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**RUSSIAN ECONOMY IN 2017
TRENDS AND OUTLOOKS**

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R95 **RUSSIAN ECONOMY IN 2017. TRENDS AND OUTLOOKS** / [Alexander Abramov etc.; Doctor of sciences (economics) Sergey Sinelnikov-Murylev (editor-in-chief), Doctor of sciences (economics) Alexander Radygin]; Gaidar Institute for Economic Policy. – Moscow: Gaidar Institute Publishers, 2018. – 544 p. – ISBN 978-5-93255-530-9.

The review “Russian economy in 2017. Trends and outlooks” has been published by the Gaidar Institute since 1991. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 6 big sections that highlight different aspects of Russia's economic development, which allow to monitor all angles of ongoing events over a prolonged period: the socio-political issues and challenges; the monetary and budget spheres; financial markets and institutions; the real sector; social services; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

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Results: 2017

The review of the Russian economy of the Gaidar Institute usually provides an analysis of a broad range of structural, institutional and branch-specific issues, and reflects the conjunctural aspects of socio-economic development as well as ongoing trends. However, during 2017 the economy of the Russian Federation displayed partly contradictory tendencies: there was a transition to economic growth, but there were growing uncertainties associated, on the one hand, with the increasing pace of technological innovation and, on the other, with a deterioration in external political relations.

The renewed growth of GDP to a large extent reflected economic recovery and cannot for the time being be said to indicate a trajectory of growth matching, far less exceeding, average world rates of development. However, in 2017 an improved level of inflation, when compared with the entire post-Soviet period, became one of the key components of long-term growth.

The bringing under control of the budget deficit, budgetary consolidation, the observance of the budgetary rule, produced a more satisfactory macroeconomic basis for development. The influence of oil prices on the rouble exchange rate was somewhat reduced.

At the same time, a favourable conjuncture in world raw materials markets contributed to the maintenance of a positive foreign trade balance, although the Russian oil sector did suffer from restrictions imposed by the OPEC agreement. There was positive growth in the agrarian sector, even when one takes into account the significant achievements of previous years. A record grain harvest strengthened the leading position of Russia in the world wheat market.

There were positive trends in the financial market, growth in the securities markets and a recovery in the stock markets. However, overall, these markets remains narrow, insufficiently developed, and vulnerable. In the banking sector the process of withdrawal of licences from lending institutions that did not meet the requirements of the regulator continued, a new mechanism for sanitisation was adopted (a fund for consolidation of the banking sector) and was applied to a number of the largest private banks. This, on the one hand, reduced systemic risks within the banking sector but at the same time increased state participation, which was already significant.

The contribution of the banking system to the funding of the economy remained limited. The extent of lending to the corporate sector remained approximately at the level of the previous year. The principal contribution to the renewed growth of investment in basic capital in 2017 was made by enterprises' own funds, and that growth could hardly be described as being stable.

Even so, in the retail sector the contribution of the banks to investment increased. Particularly noticeable was growth in the portfolio of mortgage loans, which was partly attributable to a lowering of interest rates for mortgage lending. The scale of lending to

consumers increased, particularly that of unsecured lending, not an unambiguously positive development. While real wages began to increase, the real incomes of the population continued to fall: in such conditions the return to a consumption model of behaviour supported primarily by borrowing, without adequate growth of the economy and of incomes carries the threat of an excessive increase in the debt burden of households.

Clearly, the performance of the economy in 2017 underlines the strategic importance of a reduction of levels of poverty, of the creation of an effective system of targeted social support, of a budget manoeuvre in the direction of the development of human capital, and of an improvement in the quality of institutions, without which it will not be possible to achieve an investment-based model of sustainable growth.

Section 1. At the end of a global crisis: economic problems of 2017–2019¹

1.1. Global trends and challenges

For ten years now the world has been living under the conditions of a structural crisis. This crisis cannot be described merely by fluctuating production rates, macroeconomic unbalance, or political instability. Its essence lies in the deep transformation that has taken over multiple aspects of life in the world's leading countries, both developed and developing ones. One could say that it is a crisis of socioeconomic and political identity that has led to the formation of new realities (trends) that are likely to dominate the world for the next few decades to come. Over the decade-long duration of the crisis we have seen episodes of both expansion and contraction, of both acceleration and deceleration. But the key feature of this period is the general instability of all trends, especially economic growth, and the drastic increase in uncertainty around the consequences of both technological innovations and economic policy.

Analogous crises of the past, in the 1930s and 1970s, each lasted roughly ten years, although their beginning and end points are difficult to precisely determine. It seems that the current crisis is also coming to a close after a decade. The positive trends observed in the world economy testify to its closure, but serious risk factors could still pose obstacles to stability in the short term. (*Tables 1 and 2*).

Table 1

Economic growth, 2008–2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (est.)
1	2	3	4	5	6	7	8	9	10	11
GDP % change relative to previous year										
The World	3.0	-0.1	5.4	4.3	3.5	3.5	3.6	3.4	3.2	3.7
Russia	5.2	-7.8	4.5	5.1	3.7	1.8	0.7	-2.8	-0.2	1.8
EU (Eurozone)	0.4	-4.5	2.1	1.6	-0.9	-0.2	1.3	2.0	1.8	2.1
Great Britain	-0.6	-4.3	1.9	1.5	1.3	1.9	3.1	2.2	1.8	1.7
USA	-0.3	-2.8	2.5	1.6	2.2	1.7	2.6	2.9	1.5	2.3
Germany	0.8	-5.6	3.9	3.7	0.7	0.6	1.9	1.5	1.9	2.5
France	0.2	-2.9	2.0	2.1	0.2	0.6	0.9	1.1	1.2	1.8
Italy	-1.1	-5.5	1.7	0.6	-2.8	-1.7	0.1	0.8	0.9	1.5
Spain	1.1	-3.6	0.0	-1.0	-2.9	-1.7	1.4	3.2	3.2	3.1
Greece	-0.3	-4.3	-5.5	-9.1	-7.3	-3.2	0.4	-0.2	0.0	1.8

¹ This section is written by Vladimir Mau, Russian Presidential Academy of National Economy and Public Administration (RANEPA).

RUSSIAN ECONOMY IN 2017

trends and outlooks

Cont'd

	1	2	3	4	5	6	7	8	9	10	11
China		9.6	9.2	10.6	9.5	7.9	7.8	7.3	6.9	6.7	6.8
India		3.9	8.5	10.3	6.6	5.5	6.4	7.5	8.0	7.1	6.7
Brazil		5.1	-0.1	7.5	4.0	1.9	3.0	0.5	-3.8	-3.6	1.1
South Africa		3.2	-1.5	3.0	3.3	2.2	2.5	1.7	1.3	0.3	0.7

Source: IMF data from the World Economic Outlook Database URL: <http://www.imf.org/ru/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018>

Table 2

Economic performance in various countries of the world

	Current account balance as % of GDP		Key interest rate (end of year), % per annum		Inflation, %		Budget deficit (% of GDP)		Public debt (% of GDP)		Savings, % of GDP		Investments, % of GDP		Unemployment level, yearly average, %	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
World											25.8	25.8				
Russia	2.0	2.8	10.0	7.75	5.4	2.5	-3.7	-2.1	15.6	17.4	27.3	26.6	25.3	23.8	5.5	5.5
EU (Eurozone)			0.0	0.0	1.1	1.1	-1.5	-1.3	89.0	87.4	23.8	24.2				
Great Britain	-4.4	-3.6	0.25	0.50	1.2	2.8	-2.9	-2.9	89.3	89.5	12.6	13.4	17.0	17.0	4.9	4.4
USA	-2.4	-2.4	0.5-0.75	1.25-1.5	2.2	1.8	-4.4	-4.3	107.1	108.1	18.0	17.5	19.7	19.8	4.9	4.4
Germany	8.3	8.1	0.0	0.0	1.7	1.1	0.8	0.7	68.1	65.0	27.5	27.6	19.2	19.4	4.2	3.8
France	-1.0	-1.1	0.0	0.0	0.6	1.1	-3.4	-3.0	96.3	96.8	22.0	22.1	23.0	23.3	10.0	9.5
Italy	2.6	2.8	0.0	0.0	0.5	0.9	-2.4	-2.2	132.6	133.0	19.6	19.6	17.0	16.9	11.7	11.4
Spain	1.9	1.9	0.0	0.0	1.6	1.2	-4.5	-3.2	99.4	98.7	22.3	22.5	20.4	20.6	19.6	17.1
Greece	-0.6	-0.2	0.0	0.0	0.3	1.0	1.0	-1.7	181.6	180.2	9.9	10.5	10.5	10.8	23.6	22.3
China	1.7	1.4	4.35	4.35	2.1	2.3	-3.7	-3.7	44.3	47.6	45.9	45.4	44.2	44.0	4.0	4.0
India	-0.7	-1.4	6.50	6.0	3.6	4.5	-6.6	-6.4	69.6	68.7	29.7	28.6	30.4	29.9	3.5	3.4
Brazil	-1.3	-1.4	13.75	7.0	6.3	3.6	-9.0	-9.2	78.3	83.4	16.2	16.2	17.5	17.6	11.3	13.1
South Africa	-3.3	-2.9	7.0	6.75	6.7	5.2	-4.0	-4.5	51.7	53.0	16.1	16.2	19.4	19.1	26.7	27.6

Source: IMF data from the World Economic Outlook Database. URL: <http://www.imf.org/ru/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018>

By the end of 2017, experts were taking an optimistic attitude toward the short-term outlook for socioeconomic trends. Worldwide growth is estimated to be quite high despite the lack of inflation. The IMF predicts a growth rate of 3.7% for the world economy in 2017–2018 (as opposed to 3.3% in the previous two years), which corresponds to the expert consensus.¹

Our analysis of global growth in 2017 has led us to draw *five general conclusions* about the current problems of the world economy.

First, in 2008–2010 experts predicted that this time developing economies (primarily China) would be the engine driving the world out of the crisis. These expectations turned out to be incorrect. Once again, the main driver was the US economy. In terms of economic growth, inflation, and employment, 2017 was one of the best years of the last decade for the US. Economic growth has led to increased income and demand, thus helping clear bank balances and improve national budgets.²

Second, the observed growth roughly corresponds to the moderate rates of the last fifty years (after 1965), which indicates that it has shifted to a stable trajectory. For the same reason, we

¹ Nouriel Roubini gave quite a successful complex explanation for the increased growth rates in leading countries: "... The current acceleration of economic growth rates is caused by the increase in overall demand, which is a result of continued expansionist monetary and budgetary policy, as well as an increase in the level of business and consumer confidence. This confidence is growing thanks to the decrease of financial and economic risks, as well as the suppression of geopolitical risks, which still exert an insignificant influence on the economy and the market." (Nouriel Roubini, "The Mystery of Missing Inflation," *Project Syndicate*, Sept. 13, 2017. URL: <https://www.project-syndicate.org/commentary/monetary-policy-missing-inflation-by-nouriel-roubini-2017-09?barrier=accessreg>).

² This conclusion is not contradicted even by the significant fluctuations of the US stock market, such as those that were observed in early February 2018.

can consider the discussion about “long-term stagnation” to be moot, at least, until new data about the trend of the next two to three years becomes available.

