has been introduced - the recognition of the state registration as being invalid *in the case of absence of membership in a self-regulated organisation.*

Prior to the approval of the liquidation balance sheet, the creditors of an entity being liquidated are granted *the right to apply to the courts with a claim to satisfy their demands against the entity under liquidation*, in the case that the liquidation commission has refused to satisfy their demands or has failed to consider them.

If it lacks sufficient funds, the liquidation of a legal entity is carried out jointly and severally at the expense of its founders (participants).

In the case of non-performance, or improper performance, by the founders of a legal entity of their obligations on the liquidation, the interested person, or an authorised state body, is entitled to request, through a court procedure, the liquidation of the legal entity and the appointment of an administrative receiver for that purpose.

The procedure for the liquidation of a legal entity remains essentially unchanged, but with the clarification of some points:

A) in the case of a dispute between the founders as to whom an item remaining after the satisfaction of the creditors' demands, shall be transferred, the item shall be sold at auction by the liquidation commission;

B) the assets of a non-profit organisation that remain after the satisfaction of the creditors' demands shall be used, in accordance with the articles of association, for achieving the purposes for which such assets were created.

With regard to the satisfaction of the demands of the creditors of an entity under liquidation, the most important point here is the introduction *of the right of an interested person or authorised body to apply to the courts with a claim for an appointment procedure for the distribution of discovered assets.* This right may be exercised in the case of the discovery of assets of a liquidated legal entity, excluded from the State Register, and includes the situation of it being declared bankrupt. Such an application may be submitted within 5 years from the date of entry of information on the liquidation of that legal entity into the State Register.

Additionally, it is expressly stated, that creditors' claims for the compensation of losses in the form of loss of profit and for the recovery of penalties (forfeits, penalty fees) are to be satisfied after the 1, 2, 3 and 4th stage claims of the creditors.

Corporate legal entities (general provisions)

The law introduces *a division of legal entities into corporate ones* – those in which the founders (participants) have the right of participation (membership), and form the supreme body of such legal entities; and the *unitary ones* - the founders of which do not become participants and do not acquire the rights of membership in such entities.

Corporate legal entities include economic partnerships and societies, peasant (farming) enterprises, economic partnerships; production and consumer cooperatives, public organisations, associations (unions); partnership of property owners, Cossack associations entered into the corresponding register, and indigenous small ethnic communities.

The law introduces a *general provision on the rights and obligations of the members of a corporation*, and it repeats, to a large extent, the current norms on the rights and obligations of legal entities. New aspects are firstly the obligation to participate in taking corporate decisions, without which a corporation cannot continue its activity, provided that their participation is necessary for taking such decision, and secondly, the obligation not to perform any ac-

tions to the detriment of the interests of the corporation. These represent a significant strengthening of the rights: to act on behalf of a corporation to claim compensation for damages inflicted on it; to act on behalf of a corporation to challenge, the transactions carried out by that corporation and to demand the enforcement of the consequences of such invalidated transactions, as well as the enforcement of the consequences of the invalidity of void transactions.

The Civil Code has been supplemented with the possibility to apply the consequences of the affiliation (relatedness) of legal entities.

The members of the collegial executive body of a corporation have been granted the rights to receive information about the corporation's activity, to familiarise themselves with its accounting and other documentation, to demand the compensation of damages inflicted on that corporation, to challenge the transactions carried out by the corporation and to demand the enforcement of the consequences of any such invalidated transactions, as well as the enforcement of the consequences of the invalidity of the void transactions.

The innovation in the regulation of the activities of non-public economic societies is the introduction of the possibility for the redistribution of the powers of the society's members, disproportionately to their shares in the charter capital. This possibility may be realised through the inclusion thereof in the society's articles of association or in the corporate agreement, provided that such information was entered into the Unified State Register of Legal Entities.

The matter of the contributions of the members of economic partnerships and societies has been regulated differently. While, previously, the issue concerned "securities", it is now related to the "shares in the charter (contributed) capital of other economic partnerships and societies, state and municipal bonds". Besides those specified earlier, there were named additional exclusive intellectual rights, and rights under licence agreements, subject to monetary valuation, unless otherwise provided by law".

The law, or the constituent documents of an economic partnership or society may establish the types of assets that cannot be contributed to pay for the shares in the charter (contributed) capital.

There is also further development concerning the general provisions *on the charter capital of an economic partnership*. When paying the charter capital of an economic society, the monetary resources must be contributed in an amount not less than that of the minimum amount of the charter capital. The monetary valuation of a non-monetary contribution to the charter capital must be carried out by an independent appraiser, and the participants in an economic society are prohibited from determining the monetary valuation of a non-monetary contribution as being higher than that defined by the appraiser.

The *joint subsidiary liability of a company's participants and of the independent appraiser is now also established* if, within 5 years from the date of registration of the company or from the date of entering the corresponding changes into the articles of association, there is an insufficiency of the company's assets during the payment of its shares with non-monetary resources, in the amount by which the corresponding valuation of the assets, as entered into the charter capital, was overstated. Such liability does not apply to companies, incorporated through the process of the privatisation of unitary enterprises.

A separation of companies, which had been under discussion for a long time*, into public and non-public ones has been* introduced. A public company is a joint-stock company, the shares of which, and the securities of which, convertible into its shares, are publicly placed (via public subscription) or are publicly traded under the conditions established by the corre-

sponding laws on securities. The rules, relating to public companies also apply to any joint-stock company, the articles of association and commercial name of which contain reference to the fact, that such a company is a public one.

Any business entity that does not meet the above criteria is considered to be a non-public company. With regard to non-public companies, the possibilities of making changes in certain general corporate norms, by registering them in the articles of association, are provided for. Such norms, for instance, include: the procedure for convening, preparing and carrying out general meetings of the participants of the business entity and the procedure for making decisions through these; on the procedure for exercising a pre-emptive right to acquire a share or part of a share in the charter capital of a limited liability company or a pre-emptive right to acquire shares or securities that are convertible into shares, placed by that company, etc.[1]

Alongside this, additional liability companies and closed joint-stock companies shall cease to exist, as had been suggested, even before 2008, by the Corporate Legislation Development Concept.

As was previously stated, the law introduces the definition of a *"public joint-stock company"*, and establishes certain features of its activity

A public joint-stock company is be obliged to submit to the Unified State Register of Legal Entities a reference to the fact, that the company is a public one. Only after doing so, will a joint-stock company be entitled publicly to place shares and securities convertible into shares. This requirement does not apply to joint-stock companies incorporated prior to 1 September 2014, provided they meet the criteria for public joint-stock companies.

The collegial governing body of a public joint-stock company must be comprised of not less than 5 people. The procedure for the creation and the competence of such a collegial body are defined according to the law on joint-stock companies and by the articles of association of that public joint-stock company.

The obligations, related to the maintenance of the registry and the performance of the counting commission of the shareholders of a public company, are to be undertaken by an independent organisation that has the appropriate licence provided for by law. In a public joint-stock company, the number of shares owned by any shareholder, their aggregate nominal value, as well as the maximum number of votes granted to any one shareholder, cannot be restricted. The articles of association of a public joint-stock company cannot provide for the necessity of receiving an individual's consent for the alienation of the shares of that company. No one may be granted a pre-emptive right to acquire the shares of a public joint-stock company, except for those cases, provided for by paragraph 3 of Article 100, related to the increase of the charter capital of a joint-stock company.

The articles of association of a public joint-stock company may not attribute to the exclusive competence of the General Meetings of shareholders the solution of issues not related to such competence in accordance with the Civil Law and the law on joint-stock companies.

A public joint-stock company is obliged to disclose publicly the information prescribed by law. Additional requirements for the creation and activity, as well as for the termination of public joint-stock companies are established by the law on joint-stock companies and the laws on securities.

A public joint-stock company is prohibited from placing preference shares, the nominal value of which is lower than the nominal value of the ordinary shares.

[1] For more details, refer to the Article 66.3 of the Civil Code of the Russian Federation, as revised in the Federal Law of May 05, 2014 No.99-FZ.

On the whole, the innovations in this block may be evaluated as necessary ones, which had been anticipated for a long time.

Corporate agreement

Article 67.2, named the "Corporate Agreement", has been introduced in the Code, and this Article is common to all business entities, including joint-stock companies. According to this Article, the participants of a business entity, or some of them, shall be entitled to execute between themselves an agreement on the exercise of their corporate (member) rights (the corporate agreement), in accordance with which they shall be obliged to exercise such rights in a specified manner, or to refrain from (refuse) the exercise thereof. This includes voting in a certain way at general meetings of the company's shareholders, performing other actions related to the management of the company in a coordinated manner, acquiring or alienating shares in its charter capital at a certain price and/or upon the occurrence of certain circumstances, or refraining from the alienation of shares prior to the occurrence of certain circumstances (p. 1 Article 67.2).

A corporate agreement cannot oblige its parties to vote in accordance with the instructions of the company's bodies, to determine the structure of the company's bodies and their competence. Any conditions of a corporate agreement, contradicting those indicated above, are null.

The participants that have executed a corporate agreement are obliged to notify the company about this fact, but in doing so, they are not required to disclose the content of the corporate agreement. The information on the corporate agreement of a public joint-stock company shall be disclosed to the extent, and both in accordance with the procedure and conditions provided for by the law on joint-stock companies. Unless otherwise provided for by law, the information on the content of a corporate agreement, executed by the participants of a non-public company, shall not be subject to disclosure, and is considered to be confidential.

Violation of a corporate agreement may constitute grounds for the recognition of a decision made by a body of a business entity with regard to a claim, brought by a party under such an agreement, to be invalid, provided that, as on the date of taking the corresponding decision by the body of the company, all participants of the company were parties under the corporate agreement.

A transaction, made by a party under the corporate agreement that violates it may be found invalid by a court on the basis of a claim, brought by a party under that agreement, only if the other party under the transaction knew, or should have known, about the limitations provided for by the corporate agreement.

The rules related to the corporate agreement also apply to the agreements, executed by the creditors of a company and other third parties with the participants of the business entity, in accordance with which the latter is obliged to exercise their corporate rights in a certain manner of to refrain from the exercise thereof. The purpose of this is to secure the interests, protected by law, of such third parties.

These rules related to subsidiary business organisations, introduced in the Civil Code, essentially duplicate the norms of the Federal Law "On Joint-Stock Companies".

The innovations in this block are aimed at the development of corporate relations and provide participants in the economic turnover with the possibility of regulating their own mutual relations, and this corresponds well with the nature of the entrepreneurial activity.

Non-profit corporate organisations

According to the evaluations of the developers of the first draft of the Civil Code of the Russian Federation, which was approved in 1994, at that time no one realised that, as a consequence of the open list of non-profit organisations provided for in the Code, the legislation in this branch would be created so actively and un-systematically. The current condition of this branch of legislation is such that even specialists differ in their opinions with regard to the number of currently existing forms of non-profit organisation (different specialists itemise from 20 to 40 such forms). Such a multiplicity of forms is evidently excessive, and as a rule, is not justifiable.[1] This is why the Civil Code provides a closed list of the legal organisational forms of non-profit organisations that also includes the corporate ones.

The non-profit corporate organisations are considered to be those legal entities that do not pursue profit-making as the main purpose of their activity, do not distribute received profit among their participants, and the founders of which receive the right of participation (membership) in such entities and form their supreme body.

The non-profit corporate organisations include: consumer cooperatives, public organisations, associations (unions), partnerships of property owners and Cossack associations, as well as indigenous small ethnic communities of the Russian Federation.

The remaining norms, related to non-profit corporate organisations, duplicate the corresponding norms of the Federal Law "On Non-Profit Organisations".

With regard to the **consumer cooperatives**, changes have been made, related to the transformation thereof. Previously, the transformation of a consumer cooperative into a business entity or partnership was possible, and now they can transform into a public organisation, association (union) or an autonomous non-profit organisation or fund.

The law additionally fixed the new obligation of the members of a consumer cooperative - to cover any formed losses by making additional contributions. The size of such contributions is determined within three months of the date of the approval of the annual balance sheet. In the case of non-fulfillment of this obligation the cooperative may be liquidated through a court order at the request of the creditors. The members of a cooperative are held jointly and subsidiary liable for its obligations within the frame of the corresponding non-contributed part of the additional contribution of each member of the cooperative.

The legal norms, related to **production cooperatives**, to a significant extent, duplicate the norms of the corresponding Federal Law.

The regulation of the **activity of public organisations has been expanded.** Now, they are created "for the provision and protection of the mutual interests and achievement of other purposes not contradictory to the law". Public organisations may amalgamate in associations (unions). A public organisation, upon the decision of its founders, may be transformed into an association (union), an autonomous non-profit organisation or a fund.

The number of founders of a non-profit organisation may not be fewer than three people. A participant (member) of a public organisation shall exercise the corporate rights noted above, according to the procedure, established by the articles of association of that organisation. Such a participant is also entitled to be on a par with other participants of the organisation in the gratuitous use of the services provided by the organisation. Such a participant is also obliged to pay membership and asset contributions and to bear other obligations incumbent upon the

[1] Denisov S. A. Non-profit organisations in the new version draft of the Civil Code of the Russian Federation // The Civil Law Bulletin. 2012. No. 4, pp 66–74.

participants of such a corporation. A participant of a public organisation has the right to withdraw from the organisation at any time. Membership of a public organisation cannot be alienated. The exercise of the participant's rights cannot be assigned to another person.

The exclusive competence of the supreme body of a public organisation has been expanded. In addition to a range of powers provided for the supreme body of a corporation (p.2 of Article 65.3 of the Civil Code of the Russian Federation) it now also includes the ability to take decisions on the size and procedure for payment of the membership and other asset contributions.

It is now mandatory for a public organisation to have a sole executive body (a chairman, president, etc.) while permanent collegial executive bodies (board, administration, presidium, etc.) may be created. Previously, one and/or the other body could be created. In addition to that, it has been established that, upon a decision taken at a general meeting of the members of a public company, the powers of its executive body may be prematurely terminated in cases of "flagrant violations by this body of its duties, an inability to demonstrate the proper conduct of affairs, or upon other serious grounds".

The legislator has introduced a definition of an **association** (a union), similar to that fixed in the Federal Law "On Non-Profit Organisations"; however, it is emphasised that the purposes of an association (union) should be non-profit in nature and not contrary to the law. The following examples of an association (union) are given:

- an association of persons, whose purposes are the coordination of their entrepreneurial activity and the representation and protection of their common property interests;
- professional associations of citizens, whose purposes are not the protection of the labour rights or the interests of their members;
- professional associations of citizens, not connected with their participation in labour relations (associations of lawyers, notaries public, appraisers, individual artists etc.);
- self-regulated organisations and their amalgamations.

An association is the owner of its assets, and is held liable for its obligations with all its assets, unless otherwise provided for by law with regard to associations (unions) of certain types. An association (union) is not held liable for the obligations of its members, unless otherwise provided for by law. The members of an association (union) are not held liable for its obligations, unless a subsidiary liability of the members is provided for by law or by the articles of association of such an association (union).

An association (union), upon the decision of its members, may be transformed into a public organisation, an autonomous non-profit organisation or a fund.

The features of the legal status of associations (unions) of certain types can be established by laws.

So, as we can see, the regulations leave open a wide range of possibilities for the functioning of the associations (unions) according to other rules.

There must be no fewer than two founders of an association (union). The laws on certain types of associations may establish other requirements for the minimum number of founders.

Issues related to taking decisions on the procedure for the determination of the size and method of payment of membership contributions, on additional asset contributions on the part of the members of an association (union) and on the extent of the subsidiary liability for the obligations of the association (union), if any, fall within the exclusive competence of the supreme body of the association (union), along with those matters provided for by p. 2 of Article 65.3, considered above.

The peculiarities of the creation and termination of the powers in an association (union) of the executive bodies, and the rights and responsibilities of its members are similar to those also considered above that are provided for a public organisation.

A further innovation is the introduction into the Civil Code of the definition of a **partnership of property owners**, which means a voluntary association of real estate owners, created by those owners for the joint possession, use and disposal, within the frames established by law, of property, which by law is in their joint possession or in joint use, in addition to other purposes provided for by law.

The articles of association of the partnership must contain all the key provisions, related to the activity of such a partnership. The partnership is not liable for the obligations of its members and the members of a partnership are not liable for its obligations. Upon the corresponding decision of its members, a partnership of property owners may be transformed into a consumer cooperative.

The partnership is the owner of its assets. Common property in an apartment building, as well as the shared facilities in horticultural, gardening and non-profit dacha partnerships, belong to the members of the partnership of property owners according to the right of common shared ownership, unless otherwise provided for by law. The composition of such property and the procedure for the determination of the shares in the common ownership right to such property is established by law.

A share in the common ownership right to the common property in an apartment building, a share in the common ownership right to the shared facilities in horticultural, gardening or in a non-profit dacha partnership of an owner of a land plot (who is a member of such a non-profit partnership) follow the fate of the ownership right to the above-specified premises or land plot.

The features of governance of a partnership of property owners are similar to those for a public organisation which were considered above.

The Code gives the definition of a **Cossack society**, as one which is introduced into the State Register of Cossack Societies in the Russian Federation of citizens' associations, created for the purposes of the preservation of the traditional way of life, households and culture of the Russian Cossacks, as well as for any other purposes provided for by the Federal Law of 5 December 2005 No.154-FZ “On the State Service of the Russian Cossacks”, and which voluntarily, according to the procedure established by law, assumes the obligations of performing a state or other service.

A Cossack society, upon the decision of its members, may be transformed into an association (union) or an autonomous non-profit organisation. The provisions of the Civil Code with regard to non-profit organisations apply to Cossack societies, which have been entered in the State Register, unless otherwise established by the above-mentioned law on Cossacks.

The definition of an **indigenous small ethnic community of the Russian Federation** has also been included in the Code, to mean a voluntary association of the citizens belonging to any of the indigenous small ethnic communities of Russia, and who are united by blood, kinship and/or on a territorial or neighbourly basis for the purposes of protecting their native habitat, or preserving and developing their traditional ways of life, households, crafts and culture.

The members of such a community have the right to receive a part thereof or a compensation for the price of such part in the case of exiting the community or of its liquidation.

Such a community, upon the decision of its members, may be transformed into an association (union) or an autonomous non-profit organisation.

The provisions of the Code apply with regard to such communities, unless otherwise provided for by law.

In evaluating the innovations of this section, it is worth mentioning the limited list of organisations, their systematisation, and the raising of the status of the norms on non-profit organisations, which is, undoubtedly, a positive move.

Non-profit unitary organisations

More extensive regulation has been created in the Civil Code for **funds.** It has been stipulated that the reorganisation of funds is not permitted, with the exclusion of non-state pension funds.

The assets, transferred to a fund by its founders, are the property of the fund. The exclusive competence of the supreme collegial body of a fund has been established, although it can be expanded both by law and by the articles of association of the fund.

The supreme collegial body of a fund has to elect an exclusive executive body for the fund but may also appoint a collegial executive body.

The persons, authorised to act on behalf a fund are obliged, upon the request of members of the fund's supreme body, acting in the interests of the fund, to compensate for any losses caused to the fund by such persons. There also should exist a board of trustees of the fund that maintains supervision over the fund's activity, over making of decisions by other bodies of the fund and their enforcement, as well as over the usage of the fund's resources and the compliance of the fund with the current legislation. The board of trustees of a fund acts on a public basis.

It is interesting that the possibility of changes in the articles of association of a fund by a court decision is provided for (along with the more usual possibility of the introduction of such changes by the supreme body), on the basis of the corresponding application of the fund's bodies, if the preservation, unchanged, of the fund's articles of association entails consequences that could not be foreseen during the establishment of the fund, and the supreme collegial body of the fund or the founder of the fund have not changed its articles of association. This offers a mechanism for overcoming conflicts.

A fund may be liquidated only on the basis of a court decision, upon the application of the persons concerned, if the assets of the fund are insufficient to perform its activity and the possibility of receiving the necessary assets is unreal; if the purposes of the fund cannot be achieved, and the necessary changes in the purposes of the fund cannot be made; if the fund in its activity evades the purposes provided for in the articles of association; and in other cases, provided for by law.

In the case of the liquidation of a fund, its assets, which remain after the satisfaction of the claims of its creditors, are directed for the purposes, indicated in the fund's articles of association, with the exclusion of those cases where the law provides for the return of such assets to the founders of the fund.

Institutions have also been the subject of a definition that is uniform for all forms. That is: "an institution is considered a unitary non-profit organisation, created by the owner for the performance of governance, social and cultural and other functions of a non-profit nature". In addition to this, some innovations with regard to the FZ "On Non-Profit Organisations" have been introduced:

– In creating an institution, co-foundership by several persons is not permitted.

– An institution is held liable for its obligations for its disposable monetary resources, and in those cases established by law, also for other assets. In the case of insufficiency of monetary resources or assets, the owner of the corresponding assets is to be held subsidiary liable.

The founder must appoint a head of the institution, who is an organ of the institution. Heads of a state or municipal institution may be elected by its collegial body and approved by its founder.

With regard to **state or municipal institutions**, their division into state-owned, budgetary or autonomous institutions is preserved. State or municipal institutions are not held liable for the obligations of the owner of their assets. A state-owned institution is held liable for its obligations in respect of its disposable monetary resources. In the case of an insufficiency of those monetary resources the owner is held subsidiary liable for the obligations of the state-owned institution.

The property liability of a **budgetary institution** is differently regulated from now on. It is now held liable for its obligations for all its assets according to its right of operational management, including those acquired on the basis of income received from income-yielding activity, with the exclusion of very valuable assets and a number of other exceptions.[1] In the case of insufficiency of a budgetary institution's assets the owner of the assets of the institution will be held subsidiary liable for the obligations of the institution that may be levied in relation to the consequent infliction of harm to citizens.

With regard to a **private institution**, it must in whole or in part be financed by the owner of its assets, and is held liable for its obligations with respect to disposable monetary resources. In the case of insufficiency of those resources the owner of the assets shall be held subsidiary liable. A private institution may be transformed by the founder into an autonomous non-profit organisation.

Autonomous non-profit organisations are now subject to more detailed regulation, in respect of the requirements to their articles of association, which must now contain the purposes of the activity of the organisations, the composition, procedure for the formation of and the competence of the bodies of that autonomous non-profit organisation, etc. An important point is the fact that, an autonomous non-profit organisation that engages in entrepreneurial activity necessary for the achievement of its purposes, shall be obliged to establish business entities or to participate in such entities.

A person may, at his/her own discretion, withdraw from the founders. Upon the unanimous decision of the founders of an autonomous non-profit organisation, new persons may be included in its founders. An autonomous non-profit organisation, upon the decision of its founders, may be transformed into a fund.

The governance of the activity of an autonomous non-profit organisation is carried out by its founders, according to the procedure established by its articles of association as approved by the founders. Upon the decision of the founders a permanent collegial body (bodies) may be created, the competence of which must be established according to the articles of association. The founders must appoint a sole executive body, which may also be represented by one of the founder-citizens.

[1] For more details, refer to p. 5 of Article 123.22 of the Civil Code as revised on 05 May 2014, as amended and supplemented, and entered into force since 1 September 2014.

Religious organisations are subject to some new regulations. Now, such an organisation may be considered a voluntary association of the citizens of the Russian Federation or other persons, permanently and on legal grounds residing on the territory of the Russian Federation, which was created by them for the purposes of the joint confession and propagation of faith, according to the procedure, established by law.

The Civil Code now separates: a local religious organisation - a legal entity, from a centralised religious organisation - an association of these local organisations, as well as a governing or coordinating body, created by such association.

It has been stipulated that a religious organisation cannot be transformed into a legal entity of another legal organisational form. The rights of the founders, the articles of association and property issues are now regulated, to a large extent, uniformly with Articles 10 and 21 of the Federal Law "On the Freedom of Conscience and on Religious Associations".

Summarising the results of the analysis of the changes in the Civil Code, it is worth mentioning the systematic development of the legislation (for the first time since 1995) with regard to the matter under consideration. The suggested measures are aimed at the further development of the rules on corporate governance by means of changing the norms on the reorganisation and liquidation of enterprises, the introduction of norms on corporate agreements, the rights and obligations of shareholders, and the classification of legal entities.

Theoretically, the conditions have been laid for *raising the levels of responsibility of the head of a legal entity, and of the founders and members of the Board of Directors* in the case of inflicting losses on a legal entity through their fault, or their joint liability. Furthermore, we can observe the development of corporate governance itself by the introduction of the institution of corporate agreements and the possibility to redistribute the legal powers of the participants of a company disproportionately to their shares. However, in this regard there is a risk of misuse and the violation of the rights of shareholders, particularly of the minority ones.

An important feature of the legal regulation of legal entities, which we would like to note, is *the flexibility of the regulation:*

- the use of open lists, which can be supplemented by each company itself;
- the participants of a corporation may, themselves, supplement the rights and obligations;
- the company may now determine the types of assets that cannot be contributed to pay for shares in the charter contributed capital;
- non-public companies can make changes in the articles of association with regard to the procedure for convening, preparing and carrying out the general meetings of the company and their decisions-making, etc.

The majority of the innovations which have been introduced seem to be the norms, which are necessary, systematic and developing the legal relations. The exceptions are those on reorganisation, which narrow the rights of creditors, and are aimed at the preservation of transactions, even those made after illegal reorganisation. By doing so, they slow down and impede the establishment of a balance of interests among the participants in corporate relations.

6.3.2. The New Code of Corporate Governance

The global financial and economic crisis in the late 2000s gave a new impetus to the revision and development of the norms of corporate governance. The OECD in its reports on cor-

porate governance and the financial crisis[1] for the years 2009–2010 emphasises the extensive impact of defects in corporate governance on the development of the crisis. In 2011, the Financial Crisis Inquiry Commission (FCIC), created by the US Government, published its Report on the Inquiry into the Financial Crisis,[2] in which the main causes of the crisis were named as the significant failures of corporate governance and of risk management in many systemically important financial institutions.

As is known, the Principles of Corporate Governance of the OECD (hereinafter referred to as the "PCG of the OECD"), which were initially approved in 1999 as a result of a series of large corporate scandals which swept the countries of the world at the turn of the millennium (for example, Enron and WorldCom in the USA, HIH and One.Tel in Australia), were reviewed as early as 2004. In 2014, the crisis of the end of the 2000s formed the grounds for beginning a new process of reviewing the PCG of the OECD.

It is quite natural, therefore, that the global financial and economic crisis has also become one of the reasons to review the Russian Code of Corporate Conduct of 2002[3] (hereinafter referred to as the "CCC"). The speculative investors prevailing on the Russian market during the catch-up growth period have lost their interest in Russian companies, while the long-term investors require a clear understanding of the strategic targets and prospects of any company, as well needing to be sure that their rights will not be violated. This is impossible without constant improvements to the regulatory norms and practices of corporate governance.

At the beginning of the 2000s the Russian legislation on joint-stock companies was underdeveloped and had an abundance of loopholes, which the CCC of 2002 was intended to close. As a result, the structure of the CCC turned out to be rather bulky and overloaded. The principles of Corporate Conduct, stated in the first chapter of the CCC, were the basis for the recommendations contained in the subsequent nine chapters, but these were far too detailed for a framework document.

Since the adoption of the CCC, a significant number of problems and issues related to corporate conduct have been solved at the level of legislation and by regulatory legal acts. There is now no further need for the many "regulating" recommendations of the CCC: there is no more need for separate chapters on the general meetings of shareholders (Chapter 2), on the executive bodies of a company (Chapter 4), on dividends (Chapter 9) or on the settlement of corporate conflicts (Chapter 10).

The new Code of Corporate Governance of 2014[4] (hereinafter referred to as the "CCG") has adopted its structure from the PCG of the OECD of 2004. The CCG consists of two parts, the first part contains the principles of corporate governance (Part A), and the second part (Part B) contains recommendations related to the realisation of those principles.

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[1] Corporate governance and the financial crisis. URL: http://www.oecd.org/daf/ca/ corporategovernance-andthefinancialcrisis.htm.

[2] FCIC. The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States / Official Government Edition, 2011. – P. xviii. URL: http://fcic.law.stanford.edu/report.

[3] The Order of the FCSM of the Russian Federation of 04 April 2002 No. 421/p "On the Recommendations for the Use of the Corporate Governance Code" // Bulletin of FCSM of Russia, No. 4, 30 April 2002 (the Order) actually became void after the publishing of the Letter of the Bank of Russia of 10 April 2014 No. 06-52/2463, which recommended the Corporate Governance Code.

[4] The Letter of the Bank of Russia of 10 April 2014 No. 06-52/2463 "On the Corporate Governance Code" // Bulletin of the Bank of Russia, No. 40, 18 April 2014.

The second part of the CCG is more practical in character in comparison to the annotations of the second part of the PCG of the OECD, consisting of comments on the principles of corporate governance, which are intended to help in an understanding of the basis of these principles.

It is worth noting that the development of the CCG took place simultaneously with the realisation by the OECD of its plan of action for corporate governance and resolving the financial crisis, at one stage of which the experts of the OECD came to the conclusion that the defects in corporate governance, which had played a significant role in the development of the financial crisis, were caused, not by defects in the international and national standards of corporate governance, including the PCG of the OECD, but by the non-performance of such standards. As a result, in 2010 the OECD published a set of recommendations, complementing those principles, for overcoming the defects of corporate governance and supporting a more effective realisation of the PCG of the OECD.[1] Only in 2014 did it announce the start of the process of reviewing the PCG of the OECD themselves.

Since the OECD participated in the development of the Russian CCG during the above period, we can assume, that this fact, among others, has influenced the recommendatory (rather than annotative) character of the CCG, and that the new PCG of the OECD will also be of more practical character.

What is the difference between the principles of corporate governance of 2014 and the principles of corporate governance of 2002, and what do they have in common with the principles of corporate governance of the OECD?

Firstly, the new name of the Code - the Code of Corporate *Governance* - reflects the change in approach and role of the Code. Now it is not just a document, defining the proper conduct of Russian joint-stock companies in relation to their shareholders and investors, but also "a powerful tool for increasing the efficiency of governing a company and ensuring its long-term and sustainable development".

The CCG adopted from the PCG of the OECD the definition of corporate governance, which was previously absent in the CCC.

The term "corporate governance" covers the system of mutual relations between the executive bodies of a joint-stock company, its Board of Directors, the shareholders and other stakeholders. Corporate governance is a tool for the definition of the targets of a company and a means for achieving such targets, as well as for ensuring the effective control over the company's activity on the part of the shareholders and other stakeholders.

Secondly, the CCG adopts the principles of the CCC, based on the PCG of the OECD, which are related to the rights of shareholders and the equality of shareholders in the exercise of their rights, and it further develops these principles in the recommendations (section I).

Thirdly, the principles, related to the Board of Directors of a company, have changed to the largest extent (section II).

The CCG has clarified the obligations of the Board of Directors, particularly, by including several principles of corporate governance from the OECD. The Board of Directors is obliged:

[1] Corporate Governance and the Financial Crisis: Conclusions and Emerging Good Practices to Enhance Implementation of the Principles. OECD, 2010.

- to determine the principles and approaches to the system of risk management and of internal control in the company (2.1.3);
- to play a key role in ensuring the transparency of the company, the timeliness and completeness of the disclosure of information by the company, and the easy access of shareholders to the company's documents (2.1.6);
- to exercise control over the corporate governance practices in the company and to play a key role in significant corporate events, taking place in the company (2.1.7).

The CCG has turned the recommendation of the CCC, related to the requirements of a member of the Board of Directors, into a form principle. It is recommended that a member of the Board of Directors should have an impeccable business and personal reputation, and have the knowledge, skills and experience, necessary for performing his/her duties (2.3.1).

The CCG has improved the principles, related to independent directors (2.4.1–2.4.4), going further than the PCG of the OECD, and, in particular, has defined an independent director as a person who has sufficient professional competence, experience and independence to form his/her own position and who is able to make independent, objective and good faith judgments.

The CCC recommended, that the independent directors should comprise at least one quarter of the composition of the Board of Directors (and that under any circumstances, there should be no fewer than three independent directors). Along with the definition of an independent director, the requirement for the number of independent directors was a recommendation, made by the CCC. The CCG raised this recommendation to the level of a principle and increased the required proportion of independent directors up to at least one third.

The CCC recommended the creation of committees for the preliminary consideration of the most important issues related to the activity of a company, and that these should consist of the members of the Board of Directors. The principles of the CCG also establish new requirements for the composition of such committees (2.8).

The audit and remuneration committees must consist of independent directors. A remuneration committee must be headed by an independent director, who is not the chairman of the Board of Directors. The majority of the members of a committee for nominations must be independent directors.

The subsequent recommendations, transformed into principles, became the provisions: on the Chairman of the Board of Directors (2.5) (such a principle is absent in the PCG of the OECD), on the rights and obligations of the members of the Board of Directors (2.6) and on the obligation of the Board of Directors to ensure the assessment of the quality of the work of the Board of Directors, its committees and the members of the Board of Directors (2.9).

Fourthly, the Russian principles differ from the principles of the corporate governance of the OECD by the presence of principles related to the Corporate Secretary of a company. Now, the above-specified principles constitute a separate small section (III) of the CCG, which has been partly formed using the recommendations of the CCC (Chapter 5 of the recommendations of the CCC), but which clarifies the tasks of the Corporate Secretary of a company (efficient current interaction with the shareholders, coordination of the company's actions with regard to the protection of the shareholders' rights and interests and support of the efficient work of the Board of Directors) and establishes the requirements of his/her position (for instance, sufficient independence from the company's executive bodies).

Fifthly, through a separate section (IV) on systems of remuneration, the CCG develops a separate principle from those of the CCC and PCG of the OECD, which establishes the de-

pendence of the remuneration of the members of the Board of Directors, executive bodies and other key executive employees of a company on their actual contribution to the results of the company's activity and on the long-term interests of the company and its shareholders.

Sixthly, the CCG has updated the principles relating to the system of internal control, and has established new principles for risk management (section V). The CCC included risk management in the procedures for internal control, and the principles of risk management themselves were absent in it.

The development of the specified principles was due to the significant role of the defects of corporate governance in the field of risk management in the development of the global financial and economic crisis at the end of the last decade. Despite this significant role of the risk management system, there is little said about it in the PCG of the OECD.

Seventhly, the principles of disclosure of information about a company and of the information policy of a company as stated in the CCC and the CCG (section VI) do not specify, which substantial information about its activity a company must disclose. However, the recommendatory parts of the CCC and the CCG do contain a list of information subject to disclosure - from the structure of the capital of the company to information related to the social and environmental responsibility of the company.

The Principles of Corporate Governance of the OECD expressly state, that the disclosed substantial information should include, among other, data on the rights of the major shareholders and voting rights, transactions with affiliated persons and any predictable risk factors.

According to the recommendations of the CCG, the web-site of a company on the internet should be the main source of disclosing information.

The principles of the CCC and the CCG related to confidential and insider information, are absent from the PCG of the OECD, but in the annotations to the Principles of Corporate Governance of the OECD there is mention of the provision of such information.

Eighthly, as we have already seen, the CCG has transformed several recommendations of the CCC into principles of corporate governance. The most significant transformation is related to the provisions on substantial corporate actions (from the recommendatory Chapter 6 of the CCC into Section VII of the principles of the CCG).

For instance, the Codes consider as substantial corporate actions: the reorganisation and merger of a company, the performance by it of substantial transactions and increases or reductions of the charter capital. The innovation of the CCG is in classifying the listing and delisting of the shares of a company as among the above-mentioned actions. However, the provisions on substantial corporate actions are absent in the PCG of the OECD.

There are some principles of the corporate governance of the OECD, which have not been included in the Russian version of the CCG, but which are worth adopting and fixing.

First of all, there is the most important 'Principle I', related to the creation of an efficient system as a basis of corporate governance, insomuch as this is related to the *applicability* of the legal and regulatory requirements affecting the practice of corporate governance, and, in this regard, vesting the supervision, regulatory and law-enforcement bodies with the corresponding powers and resources to perform their obligations in a professional and objective way.

As we have already said, the failures of corporate governance have been caused, not so much by flaws in the principles of corporate governance, as by the non-performance of such principles. Therefore, to ensure compliance with corporate, legal and regulatory requirements the above-specified bodies should be vested with the appropriate powers.

Furthermore, with the purpose of increasing the efficiency of the activities of companies, the systems of corporate governance should recognise the rights of the parties concerned (for example, of the companies' employees and creditors) and should encourage active cooperation between the companies and these parties (Principle IV of the PCG of the OECD).

So, the main advantage of the CCG of 2014 is in its structure, which has become more compact and convenient. Unnecessary provisions, duplicating the legislation, have been removed from the CCG. The CCG is now more in line with the international standards of corporate governance, and this facilitates the efficient use of its provisions by companies. However, such use remains voluntary, while the compliance with the provisions of the corporate governance codes of a number of developed countries has, for a long time, been founded on the "comply or explain" principle.[1]

6.4. Public Policy for Stimulating Scientific and Industrial Cooperation

6.4.1. The evolution of public policy for promoting scientific and industrial cooperation in the 2000s: a brief summary

The state policy for promoting cooperation between science and business has been widely developed over the last few years. It was, and remains, fully immersed 'into the context' of the implementation of a policy of public stimulation of science and innovation, the configuration of which has been determined by a combination of the current resource capabilities of the state and the ideas of the role and place of innovation in the development of the national economy that has dominated the upper echelons of power at different periods time. The key stages in the evolution of public policy towards stimulating scientific and industrial cooperation have coincided with the stages of development of innovation policy in general.[2]

From the collapse of the Soviet Union to around the start of the last decade, Russia's innovation policy was not a primary focus of the state, for a whole range of objective and subjective reasons. The principal of these were the difficult socio-economic situation in the country, the scarcity of budgetary resources and even the disbelief in the possibility of resolving acute economic problems by fostering innovation, on the part of the representatives of government directly involved in shaping the agenda and determining the emphases of public policy. Measures implemented by the Government in this regard were aimed mainly at supporting at least a minimum level of operation of the extremely large and cumbersome system for organising the research and development sector which had been 'inherited' from the USSR. At the same time, questions regarding the commercialisation of the results of supported work and their application within the manufacturing sector were, in most cases, either not raised at all or considered only formally, without giving rise to any real commitments. This policy, which was relatively low-cost for the state but, of course, haphazard, obviously ended up preserving the problems which already existed in the development of national science, technology and engineering and did not result in any tangible or significant innovative breakthroughs.

The economic growth that began in the late 1990s quite quickly led to a considerable softening of budgetary limitations, thus, providing an opportunity to extend the range of real priorities of the policies implemented by the state and to increase the resources available to some

[1] For instance, the Corporate Governance Codes of the United Kingdom and Germany, the Corporate Governance Code of France (for public companies).

[2] See, for example, Kuzyk, M., Simachev, Yu. Russia's Innovation Promotion Policies: Their Evolution, Achievements, Problems, and Lessons. Published Papers 164, Gaidar Institute for Economic Policy, 2013.

of the fields that had previously been 'on the periphery' of the state's attention. One of these new priorities of the state was support for innovation; although, of course, the process of 'building' it into the relevant public policy agenda was by no means instantaneous and took the major part of the last decade.

The first clear sign of change in the attitude of the state towards innovation was the initiation in 2002-2003 of an essentially new instrument of innovation policy: the key innovation projects of national significance (KIP), which was unprecedented, both in terms of the extent of support provided and the level of state attention to its initiation and 'launch'.

A considerable intensification of innovation policy occurred in 2005-2008 due to the favourable economic situation and stable growth of budgetary revenues. This resulted, among other things, in the creation of new instruments of the state to stimulate scientific and industrial cooperation. During this period the TEMP and PUSK Programmes of the Foundation for Assistance to Small Innovative Enterprises were launched (the second programme was implemented jointly with Rosnauka, the Federal Agency for Science and Innovations) while R&D support mechanisms proposed by the business sector were introduced by the state. Moreover, the conditions for writing off R&D costs when determining taxable profit were significantly softened.

The financial and economic crisis erupted in the second half of 2008 and the 'mobilisation' of state resources for the implementation of the large-scale anti-crisis programme which it triggered, as was noted above, resulted (although with a certain time lag) in the curtailing of a number of public policy measures and tools aimed at stimulating scientific and industrial cooperation including the TEMP and PUSK Programmes of the Foundation of Assistance to Innovations and the support for business projects and KIPs which had been sponsored by the Ministry of Education and Science. It must be said, though, that even at the most acute stage of the crisis, the state did not refuse to create new initiatives in this area, including those relating to support for interaction between science and business. However, for obvious reasons, most emphasis was placed on tools which did not require additional budgetary expenditure: profit tax relief was introduced on R&D costs included in a special-purpose list, and the abilities for scientific and educational budgetary institutions to create small innovative enterprises (SIEs) were significantly extended.

Around the end of 2009 and early 2010, when clearer signs of the post-crisis recovery had began to appear, innovation policy was brought to the fore in the Government's active agenda. At the same time, in a new round of development, the stimulation of interaction between the different participants in innovation processes (including, of course, science and business) was named among the key priorities of innovation policy implemented by the state, along with support for the research and innovation activities of higher education institutions. In this context, we should note the launch of joint projects between businesses and higher education institutions for creating new manufacturing facilities, programmes for developing the innovation infrastructure of higher education institutions, the initiation of new technology platforms and regional innovation clusters whilst forcing the largest state-owned companies to adopt programmes for innovation-driven development with the mandatory inclusion of a 'cooperative element' in each programme.

Finally, starting about 2013, in a period that was at first marked by increasing uncertainty in respect of the prospects for development, and later by more distinct manifestations of a new crisis, the initiation of new areas and measures for state stimulation of scientific and industrial cooperation almost ceased.

An overview of the development of governmental policy for stimulating interaction between science and business in the last fifteen years is presented in *Table 18*.

The main form of public stimulation of scientific and industrial cooperation was, and still is, budgetary funding of the R&D conducted by scientific organisations and higher education institutions in the interests of business. Here, the direct recipients of budgetary funds could be both organisations performing R&D (typical example – business projects) and 'end user' companies ('Mechanism 218'). Moreover, financial support of 'cooperative' R&D has also been carried out by state development institutes: the Foundation for Assistance to Small Innovative Enterprises, and the Russian Foundation for Technological Development (RFTR).

With the development of public innovation policy and the 'enrichment' of its set of active tools, the list of the areas of support for scientific and industrial cooperation was also extending: mechanisms of budgetary and quasi-budgetary funding were supplemented by fiscal incentives (the main one of which was profit tax relief for certain R&D costs included in a special-purpose list), special legislative mechanisms (a set of legal provisions stimulating the creation of inculcation companies by budgetary scientific and educational institutions), organisational tools (technology platforms) and policy measures (approval of the innovation-driven development programmes of the largest state-owned companies).

Table 18

Development of public policy for stimulating scientific and industrial cooperation

	Stable growth					Crisis		Recovery			Uncertainty	
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Key innovation projects of national significance	Ministry of Industry, Science and Technology	Ministry of Industry and Energy/Ministry of Industry and Trade/ Ministry of Education and Science				Ending of funding of KIPs by Ministry of Education and Science						
TEMP Programme of the Foundation for Assistance to Innovations												
PUSK Programme of the Foundation for Assistance to Innovations and Rosnauka												
Softening of the accounting procedure for R&D costs in profit taxation				Used – 2 years, with no result – 100%		1 year				In the tax period of R&D completion		
Projects for commercialisation of technology in thematic areas proposed by the business sector												
R&D projects in thematic areas proposed by the business sector												
VAT relief for certain types of R&D												
Profit tax relief for expenditure on R&D included in a speciallist										Requirement to submit a report to the tax authorities		
Stimulation of the creation of SIEs by budgetary institutions							Simplification of the procedure for SIE	Support of partnerships between	Extension of the rights of institutions for their disposal of assets; possibility of using the simplified taxation procedure for SIEs; reduc-			

	Stable growth					Crisis		Recovery			Uncertainty	
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
							creation	SIEs and SECs (Scientific Educational Centres)	tion of payment rates to non-budgetary funds for SIEs			
Joint projects of companies with higher education institutions and scientific institutions								Higher education institutions		Higher education institutions and scientific institutions		
Programmes for development of the innovation infrastructure of higher education institutions												
Creation and development of technology platforms									Creation of a list of platforms; RFTR funding		Budgetary funding of R&D in the interests of the platforms	
Programmes for innovation-driven development by the largest state-owned companies									47 companies	60 companies		
Possibility to reduce taxable profit through reserves for future R&D												
Programmes for development of regional innovation clusters										Selection of 25 clusters	Funding of 15 clusters	Funding of 15 clusters

Source: prepared by the authors.

6.4.2. Key areas and tools of public policy in the field of development of scientific and industrial cooperation

From the quite active and multi-faceted policy for stimulating scientific and industrial cooperation applied by the state in the 2000s, the following key areas can be highlighted:

- key innovation projects of national significance;
- TEMP and PUSK Programmes;
- softening of the accounting procedure for R&D costs when determining taxable profit;
- R&D and technology commercialisation projects in thematic fields proposed by the business community;
- VAT relief for certain types of R&D;
- profit tax relief for expenditure on R&D included in a special-purpose list;
- stimulation of the creation of inculcation companies by budgetary scientific and educational institutions;
- support for cooperation between companies, higher education institutions and state scientific institutions as part of a framework of projects for the creation of advanced manufacturing facilities;
- support for the development of innovation infrastructure within higher education institutions;
- creation and support for the activities of technology platforms;
- creation and monitoring of programmes for innovation-driven development of the largest state-owned companies;

- possibility of reducing the amount of taxable income through creating reserves for future R&D;
- support of programmes for the development of regional innovation clusters.

We should note that some of these areas were implemented in several stages and, more importantly, were often realised using a variety of different measures and tools (*Table 19*.). For instance, stimulation of the creation of inculcation companies by budgetary scientific and educational institutions, which had formerly been of a regulatory nature, soon also acquired financial and tax 'components', while technology platforms which were at first solely communication tools, later 'set up' special funding mechanisms.

Table 19

Key areas and tools of public policy for stimulating interaction between research and development sector organisations and business in the fields of research and/or innovation

Area	Tool (content)	Type	Application period	Key documents
Key innovation projects of national significance (mega-projects, or KIPs)	Non-repayable budgetary funding of R&D within the framework of innovative projects	Financial (budget)	From 2003	Order of the Ministry of Industry, Science and Technology of Russia of 11 February 2002 No. 22 'On the Organisation within the Ministry of Industry, Science and Technology of Russia of Work for the Preparation of Proposals on Projects (Programmes) of Particular National Significance' Federal Target Scientific and Technical Programme (FTSTP) 'Research and Development in Priority Areas of the Development of Science and Engineering' for 2002-2006 (as amended by the Resolution of the Government of the Russian Federation of 12 October 2004 No. 540) Federal Target Programme (FTP) 'Research and Development in Priority Areas of the Development of the Scientific-Technological Complex of Russia for 2007-2012' (approved by the Resolution of the Government of the Russian Federation of 17 October 2006 No. 613) Resolution of the Government of the Russian Federation of 6 April 2011 No. 253 'On Making Amendments to the Resolution of the Government of the Russian Federation of 17 October 2006 No. 613' Order of the Ministry of Industry and Trade of Russia of 30 April 2009 'On Approval of the Regulation on the Selection of Key Innovation Projects of National Significance by the Ministry of Industry and Trade of the Russian Federation' Order of the Ministry of Industry and Trade of Russia of 3 November 2010 No. 991 'On the Organisation within the Ministry of Industry and Trade of the Russian Federation of Work Relating to Applied Scientific Research and Development' State Programme of the Russian Federation 'Development of Industry and Increasing Its Competitiveness' (approved by the Resolution of the Government of the Russian Federation of 15 April 2014 No. 328)
TEMP (Technology for Small Enterprises) Programme of the Foundation for Assistance to Small Innovative Enterprises	Quasi-non-repayable funding of R&D required extend activities under licences	Financial (development institute)	2005-2011	Internal documents of the Foundation
PUSK (Partnership of Universities and Companies) Pro-	Non-repayable state funding of research activities and quasi-state – of devel-	Financial (budget and development	2006-2009	Internal documents of the Foundation and Rosnauka

Area	Tool (content)	Type	Application period	Key documents
gramme of the Foundation for Assistance to Small Innovative Enterprises and Rosnauka	opment activities	institute)		
Softening of the accounting procedure for R&D costs when determining taxable profit	Reduction of the period of writing off costs on R&D the results of which are used in manufacturing, from 3 to 2 years; increase of R&D cost write-off rate for R&D which gave no positive results, from 70 to 100%	Tax (profit tax)	2006	Federal Law of 6 June 2005 No. 58-FZ 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation on Taxes and Duties'
	Reduction of the period of writing off costs on R&D to 1 year	Tax (profit tax)	2007-2011	Federal Law of 27 July 2006 No. 137-FZ 'On Making Amendments to Part I and Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation in Respect of Taking Measures for the Improvement of Tax Administration'
	Writing off R&D costs in the tax period of the R&D completion	Tax (profit tax)	From 2012	Federal Law of 7 June 2011 No. 132-FZ 'On Making Amendments to Article 95 of Part I, Part II of the Tax Code of the Russian Federation in Respect of the Creation of Favourable Tax Conditions for Innovation Activities and Article 5 of the Federal Law 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation'
Projects for commercialisation of technologies in thematic areas proposed by the business community (business projects)	Non-repayable budgetary funding of R&D related to innovative projects	Financial (budget)	2007-2010	Federal Target Programme 'Research and Development in Priority Areas of Development of the Scientific-Technological Complex of Russia for 2007-2012' (approved by the Resolution of the Government of the Russian Federation of 17 October 2006 No. 613) Resolution of the Government of the Russian Federation of 6 April 2011 No. 253 'On Making Amendments to the Resolution of the Government of the Russian Federation of 17 October 2006 No. 613'
R&D projects in thematic areas proposed by business community	Non-repayable budgetary funding of R&D	Financial (budget)	2007-2013	Federal Target Programme 'Research and Development in Priority Areas of Development of the Scientific-Technological Complex of Russia for 2007-2012' (approved by the Resolution of the Government of the Russian Federation of 17 October 2006 No. 613) Resolution of the Government of the Russian Federation of 6 April 2011 No. 253 'On Making Amendments to the Resolution of the Government of the Russian Federation of 17 October 2006 No. 613'
VAT relief for certain types of R&D	VAT relief for R&D including certain types of works	Tax (VAT)	From 2008	Federal Law of 19 July 2007 No. 195-FZ 'On Making Amendments to Certain Legal Acts of the Russian Federation in Respect of Creation of Favourable Tax Conditions for Funding Innovation Activities'
Profit tax relief for costs on R&D included in a special-purpose list	Writing off R&D costs at a 1.5 rate in the period of the actual conduct of those R&D activities	Tax (profit tax)	From 2009	Federal Law of 22 July 2008 No. 158-FZ 'On Making Amendments to Chapters 21, 23, 24, 25 and 26 of Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation on Taxes and Duties' List of scientific research and developments, the taxpayer's expenses on which are included, in accordance with clause 2 of Article 262 of Part II of the Tax Code of the Russian Federation, in other expenses in the amount of the actual costs multiplied by the rate of 1.5 (approved by the Resolution of the Government of the Russian Federation of 24 December 2008 No. 988, as amended by the Resolutions of the Government of the Russian Federation of 13 October 2011 No. 836 and of 6 February 2012 No. 96) Federal Law of 7 June 2011 No. 132-FZ 'On

Area	Tool (content)	Type	Application period	Key documents
				Making Amendments to Article 95 of Part I, Part II of the Tax Code of the Russian Federation in Respect of the Creation of Favourable Tax Conditions for Innovation Activities, and Article 5 of the Federal Law 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation'
Stimulation of the creation of inculcation companies by budgetary scientific and educational institutions	Simplification of the procedure for the creation of business entities by budgetary institutions	Normative	From 2009	Federal Law of 2 August 2009 No. 217-FZ 'On Making Amendments to Certain Legal Acts of the Russian Federation on Matters of the Creation by Budgetary Scientific and Educational Institutions of Business Entities for the Purpose of the Practical Application (Implementation) of the Results of Intellectual Activity'
	Non-repayable budgetary funding (Rosnauka) of research activities of scientific and educational centres and quasi-state funding (Foundation for Assistance to Innovations) of development activities of small inculcation companies	Financial (budget and development institute)	2010-2012	Internal documents of Rosnauka and the Foundation
	Extension of rights of budgetary institutions in respect of property disposal	Normative	From 2011	Federal Law of 8 May 2010 No. 83-FZ 'On Making Amendments to Certain Legal Acts of the Russian Federation in Relation to Improvement of the Legal Status of State (Municipal) Institutions'
	Non-competitive procedure for leasing out property by budgetary institutions to inculcation companies	Normative	From 2011	Federal Law of 1 March 2011 No. 22-FZ 'On Making Amendments to Article 5 of the Federal Law 'On Science and Scientific and Technical Policy' and Article 17.1 of the Federal Law 'On Protection of Competition'
	Possibility to apply a simplified taxation system for inculcation companies	Tax	From 2011	Federal Law of 27 November 2010 No. 310-FZ 'On Making Amendment to Article 346.12 of Part II of the Tax Code of the Russian Federation'
	Reduction of payment rates to non-budgetary funds for inculcation companies	Quasi-tax	From 2011	Federal Law of 16 October 2010 No. 272-FZ 'On Making Amendments to the Federal Law 'On Insurance Payments to the Pension Fund of the Russian Federation, the Social Security Fund of the Russian Federation, the Federal Compulsory Medical Insurance Fund and the Regional Compulsory Medical Insurance Funds' and Article 33 of the Federal Law 'On Compulsory Medical Insurance in the Russian Federation'
Support of cooperation between companies and higher education institutions and state scientific institutions within the framework of projects for the creation of advanced manufacturing facilities ('Mechanism 218')	Non-repayable budgetary co-funding of R&D activities conducted by higher education institutions and (from 2012) by state scientific institutions for business companies within the framework of innovative projects	Financial (budget)	From 2010	Resolution of the Government of the Russian Federation of 9 April 2010 No. 218 'On Measures for the Public Support for the Development of Cooperation between Russian Higher Education Institutions and Organisations Carrying Out Complex Projects for the Creation of Advanced Manufacturing Facilities' Order of the Ministry of Education and Science of Russia of 16 July 2010 No. 786 'On Approval of the Form of an Agreement between an Organisation Carrying Out a Complex Project for the Creation of an Advanced Manufacturing Facility and the Ministry of Education and Science of the Russian Federation on the Conditions for the Provision and Use of Subsidies for the Implementation of Complex Projects for the Creation of an Advanced Manufacturing Facility Carried Out with the Involvement of a Russian Higher Education Institution' Resolution of the Government of the Russian Federation of 12 October 2012 No. 1040 'On Making Amendments to the Resolution of the Government of the Russian Federation of 9 April 2010 No. 218'

Area	Tool (content)	Type	Application period	Key documents
				Order of the Ministry of Education and Science of Russia of 7 November 2012 No. 904 'On Approval of the Form of an Agreement between an Organisation Carrying Out a Complex Project for the Creation of an Advanced Manufacturing Facility and the Ministry of Education and Science of the Russian Federation on the Conditions for the Provision and Use of Subsidies for the Implementation of Complex Projects for the Creation of an Advanced Manufacturing Facility Carried Out with Involvement of a Russian Higher Education Institution or State Scientific Institution' Resolution of the Government of the Russian Federation of 5 April 2014 No. 269 'On Making Amendments to the Resolution of the Government of the Russian Federation of 9 April 2010 No. 218'
Support for development of the innovation infrastructure of higher education institutions	Non-repayable budgetary funding of programmes for the development of the infrastructure of higher education institutions	Financial (budget), infrastructure	2010-2012	Resolution of the Government of the Russian Federation of 9 April 2010 No. 219 'On Public Support for the Development of Innovation Infrastructure in Federal Educational Institutions of Higher Professional Education'
Creation and support for the activities of technology platforms	Approval of a list of technology platforms	Organisational, communication	From 201 1	Procedure for the Creation of a List of Technology Platforms (approved by the Decision of the Government Commission for High Technology and Innovation of 3 August 2010, Minutes No. 4). List of technology platforms (approved by the Decision of the Government Commission for High Technology and Innovation of 1 April 2011, Minutes No. 2, as amended by the Decisions of the Government Commission for High Technology and Innovation of 5 July 2011, Minutes No. 3, of 21 February 2012, Minutes No. 2) Presidium of the Council of the President of the Russian Federation for Economy Modernisation and the Innovation-Driven Development of Russia, of 20 November 2012, Minutes No. 1, of 31 July 2013, Minutes No. 2
	Quasi-state repayable funding by RFTR of R&D undertaken within the framework of projects presented by the technology platforms	Financial (development institute)	From 2011	Internal documents of the RFTR
	Assignment of the President of the Russian Federation to the Government of the Russian Federation to link state programmes for the development of the industrial and agricultural sectors and the strategy for development of the leading sectors of the economy with top-priority technology platforms	Normative, directive	From 2012	Decree of the President of the Russian Federation of 7 May 2012 No. 596 'On Long-Term Public Economic Policy'
	Non-repayable budgetary funding of R&D proposed by the coordinators of technology platforms	Financial (budget)	2013	Internal documents of the Ministry of Education and Science of Russia
	Non-repayable budgetary funding of R&D that is in line with the strategic research programmes of technology platforms	Financial (budget)	From 2014	Internal documents of the Ministry of Education and Science of Russia
Programmes for innovation-driven development of the largest state-owned companies	Approval of programmes for innovation-driven development and monitoring of their implementation	Directive, monitoring	From 2011	Recommendations for Designing Programmes for Innovation-Driven Development of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises, Regulation on the Procedure for Monitoring of Development and Implementation of

Area	Tool (content)	Type	Application period	Key documents
				Programmes for Innovation-Driven Development of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises, List of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises Designing Programmes for Innovation-Driven Development (approved by the Decision of the Government Commission for High Technology and Innovation of 3 August 2010, Minutes No. 4). List of Assignments of the President of the Russian Federation Based on the Results of the Meeting of the RF President's Commission on Modernisation and Technological Development of the Russian Economy, 3 November 2011, No. Pr-3291. Amendments to the Regulation on the Procedure for the Monitoring of Development and Implementation of the Programmes for Innovation-Driven Development of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises, amendments to the List of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises Designing Programmes for Innovation-Driven Development (approved by the Decision of the Government Commission for High Technology and Innovation of 30 January 2012, Minutes No. 1)
Possibility to reduce taxable profit through creaking reserves for future R&D	Taking reserves for future R&D into account when determining taxable profit	Tax (profit tax)	From 2012	Federal Law of 7 June 2011 No. 132-FZ 'On Making Amendments to Article 95 of Part I and Part II of the Tax Code of the Russian Federation in Respect of the Creation of Favourable Tax Conditions for Innovation Activities, and Article 5 of the Federal Law 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation'
Support of programmes for the development of regional innovation clusters	Assignment of the President of the Russian Federation to the Government of the Russian Federation to link state programmes for the development of the industrial and agricultural sectors and the strategy of developing the leading sectors of the economy with regional innovation clusters	Normative, directive	From 2012	Decree of the President of the Russian Federation of 7 May 2012 No. 596 'On Long-Term Public Economic Policy'
	Subsidies to the constituent entities of the Russian Federation for the implementation of programmes for pilot clusters	Financial (budget)	From 2013	Procedure for the Creation of a List of Pilot Programmes for the Development of Regional Innovation Clusters (approved by the Decision of the Working Group for the Development of Private and Public Partnerships in Innovation Sector of 22 February 2012, Minutes No. 6-AK). Assignment of the Chairman of the Government of the Russian Federation of 28 August 2012 No. DM-P8-5060. Rules for the Distribution and Provision of Subsidies from the Federal Budget to the Budgets of Constituent Entities of the Russian Federation for the Implementation of Measures Envisaged by the Programmes for the Development of Pilot Regional Innovation Clusters (approved by the Resolution of the Government of the Russian Federation of 6 March 2013 No. 188). Resolution of the Government of the Russian Federation of 15 September 2014 No. 941 'On Making Amendments to the Rules for the Distribution and the Provision of Subsidies from

Area	Tool (content)	Type	Application period	Key documents
				the Federal Budget to the Budgets of Constituent Entities of the Russian Federation for the Implementation of the Measures Envisaged by the Programmes for the Development of Pilot Regional Innovation Clusters'

Source: prepared by the authors on the basis of regulatory legal acts and internal documents of the federal authorities and development institutes.

Areas of public policy initiated in the period of stable growth (2002 – mid-2008)

Key innovation projects of national significance (KIPs, or mega-projects)

Support for projects in this category (in the form of targeted budgetary funding) was particularly mentioned in a fundamental document adopted in early 2002 in the field of scientific and technological development – 'The Fundamentals of the Policy of the Russian Federation in the Field of Science and Technology Development for the Period until 2010 and Further Prospects'[1] –as one of the key measures of public stimulation of scientific, scientific-technical and innovation activities.

One can highlight a whole range of features of mega-projects that markedly distinguish them from any of the earlier applied public innovation support tools. Firstly, there is the quite the significant volume of both projects themselves and budgetary resources allocated for their implementation – up to Rb 1.5bn; furthermore, those budgetary funds were provided on a non-repayable basis and could cover up to one half of the project cost. Secondly, the duration of the projects: although the official limit of their implementation period was 4 years, in practice, most of these projects continued for 5-6 years, and some of them even longer. Thirdly, each project covered several consecutive stages of the innovation cycle – from the development of a new product or technology to the commencement of bulk sale. The latter circumstance determined both the scale and duration of the projects and established the necessity for a consortium of contractors to participate in each project (including at least the developer organisation and the company responsible for large-scale commissioning of the created products or technologies). This is what enables us to view mega-projects as a tool contributing to the development of scientific and industrial cooperation.

However, with the undoubted importance of the above features of mega-projects, the main peculiarity of this tool was that the recipients of support were required not only to develop and launch production of new products but also to gain revenues from the sale of such products in an amount that exceeded the costs incurred by the state to support the project by a factor of at least five times. This requirement, in our opinion, was the key one in the entire 'structure' of mega-projects, because it was through its help that the state attempted not only to ensure support for innovations that were in real demand in the market, but also to guarantee that it recovered (although with a significant delay) the invested funds – in the form of tax or other payments generated mainly at the stage of mass production and sale of the products. It was also assumed that each KIP was able to ensure a significant contribution to meeting the most important public objectives, such as an increase in the level of national security level and improvement in the quality of life of the population or, at least, having a considerable economic impact at the level of individual industries and sectors. However, it is important to note that the state initially suspected that not all mega-projects would give the expected quantitative results.[2] In 2001, according to the main 'ideologist' of the creation of this tool – the Deputy

[1] Letter of the President of the Russian Federation of 30 March 2002 No. Pr-576.
[2] Imamutdinov, I. Innovative Choice. Expert, 2002, No. 46.

Minister of Industry, Science and Technology of the Russian Federation, Andrei Fursenko – a fundamental effect of the implementation of KIPs should have been the creation of successful project teams and the generation of positive examples, stories of success.[1]

The state's considerable 'stake' on the implementation of mega-projects as one of the main stepping stones for building the economy of knowledge[2] was clearly evident at the stage of the initial selection of their themes. The relevant process was quite complex and costly, included several stages, and lasted for about a year. In early 2002 the Ministry of Industry, Science and Technology of Russia organised a call for project proposals. The received applications (over two hundred) underwent preliminary scientific and technical expert examination in the Republican Research Scientific and Consulting Centre of Expertise (RRSCCE), after which they were referred for review to specially created thematic working groups, including, along with representatives of the Ministry, subject matter experts and independent innovation brokers and investors. The next stage of review of the projects was carried out by a representative expert council consisting of leaders of the Ministry, large business structures and academic institutes. Finally, a list of projects compiled by this expert council was submitted to the Government for approval.[3]

In 2003, based on the results of this selection, the Ministry of Industry, Science and Technology of Russia launched 12 KIPs, for which the total volume of budgetary funding had amounted to Rb 1.2bn by the end of the year (comparable, for example, to the annual volume of budgetary funding for the basic technological Federal Target Programme 'National Technological Base'). After the said Ministry had been abolished in 2004,[4] six of the mega-projects were transferred to the Ministry of Education and Science of Russia, five – to the Ministry of Industry and Energy of Russia, and one – to the Ministry of Regional Development of Russia. The first two Ministries 'assimilated' the KIP tool and soon started initiating new projects. The relevant expenditure item of the Ministry of Education and Science of Russia was included first in the FTSTP 'Research and Development in Priority Areas for the Development of Science and Engineering' for 2002-2006 [5] and after its completion – in the FTP 'Research and Development in Priority Areas for the Development of the Scientific-Technological Complex of Russia for 2007-2012.'[6] The development of new mega-projects sponsored by the Ministry had continued until 2009; and funding of previously initiated projects within the framework of the FTP 'Research and Development…' – until 2010.[7] As for the launch and funding of mega-projects by the Ministry of Industry and Energy of Russia, and subsequently by the Ministry of Industry and Trade of Russia, this process is ongoing –

[1] Myazina, E. Five Rubles for One. Izvestiya of 8 July 2002.
[2] Leskov, S. Andrei Fursenko: How to Benefit from Natural Propensity of a Russian Man. Izvestiya of 17 October 2003.
[3] Imamutdinov, I. Innovative Choice. Expert, 2002, No. 46.
[4] Decree of the President of the Russian Federation of 9 March 2004 No. 314 'On the System and Structure of Federal Executive Bodies.'
[5] As revised by Resolution of the Government of the Russian Federation of 12 October 2004 No. 540 'On Making Amendments to Federal Target Scientific and Technical Programme (FTSTP) 'Research and Development in Priority Areas of Development of Science and Engineering' for 2002-2006 and Invalidating Certain Legal Acts of the Government of the Russian Federation.'
[6] Approved by Resolution of the Government of the Russian Federation of 17 October 2006 No. 613 'On Federal Target Programme (FTP) 'Research and Development in Priority Areas of Development of the Scientific-Technological Complex of Russia for 2007-2012.'
[7] Resolution of the Government of the Russian Federation of 6 April 2011 No. 253 'On Making Amendments to Resolution of the Government of the Russian Federation of 17 October 2006 No. 613.'

with KIPs being named amongst the tools for the implementation of the State Programme 'The Development of Industry and Increase in its Competitiveness.'[1]

In general, for the period from 2003 to 2014 about 70 mega-projects were initiated, out of which over 2/3 were 'in the line' of the Ministry of Industry and Energy/Ministry of Industry and Trade of Russia. Interestingly, the supported KIPs were by no means only from the high technology sectors: for instance, some of the projects represented the wood processing, paper and pulp, and metallurgy sectors. However, at the level of the entire group of supported mega-projects, two priority sectors were clearly distinguishable: the machine building complex and the medical and pharmaceutical industry (predominantly the KIPs were associated with these sectors). The total volume of budgetary funding of KIPs over the last 12 years has been around Rb 24bn.

The experience of application of the KIP tool by the state and the results achieved within the framework of supported projects were, on multiple occasions, positively assessed by not only representatives of the relevant Ministries,[2] but also by representatives of the expert community.[3] Among the key positive effects of the implementation of mega-projects the following were most often noted: the creation and successful development of a new scheme of private and public partnership ensuring a rational combination of interests of the state and business within the framework of implementation of large-scale innovative projects and the development of effective and mutually beneficial collaboration between organisations of the research and development sector and industrial companies. Moreover, in respect of certain projects one could often hear mention of results such as significant growth in the manufacture of new and improved products, their widespread use in different sectors and the development of new markets, including for export.

Along with the merits and positive effects of KIPs, both experts and representatives of the government authorities noted considerable problems with their realisation. For instance, in some cases, the executives had difficulties ensuring the required level of non-budgetary co-funding of projects – there was even a precedent of the early termination of a state contract due to a failure to fulfil the relevant obligations.[4] Moreover, the not insignificant problems of the practical realisation of mega-projects were related to the distribution of rights for created

[1] The effective version is approved by Resolution of the Government of the Russian Federation of 15 April 2014 No. 328 'On Approval of State Programmes of the Russian Federation 'Development of Industry and Increase of Its Competitiveness'. However, it should be noted that the state programme provides for relevant budgetary funding only until 2014 and only on item 'Support of innovation-driven development of companies in the field of technical regulation, standardisation, assurance of uniformity of measurements and information.'

[2] See, for example, Ministry of Education and Science of Russia. Improvement of Mechanisms of Formation and Implementation of the Key Innovation Projects of National Significance. Theses of the Report of the Minister of Education and Science of the Russian Federation Andrei Fursenko. 2006. http://www.fcntp.ru/page.aspx?page=99; Ministry of Industry and Trade of Russia. On Implementation of the Key Innovation Projects of National Significance. Theses of the Report of the Minister of Industry and Trade of the Russian Federation S. Naumov. 2009. http://old.minpromtorg.gov.ru/industry/radioelectronic/1

[3] Voronkina, L., Ivanova, O. Key Innovation Projects of National Significance as an Element of National Innovative System. Almanac 'Science. Innovations. Education'. No. 2. Moscow: Languages of the Slavic Culture, 2007; Rykova, I., Bogachev, Yu., Oktyabrsky, A. Innovation Projects of National Significance: Principles and Methodology of Formation of the Key Innovation Projects of National Significance. In the book: Effective Public Administration in the Conditions of the Innovative Economy: Policy of Innovation-Driven Development. Edited by S.N. Silvestrov, I.N. Rykova. Moscow: Dashkov and Co., 2011.

[4] Ministry of Education and Science of Russia. Improvement of Mechanisms of Formation and Implementation of the Key Innovation Projects of National Significance. Theses of the Report of the Minister of Education and Science of the Russian Federation Andrei Fursenko. 2006. http://www.fcntp.ru/page.aspx?page=99

intellectual property being limited by the possible forms of use of the allocated budgetary funds, the necessity to comply with legal requirements for state purchasing and unilateral changes to the rules and conditions of support by the state.[1]

Viewing the results of the KIP tool in general, one has to admit that the 'stake' on mega-projects as a means of assuring meaningful technological changes on a national scale was something of a failure rather than a success: even with the undoubted successes reached within the framework of implementation of a considerable proportion of the projects, the achieved results were mostly of a 'local' nature and failed to ensure significant progress in technological development, at least at the level of particular industries and sectors.

TEMP Programme

In 2005 the Foundation for Assistance to Small Innovative Enterprises (Foundation for Assistance to Innovations) began the implementation of the TEMP (Technologies to Small Enterprises) Programme aimed at supporting the commercialisation of developments made by state scientific organisations (academic and sectoral research institutes) and higher education institutions. Under the Programme the Foundation provided non-repayable (grant) funding for the R&D required for the extension of work under the licences acquired by enterprises from state organisations; the major part of the works financed by the Foundation (at least 70%) was carried out by licensees. Supported projects were supposed to result in the development of manufacturing and introduction to the market of new promising products and services in volumes at least 3 times greater than the corresponding investment by the Foundation. The total duration of the supported projects could reach 4 years, with the maximum share of the Foundation's funds in the total cost of the project set at 30%. The following were admitted to participation in the Programme: small enterprises already selling their products in the market in sufficiently large volumes (from Rb 30m per year) and consortia consisting of a small enterprise and a medium or large company.

Competitive selection of projects within the framework of the TEMP Programme had been carried out until 2008, after which the Programme implementation was terminated due to the re-allocation of state resources in favour of anti-crisis measures (in the implementation of which the Foundation for Assistance to Innovations was partly involved). Within the framework of the Programme the Foundation financed over 70 projects to the tune of about Rb 1bn in total. At the same time, for certain projects the volume of funds provided by the Foundation reached Rb 30m.

In general, the results of implementation of the TEMP Programme have been considered quite positive (although, mainly by representatives of the Foundation).[2]

The key advantage of this support mechanism was its strict orientation towards the commercialisation of particular developments and its key limitation – the necessity to use existing

[1] Parmon, V., Noskov, A., Anfimova, N. Problems of Innovative Interaction between the Russian Science and Large Manufacturing Facilities. Innovations, 2010, No. 5; Rykova, I., Bogachev, Yu., Oktyabrsky, A. Innovation Projects of National Significance: Principles and Methodology of Formation of Key Innovation Projects of National Significance. In the book: Effective Public Administration in the Conditions of the Innovative Economy: Policy of Innovation-Driven Development. Edited by S.N. Silvestrov, I.N. Rykova. Moscow: Dashkov and Co., 2011.

[2] See, for example, Bortnik, I. Foundation of Assistance: Development Logic. Innovations (special issue), February 2009; Innovations: Mechanisms of Search for Ideas. Record of the Round Table – meeting of Expert Group No. 5 'Transfer from Stimulation of Innovations to the Growth on Their Basis' on work over 'Strategy 2020' of 24 March 2011 http://2020strategy.ru/data/2011/07/22/1214726205/3.doc

intellectual property items. However, it should be noted that this limitation was reasonably determined by the aim to ensure the real effectiveness of the projects (reaching the stage of sufficiently large sales) with relatively small predetermined volumes of support.

PUSK Programme

In 2006 the Foundation for Assistance to Innovations and the Federal Agency for Science and Innovations (Rosnauka) jointly initiated the PUSK (Partnership of Universities and Companies) Programme. This Programme was oriented towards the support of joint projects between Russian higher education institutions and small innovative companies envisaging the development and application of new products and technologies. The support recipients here were both higher education institutions developing technologies, and small companies implementing these technologies in manufacturing. Selection of projects to be supported was carried out on the basis of the results of parallel tenders conducted by Rosnauka and the Foundation for Assistance to Innovations. Based on the tender results, Rosnauka financed the conduct of research activities by the higher education institutions[1] aimed at the creation of new technology and its adaptation to the needs of particular enterprises; the Foundation, in its turn, provided the funds to the enterprises for carrying out development activities required for the implementation of the technology in manufacturing. Moreover, within the framework of each project the higher education institution was supposed to train, using its own or third-party funds, experts in the field of the newly-developed technology for the purpose of promoting further use of this technology by the enterprise. The duration of the supported projects was 2-3 years, with a relatively small total volume of funding – up to Rb 16m – and allocated in equal parts between Rosnauka and the Foundation for Assistance to Innovations.

The key feature of the PUSK programmes was, together, of course, with the 'parallel' scheme of selection and funding of small enterprises and higher education institutions, in the obligations which it envisaged requiring higher education institutions to provide personnel to support small enterprises in the realisation of joint projects.[2] This circumstance was, in our opinion, a key advantage of the tool in question. The most significant of its disadvantages was the necessity to 'break down' projects into two different (although still interrelated) parts, each of which was actually a separate object of support. Generally speaking, such a scheme posed a risk of significant problems when transferring the results of developments made by the higher education institution to the enterprise – not least, due to the inevitable differences in their research and business cultures. However, the training by the higher education institution resulting in highly-qualified personnel for each 'particular project' envisaged by the Programme was aimed, among other things, at contributing to the elimination of possible conflicts between the project participants.

According to the available data, from 2006 to 2009, within the framework of the PUSK Programme 22 projects were implemented the participants in which, on the part of the educational sector, were both relatively small higher education institutions and the largest universities, such as the Lomonosov Moscow State University or the Bauman Moscow State Tech-

[1] We should note that funding of projects on the part of Rosnauka was carried out within the framework of FTP 'Research and Development…,' however, it was not documented as a separate mechanism but was performed using the funds allocated to the existing programme activities.

[2] For this reason this mechanism has some similarity with sufficiently successfully applied abroad (mainly, in the UK) 'Teaching Company Scheme' providing for delegating by universities of students and post-graduates to companies for the conduct of research and development (Dezhina, Kiseleva, 2008).

nical University. The total volume of their funding from the Foundation for Assistance to Innovations and from Rosnauka was about Rb 260m. When the 2008 financial crisis broke, the PUSK Programme suffered the fate of the TEMP Programme, with its termination being initiated by Rosnauka this time[1]. Despite the quite modest scale of application of the support mechanism provided by the Programme, its results were positively assessed not only by its direct participants[2] but also by representatives of the expert community.[3]

Softening of the accounting procedure for R&D costs when determining taxable profit

Starting from 2006 the state has made a number of steps aimed at creating more attractive conditions for the funding of R&D by organisations (from the perspective of taxation on profits). The measures implemented were related both to independent R&D conducted by organisations which were 'end consumers' and the placement of relevant orders with third-party contractors, so this enables us to consider this area in the context of a stimulation of scientific and industrial cooperation.

Before the end of 2005, R&D costs incurred by organisations were accounted uniformly in determining the amount of taxable profit over the three years subsequent to the completion of the relevant work. In this case, if the R&D results were used by the organisation in manufacturing or in the sale of products and services, the relevant costs were to be written off in full; otherwise, only 70% of costs incurred were 'taken into account' when calculating taxable profit.[4]

From early 2006 the period for writing off expenditure on R&D the results of which were used by the organisation, was reduced to two years; meanwhile, costs on R&D which gave no positive results were still to be written off within three years but in their full amount.[5] From 2007 the accounting period for R&D expenditure (regardless of the result) when determining taxable profit, was reduced to one year.[6] Finally, since 2012 such expenses must be written off in the same tax period (year) in which relevant R&D activities were completed.[7]

In general, the gradual softening by the state of the tax regime in respect of R&D costs certainly deserves a positive view. However, it should be noted that the mechanism being im-

[1] Innovations: Mechanisms of Search for Ideas. Record of the Round Table – Meeting of the Expert Group No. 5 'Transfer from Stimulation of Innovations to the Growth on Their Basis' on work over 'Strategy 2020' of 24 March 2011 http://2020strategy.ru/data/2011/07/22/1214726205/3.doc. We should note that in 2010 the Agency and Foundation initiated a new joint programme oriented on the support of partnerships of small innovative enterprises with scientific and educational centres – structural subdivisions of state-owned scientific organisations or higher education institutions (see below).

[2] Polyakov, S., Zybim, D. About the Implementation of the PUSK Programme. Innovations, 2007, No. 5; Bortnik, I. Foundation of Assistance: Development Logic. Innovations (special issue), February 2009.

[3] Dezhina, I., Kiseleva, V. State, Science and Business in the Innovation System of Russia. Scientific Works/Institute of the Economy in the Transition Period; No. 115P. Moscow: Institute of the Economy in the Transition Period, 2008.

[4] Tax Code of the Russian Federation (Part II) of 5 August 2000 No. 117-FZ.

[5] Federal Law of 6 June 2005 No. 58-FZ 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Some Other Legal Acts of the Russian Federation on Taxes and Duties.'

[6] Federal Law of 27 July 2006 No. 137-FZ 'On Making Amendments to Part I and Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation in Respect of Taking Measures for Improvement of Tax Administration.'

[7] Federal Law of 7 June 2011 No. 132-FZ 'On Making Amendments to Article 95 of Part I, Part II of the Tax Code of the Russian Federation in Respect of Creation of Favourable Tax Conditions for Innovation Activities and Article 5 of Federal Law 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation.'

plemented is not tax relief in the traditional meaning of the term because it provides neither for the scaling of the expenses actually incurred (unlike the mechanism of the 1.5-rate write off of costs on certain types of R&D described below) nor their write-off 'ahead of time' (as in the case of the formation of reserves for future R&D costs, also described below).

Funding of R&D conducted in the interests of business

When the previously mentioned FTP 'Research and Development…' was initiated in 2007, two new mechanisms of support for interaction between science and business were introduced.

The first mechanism provided for budgetary co-funding of projects for the commercialisation of technology in the interests of particular Russian companies ('business projects'). Companies initiated projects by submitting their proposals in respect of their subject matter and key parameters to the state. Then, on the basis of the results of a review of the received proposals, the state announced a tender for undertaking the R&D required for the implementation of the projects. The initiating company was provided with an opportunity to participate in the preparation of the tender documents and the expert examination of the applications received, but neither the initiating company nor its affiliates could, themselves, participate in the tender. The organisation selected on the basis of the results of the tender would then conduct the R&D at the request of the state and the results received were to be transferred to the initiating company for commercialisation. The maximum duration of such supported projects was 3 years, with the annual volume of budgetary funding of the business project not exceeding Rb 100m. It was also established that the budgetary funds could account for no more than 30% of the total cost of the project.

It is important to note that such business projects had a whole range of features in common with KIPs. For example, in both cases the initiators of the projects were particular business structures, with the state being responsible only for the conduct of the R&D, and the expected result of the projects was not only the creation of new products and technologies, but also their application by manufacturing facilities. This explains both strengths and weaknesses of the two instruments: their implementation of several stages of the innovation cycle, the emphasis on commercialisation and their regulatory restrictions. However, the scheme of support for business projects had one principal peculiarity which, in our opinion, significantly limited its potential efficiency: in contrast to KIPs, the recipient of support was not the company initiating the project and directly interested in the results of the R&D financed by the state, but a third-party contracting organisation that, notably, was selected by the state (even if with some participation of the initiating company). Generally speaking, this posed substantial risks for companies in relation to the extent to which the R&D results eventually transferred to them would meet their needs.

However, the above disadvantage of business projects did not lead to a lack of interest on the part of Russian companies: 2007 and 2008 saw the commencement of implementation of 12 projects initiated by, inter alia, a number of large state and private companies: Scientific Production Organisation (NPO) 'Saturn', TNK-BP, Rocket and Space Corporation 'Energia', etc. The annual volume of budgetary funding of business projects in 2007-2009 was about Rb 1.5bn; while the total budgetary expenditure on the implementation of any one project usually did not exceed Rb 150m.

The period of application of the business project tool was quite short – starting from 2009 no new projects were initiated, and budgetary funding of previously launched projects was cut

off in 2010. At the same time, despite such a short period of its existence, this instrument received positive assessment not only in official documents but even from some representatives of the expert community.[1]

The second mechanism initiated within the framework of the FTP 'Research and Development…' provided for budgetary co-funding of R&D conducted in the interests of business. The scheme of its implementation was quite similar to that described above for the support of business projects: projects were initiated by high-tech Russian companies, and, on the basis of their proposals, the state announced a tender for the conduct of R&D. Initiating companies had a chance to participate both in the preparation of the tender documents and in expert examination of the received applications, but the selection of contractors was carried out by the state. The latter financed up to half of the conducted R&D, with the volume of support being Rb 30-50m per year and with durations not exceeding 3years. The principal difference of this tool of support for business projects was that, in this case, the projects covered only the R&D stage but did not include the further commercialisation of the results, which were entirely the responsibility of the initiating companies for 'buy-back'.

Thus, this scheme of R&D support in the interest of business fully replicated the key flaw of the business project tool – the 'secondary' role of the initiating companies in the selection of the R&D contractors and further interaction with them in project realisation together with the related risks of receiving results which did not quite meet their needs – but, at the same time, it lacked the important advantage of the latter – its orientation towards practical application of the supported developments.

However, as in the case of the business projects, the possibility of receiving state co-funding of R&D, even with the 'load' of the contractor being selected by the state, aroused great interest in Russian companies, both small and quite large: among the project initiators were, for example, MMC Norilsk Nickel and JSCB Gazprombank. At the same time, in contrast to the extremely limited practice of support for business projects, application of this mechanism was quite lengthy and large-scale: budgetary funding of R&D projects in the interests of business continued all the way until the completion of implementation of the FTP 'Research and Development…' in 2013,[2] while the initiation of new projects ceased in 2012 – one year before the completion of the Programme. During this period about 80 projects received public support and the total volume of budgetary funding of such projects was about Rb 8bn (from Rb 0.5m to Rb 2.2bn per year). The amount of support for any one project, however, usually did not exceed Rb 100m.