Third, the postcrisis growth does not exhibit the V-shaped “postcrisis bounce” characteristic of many past crises. This could attest to the instability of these rates. Many experts believe that by absorbing excess capacity, a bounce of this sort can create a safety cushion that softens the inevitable shocks that periodically arise in the world economy.¹ The lack of a bounce, meanwhile, creates additional risks that could arise in the near future. In this case, the bounce-free recovery is, in our opinion, a direct consequence of successful anticrisis policies of the last decade.² The world learned to handle crises: lessons have been learned, and despite the exceptional severity and novelty of the problems that trouble the world, the crisis of the early twenty-first century ended up being much milder than the twentieth-century ones. But social stability during the crisis (i.e., successful anticrisis policy) came at the cost of a virtual rejection of “creative destruction” and a consequent negative effect on postcrisis dynamics.³

Fourth, the process of globalization continues despite the dark prognoses made regularly over the last decade. In 2017 world trade exhibited growth rates exceeding that of the GDP: 4.4% in terms of physical volume and about 10.5% in terms of price, reaching a total of \$17.7 trillion (according to data from the IMF and the WTO).⁴ But the problems and the resistance to globalization are evident. World trade is growing more slowly now than it was a decade ago, while countries are resorting to protectionist measures more often and on a greater scale. This can be explained by a few structural reasons that have long-term impact:

- countries that supply cheap goods are now focusing on domestic markets, which are significant in size both because of the high population in Asia and because of the increased affluence of the local population as a result of accelerated growth in recent decades;

- production is moving closer and closer to areas of consumption and R&D (a trend sometimes called the reindustrialization of developed countries), which is a result of increasing labor costs in major developing countries on the one hand and, on the other, of fundamental technological disruptions that have substantially lowered the role of the cost of labor and natural resources in the production of competitive goods;

- structural shifts and increasing uncertainty about the labor market in the mid-term have pushed governments to limit access to domestic markets. This is also caused by increasing geopolitical tension.

Fifth, the situation remains rather contradictory. On the one hand, global growth is accelerating and the “growth gap” is narrowing while inflation remains unusually low for this economic situation. On the other hand, the growth of productivity remains low, inequality is increasing, and social problems have been exacerbated by the profound influence of technological change on the labor market.

¹ For example, Stephen S. Roach, “Complacency will be tested in 2018,” *Project Syndicate*, Dec. 14, 2017. URL: <https://www.project-syndicate.org/commentary/test-for-economic-complacency-in-2018-by-stephen-s--roach-2017-12/russian>

² Cf.: G. Idrisov, V. Mau, A. Bozhechkova, “In search of a new model of growth,” *Voprosy ekonomiki*. 2017, no. 12, p. 14.

³ Cf.: Joseph Schumpeter, *Capitalism, Socialism, and Democracy*, New York: Harper & Bros, 1942. See also R. Caballero and M. Hammour, “On the timing and efficiency of creative destruction,” *Quarterly Journal of Economics* 111, 1996, pp. 805–52.

⁴ <http://www.imf.org/en/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018>; https://www.wto.org/english/news_e/pres17_e/pr800_e.htm.

Many experts believe that the renewed growth has not yet been accompanied by an increase in productivity. It is based primarily on demand-side factors, since long-term stable growth is based on supply-side factors (such as increased productivity).¹

This is the foundation for trends in socioeconomic development that will characterize 2018 and 2019 in the major countries of the world.

First, monetary policy is starting to be normalized, a fact that has not yet been reflected in increasing inflation rates. Much will depend on the policy of the Federal Reserve System, which for the first time in a very long while is headed not by an economist but by a lawyer. A key challenge now will be to help monetary authorities find the optimal solution to stimulate growth without allowing a surge in inflation. This task is theoretically simple but politically very complex. The tightening of monetary policy is necessary and inevitable, but it will always meet political opposition—monetary authorities will inevitably be blamed for slowed economic growth. The position of central banks is getting all the more difficult because in recent years they have faced more criticism of their independence, as agencies that cannot be held accountable for economic growth and employment. Economic growth is never fully stable anyway, and any slowing of it will be explained first and foremost by the policy decisions of monetary authorities.

The situation will be further intensified by the fact that for the last four decades (since the early 1980s) inflation has been at the periphery of attention for developing countries as deflation came to be perceived as the main threat. Public opinion and policies of these countries lost their immunity to the inflation disease (whereas the political leadership and economic experts of most postcommunist countries did not). Meanwhile, slowing monetary normalization could lead to a burst of high inflation, however strange that may sound at present.

The normalization of monetary policy carries with it another risk related to the dramatic increase in the importance of financial markets, including the real sector's dependence on them. Indeed, according to data of the Bank of International Settlements, the cumulative assets of the Federal Reserve System, the European Central Bank, and the Bank of Japan grew by \$10.4 trillion, while the growth of the nominal GDP in those countries was only \$4.9 trillion. Thus the difference of \$5.5 trillion represents the liquidity that makes it possible to appreciate the "financial bubble" of global assets.² The expansion of this "bubble" (whether it is spontaneous or a result of the central banks' decreased balances) could cause serious shakeups not only in individual companies but also in national economies oriented toward overvalued financial assets.

The budgetary and tax policies of developed countries will be important issues. Sectors of human capital and infrastructures are undoubtedly budget priorities; in recent years, this fact has been reflected in election campaigns in every developed country. But this gives rise to a conflict between the need to increase budget expenditures and the possibility of funding them.

¹ "But there is another potential obstacle in the path of sustained recovery: the long-term decline in productivity growth has not yet been reversed. Instead, the current boom seems to be demand-led, with private consumption being the biggest driver, though private investment, too, is finally starting to rise. These trends have been accompanied by solid employment growth, which is welcome news, but cannot last forever. In the longer run, economic performance and potential growth will depend on the supply side and, in particular, on a revival of productivity growth." (Kemal Dervis and Zia Qureshi, "The danger in today's good economic news," *Project Syndicate*, Jan. 11, 2018. January 11. URL: <https://www.project-syndicate.org/commentary/economic-growth-forecasts-optimism-inequality-by-kemal-dervis-and-zia-qureshi-2018-01>).

² URL: <http://fingfx.thomsonreuters.com/gfx/rngs/GLOBAL-CENTRALBANKS/010041ZQ4B7/index.html>; <http://www.imf.org/external/pubs/ft/weo/2017/02/weodata/download.aspx>

There are only three ways out of this conflict: increasing taxes, redistributing resources from other sectors, and increasing government debt. Raising taxes is fraught with the risk of inhibiting growth. The redistribution of spending to benefit high-priority sectors is politically limited by the demands of the defense sectors. A factor in favor of increasing debt is the unprecedentedly low interest rates (i.e. debt is cheap), but the high level of budgetary debt in leading countries and the risk of a full-scale budget crisis as a result of normalized monetary policy and growing interest rates make strong arguments against it.

There is an ongoing discussion about the relationship between monetary and budgetary methods. The former risks missing the onset of an inflation surge. The latter is fraught with a lengthy budgetary crisis for the foreseeable future.

A highly important problem combining both macroeconomic and structural challenges is developing a new model for the welfare state that corresponds to contemporary technological, demographic, and social realities. The crisis of traditional systems of state pensions, health care, education, and labor market regulations (those that were formed by the twentieth-century industrial model) is becoming more and more evident. So far it has not been possible to strike a balance of efficiency, reliability, and financial sustainability. The private models of recent decades have also been unable to provide an adequate solution to this three-pronged problem. Social programs and services are getting more expensive, which leads to either (a) the displacement of financing for other programs (infrastructural ones, for instance), (b) increased taxes, or (c) decreased revenue in these sectors. This gives rise to a conflict between economics and politics: all these options of financing are unacceptable solutions when it comes to steady growth, but these sectors of human capital are presently the key priorities of state policy for ensuring this growth. The quality of education and health care is a focus of election campaigns in all developed countries and will remain so for the foreseeable future. Moreover, the solution to these problems cannot be reduced to purely fiscal means: the problem isn't a matter of money, but a matter of reforming the very principles of how these sectors function. In other words, reforming the welfare state requires coordinated actions in the structural, fiscal, and financial spheres, to say nothing of the political consensus (or political will) needed for these reforms.

Globalization also poses new challenges for the welfare state. In 2016-17, economists came to accept the thesis about the conflict between the economic and sociopolitical consequences of globalization. From an economic perspective, free trade leads to a growth of overall prosperity, and in this regard the findings of classical economics of the eighteenth and nineteenth centuries have been confirmed by the course of history, including in recent decades. But political consequences have been ambivalent, leading at certain stages to growing inequality and consequent social conflicts.

The belief that globalization benefits everyone by guaranteeing growth has been replaced by the understanding that this benefit comes only in the final analysis and applies only to certain people and certain spheres of activity. Globalization has winners and losers. Hence the increase in populism, especially in developed countries. However, this does not mean that a rejection of globalization will bring political stability (reduced conflict) or normalization (a decline in populism). To the contrary, globalization is important as a source of additional growth, which is especially important in the recession conditions of the last few years (or the last few decades, when speaking of Japan). But at the new stage, when the welfare state is being restructured, it is crucial to also develop means of compensating those who have suffered substantial losses

from globalization.¹ Of course, this conclusion should be met with caution: compensation should not disincentivize the efforts of people and companies to adapt to the new realities.

The modernization of the welfare state has a direct effect on the chances of increasing productivity. To a significant degree, its stagnation reflects the state of human capital: professional skills and qualifications lag behind rapid technological changes that are radically transforming demand for labor resources. There are obvious structural disbalances on the labor market: the demand for qualifications does not match the supply. Governments can alleviate this problem in two ways, which are not necessarily mutually exclusive alternatives: they can actively invest in education (retraining personnel) and intensify the redistribution of resources from the more successful to the “victims” of globalization and technical progress. The first path is preferable, but more difficult to enact. The second creates risks of exacerbating a welfare mentality. Though it would alleviate acute social problems, it does not offer long-term solutions.

Finally, 2017 demonstrated how leading countries are adapting to the new realities. A wave of populism struck in 2016, most vividly with the Brexit referendum in the UK and the presidential election in the US. But it did not have a negative effect on economic trends, whether national or global. Despite political complications, economic trends were positive in terms of both growth rates and the state of financial markets. And the populist trends in developed countries did not develop steadily: they certainly manifested in the election results in several European countries but did not decide those votes. But populism apparently will remain a substantial factor influencing political and economic processes for the foreseeable future, especially in developed countries. This will particularly be encouraged by the current high level of inequality.²

Now we can begin to take *stock of the global structural crisis* that began in 2008. It poses several fundamental questions, the answers to which were completely unclear at the beginning. Determining them has taken a rather long period: “a turbulent decade.”³ Now we have a clearer understanding of the contours of the future postcrisis world. Against this background a new intellectual agenda is taking shape, through pointed discussions about the key problems of socioeconomic development in both the world as a whole and in individual countries. We are

¹ “Other means of alleviating the contradictions between globalization and prosperity are the emigration of workers or introducing protectionist measures in trade. But these options are characteristic for earlier phases of industrialization, that is, before the appearance of the modern socialist state. Furthermore, the lesser success of populism in Europe (compared to the US) are related to the EU’s more developed systems of the welfare state that compensate for the losses from globalization.” (Dani Rodrik, “Too late to compensate free trade’s losers,” *Project Syndicate*, Apr. 11, 2017. URL: <https://www.project-syndicate.org/commentary/free-trade-losers-compensation-too-late-by-dani-rodrik-2017-04?barrier=accessreg>).

² According to the data of the World Inequality Report 2018, the share of national income belonging to the wealthiest 1% of the US population grew from 11% in 1980 to 20% in 2014, while the poorest 50% only have 13% of income. The share of the wealthiest 1% for approximately the same period grew from 4% to 20% in Russia, 6% to 14% in India, and 6% to 22% in India. (World Inequality Report 2018. URL: <http://wir2018.wid.world/files/download/wir2018-summary-russian.pdf>).

³ The issues and challenges posed by the global structural crises are examined in further detail in our book V.A. Mau, *Crises and lessons: Russia’s economic in an era of turbulence*, Moscow: Gaidar Institute, 2016, pp. 27–29, 342–347. They are common to all crises of this sort. But the solutions to them, of course, are specific for each crisis.

essentially gaining an understanding of the contours of the “new reality” that we must function in for the duration of the foreseeable period ahead.¹

First. The geopolitical situation has shifted toward a multipolar, multivector world, unlike the bipolar model that took hold after the crisis of the 1930s and the unipolar one that followed the crisis of the 1970s. The coming period will be characterized by a system of complex, diverse, and highly dynamic configurations of various alliances and groupings. In the economic sphere this trend is apparent primarily in the transition of world trade from a unified system based on the principles of the WTO, toward the predominance of variable, multispeed trade agreements.