VAT relief for certain types of R&D

In early 2008 the state introduced a new mechanism of tax stimulation for R&D activities (and, hence, their funding – including funding within the framework of scientific and industrial cooperation). This tax benefit provided VAT relief for the conduct of R&D relating to the creation of new products and technologies or improvement of existing ones. However there was the constraint that the relevant work should include the development of a design for an

[1] Gurvich, V. At the Threshold of the New World. Political Journal, 2008, No. 2.
[2] By Resolution of the Government of the Russian Federation of 6 April 2011 No. 253 'On Making Amendments to Resolution of the Government of the Russian Federation of 17 October 2006 No. 613' implementation of the programme was extended for one year.

engineering facility or a technical system, a new technology, or the creation of development prototypes of machines, equipment, materials (not for further resale) and their testing.[1]

We should note that the spectrum of works eligible for the tax relief was quite wide, which was an undoubted advantage for the prospect of stimulating research and innovation activities. At the same time, the very fact that the tax relief applies only to a part of R&D (although a considerable part) somewhat complicates its application and administration. However, the dynamic growth of the scale of its use observed up to and including 2013 (when the volume of R&D 'covered' by the tax relief was Rb 53bn[2]) evidences the successful 'adaptation' of taxpayers to the peculiarities of this tax mechanism.

Areas of public policy initiated in the crisis period (second half of 2008 and 2009)

Profit tax relief for costs on R&D included in a special-purpose list

In early 2009 profit tax relief was introduced in respect of R&D costs in a range of thematic areas included in a special-purpose list,3 based on a list of critical technologies and, in fact, detailing the major part of the items included therein. This tax relief envisaged that expenditure on such R&D conducted in the interests of the taxpayer organisation itself (but not on behalf of third parties) would be taken into account at a rate of 1.5[4] when determining the taxable profit of the organisation. In this case the preferential tax treatment applied both to the independent conduct of R&D by the company itself and to the placement of relevant orders with third-party organisations, which allows us to consider it as a tool, not only for stimulating expenditure on R&D in certain areas of utmost importance to the state, but also for promoting scientific and industrial cooperation in these areas.

The 'selectiveness' of the introduced tax mechanism (meaning that it covered only particular thematic areas, although, in fact, quite a substantial number) explains some of the difficulties in its application by the taxpayer organisations. In our opinion, it was because of this that the scale of its application, at first, was not particularly great: based on the results of 2009 the tax relief covered only 4% of all R&D costs accounted for the purposes of taxation. However, in the following two years, with taxpayers 'becoming familiar' with this mechanism, its application expanded greatly: in 2010 the tax relief was applied to 11% of the total R&D costs of taxpaying companies and in 2011 – to almost a quarter.

From 2012 the legal regime of the tax relief application was modified considerably: taxpayers applying this mechanism were now supposed to submit reports on the relevant R&D (documented in accordance with a standard form) to the tax authorities; the latter were granted the right to appoint experts to examine the received reports to verify their compliance with

[1] Federal Law of 19 July 2007 No. 195-FZ 'On Making Amendments to Certain Legal Acts of the Russian Federation in Respect of Creation of Favourable Tax Conditions for Funding Innovation Activities.'

[2] For comparison: the volume of expenses on R&D eligible for the profit tax relief described in the next subclause in 2013 was Rb 9bn.

[3] Federal Law of 22 July 2008 No. 158-FZ 'On Making Amendments to Chapters 21, 23, 24, 25 and 26 of Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation on Taxes and Duties'; Resolution of the Government of the Russian Federation of 24 December 2008 No. 988 'On Approval of the List of Scientific Research and Developments, the Taxpayer's Expenses on Which are Included, in Accordance with Clause 2 of Article 262 of Part II of the Tax Code of the Russian Federation, in Other Expenses in the Amount of Actual Costs Multiplied by 1.5.'

[4] Costs on R&D not included in the list were accounted, for the purposes of profit taxation, in the amount of actually incurred costs during the year after the completion of relevant works (or certain stages of works).

the R&D specified by the government list.[1] This change that had been aimed at preventing unjustified application of the tax relief, at the same time considerably complicated its application by good-faith 'users' and burdened the tax authorities with additional organisational and financial costs, especially in requirement to appoint experts to examine the documents). Thus, to a considerable extent, this tax mechanism lost its previous key advantage of the relative simplicity of application and administration. As a result, in 2012 the share of costs on R&D formally eligible for the tax relief decreased by a factor of two, to 12%.

Stimulation of the creation of inculcation companies by budgetary scientific and educational institutions

Together with the launch of the above tax mechanisms, in 2009 the state commenced the implementation of measures stimulating the creation of inculcation companies by budgetary scientific and educational institutions. The first step on this path was the softening of the legislative norms regulating the creation of business entities by such institutions: the authorisation-based procedure for their creation that had been effective before was replaced by a notification-based procedure. There was a separate requirement for the activities of the created companies to be aimed at implementing the results of intellectual activity, the exclusive rights to which belonged to the creating institutions. Moreover, restrictions were established in respect of the minimum participation share of the 'parent' institutions in the capital of the inculcation companies (for OJSCs – one quarter; for LLCs – one third) and the disposal of the shares or units of the latter (only with the consent of the owner of the institution's property).[2]

In mid-2010 'in line with' the adopted legislative changes, Rosnauka and the Foundation for Assistance to Innovation launched a programme for the support of partner projects between scientific and educational centres (SEC)[3] and small innovative companies. Its scheme of implementation was close to that described above for the joint implementation by the same participants in the PUSK Programme: the recipients of support were simultaneously SECs (or, to be more exact, scientific organisations and the higher education institutions that created them), and small innovative firms. Based on the results of the parallel tenders, Rosnauka financed research conducted by the SEC teams[4] while the Foundation supported R&D by small companies conducted for implementing the SEC developments. It is remarkable that, as in the case of the other Foundation for Assistance to Innovations programme – TEMP, not only small business entities, but also larger firms were admitted to participation in the projects, provided that they involved smaller companies as joint contractors. The duration of supported projects was limited to 3years, with the volume of funding provided to each participant not

[1] Federal Law of 7 June 2011 No. 132-FZ 'On Making Amendments to Article 95 of Part I, Part II of the Tax Code of the Russian Federation in Respect of Creation of Favourable Tax Conditions for Innovation Activities and Article 5 of Federal Law 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation.'

[2] Federal Law of 2 August 2009 No. 217-FZ 'On Making Amendments to Certain Legal Acts of the Russian Federation on Matters of Creation by Budgetary Scientific and Educational Institutions of Business Entities for the Purpose of Practical Application (Implementation) of the Results of Intellectual Activities.'

[3] Scientific and educational centres were recognised officially documented (by special-purpose resolution approved by the head of the organisation) structural subdivisions of public scientific, scientific and industrial organisations or higher education institutions conducting scientific research and training personnel of the highest qualification.

[4] Relevant funds were allocated within the framework of FTP 'Scientific and Scientific-Pedagogical Personnel of Innovative Russia' for 2009-2013, however, as in the case of PUSK Programme, this area of support was not documented as a separate mechanism.

exceeding Rb 15m. Within the framework of the programme, 23 SEC partner projects and inculcation companies created by budgetary scientific and educational institutions, were supported, with the total volume of support provided amounting to about Rb 1.5bn.

It should be admitted that the regulatory measure taken in 2009, with its undoubted importance, was of a 'half-way' nature: budgetary institutions were granted the right independently to create inculcation companies and to include into their authorised capital the rights to the results of their intellectual activities, however, they were unable to transfer to them equipment, money or other property without the owner's consent. Moreover, even the leasing of property by the 'parent' institutions to the inculcation companies was permitted only in accordance with the standard procedure – based on the results of auctions or tenders.

The above obstacles were eliminated when a number of new regulative norms came into force in early 2011. Budgetary institutions were granted the right to dispose, independently, of all of their property with the exception of immovable and especially valuable movable property, and performance of major and related-party transactions.[1] Furthermore, a non-competitive procedure was established for the lease by budgetary institutions of their property to inculcation companies which they had created.[2]

In addition to the above measures, a requirement preventing inculcation companies from applying the simplified taxation system in the absence of a participating organisations owning over one quarter of capital, was cancelled.[3] Finally, for the period from 2011 to 2019 reduced rates of insurance payments to state non-budgetary funds were established in respect of inculcation companies created by budgetary institutions.[4]

In general, this process launched by the state, of the creation of inculcation companies by budgetary institutions, was quite large-scale and dynamic: while by November 2010 about 600 such companies had been established (out of which about 60% were in compliance with the standards of the 'basic' law No. 217-FZ), by April 2012 there were almost fifteen hundred (out of which 84% complied with the above law). It is important to note that the overwhelming majority (about 99%) of these companies were created by educational institutions.[5] Obviously, this fact may be partially explained by the greater interest of higher education institutions in the implementation of their results through small innovative firms. However, in our opinion, it was to a much greater extent explained by the fact that higher education institutions were 'forced' by government authorities (mainly by the Federal Agency for Education) to create small enterprises. For example, a large number of universities (including the federal ones) included the relevant indicator into their development programmes. Moreover, programmes for the development of the innovation infrastructure of higher education institutions,

[1] Federal Law of 8 May 2010 No. 83-FZ 'On Making Amendments to Certain Legal Acts of the Russian Federation in Relation to Improvement of the Legal Status of State (Municipal) Institutions.'

[2] Federal Law of 1 March 2011 No. 22-FZ 'On Making Amendments to Article 5 of Federal Law 'On Science and Scientific and Technical Policy' and Article 17.1 of Federal Law 'On Protection of Competition.'

[3] Federal Law of 27 November 2010 No. 310-FZ 'On Making Amendment to Article 346.12 of Part II of the Tax Code of the Russian Federation.'

[4] Federal Law of 16 October 2010 No. 272-FZ 'On Making Amendments to Federal Law 'On Insurance Payments to the Pension Fund of the Russian Federation, Social Security Fund of the Russian Federation, Federal Fund of Compulsory Medical Insurance and Territorial Funds of Compulsory Medical Insurance' and Article 33 of Federal Law 'On Compulsory Medical Insurance in the Russian Federation.'

[5] Andreeva, A., Kaigorodov, A. The Financial Mechanism of Commercialisation of Results of Intellectual Activity as a Key Element of Innovation Infrastructure of Regions. News of Higher Education Institutions. Series: Economy, Finance and Industrial Management, 2013, No. 1.

implemented in 2010-2012, had a significant effect on the creation of small enterprises by higher education institutions (see below): their support of small innovative firms was among the top priorities in these programmes and their number was one of the target indicators.

As a result, according to available estimates, about two thirds of companies created by higher education institutions exist either only nominally or are unviable.[1] However, at the level of individual higher education institutions the activities of inculcation companies were often assessed positively,[2] although even in these cases it was noted that not all the created companies successfully operated in the market.[3]

Areas of public policy initiated during the period of post-crisis recovery (2010-2012)

Support for cooperation with higher education institutions and state scientific institutions within the framework of projects for the creation of advanced manufacturing facilities

One of the state's main steps in stimulating scientific and industrial cooperation, in 2010, was the initiation of a mechanism of support for cooperative projects between companies and higher education institutions for the creation of advanced manufacturing facilities (known by the number of the Resolution of the Government of the Russian Federation determining the procedure for its application – Resolution 218[4]). This mechanism envisaged budgetary co-funding of innovative projects carried out jointly by companies acting as the initiators (at least formally) and chief contractors of the project, and higher education institutions playing the role of R&D contractors. The direct recipient of the budgetary subsidies here was the company which, however, referred all the funds received from the state to the higher education institution to pay for the R&D conducted. Moreover, the company had to invest funds which were at least equal to the amount of budgetary funding in the project implementation, and at least 20% of these funds had to be provided for carrying out the R&D. The period of project support was limited to 3 years, with the amount of budgetary funds allocated for implementation of any one project not exceeding Rb 100m.

The support scheme stipulated by Resolution No.218 had significant particularities that distinguished it from the tools of support for the partnership projects initiated earlier – the PUSK Programme and both the schemes of R&D funding in the interests of business, specified by the Federal Target Programme (FTP) 'Research and Development…' In contrast to the latter, within the framework of 'Mechanism 218' the higher education institution carrying out R&D was determined by the initiating company and not by the state, and this guaranteed the mutual interest of the partners in collaboration and a mitigation of the risks that any conflicts may arise (or initially exist) between them. Moreover, unlike all the above mentioned tools, works performed by the higher education institution were ordered by the company that

[1] Sterligov, I. One Third of Small Enterprises at Higher Education Institutions Exist Only on Paper. Science and Technology of Russia – STRF.ru, 2 August 2011 http://www.strf.ru/material.aspx?CatalogId=221&d_no=41450#. VNqByeY0Enh

[2] See, for example, Shigapov, Z., Vasiliev, V., Bakaev, A. Analysis of Development of Innovative Entrepreneurship in Higher School (on the example of the Tupolev Kazan National Research Technical University – Kazan Aviation Institute). Innovations, 2014, No. 2.

[3] Ruposov, V. Analysis of Economic Activities of Small Innovative Companies of the Irkutsk State Technical University. Bulletin of the Irkutsk State technical University, 2014, No. 4.

[4] Resolution of the Government of the Russian Federation of 9 April 2010 No. 218 'On Measures of Public Support of Development of Cooperation of Russian Higher Education Institutions and Organisations Carrying Out Complex Projects for Creation of Advanced Manufacturing Facilities.'

planned to implement them in its industrial activities. This scheme of interaction between partners is obviously the most rational.

Generally speaking, the above positive aspects of the support mechanism for such cooperation projects as provided by Resolution No.218 ensured its 'new quality' when compared with the tools applied before.[1] In the context of the positive aspects of this mechanism we should also mention that, in addition to developments in the manufacture of new and improved products, each project envisaged the partners' obligations to involve young scientists, specialists, students and post-graduates in conducting the R&D, to publish articles, to patent[2] and, starting from 2012, to create new jobs.[3] It is also important to note that the project monitoring period is not limited to the 3 years of provision of support, but also includes the subsequent five years.

The key disadvantage of the support scheme defined by Resolution 218 was the limitation stipulating that only higher education institutions could partner with the initiating companies. In 2012 this requirement was somewhat softened – state scientific institutions were included in the list of potential project participants,[4] – however, in our opinion, it was not softened enough, as a considerable proportion of the state scientific institutions functioning as unitary enterprises and joint stock companies that could be potentially interested in application to this mechanism still remains beyond the scope of its operation. The second significant flaw of the mechanism described is the existence of the possibility of potential 'skewing' of the implemented projects towards R&D – to the disadvantage of the remaining components. Indeed, in the case where a project was approximately equally financed by the state and the initiating company (which happened quite often), the share of R&D in the total project cost exceeded 2/3, and that could adversely affect (and, most likely, did affect) the viability of a proportion of the projects.

In general, the practical application of 'Resolution 218' turned out to be quite large-scale and long-lasting. Initially, only one cycle of support was envisaged by Resolution No.218 (in 2010-2012 – with an orientation towards the development of cooperation between companies exclusively being with higher education institutions), within the framework of which about 100 projects were selected. However, afterwards three more phases were initiated – in late 2012, early 2013 and mid-2014. It is remarkable that, while in 2010 and 2012, the maximum limit of requested subsidy was limited to Rb 300m, in 2013 it was Rb 190m and in 2014 – Rb

[1] Essentially, this mechanism represents a Russian analogue of the widespread (and well-proven) in industrially developed countries 'matching-grants' mechanism (see, for example, Dezhina I., Simachev Yu. Matching Grants for Stimulating Partnership between Companies and Universities in the Innovation Sector: Start Effects of Application in Russia. New Economic Association's Journal, 2013, No.3).

[2] Order of the Ministry of Education and Science of Russia of 16 July 2010 No. 786 'On Approval of the Form of an Agreement between an Organisation Carrying Out a Complex Project for Creation of an Advanced Manufacturing Facility and the Ministry of Education and Science of the Russian Federation on the Conditions of Provision and Use of Subsidies for Implementation of Complex Projects for Creation of an Advanced Manufacturing Facility Carried Out with Involvement of a Russian Higher Education Institution.'

[3] Order of the Ministry of Education and Science of Russia of 7 November 2012 No. 904 'On Approval of the Form of an Agreement between an Organisation Carrying Out a Complex Project for Creation of an Advanced Manufacturing Facility and the Ministry of Education and Science of the Russian Federation on the Conditions of Provision and Use of Subsidies for Implementation of Complex Projects for Creation of an Advanced Manufacturing Facility Carried Out with Involvement of a Russian Higher Education Institution or State Scientific Institution.'

[4] Resolution of the Government of the Russian Federation of 12 October 2012 No. 1040 'On Making Amendments to Resolution of the Government of the Russian Federation of 9 April 2010 No. 218.'

160m, with a maximum payment of no more than Rb 100m being envisaged for the third year of support.

At present, more than 200 cooperation projects are supported, and the total volume of their budgetary funding for 2010-2014 amounted to about Rb 30bn. Many of the largest Russian companies and higher education institutions became project participants: RZD, ALROSA, Magnitogorsk Iron and Steel Works, RSC Energia, Transneft, KAMAZ, Ilim Group, Moscow State University and St. Petersburg State University. Some of these organisations participated in several projects.

The results of application of the support mechanism provided by Resolution No. 218 are generally assessed as quite positive by the Ministry of Education and Science of the Russian Federation which has been responsible for the realisation of this mechanism, and by representatives of the expert community. The Ministry highlighted the quantitative results of the implementation of the projects: the wide involvement of the employees of higher education institutions, including young scientists, students and post-graduates, the creation of a large number of new jobs, and sufficiently high publication activity.[1] Experts, on the other hand, pointed out a range of qualitative effects of the support, such as the stimulation of mutual interest of companies and higher education institutions to collaborate with each other, the enhancement of orientation towards the demands of real business for the research activities of higher education institutions, and the building of relevant capabilities.[2] Among the significant problems of implementation of the joint projects were the initial non-readiness of higher education institutions and companies to engage in effective cooperation (in particular, the lack of necessary skills and education), a lack of skilled staff in the higher education institutions able to implement innovative projects (scientific and engineering as well as managerial), and 'conflicts' in the distribution of the rights to the results of the intellectual activity.[3]

Support of programmes for the development of the innovative infrastructure of higher education institutions

Simultaneously with the initiation of support for cooperative projects between companies and higher education institutions the state launched a mechanism for realising programmes for development of the innovative infrastructure of higher educational institutions.[4] Relevant programmes could provide for budgetary funding of a wide range of measures aimed both at cre-

[1] Ministry of Education and Science of the Russian Federation. Report on the Results and Key Areas of Activity of the Ministry of Education and Science of the Russian Federation for 2014-2016. 2013. http://минобрнауки.рф/%D0%B4%D0%BE%D0%BA%D1%83%D0%BC%D0%B5%D0%BD%D1%82%D1%8B/4693/%D1%84%D0%B0%D0%B9%D0%BB/2074/%D0%94%D0%A0%D0%9E%D0%9D%D0%94-2014.pdf

[2] Veprev A., Sergunov A., Golovnykh I., Pashkov A., Akhatov R., Shmakov A., Savilov A. Experience and Prospects of Academic Science Participation in the Creation of Innovative Aircraft Construction Technologies on the Basis of Irkut Corporation. The Defence Complex to the Scientific and Technological Progress of Russia, 2012, № 4; Dezhina I., Simachev Yu. Matching Grants for Stimulating Partnership between Companies and Universities in the Innovation Sector: Start Effects of Application in Russia. New Economic Association's Journal, 2013, No.3; Tashlykova E., Petrochenkov A., Tashkinov A. About Performance Indicators of Advanced Manufacturing Facilities. Scientific and Technical Reports of St. Petersburg Polytechnic University, 2013, No.183.

[3] Dezhina I., Simachev Yu. Matching Grants for Stimulating Partnership between Companies and Universities in the Innovation Sector: Start Effects of Application in Russia. New Economic Association's Journal, 2013, No.3.

[4] Resolution of the Government of the Russian Federation of 9 April 2010 No. 219 'On Public Support for the Development of Innovation Infrastructure in Federal Educational Institutions of Higher Professional Education.'

ating and equipping a wide range of infrastructure facilities (business incubators, technoparks, innovative technological centres, engineering centres, accreditation centres, technology transfers, innovative consulting, etc.). Additionally there was support for the development and implementation of programmes for training and qualification upgrades in small innovative business, the estimation and legal protection of the results of intellectual activity, payment for the services of consultants in the field of technology transfer, and the creation and development of small innovative companies, including the involvement of academic teaching staff in normative, methodological and practical support for the creation of such companies. Each programme was supposed to define a set of numerical performance indicators, including the volume of R&D carried out by the higher educational institution, the number of small innovative enterprises created, the number of employees working at these enterprises and the infrastructure facilities created, the number of students, post-graduates and teachers involved in activities of the small enterprises, as well as the volume of high-tech products created with the use of elements of the innovative infrastructure. Infrastructure development programmes were selected on a tender basis, with a period of implementation not exceeding three years and the maximum amount of budgetary funding being limited to Rb 50m per year.

From 2010 to 2012 the state financed about 80 programmes for the development of the innovative infrastructure of higher education institutions, annually spending about Rb 3bn for these purposes. As in the case of the mechanism of stimulation of cooperation between higher education institutions and companies discussed above, the state initially set a one-time support regime for the infrastructure development programmes. However, in contrast to 'Mechanism 218' (and to another support tool introduced in 2010 and oriented towards higher education institutions– targeted grants solicited by higher education institutions for scientists), the first round of support for infrastructure programmes turned out to be the only one, which obviously provides evidence for their lack of success and effectiveness. At the same time, current assessments of the results of the programme implementation, both by the Ministry of Education and Science of Russia (the 'operator' of this field of support) and by a number of experts, is generally positive. In particular, they highlighted the mass creation of small innovative enterprises supported by higher education institutions, the wide involvement of employees and students of higher education institutions in the activities of such companies, the fairly large-scale manufacture of high-tech products, and the dynamic growth in the volume of works and services of the innovative infrastructure organisations.[1] Additionally, the implementation monitoring system of the programme received a positive response.[2]

[1] Ministry of Education and Science of the Russian Federation. Report on the Results and Key Areas of Activity of the Ministry of Education and Science of the Russian Federation for 2014-2016. 2013. http://минобрнауки.рф/%D0%B4%D0%BE%D0%BA%D1%83%D0%BC%D0%B5%D0%BD%D1%82%D1%8B/4693/%D1%84%D0%B0%D0%B9%D0%BB/2074/%D0%94%D0%A0%D0%9E%D0%9D%D0%94-2014.pdf; Ministry of Education and Science of the Russian Federation. Report on the Results and Key Areas of Activity of the Ministry of Education and Science of the Russian Federation for 2015-2017. 2014.http://минобрнауки.рф/%D0%B4%D0%BE%D0%BA%D1%83%D0%BC%D0%B5%D0%BD%D1%82%D1%8B/4692/%D1%84%D0%B0%D0%B9%D0%BB/2982/%D0%94%D0%A0%D0%9E%D0%9D%D0%94_%D0%9C%D0%B8%D0%BD%D0%BE%D0%B1%D1%80%D0%BD%D0%B0%D1%83%D0%BA%D0%B8_24-03-14_1.doc; Andreev Yu. About the Results of Monitoring of Programmes for Development of the Innovative Infrastructure of Higher Education Institutions. Innovation Theory and Expert Review: Scientific Works. 2013. No.1 (10).

[2] Andreev Yu., Lukashova N. The Problem of Monitoring of Effects of Activities of Higher Education Institutions. Innovation Theory and Expert Review: Scientific Works, 2014, No. 1.

Creation and activities of technology platforms

In mid-2010 the state started implementing measures aimed at a 'reproduction' under Russian conditions of the long-term tool successfully applied in the EU for prioritisation of R&D areas which are in demand for business, and a consolidation of the efforts of business, science and state in these areas – technology platforms. Platforms created in Russia were designated to stimulate the efforts of the main interested parties – business, science, state and civil society – for the expansion of R&D funding and the creation of advanced commercial technologies, products and services through, among other things, extending scientific and industrial cooperation and the formation of new partnerships in the innovation sector. For this purpose, each technology platform envisaged the development of a strategic research programme defining both medium-term and long-term R&D priorities and providing for the setting-up of mechanisms for scientific and industrial cooperation and the creation of an organisational structure ensuring the necessary conditions for realisation of the interaction between enterprises, scientific and educational organisations. The central link within such a structure was supposed to be a technology platform coordinator – an organisation carrying out management and information support for interactions between the platform participants. Technology platforms could be created by initiative 'from above' (federal and regional government authorities) and 'from below' (companies, scientific and educational organisations, development institutes, business associations, etc.). The procedure for the creation of technology platforms was, in fact, authorisation-based – they were included in a special-purpose list by the Government Commission for High Technology and Innovation, on the basis of the review of relevant applications by a working group.[1]

In 2011-2013 the Government Commission (and the Presidential Council for Economy Modernisation and the Innovation-Driven Development of Russia, that replaced it) made decisions on the inclusion in the list of 34 technology platforms,[2] almost one third of which were related to the energy sector (including nuclear) and the extraction and processing of natural resources. At the same time, some areas of considerable social significance, such as construction (except for road construction) or solutions to the complex problems of urban development, remained almost 'unrepresented' by technology platforms. In most cases platform coordinators were the largest state-owned companies and corporations (RZD, Rosatom), universities (Lomonosov Moscow State University, Gubkin Russian State University of Oil and Gas) and academic centres (Kurchatov Institute, VIAM (Scientific Research Institute of Aviation Materials)).

It is important to note that initially no special measures and tools of support were envisaged for the technology platforms. It was established only that government authorities would provide institutional, management and consulting support for the activities of technology platforms while the platforms themselves would develop proposals intended to improve public policy in the scientific-technical and innovation sector, including those in relation to the specification of government-supported areas of R&D, the perfection of mechanisms for stimulating innovative activities, the improvement of technical regulation, the determination of future

[1] Procedure for Creation of a List of Technology Platforms (approved by the Decision of the Government Commission for High Technology and Innovation of 3 August 2010, Minutes No. 4).

[2] Decisions of the Government Commission for High Technology and Innovation of 1 April 2011, Minutes No. 2, of 5 July 2011, Minutes No. 3, of 21 February 2012, Minutes No. 2; Presidium of the Council at the President of the Russian Federation for Economy Modernisation and Innovation-Driven Development of Russia of 20 November 2012, Minutes No. 1, of 31 July 2013, Minutes No. 2.

requirements for the qualities of products purchased for state purposes, the specification of programmes for the innovation-driven development of large state-owned companies (see below), and the areas and principles of support for the development of scientific-technical and innovative activities by state institutes. Moreover, the results of the activities of the technology platforms were supposed to be taken into account in the planning and implementation of state support measures aimed at ensuring socio-economic development and the improvement of scientific-technical and innovative activities. At the same time, the lack of a pre-determined set of tools for supporting the technology platforms did not imply any principal refusal by the state to determine this; quite the opposite, the working group responsible for the selection of technology platforms was required to prepare proposals on state support measures and their contribution to the effective implementation of the technology platforms.

The first tool of 'field-specific' support for technology platforms was the Russian Foundation for Technological Development that resumed its activities in 2011[1]: in its 'new life' it was oriented mainly towards supporting projects (in the form of easy loans for the conduct of R&D) approved by the technology platforms. To date, the Foundation has participated in funding 18 such projects, out of which 16 were initiated by six technology platforms: Photonika, Medical Science of the Future, Materials and Technologies of Metallurgy, Bioindustry and Bioresources, Small Distributed Generation and Environmentally Friendly Thermal Energy.

In 2012 the issue of the involvement of technology platforms in the 'sphere' of the implementation of public policy in particular sectors and areas of activity attracted the attention of government authorities at the highest level: within the framework of one of the 'programme-oriented' Decrees of the President of the Russian Federation adopted in May 2012 (known as the 'May Decrees'), the Government of the Russian Federation was given an assignment to link the state development programmes in the industrial and agricultural sector and the strategies for development of the leading sectors of the economy with the top-priority technology platforms (and the pilot projects of the regional innovation clusters – see below).[2]

In the second half of 2012, technology platforms were involved in the process of formation of a set of topics of problem-oriented exploratory research supported within the framework of the Federal Target Programme 'Research and Development in Priority Areas of Development of the Scientific-Technological Complex of Russia for 2007-2013': the coordinators of the platforms submitted relevant proposals to the Ministry of Education and Science of Russia for review, on the results of which, in 2013, over 400 works were financed for the total amount of about Rb 3bn. Around two thirds of the projects were based on the proposals of 8 technology platforms: Medical Science of the Future, Materials and Technologies of Metallurgy, Radiation Technologies, Bioindustry and Bioresources, Environmentally Friendly Thermal Energy, the National Information Satellite System, Small Distributed Generation and Environmental Development Technologies. The major proportion of the contractors (over 80%) was represented by large state-owned scientific and educational organisations.

Support for R&D carried out in the interests of technology platforms continued in 2014 – already within the framework of the new Federal Target Programme 'Research and Development in Priority Areas of Development of the Scientific-Technological Complex of Russia for 2014-2020.' Then, in respect of initiated projects a requirement was established for compli-

[1] Five years earlier the Foundation almost ceased its activities due to problems of legal nature.
[2] Decree of the President of the Russian Federation of 7 May 2012 No. 596 'On Long-Term Public Economic Policy.'

ance with strategic programmes for the development of technology platforms (officially confirmed by the coordinator of the relevant platform). The duration of the support of projects was limited to 3 years, with the maximum volume of budgetary funding for each project being Rb 15m per year. Furthermore, at least half of the cost of the projects should be covered by non-budgetary co-funding, with at least 20% of the non-budgetary funds being referred for funding R&D. Each project should be oriented towards a particular consumer – a real-sector enterprise providing at least 10% of the non-budgetary co-funding. In 2014 about 150 projects were initiated, with the total volume of budgetary funding in the first year of implementation amounting to about Rb 2bn. It is remarkable that, as in 2013, the major proportion of the contractors (over 80%) was represented by large state-owned scientific and educational organisations.

We should note that the creation and development of technology platforms in Russia were carried out in a somewhat different manner from that in the EU. In foreign practice the key factors considered in the creation of technology platforms are the current and forecasted business needs in new technologies, while the support of the activities of the platforms remains within the common 'context' of the scientific and technical and innovation policy. In Russia, by contrast, the creation of technology platforms was initially related to the basic scientific and technological priorities of the state (priority areas of development of science, technology and engineering and a list of critical technologies), while research aimed to contribute to the development of platforms was supported on special grounds – within the framework of special-purpose procedures and tenders. In general, while European technology platforms are rather a tool of technological and industrial policy, oriented towards the formation of new sources of sustainable growth,[1] Russian platforms, to a much greater extent, represent aspects of the scientific and technological policy of the state.[2]

It should be admitted that, despite the obvious 'ideological' novelty of technology platforms for Russian innovation policy, in practice their creation and development fits quite well the traditional Russian model of the public stimulation of innovation being directed towards the priorities established by the state, and existing large players, and the provision of 'perceivable' socio-economic effects with the creation of special-purpose channels of public support. On the one hand, this can hardly be said to be unexpected, but, on the other hand, when creating the principally new (at least for Russia) tool of innovation policy that technology platforms were meant to be, it would be reasonable, in our opinion, at least to try to use new approaches and principles in its organisation.

At the moment, the activities of technology platforms have revealed a number of risks that had been noted by experts at the initial stage of their formation. For example, the priority areas for the creation of platforms were, mainly, predetermined 'at the top', the major part of platforms turned out to be too 'secluded' within the framework of in-country cooperation, and the attempts of platforms to 'capitalise' on their status in the form of the receipt of public support[3] became apparent. At the same time, it should be noted that not all of the concerns which

[1] Simachev, Yu., Kuzyk, M., Kuznetsov, B., Pogrebnyak, E. Russia Is on the Way to New Technological and Industrial Policy: Among Attractive Prospects and Fatal Traps. Foresight, 2014, No. 4.
[2] Lenchuk, E. Technology Platforms as a New Tool of Scientific and Technological Policy of Russia. In the book: Effective Public Administration in the Conditions of the Innovative Economy: Policy of Innovation-Driven Development. Edited by S.N. Silvestrov, I.N. Rykova. Moscow: Dashkov and Co., 2011.
[3] Simachev, Yu. Areas of Lending Best Practice of European Technology Platforms: Problems and Opportunities. Presentation to the Report at the Seminar of NRI-HSE 'European Experience of Formation and Functioning

were raised actually turned out to be true in practice: the extent of creation of technology platforms did not go beyond reasonable limits and the participation of the state in their development was not limited to simple approval of the relevant list.

In general, there is no obvious dominance of positive or negative evaluations in expert opinions in respect of the results of the creation and activities of technology platforms. In particular, among the significant achievements of technology platforms were: the organisation of productive interaction between representatives of the state, science and business communities, the mutual explanation of interests of the parties, agreements on positions and views on the development of relevant technological areas, including for the long-term.[1] As a rule, critics note the excessive 'deviation' of Russian technology platforms from the European prototype, their insufficient linkage with other elements of the innovation system, excessive emphasis on the attraction of budgetary resources and the weak participation of private business in their formation and development.[2] However, even the sceptics frequently accept the positive impact of the creation and activities of technology platforms on the intensity of interaction between science and industry.[3]

Formation and monitoring of the programme for innovation-driven development of the largest state-owned companies

Along with technology platforms, the 'active agenda' of public innovation policy was supplemented in mid-2010 by another area directly related to the development of scientific and industrial cooperation: 47 of the largest companies in the public sector were assigned to develop and integrate into their business strategy, mid-term programmes for innovation-driven development (IDP) aimed at developing and implementing world class new technologies, innovative products and services, and at innovation-driven development within the relevant sectors. Each programme should have provided for considerable improvement of the key performance indicators of manufacturing activities: reduction in the costs of products and services by at least 10%, the rational use of energy resources, increased labour productivity, environmentally friendly manufacturing and an improvement in the consumer-friendly properties of manufactured products. When determining the target values for energy consumption and labour productivity indicators, the companies were supposed to refer to the equivalent aspects of similar foreign companies.

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of Technology Platforms and Prospects of Distribution of Best Practices in Russia', Moscow, 2 December 2010 http://www.iacenter.ru/publication-files/100/78.pdf

[1] Inter-Departmental Analytical Centre. Certain Conclusions and Recommendations on Improvement of the Institute of Technology Platforms. Summary of the Round Table 'Technology Platforms as a Tool of Development or Private and Public Partnership in Innovation Sector,' Nizhny Tagil, 10 September 2011 http://www.iacenter.ru/publication-files/154/130.pdf; Chekmarev, V. Harmonisation of Industrial Policy and Processes of Reindustrialisation. Bulletin of the Nekrasov Kostroma State University, 2014, No. 6.

[2] Lenchuk, E. Technology Platforms as a New Tool of Scientific and Technological Policy of Russia. In the book: Effective Public Administration in the Conditions of the Innovative Economy: Policy of Innovation-Driven Development. Edited by S.N. Silvestrov, I.N. Rykova. Moscow: Dashkov and Co., 2011; Dushin, A. Institutes of Development of Resource-Producing Regions under the Conditions of Neoindustrialisation. News of the Ural State Mountain University, 2014, No. 4; Lebedev, A. Russian Practice and Tools of Self-Funding of Scientific and Technical and Innovation Activities. Bulletin of the Tver State University. Series: Economy and Management, 2014, No. 4.

[3] Lenchuk, E. Technology Platforms as a New Tool of Scientific and Technological Policy of Russia. In the book: Effective Public Administration in the Conditions of the Innovative Economy: Policy of Innovation-Driven Development. Edited by S.N. Silvestrov, I.N. Rykova. Moscow: Dashkov and Co., 2011.

Considerable attention in the programmes should have been paid to measures aimed at developing cooperation between the companies and higher education institutions and, to a somewhat lesser extent, between the companies and scientific organisations: in particular, it was proposed to determine priority areas for cooperation and to prepare joint research programmes. In this regard, it was proposed to include in the IDP indicators performance indicators characterising the interaction with external sources of development and innovation: the number of innovative proposals from third-party organisations and the percentage of sales of external developments in the total sales. Moreover, 'cross-participation' of the representatives of companies, scientific organisations and higher education institutions in collegial management bodies and consulting authorities was mentioned as a possible organisational mechanism of the development of such interaction. Finally, the programmes were supposed to envisage participation of companies in the creation and activities of technology platforms.[1] The implementation of the programmes for innovation-driven development was the subject of annual monitoring on the part of the Government Commission for High Technologies and Innovations (for the 22 largest and most significant companies) or the relevant sector departments for which the companies were required to submit reports on the progress of their IDP implementation.[2]

It is important to note that initially the companies were required to publish their programmes for innovation-driven development – the relevant requirement arose as early as within one year and related, not to the full texts of the programmes, but only to their summaries ('passports') and lists of planned innovative projects and R&D areas.[3]

In early 2012 the list of companies developing programmes for innovation-driven development increased by about a quarter – up to 60 companies, mainly, through extension of the first 'elite' group of companies, for which the IDPs are monitored by the Government Commission.[4]

It is quite difficult to speak about the results of programmes for innovation-driven development because, as a rule, the companies not only do not disclose the content of the reports on IDP implementation, but they even refrain from publishing the full texts of the programmes, confining themselves only to programme 'passports'. For this reason any detailed expert estimates of the effectiveness of IDPs are currently almost non-existent.

Possibility to form reserves for future R&D expenses

From the beginning of 2012 organisations were provided an opportunity to reduce the amount of their profits subject to tax through creating reserves for future R&D expenditure.

[1] Recommendations for Designing Programmes for Innovation-Driven Development of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises (approved by the Decision of the Government Commission for High Technology and Innovation of 3 August 2010, Minutes No. 4).

[2] Regulation on the Procedure for Monitoring of Development and Implementation of Programmes for Innovation-Driven Development of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises (approved by the Decision of the Government Commission for High Technology and Innovation of 3 August 2010, Minutes No. 4).

[3] List of Assignments of the President of the Russian Federation Based on the Results of a Meeting of the Commission at the President of the Russian Federation for Modernisation and Technological Development of Economics of Russia, 3 November 2011, No. Pr-3291.

[4] Amendments to the List of State-Owned Joint-Stock Companies, State-Owned Corporations and Federal State Unitary Enterprises Designing Programmes for Innovation-Driven Development (approved by the Decision of the Government Commission for High Technology and Innovation of 30 January 2012, Minutes No. 1).

The amount of such reserves may not exceed 3% of the sales revenues, with their term being limited to 2 years. It should also be noted that for the creation of a reserve the taxpaying company should develop and approve a programme for the conduct of its R&D.[1]

The key advantage of the relief in question is stimulation of the planning of R&D and a certain simplification of the relevant budgeting. At the same time, the main disadvantages of the mechanism for small and newly created companies are both the relatively small maximum amount of the payments for reserve creation and its link to sales revenues, while for large businesses the maximum 2-year term of the reserving of funds may seem insufficient.

Support for programmes for developing regional innovation clusters

In 2012 Russian innovation policy 'put into service' another tool successfully applied abroad – regional innovation clusters. The territorial proximity of such companies and participating organisations along with the availability of the scientific and manufacturing chain in one or more sectors uniting both them and the mechanism of coordination of the activities and cooperation of the cluster participants were established as the key characteristics of a cluster. Moreover, a cluster was expected to provide a synergistic effect, manifesting itself as an increase in the economic efficiency and effectiveness of the activities of each enterprise or organisation through the high degree of their concentration and cooperation.

As in the case of technology platforms, a cluster was supposed to have a central element – an organisation ensuring methodological, organisational, expert, analytical and informational support for the development of the cluster. In addition, within each cluster a coordinating body was to be created – a council including representatives, not only of the key participants of the cluster, but also of the government authorities.

The core document of a cluster is its development programme, including, in particular, measures for the development of R&D, the system of personnel training, the manufacturing potential of the cluster and its infrastructure.

It is remarkable that, as opposed to the technology platforms, public support for the development of clusters was declared from the very beginning.[2]

We should note that prior to the official documenting of the first (and still the only) 'series' of clusters, the President of the Russian Federation assigned the Government to link state programmes for the development of industrial and agricultural sectors and the strategy of development of the leading sectors of the economy with the pilot regional innovation clusters projects.[3]

In mid-2012, based on the tender results, 25 pilot regional innovation clusters were selected.[4] At the same time, the the 'Rules for the Distribution and Provision of Subsidies from the Federal Budget to the Budgets of the Constituent Entities of the Russian Federation for the

[1] Federal Law of 7 June 2011 No. 132-FZ 'On Making Amendments to Article 95 of Part I, Part II of the Tax Code of the Russian Federation in Respect of Creation of Favourable Tax Conditions for Innovation Activities and Article 5 of Federal Law 'On Making Amendments to Part II of the Tax Code of the Russian Federation and Certain Legal Acts of the Russian Federation.'

[2] Procedure for the Creation of a List of Pilot Programmes for Development of Regional Innovation Clusters (approved by the Decision of the Working Group for Development of Private and Public Partnership in Innovation Sector of 22 February 2012, Minutes No. 6-AK).

[3] Decree of the President of the Russian Federation of 7 May 2012 No. 596 'On Long-Term Public Economic Policy.'

[4] Assignment of the Chairman of the Government of the Russian Federation of 28 August 2012 No. DM-P8-5060.

Implementation of Measures Provided by Programmes for the Development of Pilot Regional Innovation Clusters' adopted in early 2013[1] provided for the allocation of funds to support only 15 clusters. The relevant funding volume in 2013 amounted to Rb 1.3bn. However, in 2014 the list of recipients of support already included 25 clusters[2] and the amount of funds allocated from the federal budget was Rb 2.5bn.

As in the case of other tools of public support, significant interest in the activities of the clusters was shown by the largest state-owned structures, such as Rosatom, Gazprom, RSC Energia, Kurchtov Institute, etc.

In general, it must be admitted that, as with the other cooperation and communication tool assimilated from foreign practice – technology platforms – Russian innovative clusters were 'designed' on the basis of a traditional (Russian) approach which places a focus on the existing leaders, and creation of special-purpose channels of direct public support. However, despite a number of sceptical assessments of the effectiveness of the approach used in Russia for the implementation of the cluster policy[3] in respect of the functioning of certain clusters, some positive effects have also been noted, primarily in respect of the increased effectiveness of communications between business, education and government authorities.[4]

6.4.3. Peculiarities of public policy for stimulating scientific and industrial cooperation; inherent problems and lessons for the future

When considering the practical results of the implementation of the different areas of public stimulation of scientific and industrial cooperation, their strengths and weaknesses (*Table 20*), we should firstly note the 'local nature' of the successes reached: even the largest-scale mechanisms, whether through engaged resources (mega-projects) or subjective coverage (VAT and profit tax relief) failed to ensure particularly significant effects, such as the mass implementation of new technology (at the level of industry or sector) or a considerable expansion of R&D funding.

Secondly, with the undoubtedly positive influence of measures taken by the state for the development of scientific and industrial cooperation, one should take into account that in most cases this development was nothing but 'capitalisation' of the already existing business connections which had arisen as early as in the Soviet period.

Thirdly, a distinctive feature of substantially all the financial mechanisms (including 'quasi-state' support by development institutes) was the strict limitation in respect of possible forms of use of allocated resources and the attempt at strict documentation of target results, limiting attention on the possible indirect positive effects.

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[1] Approved by Resolution of the Government of the Russian Federation of 6 March 2013 No. 188.

[2] Resolution of the Government of the Russian Federation of 15 September 2014 No. 941 'On Making Amendments to the Rules for Distribution and Provision of Subsidies from the Federal Budget to the Budgets of Constituent Entities of the Russian Federation for Implementation of Measures Envisaged by Programmes for Development of Pilot Regional Innovation Clusters.'

[3] See, for example, Korolev, V. Regional Innovation Clusters: Foreign Experience and Russian Conditions. Russian Foreign Economy Bulletin, 2013, No. 11; Ivanova, V., Tarasenko, V., Khafizov, R. Influence of Clusters on the Competitiveness of the Economy of Constituent Entities of the Russian Federation. News of the Volgograd State Technical University, 2014, vol. 20, No. 17.

[4] Ayupov, A., Mikhailov, R. The Mixed Model of Development of an Economic Cluster (on the example of the Kama Regional Innovation and Manufacturing Cluster). Bulletin of the Tatischev Volga University, 2013, No. 4 (29).

Table 20

Strength and weaknesses of key areas of public policy for stimulating scientific and industrial cooperation

Area	Strengths, successes	Weaknesses, problems
Key innovation projects of national significance	• Large scale of projects and long terms of implementation, significant volumes of support • Coverage of several stages of the innovation cycle – from product and development to their application in production • Emphasis on the real commercialisation, orientation towards the creation of products and technologies demanded by the market • Long period of application, proven processes • Creation of a range of new industrial facilities, considerable sales of new and improved products	• Problems of distribution of rights to results of intellectual activity • Limited possibilities for the use of allocated budgetary resources • Deficit of well-developed ideas and solutions suitable for initiation of projects • Particularly frequent change of the rules and conditions of support, sometimes in the course of project implementation • As a rule, the 'local' nature of successes and achievements
TEMP Programme	• Strict orientation towards the real commercialisation, introduction of new products to the market • Sufficiently long duration of supported projects • Partner organisations are selected by the company implementing the project • Substantial (as compared to the size of support) volumes of new and improved products • Assurance of receipts to scientific organisations and higher education institutions holding the licences • Possibility of participation of large companies (in consortium with small ones)	• Possibility to use only already existing R&D results in projects • Possibility to acquire licences only from public organisations • Limited possibilities to use allocated resources
PUSK Programme	• The composition of project participants was determined by the participants themselves, suggesting mutual interest in cooperation • Personnel support by higher education institutions of developments transferred to companies, employment of trained specialists • Adaptation of development technologies to the needs of a particular company, support for their implementation • Support of both sides of a partner project	• Limited experience of application • Insignificant size of projects • Limited possibilities to use allocated resources • 'Split' of projects into two separate parts with different contractors and customers • Risk of conflicts between the developer and consumer of the technology at the stage of its transfer and implementation
Softening of the accounting procedure for R&D costs when determining taxable profit	• Wide circle of beneficiaries • Relevant simplicity of application and administration • Stimulating influence of R&D costs of the business	• Not an actual relief
Projects for commercialisation of technologies in thematic areas proposed by the business community	• Orientation towards the satisfaction of business needs, real commercialisation of created products and technologies • Increase in production of new and improved products	• 'Secondary' role of the initiating company in selection of a contractor to conduct R&D and acceptance of work results; risk of obtaining results which do not correspond to the initiator's interests • Limited possibilities of using allocated budgetary resources • Limited experience of application, small number of launched of projects
R&D projects in thematic areas proposed by the business community	• Sufficiently large scale and long term of application, proven procedures	• 'Secondary' role of the initiating company in selection of a contractor to conduct R&D and acceptance of work results; risk of obtaining results which do not correspond to the initiator's interests • Limited possibilities for use of allocated budgetary resources • No obligations for commercialisation of obtained results
VAT relief for certain types of R&D	• Wide circle of beneficiaries • Stimulation of creation of new or improvement of existing products and technologies • Relevant simplicity of application • Significant scales of application	• 'Selectiveness' of application – by certain types of works

Area	Strengths, successes	Weaknesses, problems
Profit tax relief for costs on R&D included in a special-purpose list	• Wide circle of beneficiaries • Stimulation of R&D in thematic areas being of top priority for the state • Until 2012 – relevant simplicity of application • Dynamic growth of scales of application up to and including 2011	• 'Selectiveness' of application – by compliance of the R&D subject with the special-purpose list of thematic areas • Since 2012 – excessive complication of the procedure for application and administration
Stimulation of creation by of inculcation companies budgetary scientific and educational institutions	• Orientation towards the commercialisation of R&D results • Significant number of created inculcation companies • High demand by higher education institutions	• Low activity of budgetary science institutions • Nominal nature and non-viability of a considerable proportion of the created companies
Support for cooperation between higher education institutions and state scientific institutions within the framework of projects for the creation of advanced manufacturing facilities ('Mechanism 218')	• The composition of project participants was determined by participants themselves, suggesting mutual interest in cooperation • The initiating company orders R&D itself, which lowers the risk of obtaining results not meeting its needs • Orientation towards the creation of advanced manufacturing facilities, production of new and improved products, involvement of students and post-graduates to the conduct of R&D, publication activities • Sufficiently large scale and long term of application, proven procedures • Major participation in implementation of employees of higher education institutions, students and post-graduates, creation of a significant number of new jobs, sufficiently high publication activity • Stimulation of mutual interest of companies and higher education institutions to interact • Strengthening of orientation of research activities of higher education institutions towards real business needs • Building top-of-the-agenda research, engineering and educational capabilities of higher education institutions	• Too strict limitations in respect of the composition of R&D contractors: until 2012 – only higher education institutions, from 2012 – higher education institutions and state scientific institutions • Excessive emphasis on assurance of a considerable (and often major) share of R&D in the project structure • Limited possibilities to use allocated budgetary resources • Reduction of the maximum value of budgetary subsidies from Rb 300m (2010, 2012) to Rb 190m (2013) and then Rb 160m (2014) • Insufficiently flexible funding structure of projects initiated in 2013 and 2014 • Formal nature of a part of partnerships, non-viability of certain projects • Problems with distribution of rights to the results of intellectual activity among participants
Support for development of the innovation infrastructure of higher education institutions	• Wide spectrum of possible areas of use of budgetary funds • Sufficiently developed and effective system for monitoring of results • Mass creation of small innovative firms, wide employment in their activities of employees and students of higher education institutions, substantially significant scales of manufacturing of high-tech products, dynamic growth of volumes of works and services of organisations of the innovation infrastructure	• Perhaps, excessive orientation towards the support of small innovative firms
Creation and support of activities of technology platforms	• Application of successful international experience • Development of communication between the state, science and business, contribution to approximation of their views • Facilitation of long-term R&D planning • Reasonable number of platforms	• Dominating orientation towards scientific and technological priorities of the state, rather than business needs • Excessive orientation towards large public players (companies, scientific centres, higher education institutions) and their interests • No coverage of a number of socially important areas • Relatively weak involvement of private business • In some cases – insufficient attention to development of international cooperation • Emphasis on attraction of public resources
Development and monitoring of programmes for innovation-driven development of the largest state-owned companies	• Determination of particular areas of innovation-driven development and modernisation of the largest state-owned companies on the medium-term perspective • Orientation towards similar foreign companies,	• Closed nature of a major part of programmes and results of their implementation; no public discussion

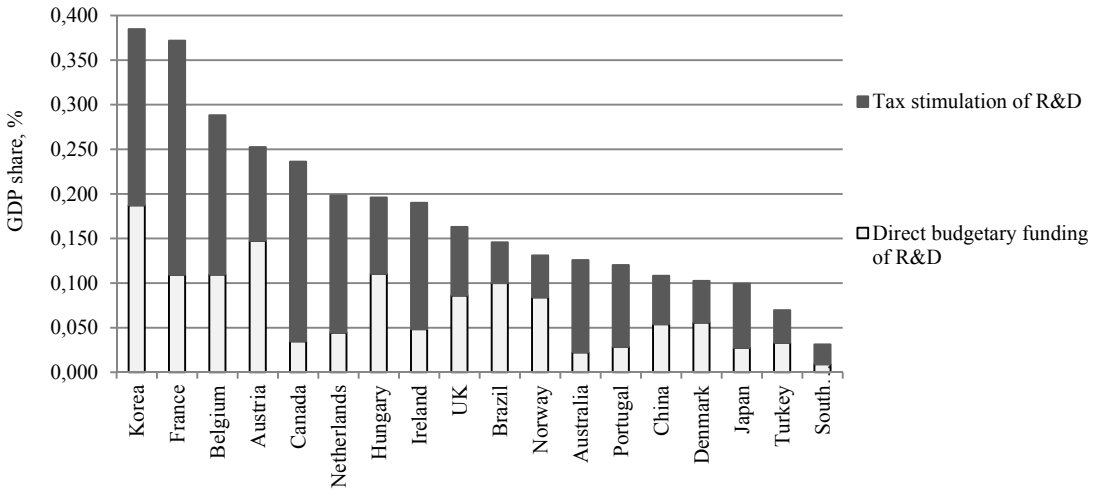
Area	Strengths, successes	Weaknesses, problems
	considerable improvement of the effectives of manufacturing activities	
Possibility to reduce taxable profit through creating reserves for future R&D	• Wide circle of beneficiaries • Relevant simplicity of application and administration • Stimulating influence of R&D planning, simplification of relevant budgeting	• Too strict limitations in respect of the amount of payments to create reserves and periods of their existence
Support of programmes for development of regional innovation clusters	• Application of successful international experience • Positive influence on interaction between business, science, education and government	• Excessive orientation towards large public players (companies, scientific centres, higher education institutions) and their interests • Emphasis on attraction of public resources

Source: prepared by the authors.

In general, the analysis of the set of tools of public support for scientific and industrial cooperation applied in the last fifteen years allows us to make *a number of observations*.

Firstly. The set of measures of public stimulation of interaction between science and business, as with Russian innovation policy in general, was characterised by excessive 'focus' on direct financial support tools. It is remarkable that some of the areas of implemented policy that had not initially been designed to provide direct financial support (stimulation of the creation of inculcation companies by budgetary scientific and educational institutions and the activities of technology platforms) over time acquired 'financial component'.

It is important to note that in many foreign countries tax measures play a significant (and often major) part in stimulating the R&D expenditure of businesses (*Fig. 1*). In Russia the situation is different: in 2012 the volume of budgetary revenues not received due to the above tax reliefs was only about Rb 5bn, while direct budgetary funding of R&D within the framework of the highlighted tools for stimulating cooperation exceeded Rb 14bn.



Source: (OECD, 2014).

Fig. 1. Public stimulation of R&D costs of businesses in a number of foreign countries in 2012

One should take into account that tax and financial tools of support have different 'target audiences' and, generally speaking, lead to different results. Financial measures are *a priori* designated for a smaller circle of beneficiaries than tax incentives and require expenditure on the selection of recipients of support and means of control of the allocated spending. At the

same time, financial mechanisms allow for providing point-wise and selective support, mitigating the risks taken by the recipients.[1] As evidenced by results of empirical research, direct budgetary funding of R&D ensures longer-term effects as compared to tax incentives.[2] Financial support more often 'pushes' companies to initiate new projects and contributes to mitigation of the risks of their implementation,[3] while tax tools mostly stimulate investments in existing projects.[4]

Secondly. The crisis of 2008-2009 resulted in 'rethinking' by the state of its role in ensuring economic development and the appropriate optimal model for stimulating innovation. While before, innovation policy had been built within the framework of the model (let us nominally call it 'consolidating'), suggesting orientation towards priorities set by the state, existing large players, the assurance of 'perceivable' socio-economic effects and the creation of special-purpose channels of support, at the stage of crisis and post-crisis recovery actions of the state acquired signs of a new 'search-oriented' model (*Table 21*). This was distinguished by its orientation towards the identification of new areas of scientific-technological development, new growth drivers based on the demands of business and society, the formation of new groups of interests and the 'horizontal' nature of the relationship with the state.[5]

Table 21

Alternative models of innovation policy formation

Consolidating model	Search-oriented model
Consolidation of efforts on implementation of already formed areas of technological development	Identification of new promising areas of scientific-technological development, new growth drivers, structuring of interests of business and science
Key driver – state priorities and programmes	Key driver – demand from business and society
Interaction with the state occurs in accordance with the 'classic' scheme – top-down	Interaction with the state are of 'horizontal coordination' nature
Orientation towards the key leaders – economic or scientific and technological	Orientation towards groups of leaders, including those under formation
Participants are united around leaders	Participants are united by common vision of promising area of development
Direct results are important (number of created companies, production and export volumes, employment)	Indirect effects are important (demonstration, institutional effect, agreed vision), change in the attitude towards innovations
Combination of the initiative 'from above' (from the state) and 'from below' (from large companies and organisations)	Initiative comes 'from below', from medium and small businesses, business unions and associations
Priority of direct support tools	Considerable attention is paid to indirect and coordinative tools

Source: prepared by the authors.

A range of areas and tools of public innovation policy initiated in the period from 2008 to 2012 (normative stimulation of creation by budgetary scientific and educational institutions of inculcation companies, 'Mechanism 218', technology platforms, regional innovation clusters,

[1] See, for example, Berube, C., Mohnen, P. Are firms that receive R&D subsidies more innovative? UNO-MERIT Working Paper Series No. 15, 2007.
[2] Guellec, D., Van Pottlesberghe, B. The impact of public R&D expenditure on business R&D. Economics of Innovation and New Technologies, 2003, 12 (3).
[3] Simachev, Yu., Kuzyk, M., Feigina, V. Public support for innovation in Russia: What Can Be Said about the Influence of Tax and Financial Mechanisms on Companies? – Russian Management Journal, 2014, vol.12, No.1.
[4] Guellec, D., Van Pottlesberghe, B. The impact of public R&D expenditure on business R&D. Economics of Innovation and New Technologies, 2003, 12 (3); Jaumotte, F., Pain, N. An Overview of Public Policies to Support Innovation. OECD Economic Department Working Paper No. 456, 2005.
[5] Simachev, Yu., Kiselev, V. Technology platforms: the case of a system innovation in Russia. OECD System Innovation Project Template workshop, Helsinki, Finland, November 29, 2013. http://www.iacenter.ru/ publication-files/192/171.pdf

etc.) was initially in compliance with the 'ideology' of the search-oriented model. However, in practice, almost all of these mechanisms were implemented in accordance with the principles of the traditional consolidating model. For instance, the 'soft' mechanism of stimulating budgetary institutions soon 'acquired' relevant target indicators, while in the creation of technology platforms and their activities the orientation towards priorities set by the state, existing large players and building special-purpose channels of public support became apparent.

Thirdly. Along with the evolution of a public 'cooperative' policy, in general, it is important to note the significant development of its complete range of areas and tools (*Table 22*). However, not in all cases should the results of such development be recognised as totally positive. For example, the gradual softening of the procedure for writing off R&D costs and the supplementation of the notification-based procedure for the creation of inculcation companies by budgetary institutions with the wider rights of the latter in respect of property disposal, undoubtedly, expanded the potential for the use of these mechanisms and promoted their contribution to the development of scientific and industrial cooperation. In the case of the mechanism of public support for the cooperative projects of companies and higher education institutions the situation does not look so unambiguous. On the one hand, inclusion of state budgetary institutions in the circle of possible business partners allowed increasing the scope of application of 'Mechanism 218'. On the other hand, the reduction of the maximum amount of support firstly to Rb 190m and then to Rb 160m accompanying the introduction of an inflexible funding structure with a maximum in the third year of project implementation, by contrast, decreased the potential of the useful application of this mechanism. Finally, the modification of the mechanism of preferential write-off of expenditure on R&D included in a special-purpose list requiring the submission of reports to the tax authorities complicates significantly both its application and administration.

Table 22

Development of certain areas of public stimulation of scientific and industrial cooperation

Area	Condition before the change	Main changes	Result
Softening of the accounting procedure for R&D costs when determining taxable profit	Writing off R&D costs during 3 years; for R&D that gave no positive results – 70% of costs	• Writing off R&D costs, the results of which are used in production, during 2 years; writing off R&D costs that gave no positive results in full • Writing off R&D costs during 1 year • Writing off R&D costs in the tax period of R&D completion	Extension of the scale and potential of influence
Stimulation of creation by budgetary scientific and educational institutions of inculcation companies	Notification-based procedure for creation by budgetary institutions of business entities	• Extension of rights of budgetary institutions in respect of property disposal • Non-competitive procedure for leasing property by budgetary institutions to inculcation companies • Possibility to use simplified taxation system by inculcation companies • Reduction of payment rates to non-budgetary funds for inculcation companies	Extension of the scale and potential of influence
Profit tax relief for costs on R&D included in a special-purpose list	Writing off R&D costs at 1.5 rate in the period when they are actually incurred	Necessity to submit a report on R&D to tax authorities	Complication of application and administration, reduction of the scale
Support of cooperative projects for creation of advanced manufacturing facilities ('Mechanism 218')	Support of partnerships between companies and higher education institutions, maximum amount of support – Rb 300m (Rb 100m per year)	• Inclusion of state scientific institutions in a number of possible partners • Maximum amount of support – Rb 190m (1st year – up to Rb 30m, 2nd year – up to Rb 60m, 3rd year – up to Rb 100m) • Maximum amount of support – Rb 190m (1st year – up to Rb 30m, 2nd year – up to Rb 60m, 3rd year – up to Rb 100m)	Extension of the scope of application but limiting the scale and potential

Source: prepared by the authors.

We should also note that in creating these new tools of public policy one can often trace a succession from mechanisms initiated earlier, with both their advantages and disadvantages being reproduced. In particular, the programme of support for cooperation of small innovative firms and scientific and educational centres implemented jointly by the Foundation for Assistance to Innovations and Rosnauka, on the one hand, reproduced one of the important merits of the TEMP Programme, namely, the possibility for the participation of a consortium of a small company and larger enterprise and, on the other hand, – replicated a fundamental disadvantage of the PUSK Programme consisting of the separate and isolated support of the two participants in the partner project. However, in some cases, the 'designing' of new measures was most probably based on the experience of application of the previously launched mechanisms, including the negative aspects, which enabled avoidance of a repeat of their problems. For example, the mechanism of support for cooperative projects between companies and higher education institutions did not 'inherit' the key disadvantage of the tools of R&D funding in the interests of business: now R&D was commissioned not by their direct 'consumer' but by the state (*Table 23*).

Table 23

Comparison of key mechanisms of financial support of innovative projects

Commencement of application	**Key innovation projects of national significance**	**Projects for commercialisation of technologies in thematic areas proposed by the business community**	**Cooperative projects for creation of new manufacturing facilities (mechanism 218)**
	2002	**2006**	**2010**
Volume of budgetary funding of the project	Formally – up to Rb 500m (in practice in certain cases – up to Rb 600m and more)	Formally up to Rb 300m (in practice – no more than Rb 260m)	Initially – up to Rb 300m, then – up to Rb 190m, then – Rb 160m
Duration of support	Formally – up to 4 years (in practice in certain cases – up to 6 years and more)	Up to 3 years	Up to 3 years
Required level of non-budgetary co-funding	Initially – at least 50%, later – at least 60%	At least 70%	At least 50%
Scale of application	Point-wise – few projects per year	Medium – about 10 projects per year	Significant – up to one hundred projects per year
Features	Large-scale and long duration of projects, strict requirements for end results	Creation of a list of topics for R&D business proposals, tender-based selection of R&D contractors	Participation in the tender of partnerships of companies and higher education institutions (later also state scientific institutions); monitoring period exceeds the support period
Support scheme	A direct recipient of support is the key project contractor that engages required subcontractors	A direct recipient of support is the R&D contractor selected by the state	A direct recipient of support is the project initiating company, which finances R&D of higher education institutions (scientific institutions)

Source: prepared by the authors.

Fourthly. A major part of the selective measures for public stimulation of scientific and industrial cooperation (with the exception of, mainly, 'highly specialised' mechanisms – oriented only towards small business, higher education institutions or budgetary institutions) is characterised by the participation of a certain circle of 'loyal customers' which, as a rule, are represented by quite large state-owned companies, leading scientific centres (industrial and academic) and certain higher education institutions. This situation reflects a widespread effect

called the 'Matthew effect' in the economic literature.[1] It implies that the state, when selecting recipients for support within the framework of a new tool (or round), mainly relies on the companies' previous history of getting support and their successful fulfilment of undertaken obligations. This results in the creation of quite a narrow circle of companies attractive (in terms of provision of support) to the state, which are regularly granted state funding. However, with the obvious negative influence of the 'Matthew effect' on the total number of companies supported by the state, at the level of the beneficiaries, the repeated support gives rather positive results.[2]

Fifthly. The principally important question, which defines materially the effectiveness of the support provided by the state, is in the degree to which the support provided by the state is 'additional' for the innovation activities of the companies. In other words, whether the receipt of support resulted simply in a replacement (or rather 'displacement') of private resources with public ones, while the total amount of R&D expenditure actually remains unchanged. At the same time, while in foreign countries the displacement effect is most often seen in the case of direct state funding,[3] in Russian practice it is approximately equal for both the financial and tax tools for support.[4]

It seems impossible to receive a comprehensive answer to these questions – at least due to the lack of practice of any comprehensive assessment of results of the application of the various measures of public innovation policy (assessments usually cover only the direct results of support and do not allow us to determine the extent of their 'complementary nature'). However, certain ideas about this can be obtained on the basis of the data of 'subjective statistics' – the results of surveying companies' chief executives (*Fig. 2*).[5]

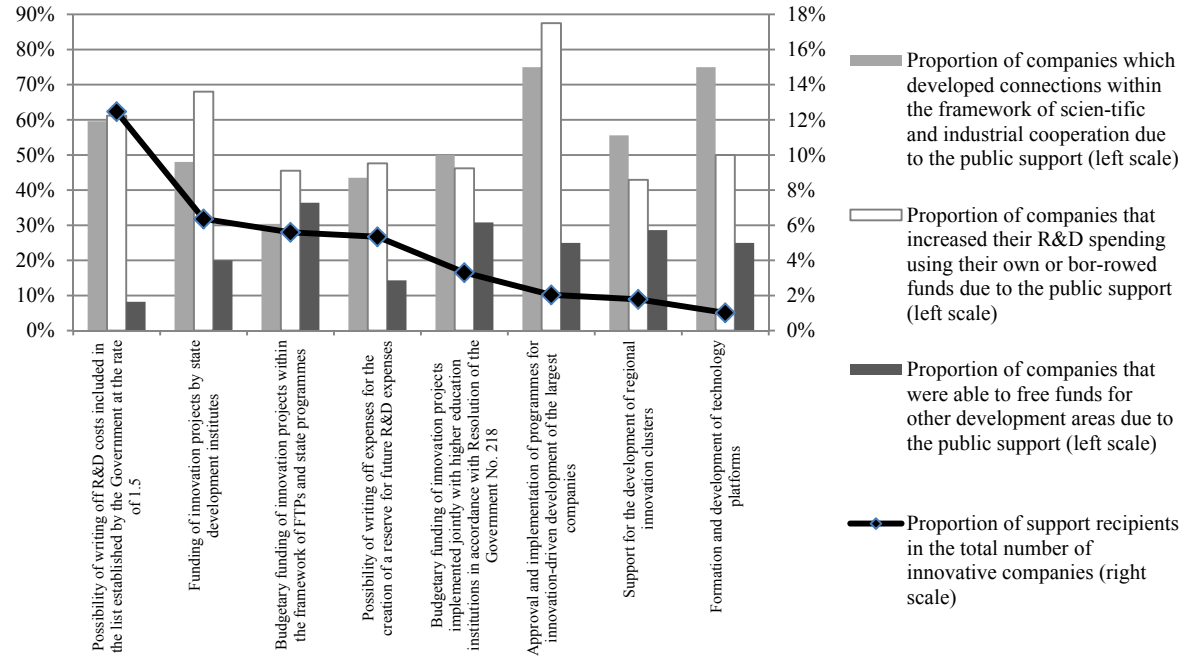
[1] Falk, R. Measuring the Effects of Public Support Schemes on Firms' Innovation Activities. WIFO Working Paper, Austrian Institute of Economic Research, Vienna, 2006; Aschhoff, B. The effect of subsidies on R&D investment and success: do subsidy history and size matter? ZEW Discussion Paper 09-032, Mannheim, 2009; Antonelli, C., Crespi, F. Matthew effects and R&D subsidies: knowledge cumulability in high-tech and low-tech industries. Working Paper 11/2011, University 'Roma Tre', 2011.

[2] Falk, R. Measuring the Effects of Public Support Schemes on Firms' Innovation Activities. WIFO Working Paper, Austrian Institute of Economic Research, Vienna, 2006; Aschhoff, B. The effect of subsidies on R&D investment and success: do subsidy history and size matter? ZEW Discussion Paper 09-032, Mannheim, 2009.

[3] See, for example, David, P., Hall, B., Toole, A. (). Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence. Research Policy, 2000, 29 (4-5); Lach, S. Do R&D subsidies stimulate or displace private R&D? Evidence from Israel. The Journal of Industrial Economics, 2002, 50 (4).

[4] Simachev, Yu., Kuzyk, M., Feygina, V. Public Support for Innovation in Russian Firms: Looking for Improvements in Corporate Performance Quality. International Advances in Economic Research, 2015, vol. 21, issue 1.

[5] The used data set was obtained on the basis of a questionnaire-based survey of 652 Russian manufacturing companies conducted in the second half of 2012 by the Centre of Market Research of the Institute of Statistic Research and Economic Knowledge of NRU-HSE and commissioned by the Inter-departmental Analytical Centre. The survey was oriented, among other things, on assessment of influence of different measures of public stimulation of innovations on companies. From about 20 measures considered, 8 were related with stimulation of scientific and industrial cooperation (see *Fig. 2*).



Source: calculated by the authors on the basis of the data provided by the Inter-departmental Analytical Centre.

Fig. 2. Scales and effects of application of certain measures of public stimulation of innovations

As it was reasonable to expect, the tax relief for R&D expenditure included in a special-purpose list was characterised by the largest 'coverage' while technology platforms and regional innovation clusters were characterised by the smallest, which is also not surprising because both of these areas of support had arisen not so long before the survey was conducted. However, the development of scientific and industrial cooperation in supported companies was, in most cases, happening in the setting of both the application of the said tax relief and their participation in the creation of technology platforms and regional innovation clusters and was connected with the approval and implementation of the programmes for innovation-driven development of the largest state-owned companies. The latter mechanism, along with the support of state development institutes and, again, the profit tax relief for expenditure on R&D included in the special-purpose list, was characterised by its positive connection with the additional R&D spending of the supported companies. Finally, the displacement of private resources with public was most often observed with the use of the tools related to direct budgetary funding. Interestingly, while for the entire set of measures of tax stimulation of innovation the displacement effect was quite significant,[1] for the tax profit relief for R&D expenditure this problem is obviously secondary.

* * *

[1] Simachev, Yu., Kuzyk, M., Feygina, V. Public Support for Innovation in Russian Firms: Looking for Improvements in Corporate Performance Quality. International Advances in Economic Research, 2015, vol. 21, issue 1.

In conclusion, it seems important to note that, to date, the world has accumulated a wide experience of the empirical assessment of the influence on companies of different tools for stimulating innovation. In accordance with the established practice, such assessment is performed breaking the effects down into several groups, including changes in the resources available for innovations, the competitiveness of companies, behavioural changes. A special part here is played by the assessment of effects of 'behavioural complimentarity' relating mainly to internal and poorly formalised factors – the specifics of the organisational structure of the companies, interests and motivations of the various parties, the company's potential to gain new knowledge and to perceive new technologies. It is behavioural changes that determine the stability of the stimulation mechanisms on such companies.

It would be reasonable to introduce into the Russian practice the assessment of 'behavioural complimentarity' and development of relevant methodology. This would allow us to ensure more objective analysis and comparison of the influences of the different mechanisms of stimulation of the innovative activities of companies.

In foreign countries empirical research for the assessment of innovation policy is deeply integrated into the decision-making system – such research activities are of a regulatory nature, performed on the basis of statistical data over long observation periods (over 10 years), the results of assessment are publicly available and continuously compared between countries. In this regard, in accordance with Russian innovation policy, it seems important to introduce the system of regular assessment of the influence on companies of the mechanisms of support for innovation. As for initiating new mechanisms of stimulating innovation for the assessment of potential beneficiaries and their possible effects, it is necessary to develop a methodology and practice of ex-ante assessment.

All this would create a basis for the accumulation and discussion of research results, improvement of our understanding of the specifics of their influence on Russian companies, an extension of training processes on the basis of the implemented initiatives and a redistribution of resources in the interests of up-scaling successful practices.

Significant factors for the increase in the effectiveness of stimulation mechanisms are their long-term stability and user-friendliness. It is in this case that they become an element of business planning and preventive decision-making in companies. Noting that there are substantial reserves for further increase in the effectiveness of the stimulation mechanisms, it should be admitted that improvements of the institutional environment, the development of competition and the labour market, and an increase in the predictability of public socio-economic policy are not any less important for the development of the innovation activities of businesses.

6.5. The Real Estate Market of the Russian Federation

6.5.1. The Market of Land Plots

According to the data of the Rosreestr, the area of land plots owned by Russian nationals keeps decreasing and as of 1 January 2014 amounted to 117,044,500 ha or 6.84% of the land of the Russian Federation against 118,281,900 ha (6.92%) as of 1 January 2013 (*Table 24*). On the contrary, the area of land in public and municipal ownership and ownership of legal entities keeps growing. Within a year, the area of land plots owned by legal entities increased by 1.2m ha and amounted to 15.92m ha or 0.93% of the land of the Russian Federation. The area of land plots in public and municipal ownership increased by 37,900 ha. As of 1 January 2014, individuals' land shares (including 656,600 ha in general joint ownership) decreased by

2.6m ha and amounted to 5.4% (92.3m ha) of the country's land or 69.4% of Russia's land in private ownership (*Table. 24*). A decrease in the area of land in shared ownership is regarded as positive factor as land plots in shared ownership by virtue of incompleteness of that title are used inefficiently.

Table 24

The pattern of land plots of the Russian Federation by the form of ownership, the 2011–2014 period

Form of ownership		01.01.2011		01.01.2012		01.01.2013		01.01.2014	
		Million ha	%	Million ha	%	Million ha	%	Million ha	%
Public and municipal ownership		1576.4	92.2	1576.7	92.2	1576.8	92.22	1576.9	92.23
Individuals' ownership		121.4	7.1	119.6	7	118.3	6.92	117	6.84
including:	Individuals' land shares;	100.8	5.9	97.6	5.7	94.9	5.55	92.3	5.4
	On the basis of individuals' other titles of ownership	20.6	1.2	22	1.3	23.4	1.37	24.7	1.44
Legal entities' ownership		12.1	0.7	13.5	0.8	14.7	0.86	15.9	0.93
TOTAL land in ownership		133.4	7.8	133.1	7.8	133	7.78	132.9	7.77

Source: The State (National) Report on The State and Utilization of Land in Russian Federation in 2013

In 14 constituent entities of the Russian Federation, as of 1 January 2014 the share of privatized land exceeded 40% of the land of a constituent entity. It is mainly southern and southwestern regions. In 15 constituent entities of the Russian Federation, the share of privatized land amounts to less than 0.40%. The Southern Federal District has the highest index (43.32%) while the Far Eastern Region, the lowest one (0.33%); Russia's average nationwide index amounts to 6.85%. In Moscow and St Petersburg individuals own 14.14% and 6.41% of land, respectively (*Table 25)*.

Table 25

The level of privatization of land by federal districts and constituent entities of the Russian Federation as of 1 January 2014*

Federal districts and constituent entities of the Russian Federation	Total area, thousands ha	Land owned by individuals, thousand ha	Land owned by legal entities, thousand ha	Level of privatization by individuals, %	Level of privatization by legal entities, %	Place by the level of privatization by individuals
1	2	3	4	5	6	7
Southern Federal District	42087.6	18230.3	1569.8	43.32	3.73	***I***
Rostov Region	10096.7	6196.8	624.3	61.37	6.18	1
Volgograd Region	11287.7	6399.5	337.7	56.69	2.99	4
Astrakhan Region	4902.4	892.4	89.2	18.20	1.82	38
Central Federal District	65020.5	19357.6	5304.5	29.77	8.16	***II***
Orel Region	2465.2	1296.2	200	52.58	8.11	6
Voronezh Region	5221.6	2598.8	405.2	49.77	7.76	7
Moscow Region	4432.9	737.1	532.5	16.63	12.01	41
Moscow	256.1	36.2	10	14.14	3.90	43
Kostroma Region	6021.1	487.4	119.7	8.09	1.99	51
Privolzhsky Federal District	103697.5	30836	4880.1	29.74	4.71	***III***
Orenburg Region	12370.2	7251.2	301.5	58.62	2.44	3
Saratov Region	10124	5522.5	825.7	54.55	8.16	5
Perm Territory	16023.6	1270.1	329.8	7.93	2.06	52
North-Caucasian Federal District	17043.9	4231.9	480.2	24.83	2.82	***IV***
Stavropol Territory	6616	3931.2	457.2	59.42	6.91	2
Republic of Karachaevo-Cherkessia	1427.7	265.2	6.7	18.58	0.47	37
Republic of Dagestan	5027	4.1	1.6	0.08	0.03	76
The Russian Federation	1709825.0	117045	15919.7	6.85	0.93	***V***

Cont'd

1	2	3	4	5	6	7
Siberian Federal District	514495.3	29293.4	1829.4	5.69	0.36	***VI***
Altai Territory	16799.6	6268.9	338.7	37.32	2.02	18
Omsk Region	14114	4584.1	536.6	32.48	3.80	25
Republic of Tyva	16860.4	68.1	3.1	0.40	0.02	69
Urals Federal District	181849.7	8909	830.1	4.90	0.46	***VII***
Kurgan Region	7148.8	2990.3	233.4	41.83	3.26	12
Chelyabinsk Region	8852.9	2925	184.1	33.04	2.08	24
Yamalo-Nenets Autonomous Region	76925	1.4	0.7	0.00	0.00	81
North-Western Federal District	168697.2	4139.6	691.2	2.45	0.41	***VIII***
Kaliningrad Region	1512.5	449.1	140.6	29.69	9.30	27
Pskov Region	5539.9	1487.6	143.6	26.85	2.59	29
St. Petersburg	140.3	9	23.7	6.41	16.89	54
Murmansk Region	14490.2	6.8	4.3	0.05	0.03	78
Nenets Autonomous Region	17681	0.2	0.1	0.00	0.00	82
Far Eastern Federal District	616932.9	2046.7	334.4	0.33	0.05	***IX***
Maritime Territory	16467.3	700.3	151.3	4.25	0.92	58
Jewish Autonomous Region	3627.1	104.8	1.1	2.89	0.03	60
Chukotka Autonomous Region	72148.1	0.1	0.2	0.00	0.00	83

* In each federal district, two constituent entities of the Russian Federation with highest indices as regards the share of land plots in individuals' ownership and a constituent entity of the Russian Federation with the lowest index are presented. Additionally presented are the Moscow Region, Moscow and St. Petersburg.
Source: The State (National) Report on the State and Utilization of Land in the Russian Federation in 2013.

By the beginning of 2014, for the purpose of provision of housing development with land plots 7,882,600 households were provided with land plots with the total area of 987,500 ha which is 1.37% and 2.46% higher as regards the number of households and the area of land, respectively, than in 2012. It is to be noted that 29.4% of land for individual housing development was provided to households (2,317,500 households) on the basis of the titles (which do not exist any longer) of lifetime ownership with hereditary succession, permanent (timeless) utilization and limited utilization of state land, including land to which titles have not been executed (*Table 26*).

Table 26

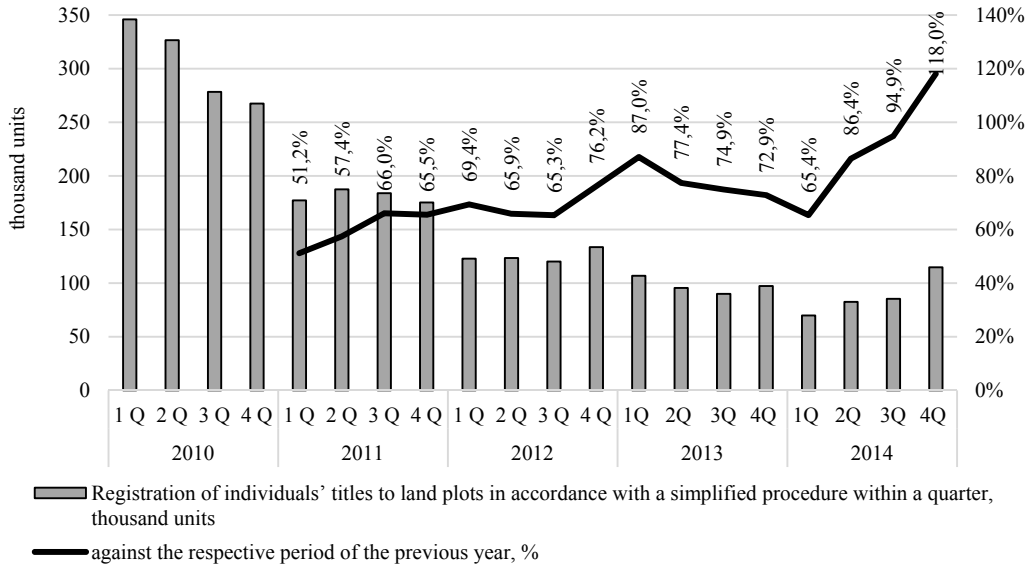
The pattern of ownership of land allocated for individual housing development, the 2011–2013 period

	2011		2012		2013	
	Thousand ha	%	Thousand ha	%	Thousand ha	%
Private ownership	514.3	55.3	546.2	56.7	576.9	58.4
State and municipal ownership, including:	416.5	44.7	417.6	43.3	410.6	41.6
Permanent (timeless) utilization	206.2	22.2	202.7	21.0	197.4	20.0
leasehold	110.8	11.9	119.1	12.3	120.4	12.2
Free of charge limited utilization (temporary utilization)	2.2	0.2	3.5	0.4	2.5	0.2
lifetime ownership with hereditary succession	56.2	6	54.8	5.7	54.0	5.5
Without execution of the title to land	41.1	4.4	37.5	3.9	36.3	3.7
Total	930.8	100	963.8	100	987.5	100

Source: The State (National) Report on The State and Utilization of Land in Russian Federation in 2013

According to the data of the Rosreestr, the process of the summer cottage amnesty, that is registration in accordance with a simplified procedure of individuals' title to land plots provided before approval of the Land Code of the Russian Federation for individual subsidiary, summer cottage husbandry, vegetable gardening, horticulture and individual garage and housing building slowed down (*Fig. 3*). In Q4 2014, as compared to Q4 2013 the excess of the

volume of registration of titles in accordance with the "summer cottage" amnesty did not change much the situation within a year: in 2014 352,721 registrations of titles were made which is 9.51% less than in 2013. Due to a lack of proper registration of the title of ownership, land plots cannot be used in the economic turnover, nor can a property tax be charged from the owner of land.



Source: The Rosreestr.