Second. New concepts about the model of economic growth are taking shape. The situation can no longer be described in terms of “long-term stagnation,” since economic growth is gaining momentum. But this model substantially differs from the previous ones described in detail by mainstream economic science. We must reconceive the relationship between the basic concepts of macroeconomic theory: growth, employment, inflation. The new mystery is inflation-free growth, and science still needs to explain this phenomenon.² Structural and technological changes may lie at its base; these can lead to a substantial decrease in the cost of new products and services, which, in all likelihood, will negatively affect the nominal rates of economic growth. We now have a new term to describe this phenomenon: “technological deflation.” It may not be very precise, but it fully reflects the essence of the phenomenon. There are also more simple explanations for it: the appearance of longer time lags between changes in monetary policy and inflation expectations.

Third. The independent status of the central banks is being questioned. After stagflation of the 1970s and the difficult struggle against inflation in developing countries, and then in postcommunist ones, the independence of monetary authorities was considered an unwavering principle that made it possible to escape the inflation legacy of the better part of the twentieth century. The last significant step in this direction was the Blair government’s 1997 decision to formally separate the Bank of England from the Treasury (though it had already been independent *de facto* for a long time). The corresponding provisions were introduced to the Constitution of the Russian Federation of 1993. The discussion sharpened considerably when the crisis began in 2008: central banks played a prominent role in preventing an economic catastrophe, demonstrating a power not subject to democratic procedures and going far beyond the reach of constitutional governments.

At present, political efforts are being made to limit the independence of central banks while imputing them with the responsibility to ensure not only the stability of the monetary system but also economic growth. Statements of this sort have been heard in both legislative and executive branches of power of several countries, including the US.

However, these issues are technically legal in nature rather than economic. In conditions of global crisis, the central banks have repeatedly taken critically important actions to prevent recessions and stimulate economic growth, and the basic principles of monetary policy and key solutions to save (or refuse to save) institutions of the financial market have been made in unity

¹ Earlier one could say “over the course of several decades,” but now the radical acceleration of technological and socioeconomic processes makes it impossible to define the temporal horizons of the new model.

² “Since the summer of 2016, the global economy has been in a period of moderate expansion, yet inflation has yet to pick up in the advanced economies. The question is why.” (Nouriel Roubini, “The Mystery of Missing Inflation,” *Project Syndicate*, Sept. 13, 2017. URL: <https://www.project-syndicate.org/commentary/monetary-policy-missing-inflation-by-nouriel-roubini-2017-09?barrier=accessreg>).

with legislative and executive branches of authority, regardless of the independent status of the regulator. However, formal introducing the responsibility for guaranteeing economic growth to the mandate of central banks will become a significant factor in limiting their independence.

The position of money emission centers in the system of administrative authorities (their independence) should not be viewed abstractly, outside the historical context as if they it can remain singularly possible forever. The question cannot be answered with dogma. The role of central banks can change over time. But it still remains unclear whether the time has truly come to change the established model of central banks, and what their place will be in future economic configurations.¹

A new problem in the activity of central banks is their relation to currency emission. And this problem appears in two forms. On the one hand, the appearance of new national currencies relieves national central banks of their right of emission: that was precisely what happened in the Eurozone. On the other hand, the appearance of cryptocurrencies poses new challenges, the volume and character of which are still difficult to grasp. However, in the extreme version, in the case of a full-fledged legalization of cryptocurrency in some country, central banks could find themselves in competition with public and private monetary systems.

Correspondingly, the *fourth* intellectual and political challenge of postcrisis development is the change in currency configurations. Global crises of the past have led to substantial transformations, to the appearance of new reserve currencies. Studies conducted in 2008–2010 on the influence of the structural crisis on currency systems addressed the future of the yuan, artificial currency units (such as SDRs) or the growing role of regional reserve currencies.²

Over the course of the decade, the direction of discussion radically changed: cryptocurrencies and the technologies related to them took a central position. In 2017 cryptocurrencies were an object of booming demand, multifold appreciation, and rapid depreciation. They were also the topic of intense discussions among economists and politicians, and posed fundamentally new questions for legal scholarship for decades to come. Both the basic possibility of using cryptocurrencies in legal monetary circulation, as well as the expediency and possibility of public regulation of them are being discussed. The risks that cryptocurrencies will be used to evade taxes and carry out illegal transactions are objects of particular attention.³

¹ Dani Rodrik sees the calls to reject the independence of central banks as a dangerous form of political populism. But at the same time, he develops an argument about the need to move their mandate beyond the guarantee of monetary stability. “Independent central banks played a critical role in bringing inflation down in the 1980s and 1990s. But in the current low-inflation environment, their exclusive focus on price stability imparts a deflationary bias to economic policy and is in tension with employment generation and growth.” (Dani Rodrik, “In defence of economic Populism,” *Project Syndicate*, Jan. 9, 2018. URL: <https://www.project-syndicate.org/commentary/defense-of-economic-populism-by-dani-rodrik-2018-01>)

² The yuan’s potential as a reserve currency was an object of increased attention of researchers after the onset of the global crisis in 2008. See, for example: Melissa Murphy and Wen Jin Yuan, “Is China Ready to Challenge the Dollar. Internationalization of the Renminbi and Its Implications for the United States,” Washington, D.C.: The CSIS Press, 2009; Jeffrey Frankel, “Internationalization of the RMB and Historical Precedents,” *Journal of Economic Integration*, 2012, Vol. 27, September (3), pp. 329-365; Eswar S. Prasad, *Gaining Currency: The Rise of the Renminbi*, Oxford University Press, 2016.

³ An analysis of the problems of blockchain and cryptocurrencies is presented in the IMF’s paper “Fintech and Financial Services: Initial Considerations,” IMF Staff Discussion Note, Washington DC: IMF, 2017. URL: <https://prague.bc.events/ru/news/mvf-predstavil-doklad-o-potentsiale-blokcheyna-i-kriptovalyut-69974>. It is noted here that cryptocurrencies have already been used to avoid the standard of currency control in China, Venezuela, and Cyprus. These are the problems that explain the decision to ban ICOs in China.

After the initial period of interest in the new technology and the opportunities for its broad use came natural doubts about its future. Around the beginning of 2018, criticism of this tool (and of all blockchain technologies) came from business and expert communities.¹ But the attitude of governments and monetary regulators toward cryptocurrencies radically differs from country to country: from a willingness to accept them as an independent unit of payment to suggestions to outlaw them as sources of heightened risk (both macroeconomic and sociopolitical).²

Presumably, cryptocurrencies will not become a key payment method, let alone international money, in the coming years. Nevertheless, this phenomenon deserves close attention because of its socioeconomic, judicial, and moral and ethical consequences.

In the meantime, we can express a few preliminary ideas on the topic. First of all, the ideas of mid-twentieth-century right-liberal economists about the preference of private currencies over ones made by the state are being realized in cryptocurrency. As often happens in history, the trend was predicted correctly, but the form in which it happened turned out to be qualitatively different from what was expected. Secondly, it remains an open question whether cryptocurrencies can take on all functions of money or if their role is limited to a means of payment and exchange. Thirdly, specific forms of cryptocurrency are not perfect tools: for the time being the technology standing behind it (blockchain) is more important, and if the demand for these technologies and tools is sustained in the mid-term perspective, then new, much more effective forms of cryptocurrency will emerge.

Thus, the first cryptocurrencies are merely a prototype for the future. On their own they cannot become a reserve currency or international money, but their role will grow rapidly. Even now we must discuss their future relationships with the state, find ways of minimizing the risks connected to them (their use in tax evasion, criminal transactions, etc.)

Fifth. The global crisis poses new demands to state regulation, including in the economic sphere. The crisis of the 1920s led to the formation of “big government” based on the Keynesian model. The crisis of the 1970s resulted in a policy of liberalization and deregulation. The current global crisis posed the question about the need for new regulation – the necessity of supplementing the global market with equally global rules for play. The “Big Twenty” was assigned to the role of this regulator, but we cannot yet confirm whether it worked. It is not excluded that this function will gradually be taken on by the relationship between the US and China, though it is unlikely that it will be any officially recognized mechanism. But systems of regulation, working *de facto* and reflecting real ratios of power, often turn out to be more effective than formally confirmed and approved ones.³

¹ Kai Stinchcombe, “Ten years in, nobody has come up with a use of blockchain,” *Hacker Noon*, Dec. 22 2017. URL: <https://hackernoon.com/ten-years-in-nobody-has-come-up-with-a-use-case-for-blockchain-ee98c180100>

² The authors of “Monitoring the economic situation in Russia” offer an interesting economic-political observation regarding how the authorities of various countries treat cryptocurrencies: “In the final weeks of 2017, cryptocurrencies– which in a certain sense are an unreal sector of the world economy – were awarded mutually exclusive status. On the one hand, representatives of the Bundesbank virtually rejected the possibility of the legal use of cryptocurrencies in the Eurozone. On the other hand, the head of Belarus, and somewhat earlier the head of Venezuela, announced the broad legalization of them. That is to say, effectively working cryptocurrency markets are mostly feared, while ineffective and destroyed markets are presenting them as a tool of financial healing, as the product of another economic civilization.” *Monitoring the economic situation in Russia: Trends and challenges of socioeconomic development*, 2017, no. 23 (61), December.

³ Zbigniew Brzezinski spoke of the possibility of forming a G-2 instead of a G-7 a decade ago.

Systems of national regulation are facing even more complex problems. Contemporary technologies lead to a decrease in the role expenditures on labor and natural resources in the functioning of the newest sectors and productions.¹ Quality (predictability, reliability) of government management is becoming the deciding factor for businesses making decisions about investment – both for the largest companies as well as for small ones. Thus, states are beginning to compete for investors not with the cost of labor or natural resources, but with the quality of public management.

In parallel we can observe one more process in the transformation of the state model – a significant portion of functions is leaving the state apparatus and moving to specially developed platforms. The thesis of the “state as platform” was widely circulated in 2017. If cryptocurrency is the realization of the predictions of right-wing economists, then the implementation of platform solutions essentially means the realization of old socialist ideas about the “withering away of the state.”²

Sixth. The problem of inequality will remain one of the key themes of political and expert discussions for the foreseeable future. Economic, social, and political challenges are all concentrated in it. The discussion requires a more precise definition of observed trends, as well as an analysis of the relationship between inequality and economic growth. To what degree is the growth of inequality a consequence of the contemporary model of economic growth? Is the growth of inequality a factor inhibiting economic growth, or is it neutral in relation to it? Recently, two fundamentally different answers to these questions have been taking shape in the economic discourse. Some economists insist that inequality will destabilize growth and even lead to a recession, while others believe inequality is the price that must be paid for economic growth. When translating the discussion to the practical arena, the key issue is the development of a rate that can guarantee increased quality of life for all members of society regardless of inequality statistics.

Thus, we can speak of the conclusion of the global structural crisis, although several important questions regarding the postcrisis world order are still not fully resolved.

1.2. Russia’s socioeconomic policy

Russia entered the global crisis at the same time as other leading developed and developing countries, but now we can speak of a certain lag of its development in our country. The considerable reserves accumulated by 2008 and the macroeconomic stability (low debt and profitable budget) helped alleviate the sociopolitical consequences of the crisis, and it was most exacerbated in 2014–2015. The successful anticrisis policy of 2015–2016 minimized decline, exerted control over basic macroeconomic parameters, maintained reserves, and suppressed inflation to an extent that had not been seen in a quarter century.

¹ This process lies at the foundation of the so-called reindustrialization of developed countries.

² The corresponding declaration was formulated at the twenty-first congress of the Communist Party of the Soviet Union, which adopted the Party’s Third Program. (Program of the Communist Party of the Soviet Union. Moscow: Politizdat, 1961.)