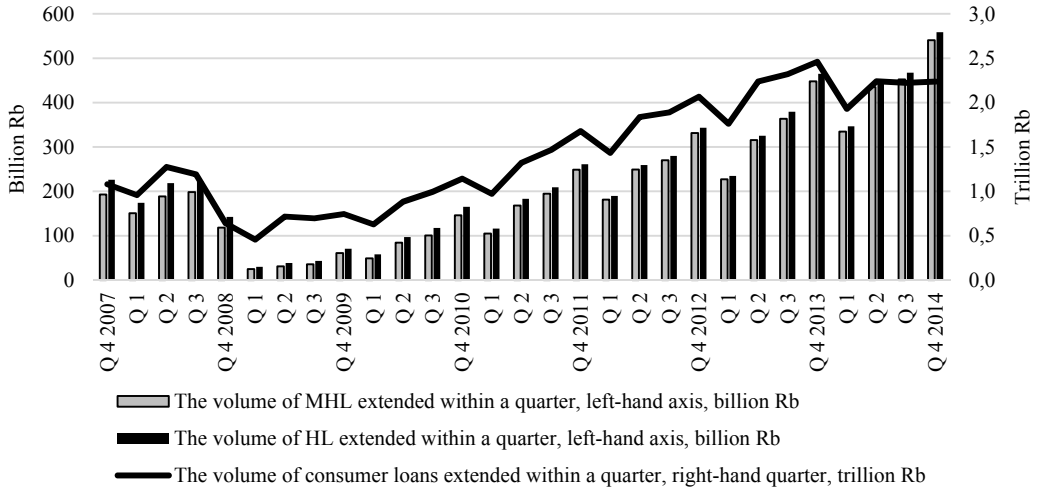
Fig. 3. Dynamics of registration of individuals' titles to land plots in accordance with the simplified procedure

According to the data of the Rosreestr, in 2014 the overall volume of registration of individuals' titles to land plots (5,992,002 certificates) increased by 2.65% as compared to 2013. The number of registered titles of legal entities to land plots rose by 5.14%, having amounted to 291,663 certificates as of 1 January 2015. In 2014, leasing of land plots by individuals (78,473 certificates) fell by 8.29% as compared to 2013, while that by legal entities (44,237 certificates), by 34.42%.

As compared to 2013, in 2014 the number of registered mortgages on land plots for individuals (694,657 certificates) rose by 26.11%, while that for legal entities (151,161 certificates) fell by 7.66%.

6.5.2. Home Equity Lending

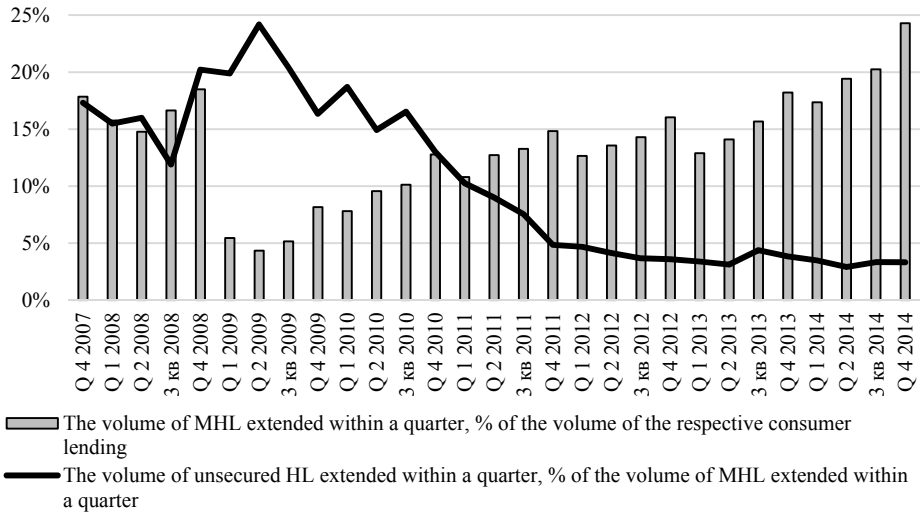
In 2014, according to the data of the Central Bank of the Russian Federation, 629 credit institutions provided 1,012,301 mortgage housing loans (MHL) for the total amount of Rb 1,762,523bn which exceeded by 22.7% and 30.18% the volume of MHL extended in 2013 and in monetary terms, respectively. In 2014, growth rates of MHL were close to those of the 2013 indices (growth of 19.27% and 31.20% as regards the number of loans and in monetary terms, respectively). In Q4 2014, they extended MHL for the total amount of Rb 540,661bn which is 20.7% more than in Q4, 2013 (*Fig. 4*).



Source: The Central Bank of the Russian Federation.

Fig. 4. Dynamics of mortgage housing lending to individuals, the 2007–2014 period

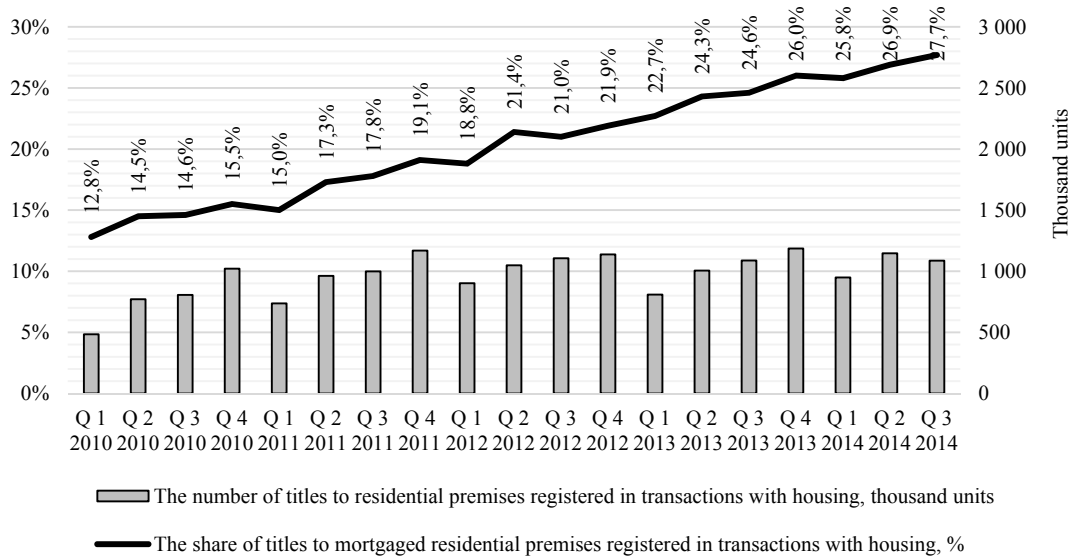
In 2014, the volume of consumer lending fell by 1.75%. In 2014, the share of MHL extended within a year in the volume of consumer loans rose by 5.02 p.p. as compared to 2013 and amounted to 20.44% against 16.13% in 2008. The share of MHL in the consumer lending volume amounted to 24.29% in Q4 2014 and increased by 6.08 p.p. as compared to Q4 2013 г (*Fig. 5*). A trend of decrease in the share of unsecured housing loans (UHL) in the HL volume preserved with some fluctuations in 2014, too. In Q4 2014, the share of UHL in the MHL volume was 0.52 p.p. lower than that of UHL in Q4 2013. The above trend is underpinned by requirements of the Central Bank of the Russian Federation to provisions for unsecured loans (Resolution No. 254-P on The Procedure for Formation by Credit Institutions of Bad Loan Provisions and Provisions for Loan Debts and Debts Made Equal to Them).



Source: The Central Bank of the Russian Federation.

Fig. 5. Dynamics of the ratio between the volumes of consumer lending and housing lending, the 2007–2014 period

According to the data of the Rosreestr provided by the OAO AHML (*Fig. 6*), in Q3 2014 the share of mortgaged real property units in the total number of real property units registered in transactions with housing increased by 3.1 p.p. as compared to Q3 2013 and amounted to 27.7%, that is, over a quarter of apartments bought with use of mortgage. Within that period, the number of titles to residential premises registered in transactions with housing did not virtually change (a 0.1% decrease) and amounted to 1,086,753 certificates.



Source: The OAO AHML on the basis of the Rosreestr data.

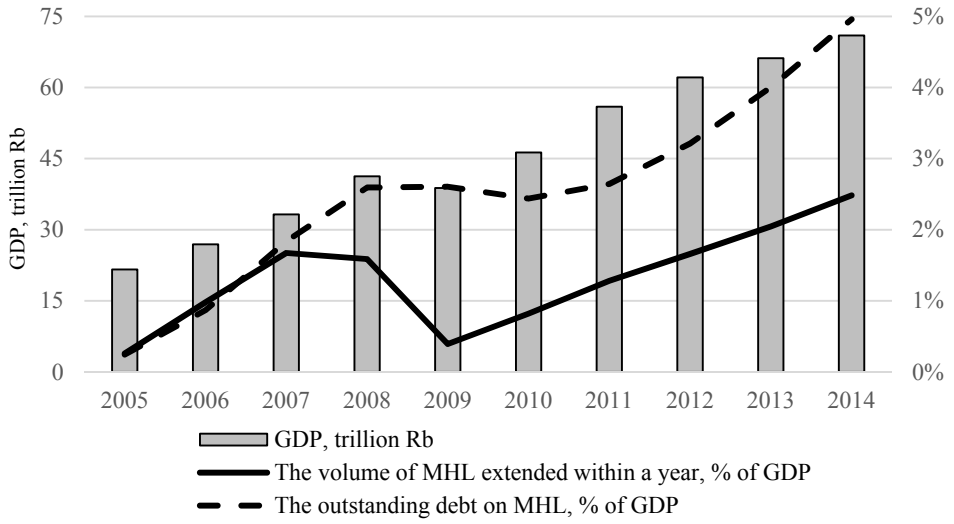
Fig. 6. Dynamics of the number of real property units registered in transactions with housing (units) and shares of mortgaged real property units in the total number of real property units registered in transactions with housing (%)

In 2014, the volume of MHL in shares of the respective value of GDP rose to 2.48% against 2.05% in 2013 and exceeded the 2007 maximum historic value by 0.81 p.p. (*Fig. 7*). As of 1 January 2015, the debt on MHL amounted to 4.96% of the respective GDP, that is, a 0.96 p.p. increase as compared to the value of 1 January 2014 (*Fig. 7*). The share of debt on MHL in GDP of the European Union, the US and the UK amounts to about 40%, 50% and 60%, respectively. According to the World Bank, for countries with a medium level of development the benchmark for the share of MHL in GDP should be equal to about 25%.

As of 1 January 2015, the debt on MHL in rubles increased by 33.38% as compared to 1 January 2014 and amounted to Rb 3,383.7bn (*Fig. 8*). With substantial growth in MHL portfolio in rubles, the overdue debt on those loans (Rb 27,205bn) rose by the mere 13.8%, while as percentage of the outstanding debt it amounted to 0.86%, which is 0.15 p.p. lower than that as of 1 January 2014. The latter is the evidence of higher quality of the portfolio of ruble mortgages.

In 2014 the quality of the MHL portfolio in foreign currency which was below that in rubles even improved a little. The debt (Rb 136.37bn) increased by 21.77% with simultaneous growth of 20.67% in the overdue debt (Rb 17.14bn); it is to be noted that in 2014 the overdue debt as percentage of the outstanding debt fell by 0.12 p.p. to 12.57% (*Fig. 8*). In 2014 the share of the overdue debt on MHL in foreign currency as percentage of the total overdue debt

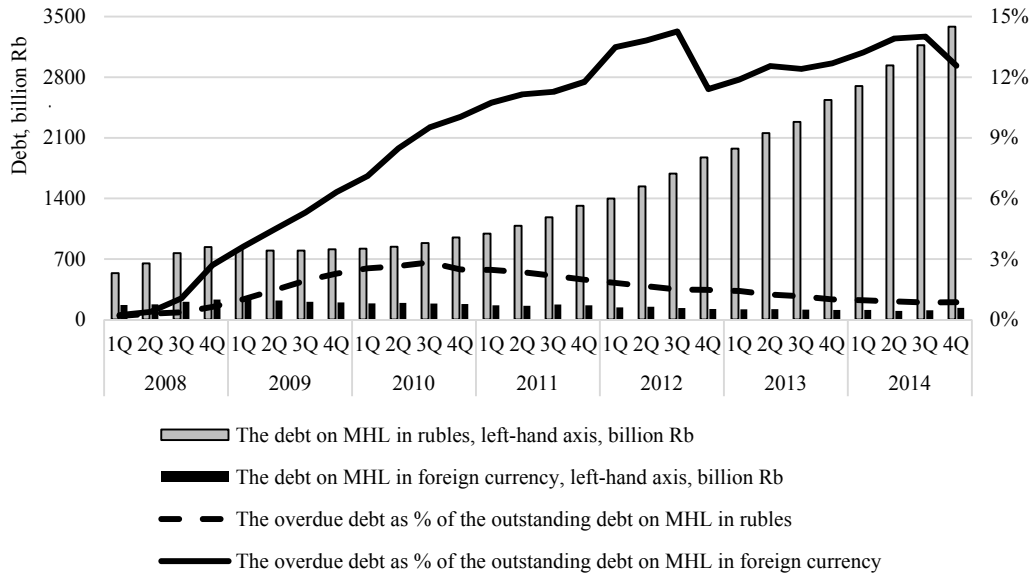
varied from 34.6 to 40.22%. As of 1 January 2015, that share amounted to 37.19%, having decreased in December by 3.3 p.p.



Source: The Central Bank of the Russian Federation.

Fig. 7. Dynamics of mortgage housing lending, % of GDP

As of 1 January 2015, the total overdue debt as percentage of the total outstanding debt amounted to 1.31%.

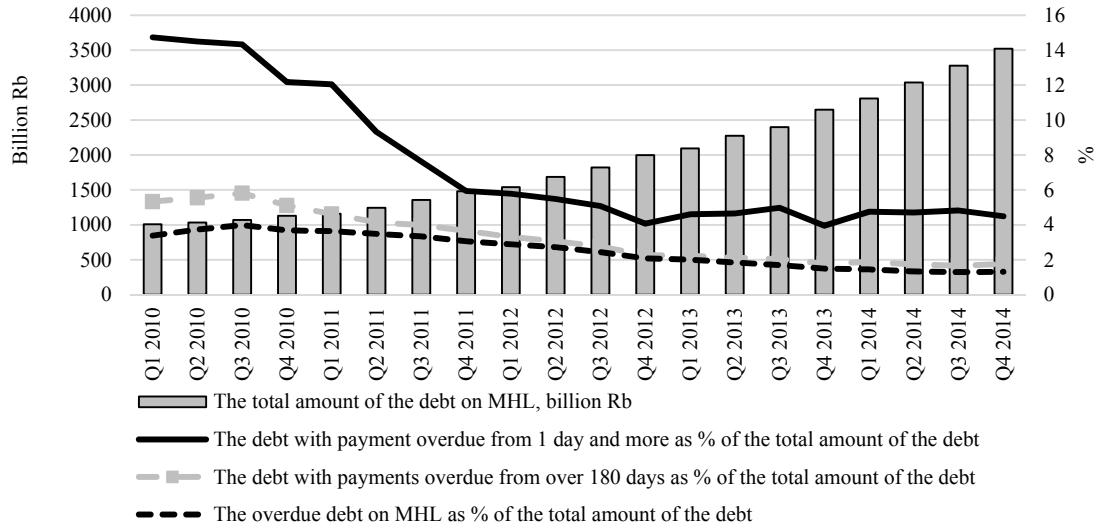


Source: The Central Bank of the Russian Federation.

Fig. 8. Dynamics of outstanding and overdue debt on mortgage housing loans

As of 1 January 2015, in the total amount of the debt the share of the overdue debt on MHL with payments overdue from 1 day and more amounted to 4.49%, which is 0.54 p.p.

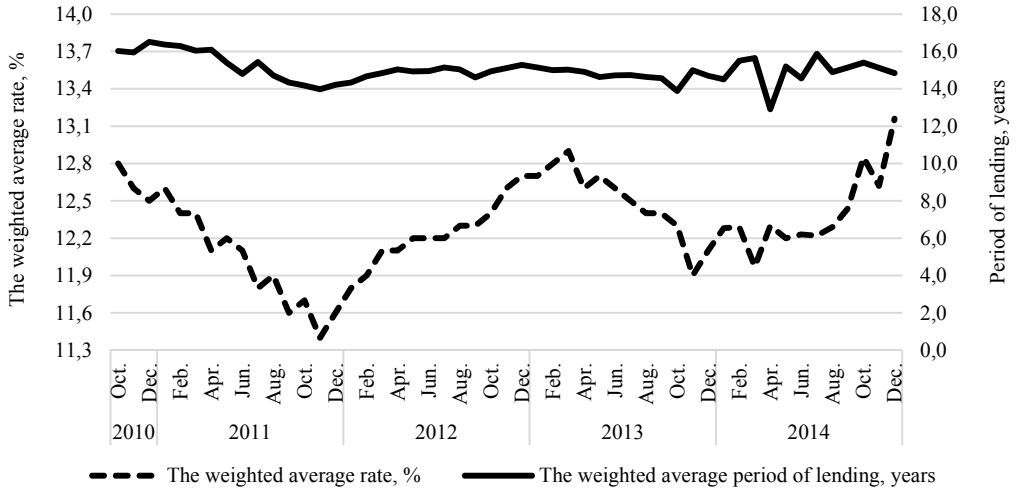
higher than that as of 1 January 2014. At the same time, the share of the debt on MHL with payments overdue for over 180 days (the debt on defaulted loans) in the total amount of the debt kept falling and as of 1 January 2015 amounted to 1.76%, that is, a decrease of 0.02 p.p. as compared to that as of 1 January 2014 (*Fig. 9*).



Source: The Central Bank of the Russian Federation.

Fig. 9. Dynamics of the debt on MHL by the period of delay in payments

In 2014 the weighted average rate on MHL in rubles extended within a month increased from the minimum value of 11.97% in March to 13.16% in December (*Fig. 10*). The weighted average period of lending as regards MHL in rubles extended within a month varied from 12.9 years to 15.9 years (*Fig. 10*).



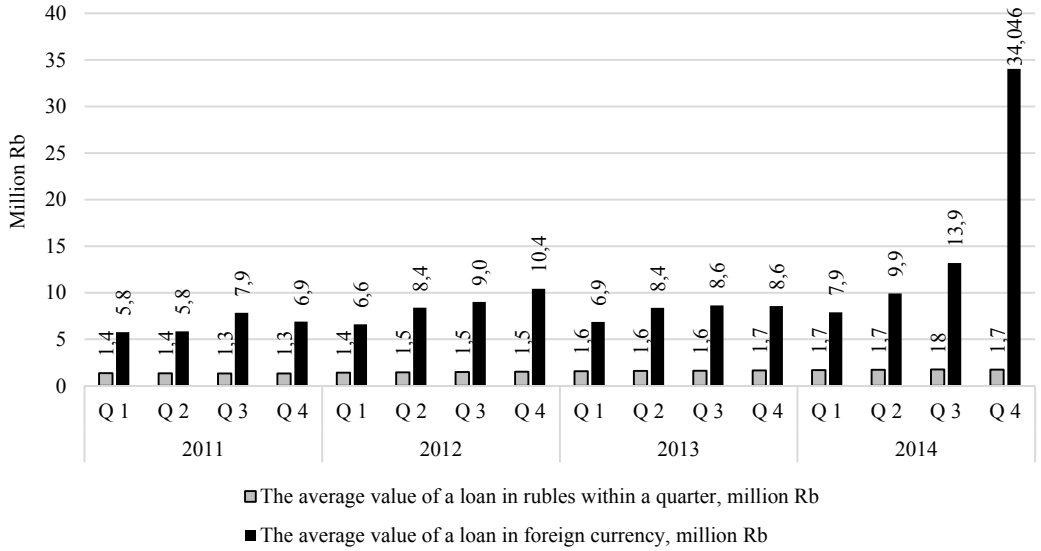
Source: The Central Bank of the Russian Federation.

Fig. 10. The weighted average rate and the period of lending as regards MHL in rubles extended within a month

As of 1 January 2015, the weighted average rate on MHL in foreign currency fell to 9.25% with the highest rate of 9.84% registered as of 1 February 2014. As of 1 January 2015, the weighted average period of lending as regards MHL in foreign currency extended from the beginning of the year amounted to 12.2 years.

In 2014, the share of the volume of MHL in foreign currency extended from the beginning of the year and the share of the debt on MHL in foreign currency in the total amount of the debt varied at the level of 0.5% and 4.0%, respectively and as of 1 January 2015 amounted to 0.61% and 3.87%, respectively.

In Q4 2014, the average value of the mortgage loan in foreign currency rose to Rb 34m, having exceeded nearly 20 times over MHL in rubles (Rb 1.74m) *(Fig. 11*).

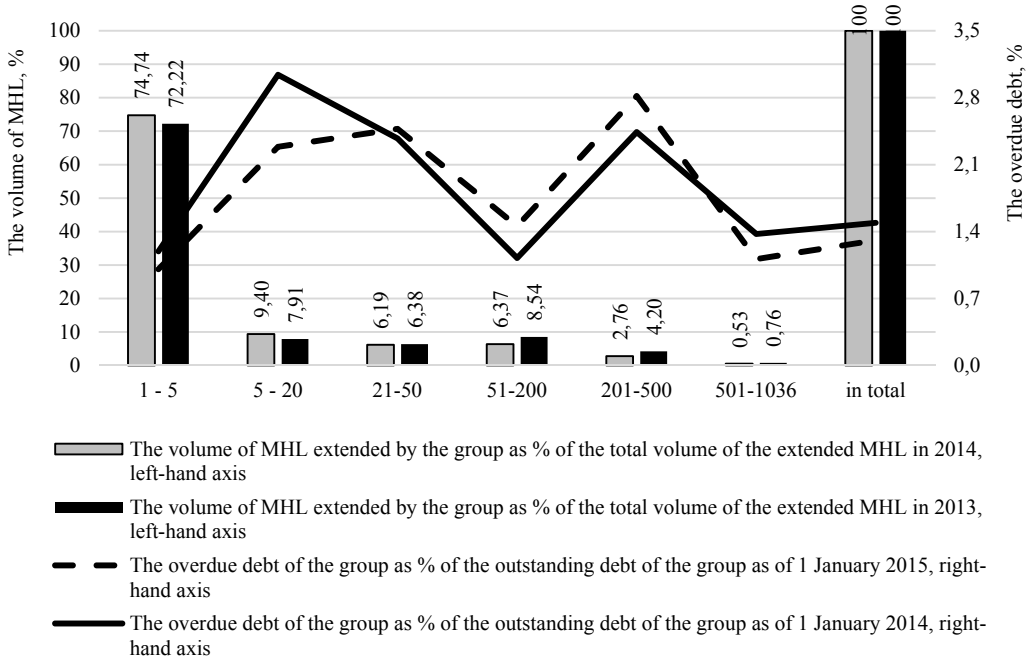


Source: The Central Bank of the Russian Federation

Fig. 11. The average value of MHL in rubles and foreign currency within a quarter

The share of the first group of five credit institutions (with largest assets) in the total volume of MHL extended in 2014 amounted to 74.74%, having gained 2.52 p.p. and 8.75 p.p. as compared to 2013 *(Fig. 12)* and 2012, respectively, which factor is evidence of continued concentration of the mortgage market. With reduction of the share of the overdue debt on MHL in the total debt in the Russian Federation (1.31% as of 1 January 2015 against 1.49% in 2013 and 2.08% in 2012), the leading position was taken over from the second group by the fifth largest group as regards the size of assets. That group has the largest value of the share of the overdue debt (2.82%), that is, the highest risk MHL portfolio. As of 1 January 2014, the first two groups (20 credit institutions out of 629) account for 84.14% of the Russian MHL market (*Fig. 12*).

As of 1 July 2014, Rb 154.6bn worth of MHL was repaid by borrowers prior to maturity which value is 36.8% higher than that as of 1 July 2013. The above sum amounts to 20.1% of the volume of MHL extended in H1 2014, while in the total volume of early repaid MHL it is equal to 76.42%, which is 0.39 p.p. lower than in H1 2013. It is to be noted that Rb 1.98bn worth of MHL was repaid early by means of funds received from sale of mortgaged property, that is, a decrease of 21.56% as compared to H1 2013.



Source: The Central Bank of the Russian Federation.

Fig. 12. Dynamics of the volumes of MHL extended to individuals and the overdue debt by the groups of credit institutions ranged by the value of assets, the 2013–2014 period.

In 2014, the OAO AHML maintained the volume of refinancing of AHL at the level of 2013. It is to be noted that 32,392 loans for the total amount of Rb 50.27bn were refinanced which was 4.73% higher and 0.98% lower in monetary and quantitative terms, respectively, than in 2013. As compared to 2012, the OAO AHML refinanced 17.54% and 40.04% less of MHL in monetary terms and as regards the number of mortgages, respectively. In 2014, the weighted average rate of repurchasing of mortgages by the OAO AHML amounted to 10.7%, while that on special products, to 10%, in particular, 9.7% on the *Military Mortgage* program. Generally, in 2014 within the frameworks of realization of special mortgage programs the OAO AHML refinanced 16,495 mortgage loans for the total amount of Rb 29.5bn (including 6,800 loans under the *Military Mortgage* program for the total amount of Rb 14.97bn). The share of mortgage loans refinanced by the OAO AHML within the frameworks of social mortgage programs amounted to 50.92% and 58.69% of the total volume of the OAO AHML's activities on the primary market in quantitative terms and monetary terms, respectively.

As of 1 January 2015, within the frameworks of the *Stimul* program the OAO AHML's existing liabilities as regards provision of loans to banks which finance housing development projects amounted to Rb 51.5bn. From 1 October 2009, the OAO AHML concluded agreements for the total of Rb 119.4bn which was to be spent on building of 6.9m sq. m of housing.

Growth in housing mortgages in a situation of the macroeconomic crisis is evidence of the fact that a mortgage loan is becoming an investment and savings instrument. In prospect, the above may result in growth in prices on housing which situation, in its turn, reduces short-term risks of housing lending and, thus stimulates relaxation in requirements to borrowers,

that is, emergence of low-quality high-risk loans. A similar scheme of development resulted in the 2008 mortgage crisis in many OECD countries.

6.5.3. Building, Commissioning and Supply of New Housing

In 2014, in housing development the highest growth in housing commissioning volumes (14.9% as compared to 2013) in the entire period after the previous financial and economic crisis was observed. However, within the entire year a downward quarterly trend of commissioning of volumes of housing as compared to the respective indices of 2013 was observed.

Generally, in 2014 1,080,300 apartments with the total floorspace of 81.0m sq. meters were commissioned (*Table 27*).

Table 27

Commissioning of housing in Russia in 1999–2014

Year	Million sq. meters of housing	Growth rates, %	
		Against the previous year	Against 2000
1999	32.0	104.2	105.6
2000	30.3	9.7	100.0
2001	31.7	104,6	104.6
2002	33.8	106.6	111.5
2003	36.4	107.7	120.1
2004	41.0	112.6	135.3
2005	43.6	106.3	143.9
2006	50.6	116.0	167.0
2007	61.2	120.9	202.0
2008	64.1	104.7	211.5
2009	59.9	93.4	197.7
2010	58.4	97.5	192.7
2011	62.3	106.6	205.6
2012	65.7	104.7	216.8
2013	70.5	107.3	232.7
2014	81.0	114.9	267.3

Source: The Russian Statistical Yearbook. 2007: Statistical collected volume/ The Rosstat M., 2007, p. 507; The Russian Statistical Yearbook. 2011: Statistical collected volume/ The Rosstat M., 2011, p. 461; On Housing Development in 2014, www.gks.ru and authors' calculations.

In 2014, individual developers commissioned 260,300 of housing with the total floorspace of 35.2m sq. meters which is 14.8% more than in 2013. Growth rates of housing development by individual developers were in line with those of housing development in general, while the share of housing development by individual developers in the total floorspace of completed housing nationwide was equal to 43.5%.

Positive dynamics of housing development was observed in Russia's most regions, including nearly all the regions where the aggregate volumes of commissioning of housing exceeded 1m sq. meters (*Table 28*).

Table 28

Dynamics of commissioning of housing in Russia's regions in 2014 (arranged by the rates of commissioning)

Region	Growth rates of housing commissioning, % as compared to 2013
1	2
Chechen Republic	3.1 times
Kaliningrad Region	175.7
Orenburg Region	145.6
Volgograd Region	140.0
Sverdlovsk Region	138.3
Novosibirsk Region	128.1
St. Petersburg	126.3

Cont'd

1	2
Krasnodar Territory	120.3
Leningrad Region	117.9
Lipetsk Region	117.6
Saratov Region	115.7
Voronezh Region	115.6
Tyumen Region (with autonomous regions)	114.0
Belgorod Region	113.6
Chelyabinsk Region	113.6
Moscow Region	111.5
Perm Territory	109.9
Rostov Region	109.0
Samara Region	108.7
Dagestan	107.2
Bashkortostan	106.7
Krasnoyarsk Territory	105.9
Moscow	105.8
Nizhny Novgorod Region	103.3
Kemerovo Region	100.7
Tatarstan	100.2
Stavropol Territory	80.1

Source: On Housing Development in 2014, www.gks.ru.

As seen from *Table 28*, the dynamics of commissioning of housing which was largely above the average nationwide (over 20%) was observed in Chechnya, the Kaliningrad Region, the Orenburg Region, the Volgograd Region, the Sverdlovsk Region, the Novosibirsk Region, St. Petersburg and the Krasnodar Territory. At the same time, in the Kemerovo Region and Tatarstan, growth in the volumes of housing development did not exceed 1%, while in the Stavropol Territory there was a drop in the volumes of commissioning of housing.

The Moscow Region retained its leading position among Russian Regions as regards the volume of commissioning of housing in absolute terms. Moscow which took the 3rd place (over 3.3m sq. meters) in the country after the Moscow Region (about 8.3m sq. meters) and Kuban (4.75 sq. meters) succeeded in that, too. The unit weight of the capital region in the overall volume of housing development in Russia amounted to 14.3% of which the Moscow Region accounted for a larger portion (10.2%), while the share of Moscow proper was equal to 4.1%. It is to be noted that by the value of that index Moscow is followed closely by St. Petersburg and the Tyumen Region,[1] where volumes of commissioning of housing exceeded 3m sq. meters.

On the basis of the results of 2014, substantial growth in housing development should be unambiguously regarded as a great achievement. The case for it is the fact that annual growth rates of housing commissioning doubled as compared to 2013, physical volumes of housing development increased and fulfillment of the *Zhilische* (Housing) federal purpose program in the 2011-2015 was ahead of the schedule.

In the entire period from the beginning of the 2000s, the higher rates of commissioning of housing were observed only in the 2006–2007 period. If in the first two years of the recovery growth after the previous crisis (2011–2012) they finally succeeded in achieving the excess of the absolute value of that index over the volumes of commissioned housing in the 1990 (61.7m sq. meters), while in 2013 they got closer to the values which were the best ones in the

[1] What is meant here is the territory of the Tyumen Region (together with Khanty-Mansiisk-Yugra (the Khanty-Mansiisk Autonomous Region) and the Yamalo-Nenets Autonomous Region); it is to be noted that in the Tyumen Region proper (without autonomous regions) and the Khanty-Mansiisk Autonomous Region in particular the volumes of commissioned housing exceeded 1m sq. meters.

late 1988-1989 Soviet period (71m sq. meters–72m sq. meters), in 2014 they managed to exceed them substantially[1]. Achievement of the target index of the volume of commissioned housing scheduled for 2015 (71m sq. meters) – which is the most important one for the Zhilische (Housing) purpose program – took place 2 years earlier.

However, the above is in no way an automatic guarantee of positive trends being preserved in future, particularly, in a new and more complicated situation of Russia's economic development in general. Due to the above, it is to be reminded that in the period of the previous crisis on the basis of the results of 2008 growth in housing development - which gave way to a drop in subsequent two years - was observed; as a result of that drop the volumes of commissioned housing fell by 9% against the index of 2008.

Further prospects of housing development are not quite clear yet. In terms of the effect of the balance of supply and demand in the market on the volumes of housing, it is important to take into account the fact that with a decrease in households' incomes and growth in the cost of lending for households and developers, in the next two years the latter will have to reduce the volumes of commissioned housing, carry out a more conservative policy and keep building only the most profitable projects preferring within a certain period of time not to initiate new projects. The first evidence of that can be seen today: while volumes of commissioned housing grow as a result of the building boom of the 2011-2012 period, in a two-year time a drop in building activities may result in a large reduction of volumes of commissioned housing.

According to the estimate of the Ministry of the Building Industry of the Russian Federation, in 2015 about 76m sq. meters of housing can be commissioned in Russia, that is, a decrease within the same volume as in 2009 is accepted. However, difficulties experienced by the banking sector may affect the building industry and the existing targets as regards commissioning of housing. M. Men, Minister of the Building Industry, Housing and Public Utilities of the Russian Federation stressed that in case of mortgage-related problems all the building entities would be affected.[2]

Generally, the situation on the mortgage lending market is quite a complicated one. According to the data of the Agency for Housing Mortgage Lending (OAO AHML), in January 2015 the weighted average rate on mortgage loans was equal to 14.2% amounting to 16% on some banking mortgage programs. It became apparent that in 2015 the situation on the market would be getting worse. Everything points to the fact that in the near future the mortgage market, as well as the number of mortgage-issuing banks is going to decrease.[3]

M. Zadornov, Head of the VTB24 does not exclude the prospect of a 2.5 times reduction of the volumes of mortgage issuing[4]. Most experts are unanimous that with preservation of the key rate at the level of the end of last year in 2015 it is logical to expect reduction of 20%-60% in demand on mortgage, though at the official level more optimistic estimates are made.

[1] It is to be noted that such an achievement alone does not mean that housing has become more affordable for most households due to higher differentiation of the existing and desired housing conditions which arise from the difference in households' incomes, as well as changes in the pattern of commissioning of housing. At present, fewer housing premises with large floorspace are being built. So, in the 1988–1989 period in the RSFSR they commissioned over 1.2m apartments, while in 2014 with the record-high volume of housing as regards floorspace less than 1.1m apartments were built.

[2] RealEstate.ru

[3] www.Restko.ru

[4] RealEstate.ru.

According to A. Simanovsky, First Deputy Chairman of the Central Bank of the Russian Federation, mortgage growth will amount to about 15–17%.

According to D. Zemskov, Head of the Strategy and Development company, if the statistics of the 2008-2009 is taken as the reference point, then with an adverse situation prevailing in the economy for the next six months it is likely that 8%-10% of developers will become financially insolvent in case of 5%-7% decrease in the real average price on the primary market; in case of a decrease of 15%-20% in average prices the share of insolvent developers will already amount to 20%–25%.

According to the estimate of experts of the Metrium Group company[1]: "The official statistics of the Rosreestr reflects quite precisely the situation on the real property market. New housing development are in great demand and the number of EPA[2] late [2014 – *Editor.*] in the year was increasing, while the growth rates of the market of mortgage lending and the secondary housing market slowed down a great deal. However, by spring 2015 buyers' activities are expected to be less active and then all the three indices will get adjusted against one another and start to go down smoothly. It is difficult to say now how long that recession continues. It depends much whether the Government is going to take any measures to rescue the mortgage market. If buyers have an opportunity to take more or less affordable loans for buying housing, the situation on the entire real property market will be quite a good one".

Among anti-crisis measures approved by the Russian government as early as 2015, there is the subsidizing of interest rates on mortgage loans extended by banks so that to maintain them at the level of 13%. However, due to both a delay in implementation until relevant amendments to the budget are approved and the expected volume of compensation (Rb 20bn is to be paid out of the budget) which is incomparable with volumes of lending in the previous years the effect of the above measure for the housing market is rather questionable.

It is expected that allocation of Rb 20bn will permit banks to extend privileged loans for the total amount of Rb 400bn at the rate of 13% per annum. It is to be noted that the criteria of a mortgage issuing program are to be worked out yet.

According to the Ministry of Economic Development of the Russian Federation, it is necessary to assist those borrowers who buy their only housing (or housing with a larger floorspace in case of birth of two or more children). It is to be noted that such housing should belong to the "economy" class. The maximum amount of the loan should be limited depending on the location of the housing which is to be bought.

The Ministry of Economic Development of the Russian Federation proposes to use similar criteria in supporting borrowers who took mortgage in foreign currency. According to the opinion of the above Ministry, support should be rendered to borrowers who own the only housing of the "economy" class. In addition to the above, the criteria of support of such borrowers should include the following: existence of children and dependents, incomplete family composition, loss of a job by the borrower and a dramatic drop in the borrower's income.[3]

It is to be reminded that to solve the problems related to the mortgages in foreign currency, the Central Bank of the Russian Federation advised banks to convert the debt at the exchange rate which prevailed as of 1 October 2014 which value was much below the current exchange

[1] http://www.metrium.ru/news/detail/po-itogam-2014-goda-rost-kolichestva-sdelok-na-pervichnom-rynke-moskvy-sostavil-131/

[2] EPA is equity participation agreements – *Editor*.

[3] Not Everyone Can Expect to Take a Mortgage at 13%. 04.02.2015, Ъ-On-line, http://finance.rambler.ru/news/banks/157612851.html.

rate of the US dollar and euro. However, so far, banks are not in a hurry to follow the advice of the Central Bank of the Russian Federation, while in the State Duma the idea of adoption of a special law on that issue is being discussed.[1]

It is to be added that, lowering by the Central Bank of the Russian Federation of the key rate may have a more important role. In Q1 2015, the Central Bank of the Russian Federation did it once, however the extent of that reduction was incomparable with the actions taken by the regulator of the Russian financial sector last December.

6.5.4. Pricing Situation on the Residential Property Market

Due to stagnation of the Russian economy as early as 2013, the housing market stabilized in most cities, while the effect of the above factors early and late in 2014 resulted in substantial oppositely directed dynamics of prices and activities on housing markets of different cities.

The main indices of the dynamics of prices on the secondary housing market of Russian cities are shown in *Table 29*. The data is presented by real-estate market analysts who collect, verify and process the data on the basis of unified methods recommended by the Russian Guild of Realtors (RGR).[2]

The sample includes 39 cities and one region (the Moscow Region in respect of which averaged readings on 85-70 population centers are presented), including 25 cities which are centers of constituent entities of the Russian Federation with the aggregate number of the population over 43.5m people.[3]

If that index is used as a criteria, presented in the sample are the following:

- Moscow – about 12m people;
- The Moscow Region (with the aggregate urban population of 5.8m) and St. Petersburg (over 5.1m people) – aggregately 10.9m people;

[1] Subsidizing of Mortgages will Push Interest Rates on Loans Down to 13% Per Annum. 03.02.2015, TASS, http://finance.rambler.ru/news/banks/157564355.html.

[2] All the calculations were carried out by the author on the basis of the monthly data on the average unit price of housing supply and the volume of supply in Russian cities on the secondary and primary markets prepared in accordance with the unified methods by real-estate market analysts S.G. Sternik, OOO «Sternik′s Consulting», O.Vilitskaya, «MIEL» (All – Moscow and the Moscow Region), M.A. Bent, GK «Real-Property Bulletin» (St. Petersburg and Krasnodar), M.A. Horkov and G.T. Tukhashvili, RITs UPN (Yekaterinburg), E.G. Sosnitsky and A.A. Chumakov, «Titul» (Rostov-on-Don), E.A. Yermolayeva, K. Salmina, N. Ershova, «RID Analitics» (Novosibirsk, Kemerovo, Barnaul and Krasnoyarsk), S.G. Molodkina, «UPConsAllt», E.S. Ershova, K. Brednikov, FRK «Etazhi» (All – Tyumen), E.D. Yepishina, GK «Kamskaya Dolina» (Perm), V.N. Kaminsky, E.I. Pesnya, AN «TITAN» (Tver), A. Yu. Chernov, «Ilekta» (Stavropol), E.R. Gamova and T.N. Kuklova, «Centr Nedvizhimosti» (Ulyanovsk), A.V. Trushnikov, «B.I.N.-Expert» (Sterlitamak, Ishimbai and Salavat), A.A. Moiseyeva, FSK «ETAZHI» (Tobolsk), G. Yu. Eidlina, «Realty» (Shakhty), S.V. Esikov (Vladimir, Irkutsk, Orenburg, Smolensk, Togliatti and Cheboksary), A.I. Moskalev, «InvestOtsenka» (Voronezh), R.R. Khabibrakhmanov, TATRE.ru (Kazan), R.M. Kazakov, «Yarmarka» Publishing House, M.Yu. Savina, V.V. Skvortsov, Press Agency (All - Ryazan) and A.L. Patrikeyev, SOFZhI (Samara and cities of the Samara Region).

[3] As compared to the sample which was used for the analysis of the pricing situation on the secondary market in the previous annual review (see G. Malginov and G. Sternik. Prices on the Real-Estate Market // Russian Economy in 2014. Trends and Prospects (Issue 35). M., The IEP. 2014, pp. 481–485), it does not include Nizhny Novgorod, Yaroslavl, Veliky Novgorod, Izhevsk and Chelyabinsk, but it is supplemented with a small group of cities (district centers) of the Samara Region (Novokuibyshevsk, Kinel, Syzran, Otradny, Zhigulevsk, Chapaevsk and Oktyabrsk).

- 9 cities with the population of over 1m people apart from two capitals (Novosibirsk, Yekaterinburg, Kazan, Samara, Omsk, Rostov-on-Don, Krasnoyarsk, Perm and Voronezh) – aggregately 10.6m people;
- 10 cities with the population from 500,000 people to 1m people (Krasnodar, Togliatti, Barnaul, Tyumen, Ulyanovsk, Irkutsk, Orenburg, Kemerovo, Ryazan and Kirov) – aggregately over 6.3m people;
- 8 cities with the population from 200,000 to 500,000 people (Cheboksary, Stavropol, Tver, Vladimir, Surgut, Smolensk, Sterlitamak and Shakhty) – aggregately over 2.8m people;
- 4 cities with the population from 100,000 to 200,000 people (Syzran, Salavat, Novokuibyshevsk and Tobolsk) – aggregately over 0.6m people;
- 6 cities with the population of less than 100,000 people (Chapaevsk, Zhigulevsk, Kinel, Otradny and Oktyabrsk) – aggregately, over 0.3m people.

Table 29

Prices on the secondary housing market in Russian cities in the 2012–2014 period

City (Region)	Average unit price of supply, thousand Rb/ sq. meters			Price index in December 2013 against December 2012		Price index in December 2014 against December 2013	
	December 2012	December 2013	December 2014	nominal	real (IGS)	nominal	real (IGS)
1	2	3	4	5	6	7	8
Moscow	203.0/195.5*	203.3	226.6	1.0015/1.04*	0.940/0.976*	1.115	1.000
St. Petersburg	95.0	96.0	103.0	1.011	0.949	1.073	0.963
Moscow Region	84.3	88.2	93.4	1.046	0.982	1.059	0.951
Surgut (Tyumen Region)	85.6	87.0	78.5	1.016	0.954	0.902	0.810
Yekaterinburg	70.1	72.8	76.2	1.039	0.975	1.047	0.940
Kazan	61.2	63.7	66.6	1.041	0.977	1.046	0.939
Rostov-on-Don	62.8	63.0	66.1	1.003	0.942	1.049	0.942
Novosibirsk	59.1	61.4	65.6	1.039	0.976	1.068	0.959
Samara	55.8	58.5	64.6	1.048	0.984	1.104	0.991
Tyumen	59.4	65.7	63.8	1.106	1.039	0.971	0.872
Krasnoyarsk	59.0	61.0	61.4	1.034	0.971	1.007	0.904
Irkutsk	57.3	59.7	60.9	1.042	0.978	1.020	0.916
Krasnodar	48.2	52.0	56.4	1.079	1.013	1.085	0.974
Vladimir	51.3	52.7	55.1	1.027	0.965	1.046	0.939
Tver	57.8	56.1	54.8	0.971	0.911	0.977	0.877
Kemerovo	50.2	52.1	53.5	1.038	0.975	1.027	0.922
Perm	53.4	54.7	52.6	1.024	0.962	0.962	0.863
Voronezh	48.1	48.8	52.0	1.015	0.953	1.066	0.957
Smolensk	46.3	48.1	51.3	1.039	0.975	1.067	0.957
Orenburg	49.6	51.0	50.9	1.028	0.965	0.998	0.896
Kirov	43.3	48.5	50.9	1.120	1.052	1.049	0.942
Cheboksary	48.1	48.7	50.8	1.012	0.951	1.043	0.936
Barnaul	48.1	48.3	49.8	1.004	0.943	1.031	0.926
Tobolsk (Tyumen Region)	46.1	51.1	49.2	1.108	1.041	0.963	0.864
Omsk	44.7	47.4	48.7	1.060	0.996	1.027	0.922
Togliatti (Samara Region)	43.5	45.7	48.3	1.051	0.986	1.057	0.949
Ryazan	46.2	45.8	48.0	0.991	0.931	1.048	0.941
Novokuibyshevsk (Samara Region)	n/a	41.5	46.6			1.123	1.008
Sterlitamak (Bashkortostan)	40.3	43.8	44.0	1.087	1.021	1.005	0.902
Ulyanovsk	39.9	42.3	43.5	1.060	0.995	1.028	0.923

Cont'd

1	2	3	4	5	6	7	8
Kinel (Samara Region)	н/д	29.8	40.0			1.342	1.205
Stavropol	34.9	35.5	39.0	1.017	0.955	1.099	0.986
Syzran (Samara Region)	n/a	31.1	38.8			1.248	1.120
Ishimbai (Bashkortostan)	33.4	38.4	38.4	1.150	1.079	1.000	0.898
Salavat (Bashkortostan)	39.3	39.4	38.3	1.003	0.941	0.972	0.873
Otradny (Samara Region)	n/a	28.7	34.7			1.209	1.085
Zhigulevsk (Samara Region)	n/a	32.6	34.3			1.052	0.944
Shakhty (Rostov Region)	30.3	30.9	34.2	1.020	0.958	1.107	0.994
Chapaevsk (Samara Region)	n/a	23.1	28.9			1.251	1.123
Oktyabrsk (Samara Region)	n/a	21.6	20.7			0.958	0.860

* – in numerator – Moscow (within the same borders), in denominator – Greater Moscow.

As regards the level of prices achieved in December 2014, Moscow (Rb 226,600 per a sq. meter) surpassed by more than 100% St. Petersburg (Rb 103,000 per a sq. meter) which follows it. The group with prices from Rb 95,000 to Rb 60,000 per a sq. meter includes the Moscow Region and 9 cities (Surgut, Yekaterinburg, Kazan, Rostov-on-Don, Novosibirsk, Samara, Tyumen, Krasnoyarsk and Irkutsk). The group with average unit prices from Rb 60,000 to Rb 50,000 per a sq. meter includes 10 cities, while the group with prices from Rb 30,000 to Rb 50,000 per a sq. meter, 16 cities. It is to be noted that only in two cities average prices on the secondary market were below Rb 30,000 per sq. meter.

Within a year, there was a periodic stability on the secondary housing market of cities included in the sample. By November, prices in Moscow, St. Petersburg and Krasnodar rose by 6.5%, 6.1% and 7.9%, respectively.

However, after a surge of prices in December when as a result of mistrust on the part of households to the banking sector there was a speculative demand on housing and mortgages, the annual growth in prices was generally as follows: Moscow – 11.5% (on the basis of the headline inflation), Shakhty (the Rostov Region) – 10.7%, Samara – 10.4%, Stavropol – 9.9%, Krasnodar – 8.5% and St. Petersburg – 7.3%. The annual growth in prices is in the range of 5% -7% in Novosibirsk (6.8%), Smolensk (6.7%), Voronezh (6,6%), the Moscow Region (5.9%), Togliatti (5.7%) and Zhigulevsk (the Samara Region) (5.2%).[1]

At the same time, on the basis of the results of the year there was a decrease in prices on the secondary housing market in individual cities of the sample: Surgut– a decrease of 9.8%, Oktyabrsk (Samara Region) – 4.2%, Perm – 3.8%, Tobolsk – 3.7%, Tyumen – 2.9%, Salavat – 2,8% and Tver –2.3%). It is to be noted that even cities where prices kept falling during three-two quarters of 2014 (Tyumen, Tobolsk and Tver), there was growth of 1%-2% in prices in November-December.

[1] A group of small cities (regional centers) (Kinel, Chapaevsk, Syzran, Otradny and Novokuibyshevsk) stands apart from others. Due to a limited volume of housing supply in that group, there is high volatility of monthly average prices, while on the basis of the results of 2014 growth in housing prices happened to be higher than the level of the rate of inflation on the consumer market. Among those cities only Syzran and Novokuibyshevsk with the population of over 100,000 persons are fairly developed industrial cities, though they can hardly be compared, for example, with Togliatti.

In a larger portion of the sample, the dynamics of nominal prices on housing in 2014 was higher than a year before. It is to be noted that Ryazan and Tver stand out as compared to other cities. If in 2014 in Ryazan growth in prices (4.8%) succeeded a small drop in prices in 2013, in Tver a drop in prices was observed for two years running though at a smaller rate. In 2014, in a larger group of cities (Surgut, Tyumen, Krasnoyarsk, Irkutsk, Kemerovo, Perm, Orenburg, Kirov, Tobolsk, Omsk, Sterlitamak, Ulyanovsk, Ishimbai and Salavat) situated mainly in Siberia and Urals quite an opposite dynamics of slowdown of growth rates in prices and a decrease in prices was observed.

At the same time, in most cities of the sample a drop in real price on housing (with the inflation rate on the consumer market excluded) took place (IGS index).[1] An exception is only Moscow where prices remained at the previous level and small cities of the Samara Region (Kinel, Chapaevsk, Syzran, Otradny and Novokuibyshevsk) where growth in real cost of housing from 1% to over 20% is justified by a high volatility of prices. On the opposite side, there are Ishimbai, Orenburg, Tver, Salavat, Tyumen, Tobolsk, Perm, Oktyabrsk and Surgut where real housing prices fell from 11% to 19%. As compared to 2013, indices of the dynamics of the real cost of housing (IGS index) rose in Moscow, St. Petersburg, Samara, Voronezh, Ryazan, Stavropol and Shakhty. As regards Rostov-on-Don, the values of the IGS index in 2014 and 2013 were the same. However, they did not enter anywhere the area of positive values.

The data on prices on the primary market was collected on 13 cities and the Moscow Region (*Table 30*).

Table 30

Prices on the primary market of Russian cities in the 2012–2014 period

City (Region)	Average unit price of supply, thousand Rb per sq. meter			Price index in December 2013 against December 2012		Price index in December 2014 against December 2013	
	December 2012	December 2013	December 2014	nominal	real (IGS)	nominal	real (IGS)
Moscow	230.3/205.5*	215.5	216.0	0.936/1.049*	0.879/0.985*	1.002	0,900
St. Petersburg	85.0	90.5	96.5	1.065	1.000	1.066	0,957
Moscow Region	70.7	76.5	81.0	1.082	1.016	1.059	0,950
Yekaterinburg	57.5	60.8	65.5	1.057	0.993	1.077	0,967
Kazan	50.9	49.4	57.1	0.971	0.911	1.156	1,038
Samara	48.5	49.4	57.0	1.019	0.956	1.154	1,036
Tyumen	50.4	55.9	57.0	1.109	0.996	1.020	0,915
Novosibirsk	51.3	51.7	54.6	1.008	0.946	1.056	0,948
Perm	48.0	47.1	50.8	0.981	0.921	1.079	0,968
Voronezh	43.2	43.9	46.5	1.016	0.954	1.059	0,951
Krasnodar	40.2	42.8	43.9	1.065	1.000	1.026	0,921
Sterlitamak (Bashkortostan)	40.3	43.8	42.1	1.087	1.021	0.961	0,863
Ryazan	36.2	37.0	40.5	1.022	0.960	1.095	0,983
Stavropol	31.2	30.4	34.5	0.974	0.915	1.135	1,019

* – in numerator – Moscow (within the same borders), in denominator – Greater Moscow.

On the primary housing market of cities of the sample, a relative stability is observed; it is to be noted that fluctuations among average unit prices were caused by changes in the pattern of supply depending on the class of projects offered and the stage of their development, rather than upswings of demand.

[1] Calculation of the IGS index is carried out on the basis of the following formula: IGS = Iцр/Iир, where Iцр – the index of price on housing in rubles and Iир is the index of consumer prices.

As regards growth in prices on the primary housing market, the leaders were Kazan (15.6%), Samara (15.4%) and Stavropol (13.5%) where growth in real cost (with adjustment to the rate of inflation of 11.4%) of housing (IGS index) took place. The larger group of cities where the range of growth in prices on the basis of the results of the year amounted to 5%-10% included Ryazan (9.5%), Perm (7.9%), Yekaterinburg (7.7%), St. Petersburg (6.6%) and Voronezh (5.9%). A similar result (growth of 5.9%) was observed in the Moscow Region, while in Moscow prices on the primary market did not virtually change. In other cities of the sample, insignificant growth in prices took place, while in Sterlitamak prices even fell by 3.9%.

In 2014, as compared to 2013 progressive dynamics of nominal prices took place in a larger portion of the sample (Yekaterinburg, Kazan, Samara, Novosibirsk, Perm, Voronezh, Ryazan and Stavropol). In five cities from those mentioned above (Kazan, Samara, Novosibirsk, Perm and Stavropol), indices of the dynamics of the real cost of housing (IGS index) happened to be higher, too; it is to be noted that in Kazan, Samara and Stavropol the value of that index entered the area of positive values.

The data of *Table 31* show that in the past three years the average unit price of housing on the secondary market was everywhere ahead of that on the primary market.

Table 31

Correlation of prices on the secondary and primary housing markets in Russian cities in the 2012–2014 period

City (Region)	December 2012			December 2013			December 2014		
	Average unit price of supply		(2)/(1),%	Average unit price of supply		(2)/(1),%	Average unit price of supply		(2)/(1),%
	On the secondary market, thousand Rb/sq. meters (2)	On the primary market. Thousand Rb /sq. meter (1)		On the secondary market, thousand Rb/sq. (2)	On the primary market, thousand Rb/ sq. meter (1)		On the secondary market, thousand Rb/sq. (2)	On the primary market, thousand Rb/ sq. meter (1)	
Moscow	203.0/ 195.5*	230.3/ 205.5*	88.1/ 95.1*	203.3	215.5	94.3	226,6	216,0	104,9
St. Petersburg	95.0	85.0	111.8	96.0	90.5	106.1	103,0	96,5	106,7
Moscow Region	84.3	70.7	119.2	88.2	76.5	115.3	93,4	81,0	115,3
Yekaterinburg	70.1	57.5	121.9	72.8	60.8	119.7	76,2	65,5	116,3
Kazan	61.2	50.9	120.2	63.7	49.4	128.9	66,6	57,1	116,6
Samara	55.8	48.5	115.1	58.5	49.4	118.4	64,6	57,0	113,3
Tyumen	59.4	50.4	117.9	65.7	55.9	117.5	63,8	57,0	111,9
Novosibirsk	59.1	51.3	115.2	61.4	51.7	118.8	65,6	54,6	120,1
Perm	53.4	48.0	111.3	54.7	47.1	116.1	52,6	50,8	103,5
Voronezh	48.1	43.2	111.3	48.8	43.9	111.2	52,0	46,5	111,8
Krasnodar	48.2	40.2	119.9	52.0	42.8	121.5	56,4	43,9	128,5
Sterlitamak (Bashkortostan)	40.3	40.3	100.0	43.8	43.8	100.0	44,0	42,1	104,5
Ryazan	46.2	36.2	127.6	45.8	37.0	123.8	48,0	40,5	118,5
Stavropol	34.9	31.2	111.9	35.5	30.4	116.8	39,0	34,5	113,0

* – in numerator – Moscow (within the same borders), in denominator – Greater Moscow.

Earlier, an important exception was the capital of Russia[1]. However, after joining to it of a portion of the territory of the Moscow Region the situation changed and in December 2014 prices on the secondary market in Moscow started to exceed those of the primary market (4.9%). Together with Perm and Sterlitamak, Moscow formed a group of cities where such a difference in prices amounted maximum to 5%. In a larger portion of the sample (the Moscow

[1] Another exception is Sterlitamak where late in 2012 and 2013 prices on the secondary and primary markets were the same.

Region and 9 cities), the excess of prices of the secondary market was in the range of 11% to 20%, while in Krasnodar it amounted to the maximum value of 28.5%.

In the 2012–2014 period, in Krasnodar and Novosibirsk there was steady growth in the value of excess of prices on the secondary market. On the contrary, in Yekaterinburg, Tyumen and Ryazan, the gap between prices on the secondary and primary markets was narrowing, while in Voronezh it was quite a stable one. In other cities of the sample, there were mixed changes in it from year to year.

6.5.5. The Situation on the Real Property Market of Specific Cities and the Role of Mortgage Support

Early in 2014, the volumes of apartments for sale were quite stable, but due to exhaustion of the supply in a situation of a surge in real-estate activities in spring the supply decreased by summer, while in the last few months of 2014 it was falling as a result of both peak sales and removal by sellers of apartments from sale. A situation typical of many cities was observed in St. Petersburg (*Fig. 13*).

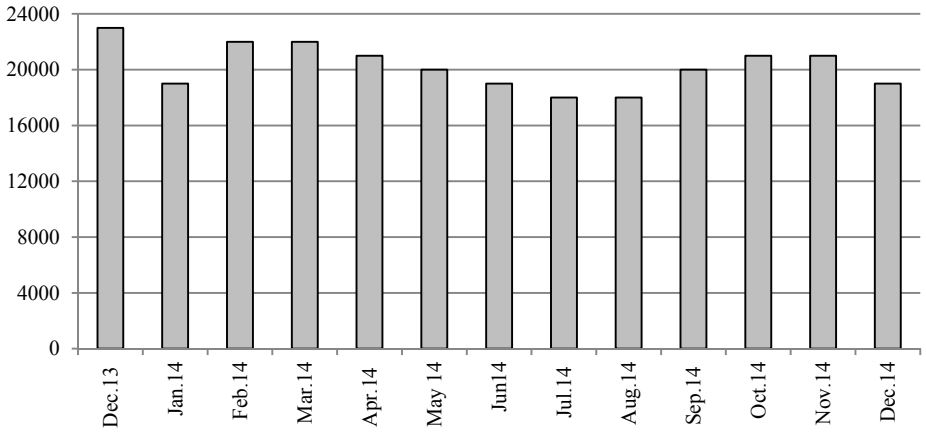


Fig. 13. Monthly dynamics of the volume of housing supply in St. Petersburg

According to the data of the Center for Research and Analysis of the Bulletin Nedvizhimosti Group of Companies, in St Petersburg prices on the secondary market kept growing during 2014. The main specifics of the second year of stagnation for the Russian housing market consisted in the fact that sudden revivals were followed by symmetrical slumps.

Most market participants and analysts are unanimous that the main factor behind growth in demand late in 2014 was the same as six months ago. Investments in housing were regarded as opportunity to save the money in a situation of another wave of depreciation of the national currency.

"No feverish demand. Just some activities by people who were late to convert their ruble savings into euro and US dollars", S. Bobashev, Chief Analyst of the Bulletin Nedvizhimosti Group of Companies said.

"Substantial depreciation of the ruble exchange rate against foreign currencies makes Russians invest money in housing. That is why at present there is a surge in demand on the primary real-estate market", P. Yakovleva, Director of the Residential Housing Department of the NAI Becar states.

A correspondent of the NGS NEDVIZHIMOST reported from Novosibirsk that throughout 2014 behavior of real-estate prices was not a typical one: they grew in those months when they normally fell and vice versa. In particular, housing prices rose in February-March at the backdrop of the Olympic Games and developments in Ukraine. There was no appreciation of housing prices in autumn, but the collapse of the ruble in December and dramatic growth in mortgage rates heated up the real-estate market which was, figuratively saying, almost in the state of winter dormancy.

In December 2014, the number of applications for buying apartments rose 1.5 times over as compared to November; it is to be noted that any sort of housing from rooms to luxurious apartments was in high demand. Both residents of Novosibirsk and non-residents were buying apartments. For example, nationals of Kazakhstan who were accustomed to US dollar prices on housing were buying it for cash because after depreciation of the ruble it was advantageous to them. In the last few days of December, growth in the economy-class housing increased by 150%, while in the business-class segment, by 100%. Feverish demand on real property prompted a number of developers to raise prices, while some of them even halted sales. Apartment owners raised prices and refused to bargain. Some owners even dissolved agreements with real-estate agencies despite the pledge made. In a situation of growing demand, sellers had a good grip of the situation. Buyers did not even think of bargaining.

According to E. Nekrasova, General Director of *Must Have*, an elite real property company, in Moscow price volatility in that segment is related to shifts in the pattern of consumption, that is, a partial substitution on the part of wealthy domestic buyers of foreign demand.

The number of European and US buyers decreased on account of employees of the financial (primarily banking) sector and experts engaged in supplies of high-tech equipment for the oil and gas industry. Demand was underpinned by buyers whose high income was determined by those people's competence which is in a particular demand in the new social and economic realities of 2014. They included experts engaged in development of the national system of payment cards (NSPC) and managers of large agricultural holdings and companies of the defense industry complex. For different reasons, they were at an advantage as a result of mutual sanctions imposed. Also, six months prior to the developments of February-March 2014 the number of buyers from Ukraine started to grow substantially.

Despite a drop in growth rates of households' income, in 2014 in Moscow in general as a result of a surge in market activities in spring and autumn 162,000 purchase and sale real-estate transactions on the secondary market were registered; according to the reporting of the Rosreestr from 2013, the above transactions also included swap transactions (a 23.1% growth), 43,200 mortgage contracts (a 22.4% growth) and 24,000 equity construction agreements (a 12.7% growth). It is to be noted that the dynamics of the number of registered equity construction agreements is not quite correct due to a time lag in provision of reporting by relevant companies.

According to the Moskomstroinvest,[1] the list of scrupulous developers made up on the basis of the reporting for Q4 2013 included 139 Moscow-based building companies which attracted individuals' funds for equity construction, while in Q3 2013 such reporting was provided by 131 companies. It is to be noted that in 2011 the number of such developers was equal only to 20. According to experts' estimates, in Moscow the share of registered equity

[1] Restko.ru

construction agreements in the total number of the signed ones amounted to 75%–80%, while as regards other cities there is a high dispersion in implementation of such procedures.

According to the data of the Rosreestr, in January-November 2014 in the Moscow Region the number of registered equity construction agreements rose by one-third. More intense consumer activities on the housing market were observed in the Moscow Region in December – as compared to the previous month growth in the registered equity construction agreements and mortgage agreements amounted to 92.7% and 27.8%, respectively. The total number of registered titles to housing increased by two-thirds against the index of November.

On the basis of the results of 2014, the unit weight of mortgage-related transactions on the primary market of the capital region amounted to nearly 50%, while as regards projects which were in particular demand, to 80%. According to experts' calculations, one-room and two-room apartments account for the main share of all the mortgage transactions. Due to a limited purchasing power, 75% of buyers who take mortgage loans buy apartments in New Moscow and in the vicinity of Moscow.

At the same time, despite the impact of international developments and general economic situation in the country the volume of mortgage lending in Russia kept growing as in the previous years though at a declining rate.

Abnormal nature of the dynamics of mortgage lending was registered by experts as early as the beginning of 2014. From February, sudden growth in applications for mortgage loans began. A portion of households which had savings used them for purchasing housing or invested in construction. It is to be noted that many buyers who used mortgage did not have enough funds. The above situation may result in aggravation of the problem related to servicing of extended loans.

In 2014, in the Russian Federation the volume of the overdue debt on mortgages rose by 19%. If in H1 stabilization of the level of the overdue debt was observed, from the beginning of Q4 the situation started to change dramatically: in September the value of that index rose by 0.2% as compared to the previous month, while on the basis of the results of October and December by 4.5% and over 5%, respectively. There was dramatic aggravation of problems related to servicing of debts of borrowers who took loans in foreign currency.

In the 2011–2013 period, the level of interest rates on mortgage loans in rubles fluctuated at the level of about 12%–13%, but after growth in the key interest rate of the Central Bank of the Russian Federation it rose in a short period of time to 15%–17% and more. Shortly after that, two large Russian banks with state participation announced that they were going to raise interest rates on mortgages. The Sberbank raised the rates on baseline mortgage products on average by 2 p.p.: as regards customers "from the street" applications for loans for purchasing of "turn-key" apartments will be met at the rate of 14.5%-15.5%, while those for purchasing of housing which is under construction, at the rate of 15%–16%. The VTB 24 raised interest rates both on new loan applications and those which were submitted earlier. Now the VTB 24 set a single rate of 14.95%. The above banks promised not to review interest rates on loans which were extended earlier. Private banks raised interest rates even further and exceeded the level of 17%.

According to M. Litinetskaya, General Director of the Metrium Group, all those developments resulted in substantial growth in the number of purchase and sale transactions late in 2014 because households fearing depreciation of the ruble actively invested funds in purchasing of housing including that with use of mortgages.

According to the OAO AHML, the "psychological level" in terms of acceptability of lending for mortgage borrowers is the rate of 15% per annum. However, in a situation of depreciation of the ruble demand on housing and mortgages is heated by willingness of a portion of households to invest available funds in that asset. Due to the above, there is quite the opposite trend now: feverish demand is observed in state-run banks which raised interest rates.

6.5.6. Prospects of Development of the Housing Market

As applied to modeling of the residential housing market, all the macroeconomic and sectorial indices were calculated with taking into account the actual level in Moscow in the base 2012 year and the regional forecast for subsequent years. In respect of other macroeconomic and market initial data (stratification of the population by the level of income, the share of demand depending on the correlation between demand and supply, cash volume of the supply of mortgage loans and other) preservation thereof at the level of the base 2012 year was acceptable.

Calculations were carried out with utilization of a math model of functioning of the local housing market[1]. The outputs of calculations are presented in *Fig. 14 a*) and *b*).[2]

So, in 2014 the stability of the Moscow housing market was expected to continue and, generally, it was as such situation, except for higher actual data as regards the index of the volume of absorption and prices on the secondary market in December.

In the 2015–2016 period, recession on the Moscow residential property market is expected, that is, slowdown of growth rates of demand, housing development, commissioning of new housing, supply of housing, absorption of housing and prices.

So, according to the forecast in 2015 on the primary market demand will decrease by 15%–20% and happen to be below the level of supply; as a result of that, the volume of absorption of housing on the market will fall by 10% and prices will be going down (in 2015 – an insignificant decrease, while in 2016 – a drop of 3%–4%). In 2016, on the secondary market demand will fall below the level of supply, the volume of absorption is expected to start shrinking already in 2015 due to the limited volume of supply, while prices fall by 5%-6% in 2016.

Experts' forecasts are close to those calculated on the basis of the model.

I. Shaikhutdinov, Chairman of the Sectorial Branch of the Delovaya Rossia Nationwide Non-Profit Organization and General Director of the Institute of Financial Development of Business believes that in 2015 with taking into account the crisis phenomena in the economy many companies will fix losses and due to that the access to bank funding is to be limited for them. Such a situation will have a negative impact on growth rates of volumes of housing development.

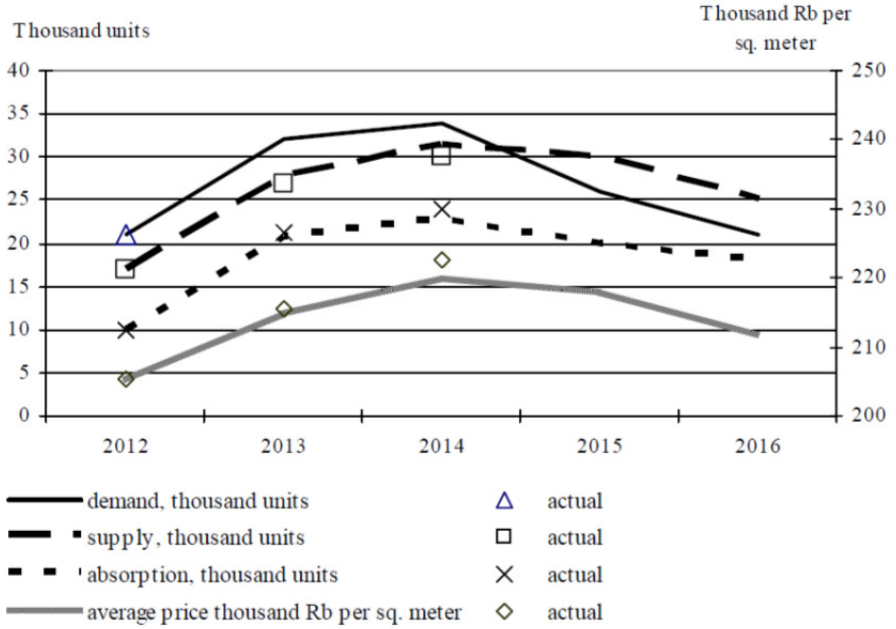
I. Husainov, Director of FRK Etazhi (Tyumen) confirmed that in 2015 the entire real-estate market is in the area of a potential risk. However, he is confident that no serious consequences will follow. Regional authorities have sufficient potential to prevent repetition of the situation with deceived shared construction participants, while risks faced by individual

[1] G.M. Sternik, S.G. Sternik and A.V. Sviridov. The Methods of Forecasting of the Russian Real Property Market. Part 4. Methods of Mid-Term Forecasting of the Local Real Property Market – Mechanization of Construction – 2014, No. 4, pp. 60–62.

[2] In *Fig.14* the "absorption" curve shows the number of purchase and sale transactions and swap transactions on the secondary market and the total floorspace of apartments which left the primary market. On the secondary market, the unit of measurement of the volume of absorption is the number of apartments, while on the primary market, it is the number of sq. meters.

developers may be handled by means of provision of target support or buy-out of apartments at a dumping price.

a) The Primary Market



b) The Secondary Market

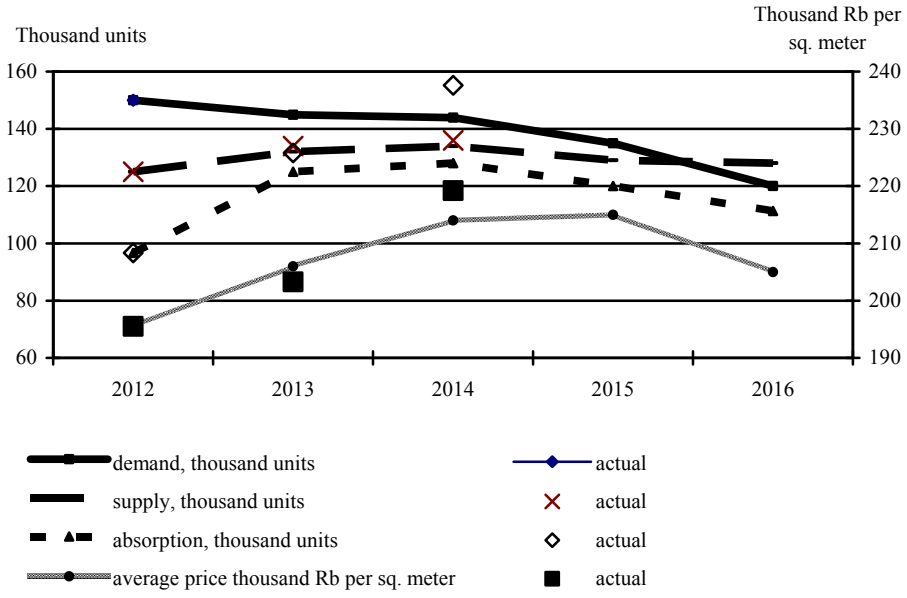


Fig. 14. The forecast of the actual dynamics of development of the residential housing market in Moscow

Acute economic difficulties naturally result in a drop in demand and in that situation it is crucially important whether developers are able to reduce prices. Taking into account the situation of the last few business days of 2014 when mass scale purchases took place the expert expressed confidence that prices would be reduced by developers which permanently needed funds and in addition to that it is to be noted that clients "from the future" who would not come later dominated among customers.[1]

D. Kolokolnikov, Chairman of the Board of Directors of the RRG Group of Companies believes that in Q1 2015 demand on leasing of commercial real estate is to go down. A substantial share of tenant-companies may halt or revise their plans as regards development of their business, while a number of companies is going to close down altogether which situation naturally results in further drop in demand on high-quality office and shopping premises, and warehouses. In 2015, new projects can hardly be expected. Due to high economic uncertainties, it is too risky to enter the market with any large-scale plans. Also, appreciation of the key interest rate of the Central Bank of the Russian Federation will have a negative effect on developers: due to growth in the cost of loans, the cost of implementation of projects will increase. Taking into account the existing high rates on loans for business, most developers will be operating at a loss.[2]

The preliminary estimates of the Standart & Poor's[3] show that in the 2014–2015 period real housing prices (consumer prices adjusted for the rate of inflation) are going to fall in a situation of weakening of the economy and slowdown of growth rates of households' income. The real average nationwide price of 1 sq. meter of housing will be decreasing at the rate of about 3% a year, while the nominal price is to appreciate within the same limits.

Generally, the analysis shows that on the basis of the outputs of 2014 there is no need in revising the six-month old forecast either downward or upward.

6.6. North Caucasus: The New Management Model and Old Problems

In the North Caucasus, one of the most 'problematic' parts of the Russian Federation, the year 2014 was very eventful both in political and socio-economic terms, such events playing a significant part in the life of the region. The management structures of the North Caucasian Federal District (NCFD) were transformed and its priorities clarified. The beginning of the economic crisis has determined new challenges for the regional authorities and once again raised the question: will the worsening economic situation result in degradation or be a factor motivating a search for new opportunities? The Olympic Games had offered hopes (which were subsequently quenched by the terrorist act in Grozny) that the power model would ultimately be able to resolve the terrorism problem in the North Caucasus. Consideration of all these factors is essential to an understanding, not only of the current situation, but also of the prospects for its development in the region.

Let us consider some aspects of how the situation in the North Caucasus developed in 2014, which, in our opinion, are the most important in relation to forming the federal policy for this region. These are the changes in the system of federal management structures responsible for NCFD, the dynamics of the terrorist threats, the situation with financing the resettle-

[1] http://franch.etagi.com/news/77-intervyu-s-ildarom-husainovym-direktorom-kompanii-etazhi-na-vserossiyskom-franchayzingovom.
[2] http://rrg.ru/news/13406#.VLPunpfk8U8.facebook.
[3] standardandpoors.com.

ment of people from the conflict zones and the payment of compensation for appropriated lands in the North Caucasian regions.

6.6.1. Changes in the management structures and priorities

Discussions over the future of the North Caucasian Federal District intensified at the very beginning of 2014. Will it be liquidated after the Sochi Olympics? Will it be amalgamated with the Southern Federal District? The answer to these questions was given in mid-May. Contrary to widespread predictions, no aggregation of the management structures occurred. By contrast, in accordance with the model already tried in the Far East and in Crimea, in addition to the Office of the President's Special Envoy, there emerged the Ministry for Development of the North Caucasus Regions. Moreover, Alexander Khloponin, who resigned from the office of President's Envoy in the NCFD but remained the Deputy Prime Minister of the Russian Government, also retained certain control functions in respect of the North Caucasus. Management transformations also affected some North Caucasian development institutions: the North Caucasus Development Corporation (NCDC) and the North Caucasus Resorts (NCR) saw such management changes.

In parallel with these changes there appeared the first signs evidencing that the priorities of the economic policy for the North Caucasus would be adjusted. A shift away from reliance on mega-projects as the strategic basis of positive changes in the region was outlined. Instead of the continuous expansion of tourist clusters, there was an emphasis on the clear determination of their priorities. At the moment there are three clusters: Arkhyz, in the Karachay-Cherkess Republic (KCR), where the first stage has already been commissioned; Elbrus-Bazangi, representing expansion of the existing resort centre of Prielbrusie in Kabardino-Balkaria; and the obviously highly 'political' resort of Veduchi in Chechnya. It is also planned to introduce significant changes to the activities of the NCDC, which has been much-criticised lately – its emphases will be shifted from global tasks to projects relating to small and medium-sized business.[1] The Minister for Development of the North Caucasus Regions clearly defined his ideology on this matter – there will be no phantom projects in the Caucasus.[2]

So, what are these changes in the federal policy of the region associated with? Several factors can be highlighted here.

Firstly, the initial five years of existence of the NCFD showed that the expected investment breakthrough had not occurred. The large-scale state support allowed the implementation of a few major projects but failed to change the situation cardinally or to beneffit the lives of ordinary people. The improvements seen in a range of economic indicators in the region were, in fact, driven by factors independent of the NCFD's development strategy, for example, the growth of the defence orders.

Secondly, it has become obvious that implementation of the strategy not only failed to mitigate the overall conflict background in the North Caucasus, but is even contributing to the appearance of new centres of tension, as resource-related conflicts arise between those carrying out traditional economic activities and the external investors. Even the projects remaining in the list of priorities are not completely free of these problems – there are also conflicts between the use of land for cattle farming and for the construction of tourist facilities.

[1] http://kavpolit.com/articles/kto_spaset_kavkazskih_biznesmenov-10640/
[2] http://kavpolit.com/articles/kuznetsov_proektov_fantomov_na_kavkaze_ne_budet-11902/

Thirdly, new 'external' restrictions have appeared–the crisis situation has limited financial appetites and the accession of Crimea moved the goalposts in the field of tourism development.

The first two of these risks, at least, had been obvious and voiced by experts as early as when the Strategy for Socio-Economic Development of the NCFD was being developed.[1] However, it was only after several years that their proposed adjustments to the Strategy started, at least, to be declared, even if not implemented in practice, by the decision makers.

Does this mean that a new (even if not written) and more balanced strategy of regional development relating to the change in priorities has more chance of successful implementation? It should be noted that while the risk of 'gigantomania' has apparently been overcome to some degree, it is clear that other problems still remain. It appears necessary to highlight the following two aspects here:

1. Any structure has its own inertia, so, declaring a change in the priorities of its activities does not really mean that these priorities will be changed in practice, even more so where the investment support mechanisms initially provided by the strategy have not been reviewed. At the same time, these very mechanisms carry significant internal risks when they take place, not only in the quite chaotic institutional environment of the North Caucasus, but also involve European countries that follow clearer and more transparent principles of attracting investment. The risks particularly involve the fact that a high level of support stimulates investors to invest even in objects with a negative market value.[2] That is why the projects, which remain top priorities for the NCFD, are in need of additional analysis in terms of their economic feasibility.

2. The transformation of the management structures in the NCFD organisationally formalised the gap between economic policy in the North Caucasus and the strategy of the activities of the power block. *De-facto*, this gap had existed previously. The NCFD's strategy for socio-economic development did not include any approaches to the provision of security in the region, and this, obviously, had a significant negative impact on its implementation. However, these matters are closely interrelated in practice. Both, the administrative barriers to business and the need for ensuring tourist safety are problems that are more than purely economic, but ones which majorly affect the prospects for the economic development of the region. It is not an accident, according to the RA Expert rating of investment attractiveness of the Russian regions, that the only republic, in which, the investment climate has significantly improved is Karachay-Cherkess[3], where the government consistently implements peaceful dialogue-based procedures for conflict resolution within society and does not allow the degree of opposition between the various national and religious groups to increase to dangerous levels. The administrative transformations in the NCFD do not create favourable preconditions for ensuring unity of policies in these two interrelated areas – economics and power – across the entire territory of the region, and thus preserves the related future risks.

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[1] See, for example: North Caucasus: Modernisation Challenge/I.V. Starodubskaya, N.V. Zubarevich, D.V. Sokolov, T.P. Intigrinova, N.I. Mironova, Kh..G. Magomedov.–Moscow: Publishing House 'Delo', Russian Presidential Academy of National Economy and Public Administration, 2012.

[2] For instance, the expert analysis of the first 10 years of support of eastern German lands identified that its investment support tools were not without flaws either, so it was proposed to give them up (See: Starodubrovskaya I., Zubarevich N., Markvart E. Federalism and Local Self-Governance –Taking into Account Territorial Variety (International Experience and Lessons for Russia). Expert Report–Moscow, 2015).

[3] См.: http://kavpolit.com/articles/skfo_ekonomika_nesbyvshegosja_optimizma-13189/

6.6.2. Budgetary funding of resettlement programmes and payment of compensation

Among the acute questions, which the federal government faced in the North Caucasus in 2014, were those of the further implementation of a range of measures connected with the organised resettlement of citizens to new territories, and of compensation payments for appropriated land. The problems associated with the implementation of such measures can be divided into two categories. On the one hand, changes in the general economic situation in the country have forced a stricter assessment of the efficiency of budgetary expenditure on resettlement and the payment of compensation. On the other hand, some of the specific circumstances associated with the practical implementation of these state measures evidenced the necessity for their critical conceptualisation and for possible adjustments.

The resettlement of the Lak from the Novolaksky District in Dagestan remained the largest-scale of all the 'resettlement' measures in 2014, while the most notable 'compensation' event was the payment of compensation for agricultural lands in the area of flooding the Gotsatl Hydroelectric Plant (HEP) in Dagestan. The federal budgetary funding of these measures is being executed within the framework of the 'South of Russia' Federal Target Programme, whose Dagestan sub-programme for 2015-2025 is now under discussion by the federal government authorities.[1] In 2014 the Russian government demonstrated that it sees the resettlement from the Novolaksky District and the payment of compensation for land plots in the area of the Gotsatl HEP as two of its top-priorities. This was reflected in Resolution of the Government of the Russian Federation of 23 December 2014 No.1444 'On the Top-Priority Measures for Ensuring Rapid Development of the Republic of Dagestan', envisaging that the set of measures for resettlement of people from the Novolaksky District to a new settlement area would be completed by 2018, and ensuring that the payment of compensation for appropriated land plots in the area of flooding the Gotsatl Hydroelectric Plant would be completed by 2016.

The settlement of the conflict in the Novolaksky District of Dagestan, including the completion of measures for the resettlement, elsewhere, of the Lak residing in this region is one of the necessary conditions for supporting inter-ethnic peace in Dagestan. In accordance with the Resolution of the Third Congress of the People's Deputies of Dagestan (June 1991) the Novolaksky District of Dagestan, located next to the border between the Republic of Dagestan and the Chechen Republic, was to be 're-created' in another territory immediately to the North of the Dagestan capital, Makhachkala. This decision was made in order to remove a serious problem threatening the inter-ethnic relations at the Dagestan-Chechnya border. The problem was that the Lak population had found itself in the Novolaksky District as a result of a forced resettlement previously conducted by the Soviet government. In February 1944, at the time when the Chechen were deported to Central Asia and Kazakhstan, the territory of the current Novolaksky District was included in the Aukhovsky District, populated mainly by the Chechen. Following the deportation of the Chechen about 7 thousand Laks were forcefully resettled from the mountains, after which the Novolaksky District was formed. When, in 1957 the Chechens were allowed to return to their native lands, the Soviet government was opposed to their settlement in the Novolaksky District. However, in the perestroika years the Chechen deported from the Aukhovsky District and their descendants bluntly re-stated the questions of

[1] RIA Dagestan, 9 December 2014 (http://www.riadagestan.ru/news/tourism_events/rayudin_yusufov_i_ shakha-shakha-bas_shakhov_prinyali_uchastie_v_soveshchanii_u_zamministra_rossiyskoy_federatsii_po_delam_severnogo_kavkaza/)

their right to return to their native land and of the restoration of the Aukhovsky District. After the Resolution of the Third Congress of the People's Deputies of Dagestan the construction began of houses for the Lak resettling in the future territory of the Novolaksky District, financed from the federal and regional budgets. The houses being left behind by the Lak were then occupied by descendants of the deported Chechens.

The fact that, even under the changing economic conditions, the federal government continued to conduct its programme for the resettlement of the Lak seems reasonable because any suspension of the programme may cause the resumption of ethnic tensions in the area and in the region as a whole. However, the preservation of the existing system for financing the resettlement and the general scheme of conflict settlement may result in poor value for money and become a new cause of destabilisation.