Table 3

Main economic indicators of the Russian Federation, 2007–2017

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	2	3	4	5	6	7	8	9	10	11	12
Macro indicators (rates of addition to physical volume, % change from previous year (unless otherwise indicated))											
GDP	8.5	5.2	-7.8	4.5	4.3	3.7	1.8	0.7	-2.8	-0.2	1.5
Industry	6.8	0.6	-10.7	7.3	5.0	3.4	0.4	1.7	-3.4	1.3	1.0
Agriculture	3.3	10.8	1.4	-11.3	23.0	-4.8	5.8	3.5	2.6	4.8	2.4
Construction	18.2	12.8	-13.2	5.0	5.1	2.5	0.1	-2.3	-3.9	-2.2	-1.4
Wholesale	9.5	5.4	2.0	3.0	4.4	3.6	0.7	3.9	-5.5	2.6	5.9
Retail	16.1	13.7	-5.1	6.5	7.1	6.3	3.9	2.7	-10.0	-4.6	1.2
Household end consumption	14.3	10.6	-5.1	5.5	6.8	7.9	5.2	2.0	-9.4	-2.8	3.4
Investments in fixed assets	23.8	9.5	-13.5	6.3	10.8	6.8	0.8	-1.5	-10.1	-0.2	4.4
Wages as a percentage of GDP*	46.7	47.4	52.6	49.6	43.9	44.2	46.1	46.4	46.8	48.4	47.7
Profit and mixed income as a percentage of GDP*	34.1	32.6	30.8	32.6	41.5	41.1	39.7	39.5	41.8	40.7	41.4
Indicators of public finances and international reserves											
Surplus (+)/ deficit (-) of the consolidated budget as % of GDP	6.0	4.9	-6.3	-3.4	1.4	0.4	-1.2	-1.1	-3.4	-3.7	-1.5
Surplus (+)/ deficit (-) of the federal budget as % of GDP	5.4	4.1	-6.0	-3.9	0.8	-0.1	-0.5	-0.5	-2.4	-3.4	-1.5
Non-oil-and-gas deficit of the federal budget as % of GDP	-3.3	-6.5	-13.7	-12.2	-8.6	-9.5	-9.4	-9.8	-9.4	-9.1	-7.9
Domestic state debt, end of year, in billions of rubles	1248.8	1499.8	2094.7	2940.4	4190.6	4977.9	5722.2	7241.2	7307.6	8003.5	8689.6
Foreign state debt, end of year, in billions of dollars (Finance Ministry data)	44.9	40.6	37.6	40.0	35.8	50.8	55.8	54.4	50.0	51.2	49.8
Total state debt as % of GDP	7.2	6.5	8.3	9.0	9.5	10.5	11.4	14.4	13.6	12.9	12.6
Reserve fund (Stabilization fund in 2007), end of year, in billions of dollars	156.81	137.09	60.52	25.44	25.21	62.08	87.38	87.91	49.95	16.03	0.00
National Welfare Fund, end of year, in billions of dollars		87.97	91.56	88.44	86.79	88.59	88.63	78.00	71.72	71.87	65.15
International reserves of the Bank of Russia, end of year, in billions of dollars	478.8	426.3	439.5	479.4	498.6	537.6	509.6	385.5	368.4	377.7	432.7
Prices and percentage rates											
Consumer price index, December to previous December	11.9	13.3	8.8	8.8	6.1	6.6	6.5	11.4	12.9	5.4	2.5
Producer price index, December to previous December	25.1	-7.0	13.9	16.7	12.0	5.1	3.7	5.9	10.7	7.5	8.4
Key interest rate of the Bank of Russia (until 2013, the minimum rate for 1-day repurchase operations per year), yearly average, % per annum	6.0	6.9	8.3	5.3	5.3	5.3	5.5	7.9	12.6	10.6	9.1
Average interest rate on loans to businesses in rubles, yearly average, % per annum	10.0	12.2	15.3	10.8	8.5	9.1	9.5	11.1	15.7	12.6	10.6
Average interest rate on savings of individuals (except demand deposits), % per annum	7.2	7.6	10.4	6.8	5.4	6.5	6.5	6.7	9.7	7.3	6.0
Labor market											
Overall unemployment (ILO methodology), annual average, % of population	6.0	6.2	8.3	7.3	6.5	5.5	5.5	5.2	5.6	5.5	5.2
Average salary, thousand rubles per month	13.6	17.3	18.6	21.0	23.4	26.6	29.8	32.5	34.0	36.7	39.1

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12
Salary in real terms, % change from previous year	17.2	11.5	-3.5	5.2	2.8	8.4	4.8	1.2	-9.0	0.8	3.4
Real disposable household income, % change from previous year	12.1	2.4	3.0	5.9	0.5	4.6	4.0	-0.7	-3.2	-5.8	-1.7
Population with monetary income below the subsistence level, millions of people	18.8	19	18.4	17.7	17.9	15.4	15.5	16.1	19.5	19.6	20.3**
Banking system											
Number of active credit organizations, end of year, in units	1136	1108	1058	1012	978	956	923	834	733	623	561
Number revoked banking licenses in the course of the year, in units	49	33	43	27	18	22	32	86	93	97	51
Rate of asset growth, % for the year	46.1	32.7	3.7	14.8	21.4	20.4	14.2	18.6	-1.5	2.1	7.8
Indebtedness of resident legal entities except banks in terms of bank loans, % for the year	52.4	28.6	0.0	9.6	22.8	15.5	11.6	12.7	5.0	-0.1	4.6
Indebtedness of resident individuals in terms of bank loans, % for the year	58.3	31.2	-11.7	14.4	35.5	39.1	27.7	11.6	-7.3	0.7	12.3
Share of overdue loans to resident legal entities except banks in total volume of debt, %	0.9	2.2	6.0	5.5	4.8	4.6	4.1	4.1	6.2	6.1	5.9
Share of overdue loans to individuals in total volume of debt, %	3.1	3.6	6.9	7.1	5.3	4.1	4.5	6.0	8.4	8.3	7.3
Profit, in billions of rubles	508	409	205	573	848	1012	994	589	192	930	790

*Figures for percentages and structure of the GDP for 2007–2010 and 2011–2016 cannot be compared due to a change in the methodology of calculating the GDP in 2011.

***In Q3 2017.

Sources: Russian Statistics Agency, Russian Ministry of Finance, Bank of Russia

In 2017 Russia's economic performance showed positive trends, but was unstable and contradictory in many parameters.

GDP growth was renewed. In 2017 it reached about 1.5%, which approximately corresponds to potential growth, estimated at 1.5% to 1.8% for the contemporary Russian economy.¹ In the context of accelerating growth of the global economy and leading developed and developing countries, this rate seems low. It does not correspond to the “political target” – to grow at a rate faster than the worldwide average.²

As we noted above, the current crisis is characterized by the lack of a V-bounce. If we add that the crisis in Russia has lagged, then we can assume that growth rates will naturally increase if external economic conditions are favorable and at least some structural and institutional reforms are passed. After all, postcrisis restoration of countries in the Eurozone – the main economic partner of Russia – happened slowly over the last few years, which brought up the question of long-term stagnation.

¹ For further detail, see: S. Sinelnikov-Murylev, S. Drobyshevskii, M. Kazakova, “Deterioration of GDP growth rates in Russia,” 1999-2014, *Ekonomicheskaya politika*, 2014, no. 5, pp. 7-37.

² Presidential address, Dec. 1, 2016. URL: https://www.wto.org/english/news_e/pres17_e/pr800_e.htm.

For all the importance of growth, there remains the risk of it stimulating populism, which would only repeat the sad results of the “acceleration” policy of 1986–1989, when nominal growth rates were accompanied by a radical deregulation of the Soviet economy that led to its collapse.¹

The *anti-inflation policy* of the Bank of Russia has achieved irrefutable success. In 2014, the announcement of a 4% target for inflation by the end of 2017 was seen as propaganda at best. But this goal was consistently pursued, and the growth rate of consumer prices of December 2017 relative to December 2016 was only 2.5%. This low level of inflation, unprecedented for postcommunist Russia, has created new opportunities for investment activity. This result was achieved thanks to the uncompromising anti-inflation position of the leadership of the Central Bank (a rigid monetary-credit policy), supported by the president and the government’s pursuit of decreased budgetary spending. Due to the external shocks that Russia encountered in 2014–2015, this was the only possible set of actions, though they were very complex politically. But at the beginning of 2018 the real interest rates in Russia remained some of the highest in the world, exceeding 5%.

Low inflation strengthens the growing trust in the ruble. In 2017, as savings increased overall, the amount of funds held in foreign currency decreased in accounts held both by individuals (from 23.1% to 19.9%) and by organizations (from 36% to 34.7%).

The success of the anti-inflation policy has another result that might be called an intellectual one. We can now say that we have exhausted the discussion about “unmonetary nature” of Russian inflation that has gone on since the beginning of postcommunist reforms, i.e. over the last quarter century. The low growth rate of consumer prices has not yet allowed us to decisively lower the interest rate, which can be explained by the inflation expectations of around 8% (twice as high as the target). This phenomenon is not unique: it reflects the long period of high inflation and the Russian population’s psychological adaptation to it. Meanwhile high inflation expectations poorly correspond to the recent trend in saving behavior to de-dollarize mid-term deposits. At present the share of ruble deposits is about 80%. Moreover in 2016–2017 mid-term dollar deposits decreased from 25% to 9%, and an analogous trend has been demonstrated by long-term deposits.

Of course, low inflation is a necessary factor for investment activity, yet an insufficient one, insofar as external economic factors play a significant role here. But this is a problem that must be addressed by actual institutional reforms.

We can observe a weakening of the dependence of the ruble’s exchange rate on fluctuating oil prices, which for a long time was its most important feature (*Fig. 1*). To put it more precisely, the increase of oil prices in 2017 had a weaker effect on the ruble’s exchange rate than the preceding fall of oil prices. As a result, the end-of-year oil price in rubles matched the record numbers of early 2014 (3800 rubles a barrel), which guaranteed additional revenue both for exporters and for the Russian budget. This does not mean the link between these two factors was fully destroyed: oil and gas remain the most important articles of Russian export and the budget, and the ruble’s value will undoubtedly react to a substantial increase (or decrease) of prices.

In these conditions, it is fully natural that the reserves of the Central Bank for 2017 substantially grew from \$377.7 to \$432.7 billion.

¹ For more on the policy of “acceleration”, see V. Mau, “Awaiting a new model of growth: socioeconomic development in Russia in 2013,” *Voprosy ekonomiki*, 2014, no. 2, pp. 22–24.

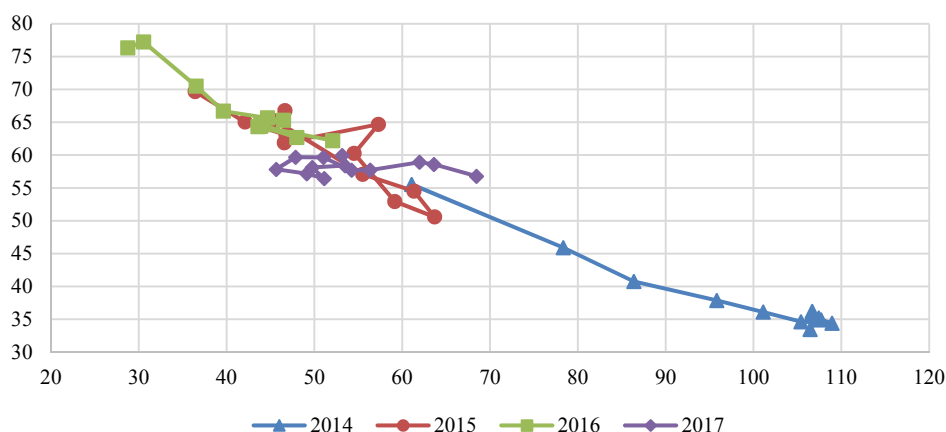


Fig. 1. Correlation of oil prices to the ruble's exchange value, 2014–2017.

Source: Russian Statistics Agency.

Discussions of *budgetary policy* were dominated by questions of maintaining the deficit at an acceptable (controllable) level, lowering the debt burden of Russia's regions, and developing measures to increase the efficacy of budgetary spending. It's no less important that this was the first year after the introduction of a new budgetary rule that limits the budgetary use of revenues from oil and gas export at prices of \$40/barrel.

In 2017, a tight budgetary policy restricting internal demand was consistently implemented: in conditions of slow restoration of economic growth, the deficit of the consolidated budget was 1.5% of the GDP. According to estimates of Russian Ministry of Economic Development, in 2018 there may be a federal budget surplus.

Broader recognition has been given to proposals for a budget maneuver increasing financing of so-called productive sectors, namely those involving human capital (education, healthcare) and infrastructure. However, the key question here is what the source of funds will be.¹ In theory there can be four:

First, a tax increase that directs additional revenue toward priority sectors. Most members of the expert community found this option politically unacceptable.

Second, a redistribution of funds from certain sectors (nonproductive) to others (productive). This redistribution can be either in absolute terms (cutting from some and transferring the balance to others) or in relative terms (directing additional budgetary revenue from economic growth toward priority sectors). Clearly, the second option is politically preferable and more realistic.

Third, an increase of the budgetary deficit and a corresponding increase of loans on the financial market. This option would contradict the course toward budgetary consolidation and would be fraught with macroeconomic destabilization.

Fourth, a change to the budgetary rule increasing the "cut-off price" to \$45/barrel. This option was supported by the Center of Strategic Reforms as the most acceptable one and the most likely to bring a rapid increase of investment in priority sectors. The Ministry of Finance

¹ For more detail, see: G. Idrisov, Y. Ponomarev, S. Sinelnikov-Murylev, "Conditions of trade and economic development in contemporary Russia," *Ekonomicheskaja politika*, 2015, no. 3, pp. 7-37; P. Kadochnikov, A. Knobel, S. Sinelnikov-Murylev, "The openness of the Russian economy as a source of economic growth," *Voprosy ekonomiki*, 2016, no. 12, pp. 26-42.

of the Russian Federation spoke against it and was supported by several experts who emphasized that changing the budgetary rule just a year after it took effect would discredit a highly important instrument of economic policy in contemporary Russia.

The solution to the issue of the budget maneuver should come out of a discussion of the corresponding sectors' ability to effectively use the additional resources that they would receive.

Macroeconomic stimulation of growth. The low growth rates pose a question of the chances for stimulating growth using methods of budgetary and monetary policy. Discussions of this topic are at the center of attention of Western economists, many of whom insist on the expediency of maintaining powerful budgetary stimuli, especially in the case of curtailing a very relaxed monetary policy. These problems have been discussed in Russia for several years now.

In 2017 insistent arguments were made in favor of an energetic budgetary and monetary stimulus: aggressively lowering interest rates of the Central Bank and simultaneously expanding budgetary injections into the economy, even more so because the low public debt allows increased borrowing. The points made by opponents of these measures were also fairly clear: in Russia the economy is inflationary, not deflationary, and in this situation monetary stimulation would lead not to investments but rather would provoke a flight from money, i.e. increased inflation and higher interest rates. Budgetary stimuli are also limited: both the relatively low efficacy of budgetary spending, and the lack of labor and production reserves, which could take effect if public investments were made. Conservative macroeconomic policy is seen here as a prerequisite for renewing stable growth.

The experience of recent crisis years shows that measures of monetary and budgetary policy do not automatically lead to renewed growth. They can help prevent a more severe crisis but are not nearly enough to drive stagnant economies toward growth.

Evaluating the opportunities for stimulating growth in Russia through budgetary and monetary policy, we must keep in mind the following three conditions. First, the key issue of monetary policy remains inflation, not deflation. Therefore, secondly, for both macroeconomic and institutional reasons the real interest rates remain rather high, which is an obstacle to investments. Thirdly, the external political situation is obviously worsening as sanction pressures intensify, and this factor cannot be compensated by macroeconomic stimulus measures.

These conditions substantially limit the possibility of stimulating growth on the supply side (and especially by budgetary means). External shocks always demand budgetary consolidation, not relaxation. Furthermore, sanctions limit the possibility of global supply responding to a possible increase in Russian demand. Supply factors, especially the supply of Russian companies, are priorities for ensuring the stable performance of the domestic economy.

Budgetary stimulus in such conditions is likely to become an additional factor in inflation, and thus will only restrict opportunities of decreasing interest rates and increasing the availability of credit. Maintaining high interest rates today is the biggest obstacle to the availability of loans, i.e. for increasing the supply of goods and services. And unlike in most countries in the West, continuing the course toward limiting inflation and increasing the availability of loans is the key macroeconomic task for stimulating growth in Russia.

Incidentally, the problem of growth, as the experience of developed countries shows, in principle cannot be resolved exclusively by macroeconomic manipulations. Budgetary and monetary policies must be appropriate to specific circumstances of the given country, but they

can only create the conditions for growth or undermine perspectives for growth. For stable economic growth leading to increased quality of life for society, a multipart complex of institutional and structural measures must be implemented.

Investment activity of business is the most important factor of stable economic growth. Investments in basic capital grew by 4.4%, and for the first time since 2013 they demonstrated a positive trend.

The situation here remained ambiguous. Mortgage loans demonstrate high growth rates. In 2017 the total mortgages issued exceeded 2 trillion rubles, which is 37% higher than the figures for 2016. At the end of 2017, interest rates on ruble mortgages went below 10% annually for the first time in history, which is an important indicator of a recovering economic and social situation. Investments in basic capital began to grow, but this primarily pertains to state investments in buildings and infrastructure, as well as investments in the oil and gas sector. At the same time, construction has decreased, which, strictly speaking, contradicts the other observed parameters.

The government and the expert community have begun to discuss mechanisms of attracting additional investment resources of private business. This pertains to expanding institutions of private-public partnership, and to the opportunities for implementing a new instrument: infrastructural mortgages.

The **banking sector** grew at rapid rates: assets increased almost by 8%, which occurred despite sanctions that were largely directed against the financial sector. At the same time the number of credit organizations continued to decrease: from 623 to 561 over the course of the year, and there were 51 cases of licenses being revoked (as opposed to 97 in 2016). For the most part these were minor banks whose total assets make up less than 1% of the aggregate assets of the banking system.

But qualitative parameters were not the most significant aspect of banking sector's performance. In 2017 the Central Bank introduced a new bailout mechanism that was used on major private banks: FK Otkrytie, Binbank and Promsvyazbank, which were transferred to the direct control of the regulator. This posed a fundamental question about the future of the banking system in Russia. A massive bailout of the banking sector strengthened the state banks. But major private banks (including Otkrytie and Binbank) took part in the bailouts, which made it possible for the private banking sector to grow. The new bailout model signified a decisive step toward nationalization. It is true that the Central Bank has declared its intentions to transfer the two banks it has bailed out to private hands, but the chances and results of such a transfer look uncertain. Promsvyazbank, apparently, will remain public, and is being transformed into a bank serving state defense interests.

Guaranteeing the growth of prosperity is the most important challenge of a country that has undergone an acute crisis. It's all the more important in a situation where economic growth has ceased to be an unambiguous synonym for improved welfare: contemporary technological innovations are capable of maintaining GDP growth on their own while simultaneously increasing quality of life.¹ The recession of 2015-16 had the most negative impact on quality of life, leading to a significant growth in the poverty level and to a decrease in consumption levels. In this regard, economic performance in 2017 is paradoxical.

Real wages have begun to increase (by 2.5% in Q1 to Q3 of 2017, 3.4% for the year), which reflects their share in the relationship to business profitability (*Fig. 2*). However, real revenues

¹ For more detail, see: G. Idrisov, V. Mau, A. Bozhechkova, "In search of a new model of growth," *Voprosy ekonomiki*, 2017, no. 12, pp. 15–16.

continued to decrease (1.2% for Q1 to Q3 of 2017, 1.7% for the year). But then retail began to grow (a growth of 1% for the year) and household consumption grew at an even more rapid rate (3.5%). From January to September of 2017 the poverty rate was 13.8%, which corresponds to the level of the analogous period of 2015-2016 but was higher than the level observed in 2012–2014.

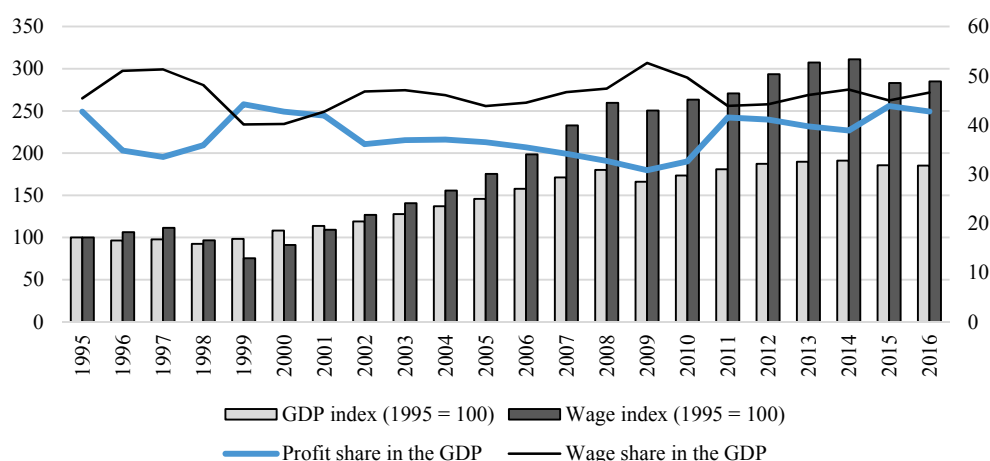


Fig. 2. Gross profit and wages as percentage of the GDP, right scale

Source: Russian Statistics Agency.

There are various explanations for such divergences: the increase in household consumption, the growth of consumer credit (bank loans to the population increased by 9.5%), the growth of online purchases. But overall, we can speak to the gradual retreat of households from the saving model of consumption and an intensifying tendency toward consumption. At this stage, these behavioral shifts can positively affect the country's economic development by activating market demand.

At the same time, wages began once again to diverge from GDP and productivity. This trend, acceptable for the restorative stage of growth, can be dangerous if it becomes a constant element of the growth model (Fig. 3).

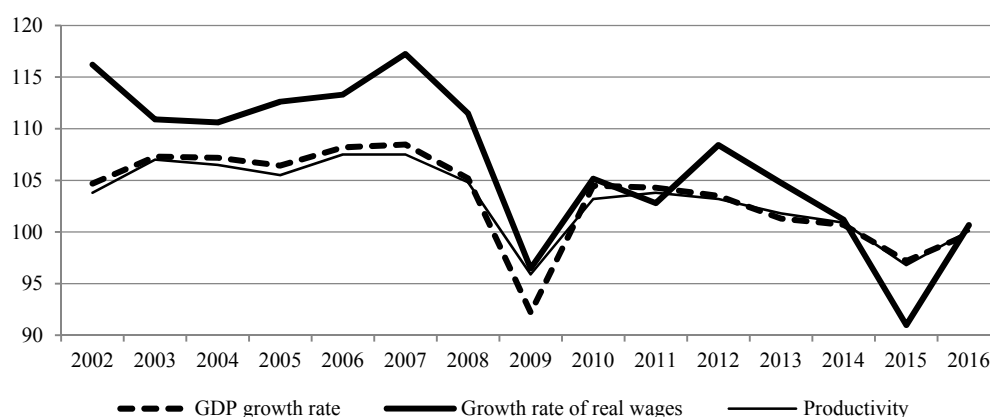


Fig. 3. Growth rates of the real GDP, real wages, and labor productivity

Source: Russian Statistics Agency.

1.3. Conclusions regarding further development

Russia faces a difficult period of consolidating growth and reaching its desired parameters of economic and social performance. The key challenge of the coming period is attaining economic growth at rates exceeding the worldwide average and guaranteeing a stable increase in quality of life.

The Russian economy, at least since its exit from the transitional period of the 1990s, has demonstrated a connection to global trends and challenges. Thus the restoration of a stable and global economic growth creates the foundation for a positive outlook in Russia. Of course, several important institutional decisions must be made to support domestic growth, and they are well known from economic discussions of recent years.¹

We would like to direct attention to several possible *priorities and risks* of forming a contemporary model of economic development.

For stable economic growth, undoubtedly, one needs a strategy. But in the conditions of contemporary technological trends, any strategy becomes obsolete the very moment it is affirmed. The role of strategy is to see alternatives and set priorities without settling into dogma and binding the government's hands. The long-term strategies that were developed in our country in the past were never fully executed. But it would be superficial and erroneous to reduce an explanation of this phenomenon to the low quality of corresponding documents or ineffective executors.