According to the Ministry of Economic and Territorial Development of Dagestan, by mid-2014 a total of 3,052 private houses, as well as many social and infrastructure facilities, had been built for the Novolaksky Lak in their new region of residence (the Makhachkala suburbs). The overall allocated expenditure for implementing the resettlement of the Lak population of the Novolaksky District for the period 1992-2013 was Rb 7,512,100,100, including, from the federal budget – Rb 6,058,500,000, and from the republican budget – Rb 1,453,600,000. According to estimates by the Government of Dagestan, the construction of a further 1,500 private houses for the migrants will be required, i.e. almost half as many, again, as the total number that have been constructed since 1992. Taking into account the considerable budgetary funds already spent on resettlement and the actual resettlement of the Lak to their new place of residence, the process of 'moving' the Novolaksky District to a new territory can be considered irreversible.

However, the currently effective procedure for the resettlement of the Lak does not, in reality, allow any determination of the 'horizon' of the funds required for this purpose. Pursuant to the republican legal acts, all Lak families whose head resided in the Novolaksky District in 1991 are eligible to receive a free private house in the resettlement area.[1] If any of the children of such a resident has started his or her own family, this family is also eligible to receive a separate house. Two separate houses are also to be provided to now-divorced spouses who had lived together in the area in 1991. As a result of such rules, the lists of those eligible to receive a house in the resettlement area are constantly being updated. Hence, the number of required houses and the required funding continue to grow. This 'self-perpetuating' process is leading to increased expenditure from the federal budget.

Another problem is that the completion of the resettlement of the Lak will, in turn, raise other very acute questions, mostly of a political nature. The restoration of the Aukhovsky District poses a threat of serious conflicts due to the lack of consensus on its borders. The Novolaksky District includes only a part of the territory of the former Aukhovsky District. There are currently about 14,000 people residing in villages previously included in the Aukhovsky District but not included in the Novolaksky District (Leninaul and Kalininaul). The residents of these villages represent multiple nationalities, so the intent of the Chechens residing there to have these villages included in the Aukhovsky District has provoked a negative response

[1] See the Regulation on the Procedure for Resettlement of the Lak Population from the Novolaksky District to a New Place of Residence (approved by the Resolution of the Council of Ministers of the Republic of Dagestan of 17 February 1993); Resolution of the Government of the Republic of Dagestan of 16 July 2004 'On Making Amendments to the Regulation on the Procedure for Resettlement of the Lak Population from the Novolaksky District to a New Place of Residence.'

from a proportion of the residents of these villages who are of different nationality (the Avar). Our research shows that, in 2014, the situation around these 'disputed' villages had continued to worsen and posed a threat of serious destabilisation, not only in the villages themselves, but in the North-Western part of Dagestan in general. This is not about a deterioration of inter-ethnic relations *per se* but about the deepening of the disparities of the views of the two ethnic communities on the future of the 'disputed' villages and in the context of a radicalisation of the demands of both parties. It is significant that in their fight for determining the future of these villages the different resident groups are obtaining external support. In particular, on 23 December 2014, the Tenth Congress of the Chechen of Dagestan was held in the Dagestani town of Khasavyurt, and at which there were representatives from all the settlements of the Republic where Chechens reside. The demand to include the villages of Leninaul and Kalininaul as part of the Aukhovsky District was central in the declaration adopted by the Congress.

Without the achievement of an inter-ethnic consensus in respect of the future of the 'disputed' villages the launch of any process of restoration of the Aukhovsky District seems quite risky. However, after the completion of the Lak resettlement process it will be extremely difficult to 'defer' the beginning of such a restoration of the District, that today is already acute and leading to a deteriorating situation around the 'conflict' villages.

In light of the above one can conclude that, in 2014, the process of implementation of measures for the resettlement of the Lak from the Novolaksky District of Dagestan implied the following organisational *problems*:

1. No date has been set, after which the list for receiving houses will no longer be expanded. The approval of such a date by the Government of Dagestan would allow a determination of the final number of houses which must be constructed beyond those which already exist, the ability to plan for the definitive completion of resettlement and for the volume of funding required.

2. Political questions relating to the restoration of the Aukhovsky District have not been resolved. First of all, there is the question of the inclusion in the District of the disputed villages. According to our estimates, the process of reaching agreement on this question between the affected population groups could take 3-4 years. It would be expedient to organise the programme for the construction of houses to cover approximately the same period and to distribute the yearly budgetary funding accordingly. It is necessary to monitor the situation, with agreement procedures being applied to ensure compliance with the borders of the future District, so that the resettlement of the Lak is not completed before there is clear evidence that the procedures are successful.

As for the **payment of compensation for land plots appropriated due to the construction of the Gotsatl HEP**, in 2014, this complex of measures that are also financed from the federal budget, was plagued by the same unresolved problems as in previous years. In the area of HEP flooding in the Khunzakhsky District of Dagestan there are land plots used either by Gotsatl village residents or those of a number of near-by settlements for agricultural purposes. Locals have expressed their dissatisfaction that no compensation is envisaged for users of many of the land plots, access to which will be almost impossible after the reservoir has been created.[1] Furthermore, the protests of the local population are resulting in violations of the compensation payment schedule. As a result, this caused multiple mass-protests of the residents of the Khunzakhsky District of Dagestan between 2010 and 2014. The budgetary 'price

[1] Money in the morning, chairs in the evening//'Present Time' (Makhachkala), 23 April 2010 (http://gazeta-nv.info/content/view/3998/216/).

tag' is relatively small: according to the estimates of local residents, they are being 'underpaid' compensation to the tune of Rb 400m.[1]

The situation in other Districts of Dagestan shows that the conflicts relating to the flooding caused by the HEP construction could have quite a serious negative impact. For example, the actual destruction of agriculture in a number of villages in the Untsukul District, which found themselves in the middle of the flooding area of the Irganai HEP has become one of the main reasons for the radicalisation of a part of the population in this area, and this is now one of the most unfavourable regions in terms of extremism.

In light of the above, the obvious insufficiency of the 2014 measures for informing residents in the area of construction of the Gotsal HEP of the real situation regarding the payment of compensation, and the procedure for such payments, may become a serious destabilizing factor.

To sum up, it can be stated that the events of 2014 have confirmed the necessity to continue the budgetary funding of the programmes of resettlement and the payment of compensation for appropriated land plots in Dagestan, which is justified and necessary to maintain stability in this region. However, without significant clarification of the plans for these measures, and for addressing the associated risks, they may become inefficient and even have a destabilising effect.

6.6.3. The dynamics of terrorist threats

The 2013 Annual Review provides a detailed analysis of the alternatives within the counter-terrorism policy and their potential consequences. Two anti-terror models were outlined: a hardline 'power model' and a 'soft power' policy. The period of implementation of the counter-terrorism policy in the North Caucasus can be divided into three sub-periods during which different combinations of the above ideologies were typical. Until autumn 2010 the 'power model' had been almost entirely dominant. The period from autumn 2010 to late 2012 can be interpreted as a combination of approaches characteristic of both models: along with the continuation of power pressure in a number of North Caucasian regions (Dagestan, Ingushetia) commissions for the adaptation of militants were created and inter-confessional dialogue between the conflicting Islamic movements began. This change in policy clearly gave a positive result – a tendency towards a reduction in the number of victims of armed conflicts began to manifest itself.

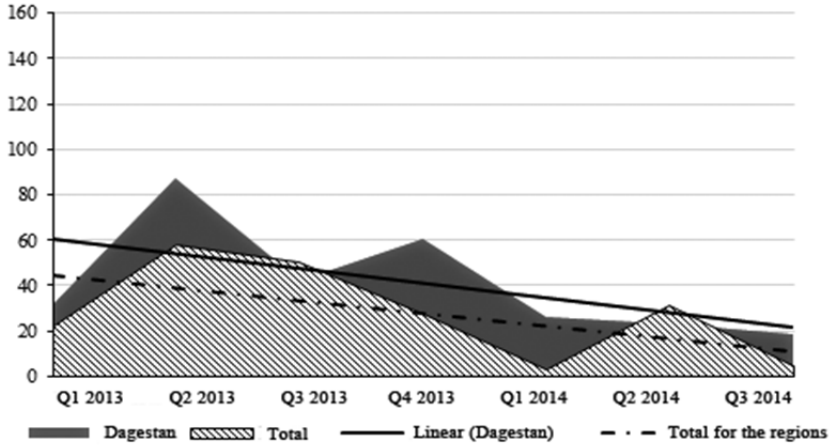
However, since early 2013 the domination of the 'power model' has returned as a result of a number of factors – a general tightening of ideological control in the country, the necessity to ensure the safety of the Olympic Games in Sochi and changes in the government of some of the North Caucasian republics. Based on an analysis of the trends of previous periods one might have expected that terrorist activities would intensify in response. However, as can be seen from the data on terrorist activities presented in *Fig.15* and *16* (noting the linear trend for the NCFD – solid line, and for Dagestan – dashed), no such effect could be observed for quite a long time, and this has supported the arguments of the advocates of the hardline scenario.

However, it should be noted that the situation has been influenced by many *external factors*, modifying the previously identified tendencies.

Firstly, there was a change in power within the ranks of the North Caucasian underground. The new leaders of the 'Caucasus Imarat' took a more moderate position: they argued against terrorist acts with civilian victims, against female suicide bombers, against resistance until the

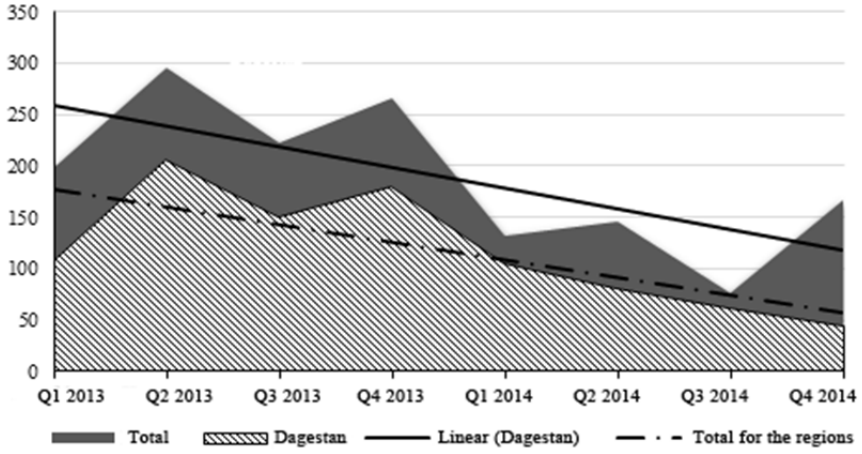
[1] Residents of the Dagestan village of Gotsal Will Not Receive Full Compensation in 2015 for Land Forfeited for Construction of the HEP// IA REGNUM, 26 December 2014 (http://www.regnum.ru/news/ economy/1881107.html).

last bullet. No alternative strategy was actually proposed. Such changes could not but affect the activity of the illegal armed groups.



Source: Memorial's data.

Fig. 15. Law enforcement officer casualties (killed and wounded) for the NCFD in general, and for the Republic of Dagestan, by quarters of 2013-2014



Source: data of the Caucasian Knot.

Fig. 16. Total victims (killed and wounded) for the NCFD in general, and for the Republic of Dagestan, by quarters of 2013-2014

Secondly, the North Caucasian situation is increasingly affected by the aggravation of the opposition in Syria and Iraq due to the appearance in their territories of the so called Islamic Caliphate (ISIS, ISIL or IS). Initially, this factor resulted in the outflow of young radicals from territories of the Russian Federation, and until recently, by using tough measures, the law-enforcement bodies had managed to prevent them from coming back. The effect had been to reduce the terrorist threats within the country. However, at the end of the year the situation began to change. One by one, the North Caucasian combat leaders started to fall away from the moderate Imarat Caucasus and to swear allegiance to the much more radical ISIS.

How might this process affect the level of terrorist threats? One might expect that it will further weaken the underground forces and facilitate counter-terrorism policy. However, there could be other, much more negative effects. For there is just one key theme in the competition between the different terrorist cells – successful terrorist acts. This is how certain experts explain the December terrorist act in Grozny–as the Imarat's response to ISIS activity.[1] Information on the total number of militants who entered the city has varied greatly but combat operations continued in the city for almost 24 hours. In the course of the special operation 15 militants were eliminated, 14 police officers were killed, and a few dozens of people were wounded.[2]

At the same time, the response of the leaders of the Chechen Republic, calling people to destroy the houses belonging to the relatives of the militants and to expel the families from the republic, cause a sharp negative reaction on the part of the human rights community in Russia. The Chairman of the Committee against Torture, I. Kalyapin, urged that some of the calls by Ramzan Kadyrov be checked for compliance with the Russian Constitution. In response to this, an office of the mobile human rights group in Grozny was burnt down and the human rights activists were accused of protecting terrorists. The opposition between the Chechen leaders and the human rights activists has spilled over into the all-Russian information field, and related questions were asked of the President of Russia at his press conference. However, no clear legal assessment of the calls was given and the President's answer was interpreted by each party in the conflict in its own favour.[3]

The lack of an unambiguous position of the government authorities on the matter of the admissibility of collective liability for terrorist actions has not only had a negative effect on the situation in Chechnya. The practice of the destruction of the houses of the relatives of real or suspected militants has spread quite widely in other republics of the North Caucasus – Dagestan, Ingushetia. At the same time, such actions are inadmissible, not only on the basis of human rights, the freedoms provided by the Russian Constitution and the provisions of Russian legislation but also in terms of the counter-terrorism policy itself.

Firstly, the hope that young people will stop performing acts of violence for fear of reprisals against their relatives is in vain. In the North Caucasus, inter-generational conflict is vividly manifested, with radical Islam being a stumbling block in this conflict. This is why older people are unable to influence the younger generation so the activities of latter will not be prevented because of threats to the older generation.

Secondly, the pressure on relatives may even worsen the situation. Today the key mechanism causing young people to become involved in armed resistance is the 'pressure spiral' when young men (and women as well) avenge loved ones and associates whom they think of as being innocent victims. Therefore, each turn of the spiral increases the number of those taking revenge, and the less selective and greater the violence becomes.

Thirdly, the destruction of houses is a serious factor in conflict conditioning of the younger generation. Children who have suffered such a trauma or who have witnessed it with their neighbours, become inclined towards resistance to a Russian government, which is directly associated with the tragedy they saw occurring, and this lays the foundations for a sustained terrorism problem in the future.

[1] http://kavpolit.com/articles/dialog_vnutri_podpolja-11930/
[2] http://kavpolit.com/articles/ot_snosa_domov_do_zabrasyvanija_jajtsami-12060/
[3] Large press conference of Vladimir Putin of 18 December 2014 http://www.kremlin.ru/news/47250

6.7. Military Economy and Military Reform in Russia

The accession of the Republic of Crimea to the Russian Federation in March 2014 was not favored by the global community and resulted in Western economic sanctions against Russia, getting even tougher throughout the entire year. The sanctions were focused chiefly on Russia's defense sector, having a strong adverse impact on the fulfillment of the state armaments program and the military-industrial complex (MIC) development program planned by the Russian leadership. The key tit-for-tat measures included the development of import substitution plans in the military-industrial complex and the placement of the Military Industrial Commission under the supervision of President Vladimir Putin in September. The international sanctions in 2014 had no effect whatsoever on the performance of the plans of professionalization and combat training of Russia's Armed Forces.

6.7.1. Updated Military Doctrine of the Russian Federation

A new edition of the Military Doctrine (MD) of the Russian Federation (RF)[1] was published on 26 December last year on the Kremlin's official website following a decision made by the Security Council (SC) of the Russian Federation. The updated edition was developed by the SC Interdepartmental Working Group[2] and considered and approved on 19 December at a meeting of the Security Council chaired by the President of the Russian Federation. Although it was noted in the SC information memorandum concerning this event that "…the essential provisions of the current Military Doctrine remained unchanged in the new edition"[3], the amendments to this document are especially noteworthy.

First of all, such a paramount task of the military and economic support to the defense sector as "optimization of defense spending, efficient planning and distribution of financial and material resources" was removed from the text of the Military Doctrine. The reference in the new edition to the necessity for "concentration of [Russia's] financial and material and technical resources, the enhancement of their efficient utilization" seems to be quite an irrelevant replacement and an attempt to avoid mentioning, even in written, the existence of budgetary constraints faced by the military establishment.

The list of external military threats in the new edition was extended to 14 from 11 threats, including the inappropriate use of information and communication technologies, threatening "regimes" in bordering countries and subversive operations of foreign intelligent services. Overall, this is not particularly surprising, because the assessment of trends in the international situation has been changed from a fairly neutral to a negative, characterized by "increasing global competition, tensions in various interstate and interregional areas, competition for values and development models, unstable processes of economic and political development at the global and regional levels amid the overall aggravation of foreign affairs".

The list of internal military threats was extended to 4 from 3 threats. A new threat was added: "informational activity influencing the population, especially young citizens, aimed at

[1] The Military Doctrine of the Russian Federation. URL: http://news.kremlin.ru/media/events/files/41d527556bec8deb3530.pdf (date of access: 26.12.2014).
[2] RF Security Council: Russia to update its military doctrine by the end of 2014// RIA Novosti. 2014. 2 September.
[3] About the results of the meeting of the Security Council of the Russian Federation concerning "Emendations to the Military Doctrine of the Russian Federation". 20 December 2014. URL: http://www.scrf.gov.ru/news/838.html (date of access: 21.01.2015).

undermining the historical, spiritual and patriotic traditions concerning the defense of the fatherland". Fortunately, the *military threats* for Russia remained almost the same both qualitatively and structurally. The foregoing new military threats appeared to have nothing to do with the key tasks of the Armed Forces, troops and "agencies" of other type in time of peace and war.

Such a significant measure as "no armaments race" has been removed from the section concerning the military policy.

6.7.2. Recruitment and enlistment policy and social policy

The year of 2014 saw further implementation of the principal provisions of the military reform launched by Dmitry Medvedev in 2008 following the military conflict with the Republic of Georgia and continued by Vladimir Putin in May 2012.[1]

By the end of the year, the total accountable number of servicemen in the Ministry of Defense reached 905,000 persons (according to the reported manning of 90.5%), making it 78,000 (9.4%) more than the previous year number when the manning level of 82.7% was reached.[2] At the same time, the number of contracted privates and junior-grade sergeants reached a historical maximum of 295,000 persons, making it 70,000 (33.3%) more for this category than that late in 2013. Hence Russia's Defense Ministry managed to compensate for the last year failure concerning the manning of servicemen of this category, reaching a qualitatively high level of recruitment and enlistment: education level: 64% of the recruited contracted servicemen have a higher or secondary vocational education; age level: 91% of the contracted servicemen are 30 years old or younger.[3] This was achieved not least because of the adoption of an amendment to the applicable law, allowing, since as early as the fall of 2014, conscripts to choose between one year of military conscription service or two years of contractual military service .[4]

The number of conscripts in the Ministry of Defense by the end of 2014 was running at 273,000 persons, making the figure for the first time less (by 22,000) than that of contracted servicemen,[5] compared to the plan of 308,100 conscripts for the spring and fall call-ups (to all defense and law enforcement troops, including Internal troops under the Ministry of Internal Affairs and military rescue units under the EMERCOM (The Ministry of the Russian Federation for Affairs for Civil Defense, Emergencies and Elimination of Consequences of Natural Disasters)).[6] Effective since 1 September 2014, all Russian higher-education students will not be only deferred from the conscription, but they will have an opportunity to simultaneously serve in the army and study, irrespective of whether or not their higher

[1] The Presidential Decree of 07.05.2012, No. 604 "Concerning the further enhancement of the military service in the Russian Federation".

[2] The report on the extended meeting of the Defense Ministry Collegium on the 2014 performance results, M., 19 December 2014. URL: http://mil.ru/files/files/koll2014/otchet-2014.doc (date of access: 22.12.2014); The progress report on the performance of the Defense Ministry plan of the implementation of the orders of the President of the Russian Federation dated 7 May 2012, No. 597, 601, 603, 604, 605 for 2013". M., 22 January 2014. URL: http://mil.ru/files/files/result2013/otchet2013.pdf (date of access: 22.01.2014).

[3] Ibid.

[4] The Federal Law of 23.06.2014, No. 159-FZ "Concerning the amendments to certain legal acts of the Russian Federation".

[5] The number of contracted servicemen in Russia's Armed Forces reached a historical maximum this year. URL: http://function.mil.ru/news_page/country/more.htm?id=12004213@egNews (date of access: 22.12.2014).

[6] *Voronov A.* Conscripts are prompted to sign contracts // Kommersant. 2014. 1 October (No. 177).

education institutions have a military arts division, and as graduates they will undertake a 3-month military training and then be transferred to the reserve.[1] As early as in October, the deference from the conscription (to be in effect from 1 January 2017) covers college and technical school students,[2] thereby confirming once again the Russian leadership's endeavor towards further humanization of the compulsory military service institution.

The number of servicemen being under command of their superior officers and in the waiting list for a permanent housing unit declined by the end of 2014 by more than a third to 16,000 persons from more than 25,000 earlier this year.[3] Consequently, the Ministry of Defense is getting close to successful resolution of the issue faced by the servicemen of this category who keep receiving their cash allowances while awaiting, and sometimes dragging out, the fulfillment of their entitlement to housing.

In 2014, 15,140 first-year students were matriculated to higher military schools (HMS), making the number 456 less than that seen in the previous year, but doubling the previously established optimal number[4]. At the same time, earlier in 2104, the Ministry of Defense had about 2,000 officers who kept serving in the capacity of sergeant.[5] During 2014, the existing HMS network was complemented with one military academy and three higher military schools, while the network of pre-higher general education institutions with three cadet schools and a Suvorov school and two cadet corps.[6]

No data was published in 2014 on the number of offices and warrant officers serving in the Ministry of Defense. In 2014, unlike the previous years, the Ministry of Defense published no official statistics on the number of retired servicemen as of 1 January 2014, which must be published in accordance with the plan of federal statistical efforts.[7]

According to Deputy Defense Minister Tatiana Shevtsova, the average cash allowance of servicemen in the Russian Army in 2014 was running at Rb 62,100, twice the average salary in Russia.[8]

In 2014, the Ministry of Defense had 20,000 servicemen with permanent housing units, making it almost equal to the previous year figure (20,500). Fourteen thousand apartments were provided from various sources while the rest were purchased using state housing certificates and housing subsidies effective since August. The Ministry of Defense provided more than 2,300 certificates in 2014. At the year end, the Ministry of Defense had 33,000 servicemen in the waiting list, which allows the Ministry to fully resolve the housing issue for this category by the end of 2016.[9]

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[1] *Voronov A.* Conscripts are prompted to sign contracts // Kommersant. 2014. 1 October (No. 177).
[2] Federal Law of 14.10.2014, No. 302-FZ "Concerning the amendments to Article 24 of the Federal Law "Concerning Military Duty and Military Service"".
[3] *Gavrilov Y.* Take an apartment or get fired // Rossiyskaya Gazeta. 2015. 24 March; Shoigu: More than 25,000 officers of the Ministry of Defense are serving in no capacity // RIA Novosti. 2014. 14 January.
[4] According to the report in December. The Defense Minister stated in September about 13,000 matriculated students.
[5] Two thousand officers keep serving in the capacity of sergeant in the Russian Armed Forces // Rosbalt.. 6 December 2013.
[6] See "The report on the Collegium extended meeting …".
[7] Executive order of 10.08.2011, No. 1063 "Concerning the approval of the list of information on the performance of the Ministry of Defense of the Russian Federation published in the information and telecommunication network, Internet".
[8] The Defense Ministry promises not to lower the salaries of servicemen // RIA Novosti. 2015. 27 March.
[9] The report on the Collegium extended meeting …; *Mukhin V.* The number of servicemen in the waiting list for housing units has reduced but the problems are still there // Nezavisimaya Gazeta. 2015. 6 February.

In 2014, the Ministry of Defense provided 17,300 servicemen with employer-owned housing units (18,851 servicemen, according alternative data), accounting for 78% of the last year result.[1] With such a progress rate, the Ministry of Defense can hardly resolve the issue of the provision of employer-owned housing units even by the end of 2017, as was envisaged earlier in 2014, because there are 88,000 persons in the waiting list.[2]

In 2014, the provision of social payments and guarantees to the families of servicemen killed or injured while participating in military exercises and training[3] was substantially upgraded. The amount of one-time benefits for killed or wounded servicemen were increased as recently as earlier in the year. "Today, when a soldier is killed in the discharge of his/her duties, his/her family may be entitled to two basic benefits: Rb 2m of insurance, Rb 3m of one-time allowance. This makes a total of Rb 5m",[4] said Mr. Krivenko, the Head of the Working Group of the Council for Human Rights and Protection of Servicemen's Rights. In addition, the human rights advocate pointed to a qualitative change in approaching the provision of survivor benefits, because there is no more difference in the rank and position of a serviceman/woman: "The basic payments are the same for a private or a general. Although there are differences in the provision of pension benefits and allowances, the retreat from the former tradition is essential, when the life of a private differed in value from that of an officer or general". Over the past two years, wounded or disabled servicemen have been entitled to an insurance of Rb 1,6m for those with 1-grade disability, up from Rb 1,5m, and Rb 1,105,000 for those with 2-grade disability, up from Rb 1m. Although these amounts don't cover the accrued inflation, this is indicative anyway of the fact that the subject matter hasn't been neglected.

According to the data provided by the Chief Military Investigation Department, , military investigation bodies received in 2014 more than 28,000 offence reports, increasing the figure by 1,000 compared to that in the previous year. The number of pending criminal cases was more than 16,000 (up 9%). Every fifth offence registered by military investigators in 2014 was related to corruption.[5] Although the Chief Military Prosecutor's Office and the Ministry of Defense the criminal statistics in the Armed Forces traditionally publish no statistics, the data available in mass from the Federal State Statistics Service (Rosstat) show a 62% increase (to 629 from 388) of AWOLs in H1 2014 compared to the same period last year, and the number of persons held accountable for simulation for draft evasion purpose increased 3.3 times (to 115 from 33).[6] The moral degradation can partially be explained by the fact that conscripts are prompted to sign contracts[7] and the prospects of being engaged in military exercises near the Ukrainian border.

In 2014, the population's attitude to the military service improved substantially, as evidenced by the results of an opinion poll published in November by the Public Opinion

[1] The report on the Collegium extended meeting …; *Mukhin V.* The number of servicemen in the waiting list for housing units has reduced but the problems are still there // Nezavisimaya Gazeta. 2015. 6 February.
[2] The progress report on the performance of the Defense Ministry plan of the implementation of the orders of the President of the Russian Federation dated 7 May 2012, No. 597, 601, 603, 604, 605 за 2013". M., 22 January 2014. URL: http://mil.ru/files/files/result2013/10-planMO2013.html (date of access: 22.01.2014); Voenny Sovet // Echo of Moscow radio station. 21 March 2015.
[3] The Federal Law of 22.10.2014, No. 310-FZ "Concerning the amendments to Article 3 of the Federal Law "Concerning the military pay and the provision of specific payments to servicemen"".
[4] *Solopov M.* The amounts of survivor benefits have been approved // Gazeta RBC. 2014. 26 November.
[5] *Kozhukhin M.* Corruption lowers in the Armed Forces // Krasnaya Zvezda. 2015. 6 March (No. 38).
[6] *Tumanov* Escaped warriors // Kommersant. 2015. 17 February (No. 27).
[7] *Borodyansky* Disentangled themselves from the commanders // Novaya Gazeta. 2015. 18 February.

Foundation.[1] One third of the respondents said in the fall of 2014 that the state of the Armed Forces was very good or good, 37% said it was satisfactory, and only 9% said it was bad, whereas in the previous year, only 9% said it was good, while the majority of respondents (42%) said it was satisfactory, and 32% said it was bad or very bad. In the fall of 2013, half of the respondents were sure that the state in the Armed Forces was getting better (compared to 30% in 2013). The number of those who noticed any worsening in the AF state reduced drastically (to 7% now from 35% in 2013). Only 19% were convinced that nothing was changed in the Russian Armed Forces.

6.7.3. The military-technical policy

The implementation of the military-technical policy represented by the State Armaments Program (SAP) for 2011–2020, the Basic Principles of the Military-Technical Policy in the Russian Federation until 2020 and Further Perspectives and the Federal Target Program "MIC development in 2011–2020"[2] and confirmed by President Vladimir Putin in May 2012[3] was continued in 2014.

A joint meeting was held on 29 January 2014, attended by the collegiums of the Ministry of Defense, the Ministry of Industry and Trade and the General Prosecutor's Office with participation of the top managers of the Military Industrial Commission (MIC) under the Russian government с повесткой дня "Concerning the rule of law in the military-industrial complex."[4]

In May and November, like in the previous year, President Vladimir Putin held two 3-day sessions of meetings on various aspects of the SAP and FTP implementation. Additionally, a meeting on import substitution in the military-industrial complex (MIC) was held on 28 July at Novo-Ogaryovo, and a meeting on the drafting of a new SAP for 2016–2025 was held on 10 September in the Kremlin, immediately prior to which President Putin took charge of the military-industrial complex.[5] The Federal Agency for Procurement of Weaponry, Military and Special Equipment, and Materiel (Rosobononpostavka) and the Federal Service for Defense Contracts (Rosoboronzakaz)[6] were abolished the day before, on 8 September. The functions of these agencies were reassigned back to the Ministry of Defense and other contracting government bodies. According to mass media, the reassignment was initiated by Defense Minister Sergey Shoigu on the ground of being inefficient due to the duplication of functions.[7]

The scope of a new system of control on spending of resources while awarding and executing the state defense contract with the participation of the Federal Financial Monitoring

[1] *Goryashko S.* The Russian Army is noticeably getting better // Kommersant. 2014. 13 November (No. 205).
[2] Approved on 31 December 2010, 26 January 2011 and 5 March 2012, respectively. None of them was published.
[3] The Presidential Decree of 07.05.2012, No. 603 "Concerning the implementation of plans (programs) of construction and development of the Armed Forces in the Russian Federation, other troops, military units and agencies and modernization of the military-industrial complex".
[4] *Tikhonov A.* MIC control contours // Krasnaya Zvezda. 29 January 2014.
[5] The Presidential Decree of 10.09.2014, No. 627 "Concerting the Military Industrial Commission of the Russian Federation".
[6] The Presidential Decree of 08.09.2014, No. 613 "Concerning certain matters of government administration of the state defense contract, military, special-purpose equipment and material resources".
[7] *Safonov I., Butrin D.* RosDefense launches the offensive // Kommersant. 2014. 3 June (No. 94); Spare some for a war // Vedomisti. 9 September 2014 (No. 166).

Service (Rosfinmonitoring) was determined only three months later[1], after President Vladimir Putin confirmed in his Presidential Address to the Federal Assembly the facts of uncontrolled growth in prices of defense-oriented products (DOPs): "…The prices of some items have increased 2, 3, 4 times, and in some cases the price has raised 11 times since the commencement of works."[2]

At the same time, Russia's Defense Minister Sergey Shoigu reported, during a conference call[3] as early as 1 December that the principal goals of the state defense contract in 2014 had been achieved, the spending increased 25% compared to the previous year, to Rb 1,7 trillion (the amount was revised down to Rb 1,650,000,000,000[4], i.e. 2.3% of GDP), while the number of weapons and military equipment (WME) supplied to the Armed Forces increased 65%. Such a disparity between the spending and the results is indeed attributed to the repayment of debts – "snags" – accumulated by the MIC under the previous state defense contracts ("catch-up schedules" to eliminate the snags under the 2014 state defense contract are set for six months).[5] Later, on 19 December, Deputy Defense Minister Y. Borisov reported that the state defense contract will be implemented 95%, which is "much better than that in 2013."[6]

A total of 38 intercontinental ballistic missiles, including 22 ocean-spanning missiles for strategic missiles underwater cruisers, were manufactured and supplied to the Armed Forces in 2014. Three Bulava SLBMs (Submarine Launched Ballistic Missile) were successfully launched from various missile underwater cruisers (Vladimir Monomakh on 10 September, Yury Dolgoruky on 29 October, Alexandr Nevsky on 28). They addressed almost all issues of reinforcing the naval component of Russia's strategic nuclear forces. Additionally, the Armed Forces were equipped with more than 4,500 new WME, including "142 aircrafts, 135 helicopters, 4 submarines, 15 surface combatants and boats, 19 surface-to-air missile systems, 590 tanks and armored infantry vehicles"[7]. As a result, the modern technology intensiveness increased compared to 2013, "19.1% in the strategic weapons system, 7.8% in the Strategic Rocket Forces, 17.9% in the Aerospace Defense Forces, 4% in the Air Force, 4.4% in the Navy, more than 8% in the Army and the Airborne Forces"[8].

At the same time, the Ministry of Defense anticipated a failure in supplies of combatant vessels and auxiliary ships, armored infantry vehicles, truck-mounted antitank weapons system and ряда weapons of destruction, as well as repair and upgrade issues on a series of items specified in the state defense contract[9]. To date, the scheduled dates of commissioning frigates under projects 11356 and 22350 have been failed due to the cessation of supplies of gas-turbine engines by Ukrainian Zorya-Mashproekt (Ukraine), and corvettes under projects

[1] The list of instructions on the implementation of the Presidential Address to the Federal Assembly. M., 5 December 2014.
[2] The Presidential Address to the Federal Assembly. M., 4 December 2014.
[3] The principal objectives of implementation of the State Defense Contract 2014 have been achieved. URL: http://function.mil.ru/news_page/country/more.htm?id=12002239@egNews (date of access: 02.12.2014).
[4] Deputy Defense Minister: The dynamic army equipment trend goes global // Rusnovosti. 24 January 2015.
[5] Ibid.
[6] The measures scheduled under the State Defense Contract will be implemented 95% at year-end. URL: http://function.mil.ru/news_page/country/more.htm?id=12004204@egNews (date of access: 22.12.2014).
[7] A meeting on the acceptance of military products. M., 19 December 2014. URL: http://www.kremlin.ru/news/47256 (date of access: 22.12.2014).
[8] Ibid.
[9] The security system weaknesses // Nezavisimoye voennoye obozreniye. 2014. 26 December.

20380 and 20385 due to the cessation of supplies of diesel engines by MTU (Germany).[1] The import substitution plan approved by President Putin in August allows imported units to be substituted in 2017 at the earliest.

The 2014 performance results of the Russian defense sector are harder to assess than those in the previous year, when Prime Minister Dmitry Medvedev submitted the Russian government 2013 performance report to the State Duma on 22 April and reported a 13.5% increase in the MIC output and a record $15,74bn worth exports of defense-oriented products (DOPs).[2]

There is no knowing why the Ministry of Industry and Trade has stopped since April 2014 publishing of its statistics, including MIC data. Therefore, the actual growth in the MIC output in 2014 remains unknown. Based on the information leaked into mass media,[3] the target growth in MIC output in 2014 was set 20%, much higher than the target value in 2013 (15–17%).[4] At the same time, Deputy Defense Minister Yury Borisov in October requested that the electronic industry growth rates should be 25–30%, not 10–14%[5], which is understandable, because the accumulated shortfall of actual output growth versus the target value in 2011–2013 puts in jeopardy the plan of 1.8-fold growth in output in 2015 versus 2011[6] behind the current SAP.

Russia's exports of defense-oriented products (DOPs) in 2104 were running at more than $15,5bn compared to the annual target volume of $13bn (accounting for 3.1% of total exports),[7] making it 1.5% short of the record volume reached in 2013, with an export contraction by 5.1% as a whole. Additionally, the share of DOPs in the structure of exports is bigger than that of lumber and paper and paperboard products, whereas smaller than that of non-ferrous metals and products thereof and food products and agricultural raw materials. Noteworthy is the success of Russian exporters, about $2,5bn worth of overrun exports of DOPs (or the previous overrun was set off on actual basis) in the last two weeks of 2014, chiefly through supplies of machinery available at Russia's Defense Ministry, more than $1,3bn worth.

The dynamics of actual output growth in the MIC and exports of DOPs in relative terms in the period between 2002 and 2014 is shown in *Table 32*.

In 2014, the Ministry of Industry and Trade published a list of organizations included into the consolidated register of organizations operating in the military-industrial complex (MIC). The number of organizations included into the latest version of the register[8] was extended with nine organizations during the year, making a total of 1339 (or 45% of license holders).[1]

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[1] OSK to suit German MTU for breaching the engine imports contract of 24 million Euro // TASS, 23 March 2015.

[2] Russia's government performance report in 2013: Shorthand report. M., 22.04.2014. URL: http://government.ru/news/11875 (date of access: 22.04.2014).

[3] Arsenal program, Bochkarev O. // Echo of Moscow radio station. 29 December 2014.

[4] See: A working meeting with Deputy Prime Minister Dmitry Rogozin. Novo-Ogaryovo, 21 March 2013. URL: http://www.kremlin.ru/news/17719 (date of access: 21.03.2013); Arsenal program with Dmitry Rogozin // Echo of Moscow radio station. 16 December 2013.

[5] RF Ministry of Defense: the electronic industry is to grow at 25–30% // RIA Novosti. 2 October 2014.

[6] Rogozin: Russia's MIC output to increase four times by 2030 // RIA Novosti. 2 October 2012.

[7] The Federal Service for Military-Technical Cooperation: the Ministry of Defense exports of weapons reached an extraordinary record level in 2014 // RIA Novosti. 2015. 27 March; Concerning the state of foreign trade in 2014 M.: Rosstat, 26 February 2015.

[8] The Executive Order of the Ministry of Industry and Trade of the Russian Federation of 20 November 2014, No. 2338 "Concerning the approval of the list of organizations included into the consolidated register of

Table 32

Growth in industrial output volumes in the MIC and exports of DOPs in 2002–2014, % year-on-year

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
MIC overall output	16.5	16.3	3.3	3.8	12.2	15.4	5.1	4.3	14.2	5.8	6.4	13.5	n/a
Exports of DOPs	28.0	12.5	7.0	6.0	5.5	16.9	10.6	5.7	17.4	27.3	14.8	3.8	–1.5

Source: The Ministry of Industry and Trade; The Federal Service for Military-Technical Cooperation; The Center for Analysis of Strategies and Technologies; the calculations made by the Gaidar Institute.

Most substantial variations in the size of the register for the past two years have been triggered by mergers of the existing organizations (similar to the affiliation of the Sukhoi Design Bureau, Chkalov Novosibirsk Aviation Production Association and Gagarin Komsomolsk-on-Amur Aviation Production Association with the Sukhoi Aviation Holding Company), changes in the nature of business and the cessation of military manufacturing (for example, the Kazan Engine-Building Production Association and Kovrov Mechanical Plant JSC), with the entrance into and removal from the register in the fall of 2013 of 18 light industry enterprises contracted by the Ministry of Defense. And closed joint-stock companies such as R&D Enterprise Planeta-Argall (Velikiy Novgorod) and Research and Production Company "Tehnojaks" (Moscow), were included back into the register after a 1-year break.

Additionally, the drastic qualitative changes in the register are associated with the ongoing going public of federal state unitary enterprises whose number was reduced by 26 in the period under review, whereas the number of open joint-stock companies increased 11, and mergers, but not excluding branches from the register (for example, six enterprises affiliated with the Shvabe Holding remained in the register).

According to the data provided by the Ministry of Industry and Trade,[2] the currently registered organizations include about 250 private businesses (18.7%).

Almost half (591 or 44.1%) of them are situated in the Central Federal District, where the city of Moscow (306 or 22.9%) and the Moscow Region (112 or 8.4%) are ranked 1st. The Volga Federal District (238 or 17.8%) and the Northwestern Federal District (223 or 16.7%) are ranked 2nd and 3rd, respectively, in which the Nizhny-Novgorod Region (55 or 4.1%) and St. Petersburg (167 or 12.5%) are dominating. The Sverdlovsk Region (42 or 3.1%) and the Novosibirsk Region (35 or 2.6%) are traditionally distinguished among the other federal districts.

The highest growth in the number of MIC organizations since October 2013 has been seen in the Central Federal District, an increase of nine organizations, basically in the city of Moscow, the Moscow Region and the Oryol Region, whereas the slowest growth was seen in the Belgorod, Bryansk, Voronezh and Ryazan Regions. The situation in the Crimea and the city of Sevastopol remained unchanged – the register, like in last year June, still has the 1020 Ship Repairing Yard and the Black Sea Fleet Construction Department owned by the Ministry of Defense, all of them are situated in the city of Sevastopol. Other MIC organizations in the Crimea and Sevastopol keep obtaining Russian licenses, though facing problems from time to time.

Territorial concentration of organizations operating in the MIC is shown in *Fig. 17*.

organizations operating in the military-industrial complex". URL: http://minpromtorg.gov.ru/common/upload/files/docs/Prikaz_N_2338_ot20.11.2014.PDF (date of access: 21.11.2014).

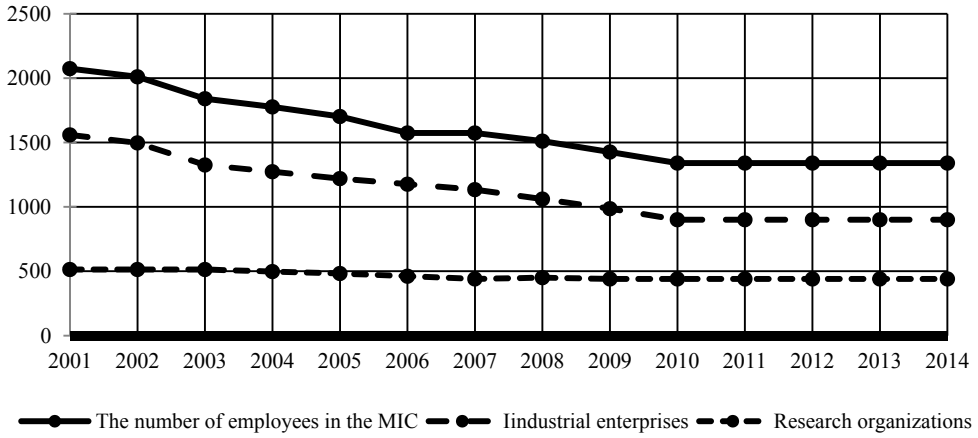
[1] As of the end of May 2014, Rosoboronzakaz issued 2967 licenses entitling to perform the State Defense Contract.