In contemporary conditions, when technology – and with it, our way of life – change not from generation to generation but several times over the course of a single generation, carrying out an approved strategy is the same thing as preserving a lag. For instance, in 2011, when Strategy 2020 was developed, concepts such as cryptocurrency or blockchain did not exist in the minds of the political and expert communities, but now the perspectives for models of state management and monetary systems cannot be seriously discussed without them.² At that time, the perspective of shale oil and gas were unclear, and few knew about 3-D printing. Today, the mastery of these technologies has not only economic consequences but also important political ones. Finally, in 2011 there was none of the geopolitical unrest that erupted three years later. In short, realizing that strategy without considering the realities of the present would be very dangerous.

Two other risks of economic policy are connected to the concept of strategy's limited role.

First, numbers cannot be fetishized. The fetishization of numbers and plans at the mature stage of the Soviet economic system was the key factor of its downfall. Numbers are always imprecise reflections of real socioeconomic processes. They are always subject to manipulation. Keeping up with development trends is far more important than achieving particular numbers.

Secondly, short-term and long-term strategic goals (and criteria) of socioeconomic development are often in conflict. Measures that yield short-term effects tend to be harmful for mid- and long-term goals, including long-term economic growth. And it is virtually impossible to determine what ensures long-term success in the immediate future (which, in terms of political logic, means the nearest election cycle). That contradiction contains a political trap, escaping which requires no small amount of bravery and political responsibility.

¹ For example, S. Drobyshevskii, S. Sinelnikov-Murylev, "Features of growth of the Russian economy in 2017 and 2018: Stimuli and limitations," *Ekonomicheskoe razvitie Rossii*, 2018, no. 2.

² *Strategy 2020: A new model of growth, a new social policy*, 2 vols., ed. V.A. Mau and Y.I. Kuzminov, Moscow, Delo, 2013.

Populism has become a serious problem in the world once more. And one of its characteristics is the predominance of short-term interests over strategic ones. As in the twentieth century, countries at the mid-level of development are especially at risk of economic (budgetary) populism that could undermine organic economic development. Artificial acceleration, i.e. increasing nominal growth rates at the cost of its quality and people's well-being, is one of the forms of populism that led to the collapse of the Soviet Union. Therefore, programs of economic development must be designed to achieve real, high-quality results in the mid-term perspective, rather than attractive returns in the immediate future.

The contemporary world does not have leading sectors, but there are leading technologies that can be present in any sectors. Therefore, sector priorities cannot be set in a centralized fashion. The state should ensure favorable conditions for private interest to identify and execute priority plans using the latest technologies. The key task of the state in this situation is to provide the infrastructure of human capital and transportation.

Maintaining high-quality human capital is a strategic problem. In conditions of a decreasing working-age population and a significant easing of global migration for the educated part of the population, the challenge of maintaining human capital becomes particularly difficult. There is a serious risk of a negative migration balance, i.e. the departure from the country of the most educated and sophisticated people who have a quality demand for goods and services, and the arrival of the less educated poor. This puts increased demands on the quality of state policy, since states begin to compete not only for investments, but also for quality demand in the sectors of education and healthcare. These sectors are exclusively important in the resolution of long-term goals of growth, but developing them effectively requires focusing not only on the supply, but also the demand.

And finally, a separate challenge is increasing the appeal of entrepreneurship. In Russian conditions this is particularly important and particularly difficult, since less than thirty years ago entrepreneurship was a crime punishable by law. Its legalization did not make private business more appealing, even in the eyes of youth. Overcoming this aversion is one of the strategic challenges facing the country.

From the above list it is not difficult to see that the key problems of guaranteeing a socioeconomic performance lie in the extra-economic sphere. And they are exactly what will be the priorities of the postcrisis stage of the country's development.

Section 2. Monetary and fiscal policy

2.1. Monetary policy¹

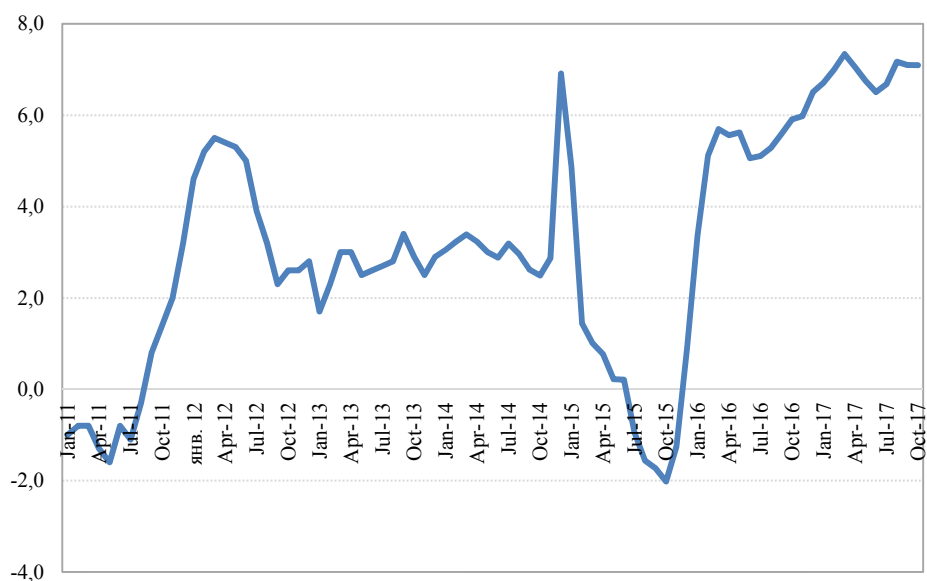
2.1.1. Monetary policy trends

The Bank of Russia eased at slow enough pace its monetary policy in 2017 despite substantial deceleration in inflation, holding that ongoing inflation risks were high, including a possible decline in crude oil prices and capital outflow, upturn in consumer demand, fiscal policy uncertainty, as well as a relatively high and unstable degree of inflation expectations. In 2017, the monetary policy rate was cut by 2.25 percentage points to 7.75 percent per annum as the inflation rate over the same period (same-month-year-ago comparison) was down 2.6 percentage points to 2.5 percent. The Russian central bank cut the key interest rate six times: by 0.25 percentage points on March 27, by 0.5 percentage points on May 2, by 0.25 percentage points on June 19, by 0.5 percentage points on September 18, by 0.25 percentage points on October 30, and by 0.5 percentage points on December 15.

Amid moderate cuts in the key interest rate, the substantial deceleration in inflation and inflation expectations in 2017, the causes of which are considered below, led to further tightening of terms of lending that started in 2016. For example, there were months when the real interest rate on corporate loans with maturities of less than one year reached the level seen in December 2014 (*Fig. 1*). Keeping a positive money market real interest rate was a headwind to growth in consumption, placing downward pressure on inflation, which nonetheless posed risks of economic growth deceleration.

International comparisons of the key interest rate with the inflation rate show that despite the fact that the Russian inflation reached low rates in 2017 that are comparable with inflation rates in developed countries, the key interest rate still remained at a relatively high level comparable with countries facing inflation rates that are 2–4 times higher than the Russian inflation rate (*Table 1*). The same is true only for Brazil with an inflation rate of 2.7 percent and the central bank key interest rate of 7 percent per annum. Therefore, the Russian Federation and Brazil rank on top in terms of real key interest rate (*Fig. 2*).

¹ This section is written by Alexandra Bozhechkova, the Gaidar Institute, the Institute of Applied Economic Studies (IAES) of the Russian Presidential Academy of National Economy and Public Administration (RANEPA); Anna Kiyutsevskaya, the Gaidar Institute, IAES-RANEPA; Alexander Knobel, VAVT under Russian Ministry of Economy, the Gaidar Institute, IAES-RANEPA; Pavel Trunin, the Gaidar Institute, IAES-RANEPA.



Note: The real interest rate was calculated using data on the inflation rate over the previous 12 months, based on the assumption of adaptive nature of inflation expectations in Russia.

Fig. 1. Real interest rate on corporate loans with maturities of less than one year in the Russian Federation in 2011–2017, percent per annum (based on inflation rate over the previous 12 months)

Table 1

Inflation rate and key interest rate in developed and developing countries*

	Inflation rate, %	Key interest rate, percent per annum
Developing countries		
Peru	1.4	3.25
Hungary	2.2	0.90
Poland	2.2	1.50
Chile	2.3	2.50
Russian Federation	2.5	7.75
Brazil	2.9	7.00
India	3.2	6.00
Indonesia	3.6	4.25
Colombia	4.1	4.75
South Africa	4.5	6.75
Mexico	6.8	7.25
Kazakhstan	7.3	10.25
Turkey	11.9	8.00
Developed countries		
Norway	1.6	0.50
Canada	1.9	1.00
European Union	1.7	0.00
Iceland	1.9	4.25
New Zealand	1.6	1.75
United States	2.1	1.50
Australia	1.9	1.50
Czech Republic	2.4	0.50
United Kingdom	3.0	0.50

* Data on 2017 inflation rate is presented on a December over December basis, data on key interest rate as of the end of December 2017

Sources: data posted on central banks' official websites.

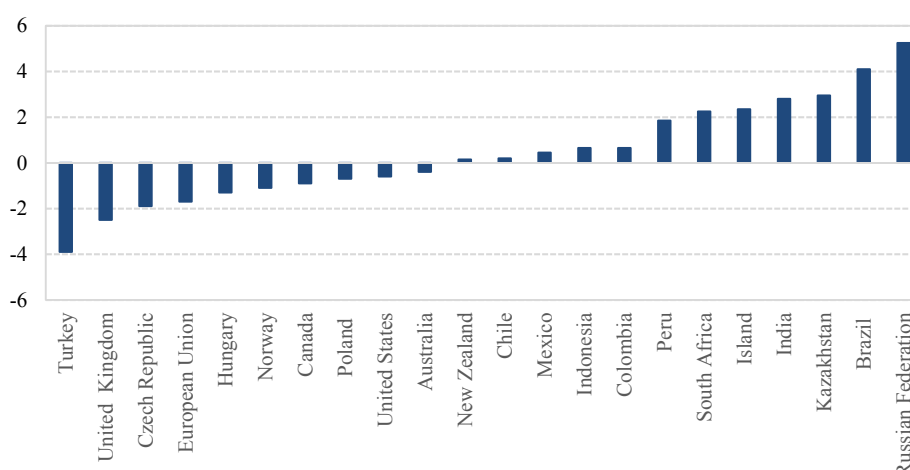


Fig. 2. Real key interest rate as of 2017 year-end, percent per annum (measures are based on inflation rate over previous 12 months)

Sources: data posted on central banks' official websites, own calculations.

Note that the Bank of Russia estimates 2–3 percent per annum of the equilibrium real key interest rate for the Russian economy with a target inflation rate of 4 percent. It appears that the Russian central bank will continue to ease its monetary policy by making incremental cuts (within a 1.5–2-year horizon) in the key rate to reach a neutral level of 6–7 percent.

2.1.2. Money market

Structural liquidity surplus in the Russian banking sector was a key feature of the money market in 2017. In this context, the Bank of Russia introduced measures to reduce the number of instruments providing liquidity to banks and to broaden approaches towards liquidity absorption.

Since April 3, 2017, for instance, the Bank of Russia discontinued providing gold-secured loans because of poor demand for this instrument from credit institutions faced with liquidity surplus. As a reminder, banks' debt on this instrument was zero since August 2016, averaging RUB 540.5 million in the period between March 2012 and June 2016.

With the aim to absorb ruble liquidity surplus, the Bank of Russia launched auctions for Bank of Russia coupon bonds (coupon OBRs). Outstanding securities were worth RUB 328.2 billion, according to data for November 1, 2017. The initial coupon OBR auction was held on August 15, 2017, at which the regulator offered OBRs worth RUB 150 billion to credit institutions, whereas the demand was worth RUB 173.5 billion (to mature on November 15, 2017). During the second OBR issue in October and November the supply surpassed the demand from banks: OBR issue was worth RUB 500 billion, whereas the demand was RUB 226.1 billion (to mature on January 17, 2018). The third OBR issue of RUB 500 billion was even weaker than the previous demand of RUB 77.8 billion. In December 2017, the fourth OBR issue worth RUB 200 billion saw a demand of RUB 48.4 billion. That was apparently associated with uneven distribution of liquidity between banks despite liquidity surplus.

On September 1, 2017, the Bank of Russia introduced a framework for emergency liquidity provision (FELP) designed for bank resolution, allowing banks faced with temporal liquidity

problems to apply to the Bank of Russia for a 90-day loan at a fixed interest rate equal to the key interest rate plus 1.75 percentage points. Regulator’s loan decision within the FELP framework relies on financial sustainability as well as systemic importance of the target bank. In 2017, for instance, RUB 1.06 trillion were allotted for the resolution of Otkritie Bank within the FELP framework as well as via fixed-rate repo loans.

Banks’ demand for central bank’s foreign-currency refinancing facility was on the slide during the year on the back of ruble appreciation and stable foreign exchange market. As a reminder, banks’ demand for the foreign-currency refinancing facility was in great demand in 2014–2015. At the height of 2015 crisis, for example, banks owed USD 35 billion to the Russian central bank on foreign-currency repos, whereas in September 2017 their debt was considerably reduced, running at just USD 897.6 million. Note that the foreign-currency refinancing facility facilitated stabilization in the foreign exchange market in times of crisis. However, while banks’ foreign-currency repo debt to the central bank averaged USD 14.3 billion in 2016, it was reduced considerably in 2017 to an average of USD 3.4 billion. Since the beginning of 2017, the bulk of funds allotted during foreign-currency repo auctions had a 28-day maturity (*Fig. 3*) at an average weighted interest rate of 3.1 percent (4.2 percent per annum in 2016). The Russian central bank discontinued holding regular foreign-currency repo auctions with maturities of 7 and 28 days since September 11, 2017.

In 2017, banks increased their demand for foreign-currency refinancing through foreign-currency swap lines. The average foreign-currency liquidity swap line for the banking sector stood at USD 576.7 million in 2017 (USD 498.4 million in 2016). Interest rates on the ruble and foreign-currency legs stood at 6.75–9 and 2.2–2.9 percent, respectively. Note that demand for foreign-currency swaps surged in December 2017, when the average foreign-currency swap line increased to USD 1.4 billion, 2.3 times higher than that of December 2016. The increase in demand for foreign-currency swaps was apparently associated with growth in banks’ demand for foreign-currency liquidity by the end of the year amid discontinued foreign-currency repos.

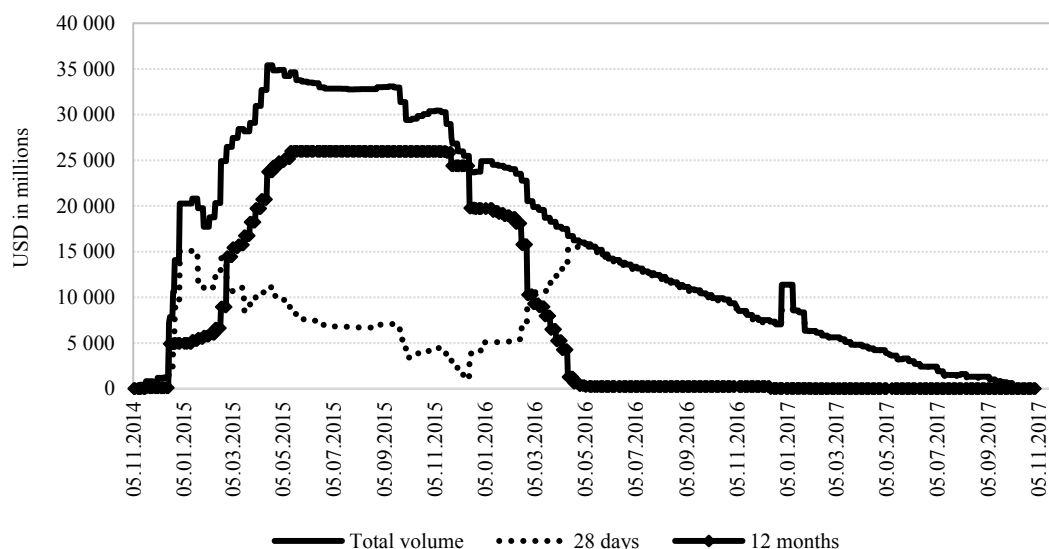


Fig. 3. Credit institutions’ liability to Russia’s central bank in second leg of foreign-currency repos in 2014–2017

Source: Bank of Russia.

It appears that liquidity surplus will continue in 2018 and, therefore, the regulator will continue to use in a flexible manner liquidity absorption instruments in the banking sector, seeking to maintain the money market overnight interest rate close to the monetary policy rate. Furthermore, the regulator will broaden the range of instruments to provide liquid assets as may be required.

In 2017, credit institutions' debt to the Bank of Russia was reduced amid structural liquidity surplus (*Table 2*). As of January-December 2017 period-end, loans, deposits and other funds raised by credit institutions decreased by 1.4 times to RUB 2.0 trillion (the value was halved to RUB 2.7 trillion in 2016) (*Fig. 4*). As a reminder, credit institutions started reducing their debt to the central bank in 2015 in response to influx of funds to the banking sector via the budget channel. Furthermore, banks' debt to the central bank peaked RUB 9.3 trillion, according to data as of the beginning of 2015.

Up until July 2017, loans secured by nonmarketable assets (RUB 329 billion, according to data dated June 30) prevailed in the structure of banks' debt to the central bank, whereas their debt on repo auctions was only RUB 77.2 billion as of the same date. In July-August 2017, however, banks' repo debt to the central bank climbed RUB 664 billion mostly due to regulator's loan to Otkritie Bank. Note that the foregoing amount does not include RUB 330 billion, according to our estimates, that were allotted via the FELP framework to Otkritie Bank. The structure of banks' debt to the central bank was back to its previous ratio in late September as a result of full repayment of loan by Otkritie Bank.

Table 2

Bank of Russia Balance Sheet of 2015–2017

	January 1, 2016		January 1, 2017		December 1, 2017	
	Rubles in billions	percent of assets / liabilities	Rubles in billions	percent of assets / liabilities	Rubles in billions	percent of assets / liabilities
Funds placed with nonresidents and securities issued by nonresidents	21,995,2	62.9	18,005,1	62.1	19,608,4	62.2
Credits and deposits	6,400,3	18.3	4,175,1	14.4	3,816,7	12.1
Precious metals	3,647,3	10.4	3,747,5	12.9	4,537,3	14.4
Securities	719,9	2.1	528,9	1.8	433,9	1.4
Other assets	920,4	2.6	1,013,4	3.5	1,616,1	5.1
Total assets	34,947,2	100	28,974,1	100.0	31,523,7	100.0
Cash in circulation	8,522,5	24.4	8,790,1	30.3	8,864,3	28.1
Balance of accounts with the Bank of Russia	12,573,3	36.0	9,985,5	34.5	11,697,2	37.1
<i>of which:</i> <i>Russian government funds</i>	8,130,7	23.3	4,662,0	16.1	5,950,7	18.9
<i>funds of resident credit institutions</i>	2,528,3	7.2	3,093,3	10.7	3,905,9	12.4
Float	0,4	0.0	2,8	0.0	10,5	0.0
Outstanding securities	-	-	-	-	306,2	1.0
Liabilities to IMF	1,074,2	3.1	1 392,9	4.8	1,417,6	4.5
Other liabilities	160,4	0.5	111,4	0.4	576,1	1.8
Capital	12,503,7	35.8	8,647,85	29.8	8,651,9	27.4
Profit for current FY	-	-	43,7	-	-	-
Total liabilities	34,947,2	100	28,974, 1	100	31,523,7	100

Source: Bank of Russia.

In 2017, banks actively increased their 1–7-day deposits in the Bank of Russia. Note that 1-week deposit auctions were most popular auctions. An average of RUB 814.6 billion were raised at like auctions, and the average weighted interest rate came out to be 9.0 percent per annum.

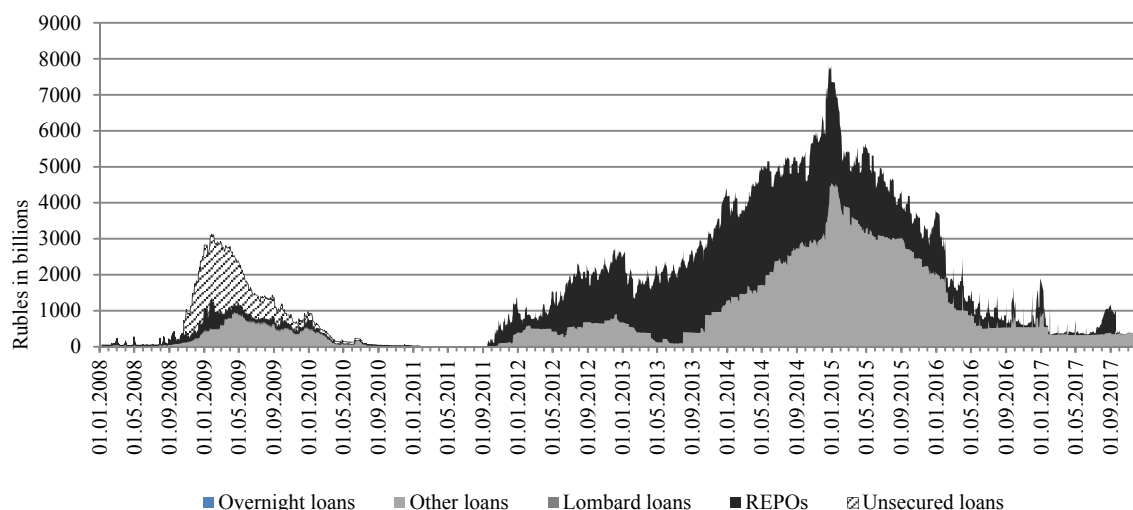


Fig. 4. Commercial banks’ ruble-denominated debt (under key instruments) to Bank of Russia in 2008–2017

Source: Bank of Russia.

In 2017, the interbank interest rate¹ in the interbank lending market was down 2.4 percentage points (from 10.1 percent per annum on average in January 2017 to 7.7 percent per annum on average in November 2017). Overall, in 2017 the interbank interest rate stood within the boundaries of interest rate band set by the Russian central bank. At some periods of the second half of the year the money market saw excessive volatility and the MIACR shifted to the lower boundary of the interest rate band probably due to increased supply in the interbank lending market from banks facing a great influx of liquidity from their customers’ operations/transactions as well as operations of the Banking Sector Consolidation Fund that was established in May 2017 for the resolution of failing banks. The average annual MIACR on overnight interbank ruble-denominated loans loosened from 10.5 percent per annum in 2016 to 8.9 percent per annum in 2017 (*Fig. 5*).

Like in 2015–2016, the principal sources of accumulation of the broad monetary base in January-December 2017 were changes in the balance on the general government’s accounts with the central bank as well as Bank of Russia’s operations providing liquidity to the banking sector. For instance, the monetary base in 2017 saw a positive increase of RUB 3.9 trillion through raising money from sovereign funds, whereas it contracted by RUB 3.2 trillion as a result of reduction of banks’ debt to the regulator. Overall, in 2017 the broad monetary base swelled by 23.7 percent to RUB 14.7 trillion as of January 1, 2018. Note that in 2016 the monetary base advanced 7.6 percent to RUB 11.9 trillion (*Fig. 6*). It appears that the pattern for

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

money supply formation will remain the same in 2018 because the National Wealth Fund will be a principal source to cover the federal budget deficit in 2018.