[2] A meeting on stuffing support of the modernization of the military-industrial complex. Korolyov, 10 March 2015. URL: http://government.ru/news/17140/ (date of access: 11.03.2015).

Source: The Ministry of Industry and Trade; the calculations made by the Gaidar Institute.

Fig. 17. Russia's MIC territorial concentration (November 2014)

The dynamics of the number of persons employed in the MIC in 2001–2014 according to the data of the Ministry of Industry and Trade are shown in *Fig. 18*, and the average salary in the MIC in 2010–2014 according to the Rosstat's data published in mass media are presented in *Table 33*. The Rosstat's data on 2014 cover only the first half of the year. If Prime Minister Dmitry Medvedev was correct saying that "in the military-industrial complex it [the salary] averaged near Rb 35,000 in the past year"[1], then the salary in nominal terms at least stopped growing, while that in real terms dropped at least 7%.



Source: The Ministry of Industry and Trade; the Federal Manual.

Fig. 18. The number of employees in defense industries in 2001–2014, thousands of persons

[1] A meeting on stuffing support of the modernization of the military-industrial complex. Korolyov, 10 March 2015. URL: http://government.ru/news/17140/ (date of access: 11.03.2015).

Table 33

Average salary in the MIC in 2010–2014

	2010	2011	2012	2013	2014 (H1)
Nominal salary, rubles	22,818	26,655	30,850	35,353	37,688
Nominal salary growth, %	–	16.8%	15.7%	14.6%	6.6%
Real salary (in 2010 prices), rubles	22,818	24,589	27,078	29,055	28,733
Real salary growth, %	–	7.8	10.1	7.3	–1.1
Average annual CPI, %	–	108.4	105.1	106.8	107.8

Source: Nezavisimaya Gazeta. 2014. 11 November; The Economic Development Ministry; the calculations made by the Gaidar Institute.

6.7.4. Military and financial policy

The execution of the 2014 federal budget differed from the schedules of the past few years in a substantial annual adjustment in June. Furthermore, the expenditure in the 'National Defense' item line were reduced in June by Rb 17,5bn for a second consecutive year. Under the 2014 federal budget law, the expenditure for this item line were initially set at Rb 2,488,000,000[1], or Rb 13bn less than the last year expenditure planned by the government[2].

As a result of the change, the fiscal year-end federal budget appropriations for the item line 'National Defense' contracted by 0.7% to Rb 2,470,600,000 (3.5% of GDP) compared to the amount specified in the initial version of the budget, while total budget appropriations remained unchanged till the end of the year. Budget appropriations for this item line increased 10.8% in real terms (17.0% in nominal terms) compared to 2013.

Since all of the foregoing military expenditure are not available in the published budget acts, they were determined on the basis of the reports made by the Federal Treasury and the reports of both committees of the Russian Federation Federal Assembly and the of the Fiscal policy guidelines in 2015–2017[3]. Confidentiality of the 2014 federal budget spending kept increasing and overran the last year maximum by 2.5 p.p. (see *Table 34*), while confidential budget allocations were running at Rb 2,291,334,000,000.00 of which 68% were appropriated to the MIC chiefly as state defense contracts and 26% to secret services. Small confidential expenditure appeared unexpectedly for the item line 'Environmental safety' and sub-items of the item lines 'Nationwide issues' and 'National security and law enforcement'. This expenditure was not seen in the previous periods.

Table 34

The share of confidential appropriations in the federal budgets of 2005–2014, %

Code and line item (sub-item) containing confidential appropriations	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Federal budget spending, total	11.3	11.8	10.3	11.9	10.0	10.5	11.7	11.7	13.9	16.4
0100 NATIONWIDE ISSUES	3.7	6.3	5.5	8.7	5.1	4.8	9.8	11.4	9.5	9.2
0108 International relations and international cooperation	–	<0.1	< 0.1	3.7	–	–	–	–	–	< 0.1
0109 State material reserves	82.9	89.2	92.2	90.2	85.0	85.1	86.6	86.8	87.2	87.7
0110 Basic research	2.1	1.2	1.1	1.0	0.8	0.3	1.0	2.7	0.7	0.7
0114 Other nationwide issues	0.1	0.7	0.3	4.4	1.6	1.1	1.3	1.3	2.3	3.1

[1] The Federal Law of 02.12.2013, No. 349-FZ "Concerning the federal budget for 2014 and the planning period of 2015 and 2016".

[2] Draft Bill No. 143344-6 "Concerning the federal budget for 2013 and the planning period of 2014 and 2015". M., 30.09.2012.

[3] The fiscal policy guidelines in 2015 and the planning period of 2016 and 2017. URL: http://minfin.ru/common/upload/library/2014/07/main/ONBP_2015-2017_1.pdf (date of access: 10.07.2014).

Code and line item (sub-item) containing confidential appropriations	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
0200 NATIONAL DEFENSE	42.1	42.8	45.3	46.1	48.1	46.4	46.9	47.6	52.6	58.8
0201 Armed Forces of the Russian Federation	33.1	35.6	37.1	39.0	40.2	39.0	40.9	41.2	48.3	54.3
0204 Mobilization training of the economy	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0205 Preparation for and participation in collective security and peace-keeping	100.0	100.0	100.0	–	–	–	–	–	–	–
0206 Nuclear weapons complex	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0207 Fulfillment of international commitments concerning military-technical cooperation	45.2	46.9	50.7	100.0	100.0	100.0	100.0	100.0	80.1	79.8
0208 National defense applied research	98.4	93.9	93.7	93.2	92.9	91.3	92.2	94.5	94.1	94.2
0209 Other national defense issues	2.5	8.8	24.4	29.2	34.6	42.0	36.8	44.9	41.9	53.8
0300 NATIONAL SECURITY AND LAW ENFORCEMENT	28.5	31.6	31.1	31.8	30.8	32.1	32.5	23.3	27.4	29.0
0302 Internal affairs agencies	4.8	6.3	5.2	5.0	3.7	4.3	3.9	3.4	3.8	4.3
0303 Internal troops	11.8	10.3	9.8	10.3	8.2	8.3	7.9	4.6	4.5	5.4
0304 Justice agencies	–	–	–	–	–	–	–	–	–	< 0.1
0306 Security agencies	97.8	95.5	97.3	99.1	99.6	97.1	99.6	99.6	99.7	99.8
0307 Border service agencies	100.0	99.0	97.6	100.0	99.5	98.6	99.1	99.1	99.6	99.9
0309 Protection of the population and territories against natural and man-made emergencies	59.0	62.4	50.7	51.4	51.0	51.3	47.0	42.6	40.7	38.6
0313 National defense and law enforcement applied research	74.0	66.4	64.4	75.5	79.4	92.1	86.0	85.9	91.4	82.4
0314 Other issues concerning national security and law enforcement	8.3	50.7	40.0	56.3	68.4	67.9	78.3	13.6	12.3	85.3
0400 NATIONAL ECONOMY	0.1	<0.1	0.4	0.6	0.6	1.6	1.8	2.4	4.9	5.2
0410 Communications and informatics	–	–	–	–	–	–	–	–	1.6	2.0
0411 National economy applied research	–	–	5.2	5.8	4.5	5.6	11.9	14.2	18.2	23.0
0412 Other national economy related issues	0.1	0.1	< 0.1	0.3	0.7	4.5	1.9	2.3	8.5	10.0
0500 HOUSING AND UTILITY SECTOR	–	3.4	0.9	7.0	10.1	19.3	14.2	6.6	11.0	11.1
0501 Housing sector	–	4.2	5.7	16.0	12.9	20.8	20.7	8.5	21.3	24.1
0700 EDUCATION	2.8	2.7	2.4	2.6	3.1	3.6	4.0	3.2	4.3	4.7
0701 Pre-school education	2.0	2.2	2.4	2.5	2.5	3.9	3.9	4.4	4.5	2.6
0702 General education	1.5	1.9	2.1	2.0	2.8	3.5	0.4	0.2	0.5	1.5
0704 Secondary vocational education	1.1	1.0	1.0	0.9	1.0	–	–	–	–	<0.1
0705 Professional training. retraining, and advanced training	16.9	15.8	17.2	1.8	2.5	9.4	17.4	8.6	6.2	2.9
0706 Higher education and postgraduate vocational education	3.2	2.9	2.5	3.1	3.6	4.1	5.2	4.1	5.2	5.3
0709 Other education related issues	0.3	0.3	0.3	0.3	0.5	0.6	0.3	0.4	0.4	0.9
0800 CULTURE, CINEMATOGRAPHY, MASS MEDIA	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	–	–	–	–
0800 CULTURE, CINEMATOGRAPHY	–	–	–	–	–	–	0.1	0.1	0.1	0.1
0801 Culture	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0804 Periodic press and publishing companies	*13.5*	*7.5*	*2.6*	*2.6*	*3.2*	*3.6*	–	–	–	–
0806 Other issues concerning culture, cinematography, and mass media	*<0.1*	*0.2*	–	–	–	–	–	–	–	–
0900 HEALTHCARE, PHYSICAL CULTURE, AND SPORTS	*4.3*	*4.0*	*2.6*	*4.1*	*3.5*	*3.0*	–	–	–	–
0900 HEALTHCARE	–	–	–	–	–	–	2.7	2.4	2.7	2.9
0901 Inpatient medical assistance	5.6	4.7	2.9	3.2	2.8	2.4	2.3	2.0	1.8	1.7
0902 Outpatient assistance	n/a[1]	n/a	n/a	13.9	4.3	3.8	2.9	3.1	4.2	4.4
0905 Sanatorium and therapeutic assistance	n/a	n/a	n/a	14.1	15.9	10.7	11.2	10.8	12.2	14.0
0907 Sanitary and epidemiological	n/a	n/a	n/a	2.1	0.6	0.6	0.7	1.4	0.8	0.8

[1] Not applicable due to changes in the budget classification structure.

Code and line item (sub-item) containing confidential appropriations	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
safety										
0908 Physical culture and sports	*0.3*	*0.3*	*0.2*	*0.4*	*0.3*	*0.6*	–	–	–	–
0910 Other issues concerning healthcare , physical culture and sports	–	–	–	*1.7*	*1.1*	*1.0*	–	–	–	–
0910 Other healthcare related issues	–	–	–	–	–	–	0.4	0.4	0.3	0.6
1000 SOCIAL POLICY	–	–	–	<0.1	<0.1	–	–	0.1	0.1	<0.1
1003 Social security	–	–	–	<0.1	<0.1	–	–	0.3	0.3	0.1
1004 Family and children protection	–	–	–	–	–	–	–	–	–	<0.1
1100 PHYSICAL CULTURE AND SPORTS	–	–	–	–	–	–	0.3	0.3	0.4	0.3
1101 Physical culture	–	–	–	–	–	–	62.0	41.5	9.1	9.8
1200 MASS MEDIA	–	–	–	–	–	–	0.3	0.3	0.4	0.4
1202 Periodic press and publishing companies	–	–	–	–	–	–	3.4	3.5	4.6	5.5
1400 INTER-BUDGET TRANSFERS BETWEEN THE CONSTITUENT ENTITIES OF THE RUSSIAN FEDERATION AND GENERAL MUNICIPALITIES	–	–	*0.2*	–	–	–	–	–	–	–
1401 Equalization transfers to the constituent entities of the Russian Federation and municipalities	–	–	*0.5*	–	–	–	–	–	–	–

Source: The Federal Budgets of 2005–2013. The data on 2005–2010 is presented in accordance with respective items and sub-items of the budget classification effective since 2011. Italicized is the data of the previous budget classification.

The absolute and relative values of basic components of the direct military allocations in the 2014 federal budget and their changes compared to 2013 in real terms are shown in *Table 35*. The data of the Federal Law of December 2, 2013, No. 349-FZ was used for 2014, because the final version of the Federal Law on the 2014 Budget[1] contains no data on the federal budget expenditure by item and sub-item of the budget expenditure classification. The recalculation into the 2013 prices was performed using the Rosstat's initial estimate[2] of the 2014 GDP deflator index (106.6%).

Table 35

Federal budget direct military expenditure for the item line 'National Defense' in 2014

Budget item line and sub-items	2014, millions of rubles / the same in 2013 prices	Changes in 2014 compared to 2013, millions of rubles / growth, %	The share of allocations, % / changes compared to 2013, p.p.	
			2014 federal budget	in GDP
1	2	3	4	5
NATIONAL DEFENSE	2,488,134 2,333,581	227,119 10.78	16.63 0.90	3.51 0.32
Armed Forces of the Russian Federation	1,897,917 1,780,026	151,914 9.33	12.69 0.52	2.67 0.21
Mobilization pre-conscription and reserve military training	6,664 6,250	–542 –7.98	0.04 –0.01	0.01 –

[1] The Federal Laws of 28.06.2014 No. 201-FZ "On Amendments to the Federal Law On the Federal Budget for 2014 and the Planning Period of 2015 and 2016"" and of 26.12.2014 No. 448-FZ "On Amendments to Article 23 of the Federal Law On the Federal Budget for 2014 and the Planning Period of 2015 and 2016"".
[2] Gross domestic product (GDP) production and usage in (GDP) in 2014. M.: Rosstat, 2 February 2015.

Cont'd

1	2	3	4	5
Mobilization training of the economy	5,427 5,089	–572 –10.11	0.04 –0.01	0.01 –
Nuclear weapons complex	36,429 34,166	4,877 16.65	0.24 0.02	0.05 0.01
Fulfillment of international commitments concerning military-technical cooperation	5,761 5,403	–401 –6.92	0.04 –	0.01 –
National defense applied research	242,772 227,692	32,557 16.68	1.62 0.17	0.34 0.05
Other issues concerning the national defense	293,165 274,955	39,286 16.67	1.96 0.20	0.41 0.06

Data source: The calculations made by the Gaidar Institute.

Military allocations for other federal budget items are shown in *Table 36.* Like in the previous year, secret services' confidential expenditure on education, healthcare, utility, etc., as well as expenditure on civil defense and EMERCOM units are hereafter not included into the military expenditure for other budget items due to changes in the UN military expenditure reporting standards[1] effective since 2012.

Table 36

Direct and indirect military allocations for other line items of the federal budget in 2014

Budget line item or *type of budget allocations*	**2014, millions of rubles / the same in 2013 prices**	**Changes in 2014 against 2013, millions of rubles / growth, %**	**The share of allocations, % / changes against 2013, p.p.**	
			in the 2014 federal budget	**in GDP**
1	2	3	4	5
National security and law enforcement				
Internal troops	127 161 119 262	–9 767 –7,57	0,85 –0,11	0,18 –0,02
Border service agencies	141 208 132 437	–9 949 –6,99	0,94 –0,12	0,20 –0,02
National economy				
Organization of alternative civil service	5 5	–1 –17,67	<0,01 –	<0,01 –
Presidential program of destruction of chemical weapons stockpiles in the Russian Federation	424 397	391 6521,99	<0,01 –	<0,01 –
Subsidies to transport organizations for purchasing motor vehicles to replenish the military convoy rolling stock	53 49	–6 –10,47	<0,01 –	<0,01 –
Subsidies to maintain the Russia-NATO Coordination Center	50 47	–4 –7,80	<0,01 –	<0,01 –
Construction of special-purpose and military facilities	12 025 11 278	–3 028 –21,16	0,08 –0,03	0,02 –
Industrial Utilization of weapons and military equipment (2011–2015)	79 74	–13 –15,29	<0,01 –	<0,01 –
Contributions to the charter capital and subsidies to organizations pertaining to the military-industrial complex	33 838 31 736	–16 549 –34,27	0,23 –0,13	0,05 –0,03
Maintenance of special-purpose facilities	124 116	– –	<0,01 –	<0,01 –

[1] The government expert group's report on the overview of functioning and further development of the United Nations system for the standardized reporting on military expenditure. A/66/89. UN, 14 June 2011.

Cont'd

1	2	3	4	5
Scholarships to young personnel employed by organizations pertaining to the military-industrial complex	240 223	–17 –7,27	≤0,01 –	≤0,01 –
Confidential expenditure	*86 124* *80 867*	*32 479* *67,12*	*0,64* *0,27*	*0,13* *0,05*
Housing and utility				
Provision of servicemen with temporal living accommodation owned by the employer and permanent living accommodation owned by the employee	8 550 8 019	–30 363 –79,11	0,06 –0,23	0,01 –0,05
Education				
Ministry of Defense expenditures	60 106 56 372	–2 139 –3,66	0,40 –0,04	0,08 –
Culture and Cinematography				
Ministry of Defense expenditures	1 872 1 755	–381 –17,85	0,01 –	≤0,01 –
Healthcare				
Ministry of Defense expenditures	49 913 46 813	–1 150 –2,40	0,33 –0,02	0,07 –
Provision of medicines to ZATO FMBA	150 141	– –	≤0,01 –	≤0,01 –
Social policy				
Pension provision of the Ministry of Defense	289 456 271 476	16 567 6,50	1,93 0,03	0,41 0,02
Pension provision to the Border Troops and Internal Troops under the Ministry of Internal Affairs	*32 926* *30 881*	*1 870* *14,22*	*0,22* –	*0,05* –
Material support to the specialists employed by the nuclear weapons complex of the Russian Federation	6 611 6 130	20 0,33	0,04 –	0,01 –
Extra monthly material support to the disabled as a result of war injuries	504 467	–150 –24,31	≤0,01 –	≤0,01 –
Assistance in repairing individual residential houses owned by the servicemen' families who lost the bread-winner	380 356	140 64,59	≤0,01 –	≤0,01 –
Provision of servicemen' survivor benefits	1 833 1 699	–10 –0,59	0,01 –	≤0,01 –
Benefits and compensatory payments to servicemen and equated persons, as well as the retired of them	8 776 8 138	882 12,16	0,06 –	0,01 –
One-time pregnancy allowance to spouses of conscripts, as well as monthly child's benefit to conscripts	2 634 2 444	–59 –2,34	0,02 –	≤0,01 –
Physical culture and sports				
The Ministry of Defense expenditures	2 027 1 901	77 4,20	0,01 –	≤0,01 –
Inter-Budget Transfers Between the Constituent Entities of the Russian Federation and General Municipalities				
Subsidies to the budget of Closed Administrative-Territorial Units (ZATOs)	11 566 10 847	–718 –6,21	0,08 –0,01	0,02 –
Migration of the population from ZATOs	501 470	–57 –10,90	<0,01 –	<0,01 –
OTHER BUDGET ITEMS TOTAL	912 545 855 861	–28 317 –3,31	6,10 –0,50	1,29 –0,05

Source: the calculations made by the Gaidar Institute.

Finally, in 2014, total military allocations (see *Table 37*) in Russia's federal budget, as calculated compliant to the UN standards for military expenditure, increased 0.3% of GDP compared to the past year, reaching 4.8% of GDP.

Table 37

Total military and related federal budget appropriations in 2014

Allocations title	Sum of allocations, millions of rubles	The share of allocations, % / changes against 2013, p.p.	
		2013 federal budget	in GDP
Total military (national defense) allocations related to the current and previous military operations	3,400,679	22.73 0.39	4.79 0.27
Total allocations for the line items 'National Defense' and 'National security and law enforcement'	4,541,721	30.36 –0.60	6.40 0.14

Source: the calculations made by the Gaidar Institute.

The execution of the 2014 federal budget[1] with regard to military expenditure didn't differ from that in 2013, and most of the expenditure (Rb 974bn (39.3%)) for the item line 'National Defense' fell on Q1 (26.5% in Q4). In the consolidated quarterly breakdown of the federal budget, the maximum spending limit overran the allocations under the budget law for the same item line by Rb 20,667,000,000 in June, decreasing in December to Rb 10,473,000,000. Overall, for the first time since 2008 the expenditure for the item line 0200 'National Defense' in 2014 overran by Rb 8,474,000,000 (0.34%) the allocations specified in the latest version of the budget law.

At the same time, a total of Rb 12,58,000,000 (0.6%) was saved for the item line 0201 'Armed Forces of the Russian Federation' against the allocations specified in the initial version of the budget law, while savings of labor costs on the personnel employed by the Ministry of Defense were running at Rb 24,292,000 (3.8%). In 2014, the Ministry of Defense servicemen cost in real terms (including the average annual CPI) contracted by 2.1% despite a 75,000 increase (33.3%) in the number of contracted sergeants and soldiers and sergeants by the end of the year[2]. Although the monetary allowance of conscripted solders remained at a level of Rb 2,000[3], contracted privates earned an average of Rb 28,000, sergeants more than Rb 39,000[4]. A total of Rb 400,656,000,000 (0.56% of GDP) was spend on the Ministry of Defense servicemen cost in 2014.

The civil personnel labor cost at the Ministry of Defense were running at Rb 211,293,000,000 (0.30% of GDP), down 8.1% year-on-year in real terms (inclusive of the average annual CPI).

The Ministry of Defense spending on combustibles and lubricants (CL) in 2014 increased 3.6% in real terms compared to those in 2013, running at Rb 65,476,000,000. At the same time, the CL purchase volume (1,78 million tons) remained at years long average level, whereas the noticeably increased frequency of surprise combat readiness inspections and military exercises was based on above-limit carryover stocks.

The federal budget expenditure on subsistence support at the Ministry of Defense in 2014 contracted 13.8% year-over-year in real terms, to Rb 50,300,000,000.00 whereas that of clothing provision increased 56.3% to Rb 34,391,000,000.00 due to the migration to a new

[1] The budget execution report as of 1 January 2015 URL: http://www.roskazna.ru/federalnogo-byudzheta-rf/fb/doc/01.01.2015.rar (date of access: 13.02.2015).

[2] The report on the extended meeting on the performance results of the Defense Ministry Collegium 2014 M., 19 December 2014. p. 4. URL: http://mil.ru/files/files/koll2014/otchet-2014.doc (date of access: 20.12.2014).

[3] The Presidential Decree of 10 March 2014, No. 136 "Concerning the extension of the term of experiment on cash allowance unification for the conscripted soldiers in the Armed Forces of the Russian Federation".

[4] RIA Novosti. 2014. 24 January. URL: http://ria.ru/defense_safety/20140124/991193336.html (date of access: 25.01.2014).

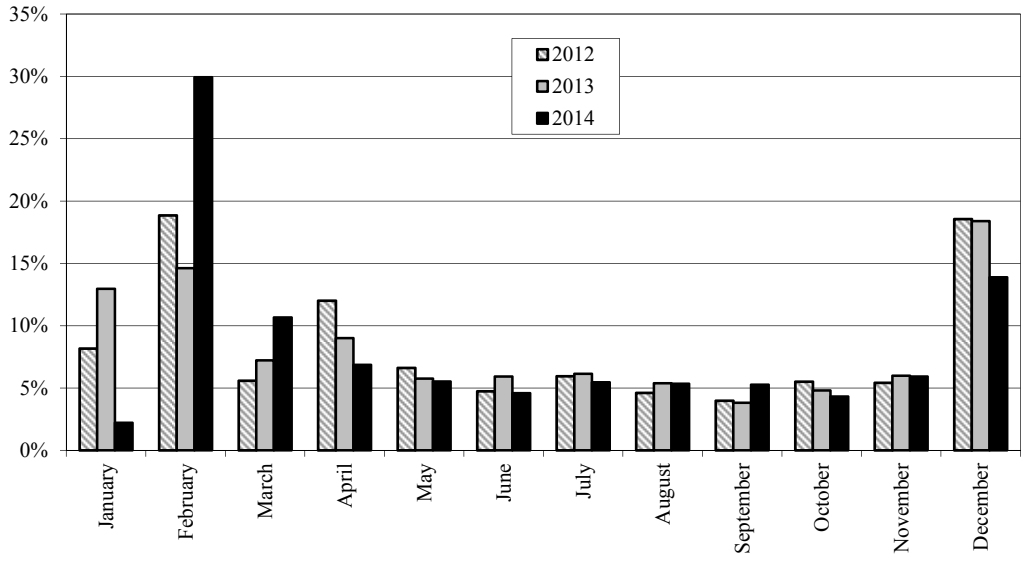
type of uniform. Regretfully, there is no way to compare the actual budget spending on these two line items with the allocations specified in the budget law, because they are not specified in the published law, which, however, is also the case with the allocations on CL and military personnel costs.

The Ministry of Defense capital investment in real estate units in 2014 decreased 16.3% year-over-year to Rb 165, 220,000,000 (0.23% of GDP) for the item line 'National Defense' and 27.0% to Rb 32,79,000,000 (0.05% of GDP) for the item line 'Housing and utility'. The actual expenditure on the latter overran by Rb 23,529,000,000 the expenditure planned in the initial version of the federal law, mostly due to a decision of the Ministry of Defense to support OJSC Obornonstroy through buying Rb 20bn of its SPO of shares. The federal budget expenditure on the saving and mortgage system of housing provision for the Ministry of Defense servicemen increased 25% year-over-year in real terms and reached Rb 78,437,000,000 (0.11% of GDP).

Pension provision costs on the servicemen of Russia's Defense Ministry in 2014 were running at Rb 287,452,000 (0.40% of GDP), up 1.5% year-on-year in real terms.

The sub-item 0208 'National defense applied research' within the line item 0200 'National Defense' took the lead in 2014 in spending growth rates, making it 41.2% year-over-year to Rb 244,636,000,000 (0.34% of GDP), except that the actual execution overran by Rb 1,865,000 (0.8%) the allocations specified in the initial version of the budget law. This abnormally high growth relates to the "least transparent, most corruptogenic part of the state defense contract"[1] and reveals serious issues concerning the economic feasibility of the latter.

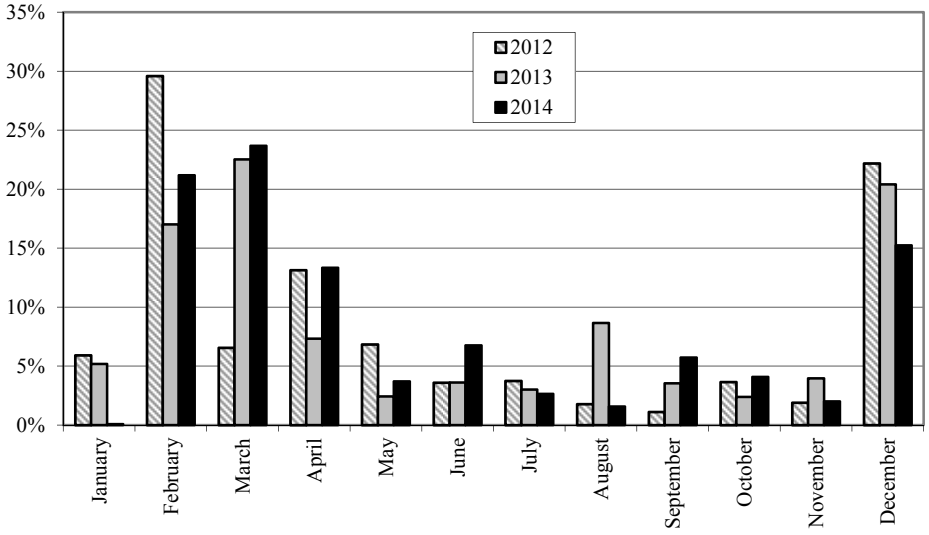
The dynamics of monthly expenditure on the largest sub-items of the line item 0200 'National Defense' of the federal budget in 2012–2014 are shown in *Fig. 19–21.*



Source: the calculations made by the Gaidar Instutute based on the data from the Federal Treasury of Russia.

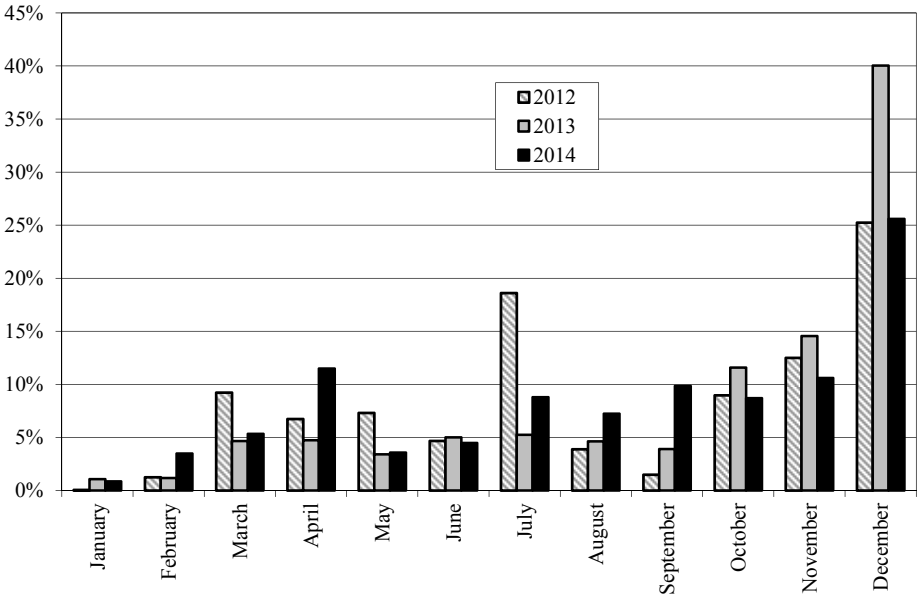
Fig. 19. Federal budget expenditure for the item line 'Armed Forces of the Russian Federation' in 2012–2014

[1] *Metov A.K.* An analysis of systemic violations in the pricing of R&D under the state defense contract. M.: Krasnaya Zvezda, 2014. p. 8.



Source: the calculations made by the Gaidar Instutute based on the data from the Federal Treasury of Russia.

Fig. 20. Federal budget expenditure for the item line 'National defense applied research' in 2012–2014



Source: the calculations made by the Gaidar Instutute based on the data from the Federal Treasury of Russia.

Fig. 21. Federal budget expenditure for the item line 'Other issues concerning the national defense' in 2012–2014

Table 38 shows military expenditure of constituent entities of the Russian Federation, being indicative of the same long years' trends. The expenditure were less than or equal to 0.01% of GDP, adding about one third of these to the federal budget mobilization spending.

Table 38

Military expenditure of the consolidated budget of the constituent entities of the Russian Federation in 2006-2014, millions of rubles*

Expenditure classification subitem	2006	2007	2008	2009	2010	2011	2012	2013	2014
Armed Forces of the Russian Federation	3,5 0,1	0,5 0,3	0,3 0,3	–	–	–	–	–	–
Modernization of the Armed Forces of the Russian Federation and military units	–	–	1,0 0,5	–	–	–	–	–	–
Mobilization and pre-conscription and reserve military training	899,3 808,6	1,351,9 1,245,6	1,797,9 1,702,2	2,116,0 2,021,6	2,003,7 1,958,4	2,250,0 2,187,3	2,366,7 2,316,4	2,506,5 2,444,7	2,582,0 2,518,9
Mobilization preparation of the economy	708,3 692,8	861,2 840,9	1,137,2 1,063,9	1,045,4 989,7	1,298,4 1,247,8	1,351,2 1,266,3	1,781,0 1,689,1	2,343,1 1,935,1	1,673,5 1,580,9
Other national defense issues	32,8 32,1	5,5 5,7	0,7 0,5	4,4 4,4	≤0,1 <0,1	2,7 2,7	3,2 3,0	3,2 2,9	3,3 3,0
Internal troops	3,5 1,4	1,0 1,0	0,3 0,3	–	–	–	–	–	–
TOTAL	1,647.4 1,535,0	2,220,1 2,093,5	2,937,4 2,767,7	3,165,8 3,015,7	3,302,1 3,206,2	3,603.9 3,456,3	4,150,9 4,008,5	4,852,8 4,382,7	4,258,8 4,102,8

* The numerator means 'allocated', the denominator means 'actually spent'.
Source: The Federal Treasury of Russia; the calculations made by the Gaidar Institute.

The early cessation, due to international sanctions, of granting state guarantees in 2014 to MIC organizations to ensure the execution of the state defense contract, whose results in terms of lending banks are presented in *Table 39*, should have (an optimistic estimate) raised more resources in consideration of the state debt for the given purpose from 0.28% of GDP in 2011 to 0.72% of GDP in 2014.

Table 39

The distribution of state guarantees to ensure the execution of the state defense contract in 2011–2014 by lending bank, millions of rubles

Bank	2011	2012	2013	2014	2011–2014	A share, %
Sberbank of Russia, Moscow	46,946,5	92,947,9	152,888,5	249,189,4	541,972,3	44.4
VTB Bank, St. Petersburg	101,522,1	87,907,5	167,410,2	183,859,4	540,699,2	44.3
Gazprombank, Moscow	8,672,8	7,642,4	20,574,6	21,635,0	58,524,8	4.8
Vnesheconombank, Moscow	719,4	786,5	21,394,8	41,356,3	64,257,0	5.3
JSB Russia, St. Petersburg	–	–	–	6,568,0	6,568,0	0.5
Promsvyazbank, Moscow	–	–	–	6,867,7	6,867,7	0.6
NOVICOMBANK, Moscow	–	–	–	1,718,8	1,718,8	0.1
Allocated by the government, total	157,860,8	189,284,3	362,268,1	511,194,6	1,220,607,8	100.0
Permitted under the budget law	168,950,0	199,837,4	399,450,0	496,949,1	1,265,186,5	–
Not used	11,089,2	10,553,1	37,181,9	–14,245,5	44,578,8	–

Source: federal budget laws, Russia's government executive orders, the calculations made by the Gaidar Institute.

B *Table 40* presents Russia's military expenditures incurred in the period between 1999 and 2013, net of the military expenditures of the consolidated budget of the constituent entities of the Russian Federation shown in (*Table 38*) and the provided state guarantees (*Table 39)*. Unlike the practice of the previous years, the expenditure in real terms were calculated using a GDP deflator instead of the expenditure deflator on final consumption of collective services of public administration.

Table 40

The key items of military expenditure in the Russian Federation in 2000-2014

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. In nominal terms (current prices), billions of rubles															
Execution of federal budget expenditures under the National Defense budget line item in accordance with the current budget classification[a]	191.7	247.7	295.4	355.7	430.0	581.1	681.8	831.9	1040.8	1188.2	1276.5	1516.0	1812.3	2103.6	2479.1
Federal budget allocations under the National Defense budget line item: in accordance with the current budget classification	209.4	214.7	284.2	354.9	427.4	578.4	686.1	839.1	1031.6	1192.9	1278.0	1537.4	1846.3	2111.7	2470.6
moved to other line items of budget classification[b]	–	–	–	–	–	44.3	77.7	91.3	126.5	202.4	270.8	324.4	223.1	149.2	122.5
in a comparable budget classification	209.4	214.7	284.2	354.9	427.4	622.6	763.9	930.4	1158.1	1395.3	1548.8	1861.9	2069.4	2260.9	2593.1
Military expenditures according to the data from U.N.[c]	201.2	291.5	322.7	442.5	494.3	659.0	815.9	942.0	1118.0	1166.1	1162.5	1423.3	1689.3	1660.1	–
Total defense appropriations related to current and past military operations[d]	292.2	301.0	424.8	549.7	578.8	780.8	952.2	1219.1	1433.8	1736.6	1893.6	2209.9	2651.3	2990.6	3400.7
2. In real terms (in 2014 prices)[e], billions of rubles															
Execution of federal budget expenditures under the National Defense budget line item in accordance with the current budget classification	1058.7	1174.1	1212.3	1283.0	1289.5	1460.7	1488.0	1595.4	1692.2	1894.0	1782.0	1825.7	2032.7	2242.9	2479.1
Federal budget allocations under the National Defense budget line item: in accordance with the current budget classification	1156.5	1017.6	1166.2	1280.2	1281.7	1453.7	1497.5	1609.2	1677.1	1901.4	1784.1	1861.6	2070.7	2251.6	2470.6
moved to other line items of budget classification	–	–	–	–	–	111.3	169.6	175.1	205.7	322.6	378.0	390.7	250.3	159.1	122.5
in a comparable budget classification	1156.5	1017.6	1166.2	1280.2	1281.7	1565.0	1667.2	1784.3	1882.8	2224.1	2162.0	2242.0	2341.0	2410.6	2593.1
Military expenditures according to the data from U.N.	1111.2	1381.6	1324.5	1596.1	1482.2	1656.4	1780.8	1806.6	1817.6	1858.8	1622.8	1622.8	1894.7	1770.1	–
Total defense appropriations related to current and past military operations	1613.4	1426.5	1743.3	1735.7	1962.6	2078.3	2337.9	2331.0	2768.2	2643.4	2643.4	2661.4	2973.6	3188.7	3400.7
3. In real terms (in 2000 prices), billions of rubles															
Execution of federal budget expenditures under the National Defense budget line item in accordance with the current budget classification	191.7	212.6	219.6	232.4	233.5	264.5	269.5	288.9	306.5	343.0	322.7	330.6	368.1	153.3	449.0
Federal budget allocations under the National Defense budget line item: in accordance with the current budget classification	209.4	184.3	211.2	231.8	232.1	263.3	271.2	291.4	303.7	344.4	323.1	335.3	375.0	153.9	477.4
moved to other line items of budget classification	–	–	–	–	–	20.1	30.7	31.7	37.2	58.4	68.5	70.8	45.3	10.9	22.2
in a comparable budget classification	209.4	184.3	211.2	231.8	232.1	283.4	301.9	323.2	341.0	402.8	391.6	406.1	420.3	436.6	469.6
Military expenditures according to the data from U.N.	201.2	250.2	239.9	289.1	268.4	300.0	322.5	327.2	329.2	336.6	293.9	310.4	343.1	320.6	–
Total defense appropriations related to current and past military operations	292.2	258.4	315.7	359.1	314.3	355.4	376.4	423.4	422.2	501.3	478.7	482.0	538.5	577.5	615.9

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4. Military encumbrance on the economy, as a percentage of GDP															
Execution of federal budget expenditures under the National Defense budget line item in accordance with the current budget classification	2.62	2.77	2.73	2.69	2.53	2.69	2.53	2.50	2.52	3.06	2.76	2.71	2.92	3.18	3.49
Federal budget allocations under the National Defense budget line item: in accordance with the current budget classification	2.87	2.40	2.63	2.69	2.51	2.68	2.55	2.52	2. 50	3.07	2.76	2.75	2.97	3.19	3.48
moved to other line items of budget classification	–	–	–	–	–	0.20	0.29	0.27	0.31	0.52	0.58	0.58	0.36	0.23	0.17
in a comparable budget classification	2.87	2.40	2.63	2.69	2.51	2.88	2.84	2.80	2.81	3.60	3.34	3.33	3.33	3.42	3.65
Military expenditures according to the data from U.N.	2.75	3.26	2.98	3.35	2.90	3.05	3.03	2.83	2.71	3.00	2.51	2.54	2.72	2.51	–
Total defense appropriations related to current and past military operations	4.00	3.36	3.93	4.16	3.40	3.61	3.54	3.67	3.47	4.48	4.09	3.95	4.27	4.52	4.79
5. By purchasing power parity (current prices), billions of U.S. dollars															
Execution of federal budget expenditures under the National Defense budget line item in accordance with the current budget classification	26.8	30.2	31.9	34.2	36.2	45.6	54.1	59.5	72.6	84.7	80.6	87.4	98.0	108.9	120.8
Federal budget allocations under the National Defense budget line item: in accordance with the current budget classification	29.3	26.2	30.7	34.1	35.9	45.4	54.4	60.0	71.9	85.0	80.7	88.6	99.9	109.4	120.3
moved to other line items of budget classification	–	–	–	–	–	3.5	6.2	6.5	8.8	14.4	17.7	18.7	12.1	7.7	6.0
in a comparable budget classification	29.3	26.2	30.7	34.1	35.9	48.9	60.6	66.6	80.8	99.4	97.8	107.3	111.9	117.1	126.3
Military expenditures according to the data from U.N.	28.1	35.6	34.8	42.5	41.6	51.7	64.7	67.4	78.0	83.1	73.4	82.0	91.4	86.0	–
Total defense appropriations related to current and past military operations	40.9	36.7	45.8	52.8	48.7	61.3	75.5	87.2	100.0	123.8	119.6	127.4	143.4	154.9	165.6
For reference															
The gross domestic product deflator, % year-over-year y	137.6	116.5	115.5	113.8	120.3	119.3	115.2	113.8	118.0	102.0	114.2	115.9	107.4	105.2	106.6
Purchasing power parity[f], RUB/US$	7,15	8,19	9,27	10,41	11,89	12,74	12,63	13,98	14,34	14,03	15,83	17,35	18,49	19,31	*20,53*

[a] For 2014 – the Federal Treasury's preliminary data on the federal budget execution.

[b] Defense Ministry total expenditures and secret outlays in item lines 05–09 and 11 of the federal budgets of 2005–2011, for 2012–2014 – additionally in item line 12.

[c] For 2014 – will be presented by the Russian Government in U.N. in 2015, also including maintenance costs on internal troops and border troops.

[d] Inclusive of the retirement benefits of the retired servicemen.

[e,] Deflated by using the GDP deflator.

[f] For 2014 – the assessment made by the Gaidar Institute.

Sources: The Federal budget laws of 2000–2014 and the execution of the federal budgets of 2000–2013; Russia's national accounts in 1997–2013: Statistical book./ Rosstat. M., 2005–2014; Objective information on military issues including military expenditure transparency. The U.N. General Secretary's reports in 2001–2014; Rosstat; the Federal Treasury of Russia.

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