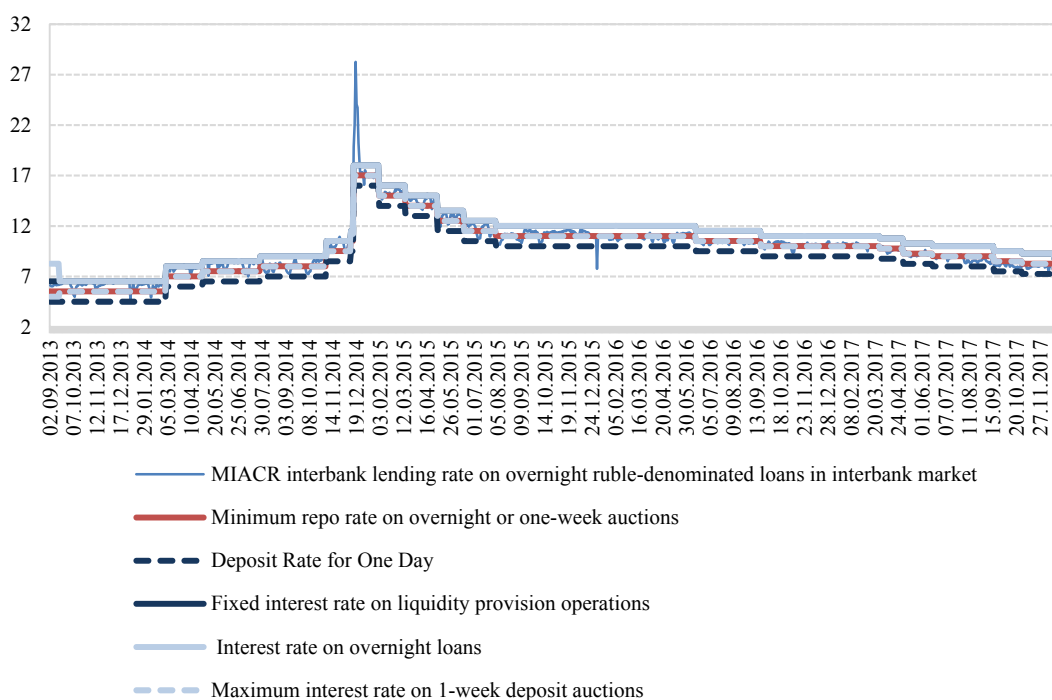
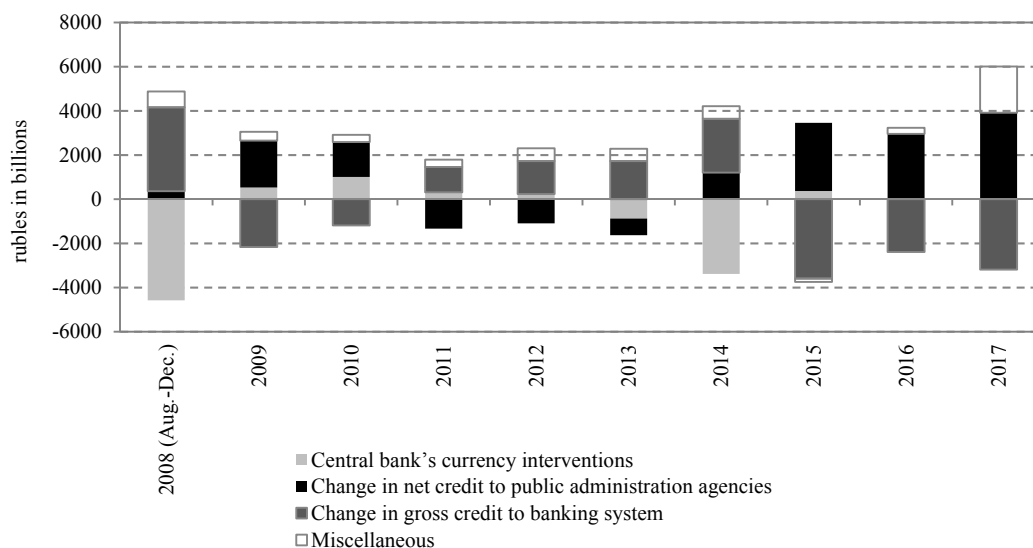


Fig. 5. Bank of Russia’s interest rate band and dynamics of interbank lending market in 2013–2017

Sources: Bank of Russia, Gaidar Institute’s calculations.



Note: No data on Russian central bank’s currency interventions and balance sheet were available for 2017 at the time of this paper.

Fig. 6. Key factors that influenced monetary base (broad definition) in 2008–2017

Sources: Bank of Russia, Gaidar Institute’s calculations.

Banks' deposits in the Bank of Russia that tripled to RUB 2373.2 billion were definable as fastest growing components of the broad monetary base as of 2017 year-end. That was associated with liquidity surplus in the banking sector and banks' low readiness to provide loans to other banks and companies due to persisting high risks and uncertainty surrounding Russia's economic development in years to come. Cash in circulation advanced 8.5 percent to RUB 9539.0 billion, correspondent accounts were up 5.9 percent to RUB 1930.7 billion as required reserves picked up 4.4 percent to RUB 506.2 billion. The Bank of Russia issued bonds worth RUB 352.4 billion. Overall, surplus reserves¹ doubled to RUB 4656.3 billion in 2017. (*Table 3*).

Table 3

Broad monetary base dynamics of 2017, rubles in billions

	January 1, 2017	April 1, 2017	July 1, 2017	July 1, 2017	January 1, 2018
Monetary base (broad definition)	11,882,7	11543,5	11596,4	12916,2	14701,5
- cash in circulation including cash in vaults of credit institutions	8,789,8	8394,9	8752,7	8895,1	9539,0
- correspondent accounts of credit institutions with the Bank of Russia	1,822,7	2143,9	1675,3	2225,0	1930,7
- required reserves	484,7	510,5	509,7	536,7	506,2
- deposits of credit institutions with the Bank of Russia	785,5	494,2	658,6	1109,8	2373,2
- Bank of Russia's bonds held by credit institutions	0	0	0	149,7	352,4
For reference: surplus reserves	2608,2	2638,1	2333,9	3484,5	4656,3

Source: Bank of Russia.

The Bank of Russia added USD 55 billion (14.6 percent) to its 2017 year-end international reserves that totaled USD 432.7 billion as of the beginning of 2018 (*Fig. 7*). Russia's foreign exchange reserves increased USD 38.5 billion (12.1 percent). Note that the increase in foreign exchange reserves was in part due to foreign exchange purchases by the Russian Ministry of Finance in the internal foreign exchange market, a total of about RUB 827.7 million as of 2017 year-end (36.8 percent of the increase in foreign exchange reserves), and banks' repayment of their debt to the central bank (USD 7.9 billion as of 2017 year-end, or 20.5 percent of the increase in foreign exchange reserves). In 2017, Russia added USD 16.5 billion (27.3 percent) to its monetary gold reserves since the beginning of the year, due to positive revaluation (USD 7.4 billion) of the reserves in 2017 despite the fact that gold prices declined in the global market in some months of 2017. As a result, as of January 1, 2018, the foreign exchange reserves accounted for 82.3 percent of the total reserves (84.1 percent in 2016) and gold represented 17.7 percent (15.9 percent in 2016). Today, Russian reserves are sufficient to ensure a sustainable balance of payments in Russia because they cover both 16 months of imports of goods and services into Russia (17 months in 2016) and external debt repayments that fall due in 2018.

¹ Surplus reserves in the banking system comprise deposits of credit institutions with the Bank of Russia and correspondent accounts of credit institutions with the Bank of Russia, as well as Bank of Russia bonds held by credit institutions.

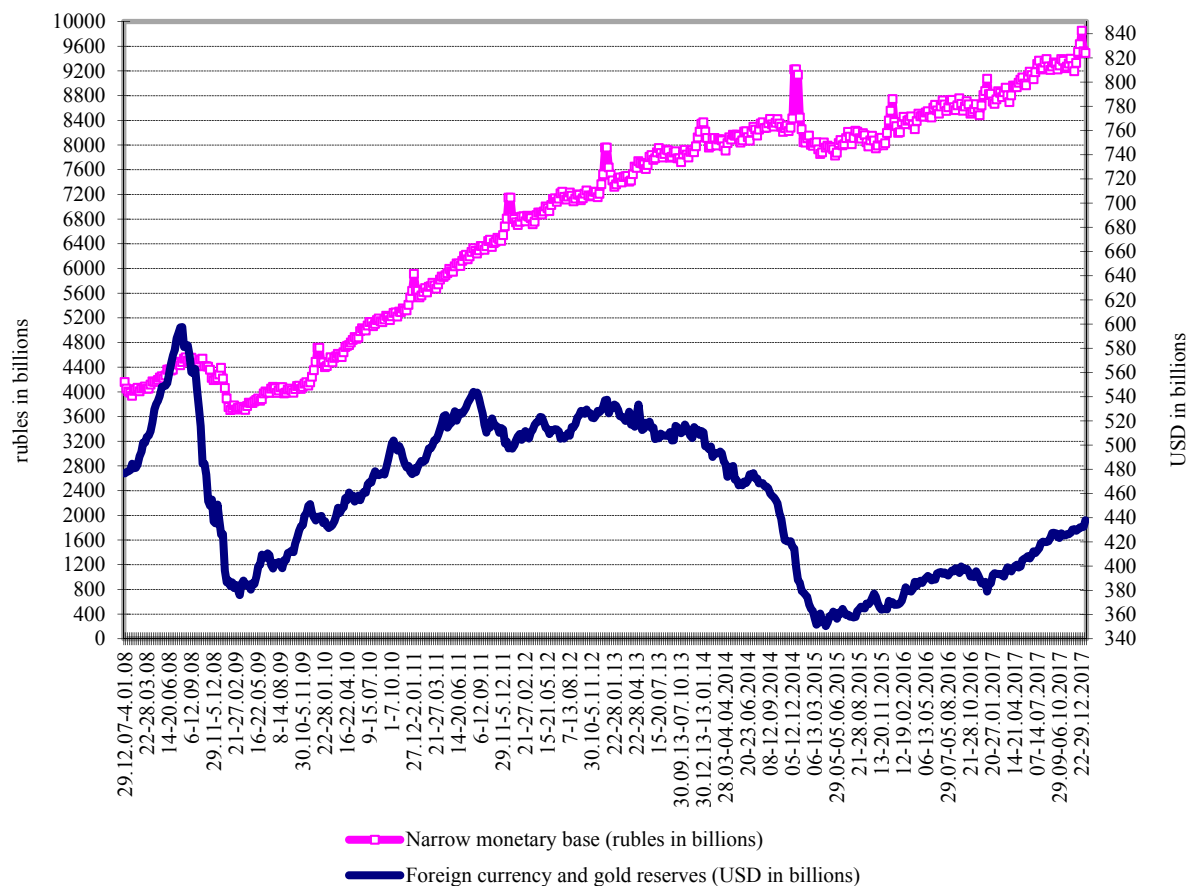


Fig. 7. Dynamics of monetary base (narrow definition) and Russia’s foreign currency and gold reserves (international reserves) in 2008-2017

Source: Bank of Russia.

In 2017, M2 increased monthly by an the average of 10.3 percent (7.4 percent in 2014, 6.5 percent in 2015, 11.3 percent in 2016). In 2017, the annualized monetary base saw an average increase of 11.2 percent. As a result, the money multiplier (the M2 to monetary base ratio) remained almost unchanged, 3.2 compared to 3.3 in 2016 (3.2 in 2014, 3.3 in 2015). The money multiplier value equals the average for emerging economies (Ukraine, Belarus, Kazakhstan), whereas it tends to vary within a range of 5–8 in developed countries. Note that East European countries saw their money multiplier rise over the past two decades as their banking system advanced further. In Poland, for example, the money multiplier advanced to 5.7 from 3.1 in the period between 1993 and 2017.

According to preliminary estimates, the level of monetization of the Russian economy (the M2 to GDP ratio) in the period between 1999 and 2017 tripled to 59.4 percent in 2017, reaching the ratio seen in Central and East European countries that are traditionally characterized by higher degree of monetization. In Poland, for example, the M2 to GDP ratio in 2016 stood at 68.1 percent (40.2 percent in 1999). In contrast, the M2 to GDP ratio in the same period increased by 2.2 times to 36.0 percent in Belarus, by 3.1 times to 42.4 percent in Kazakhstan, by 2.8 times to 46.3 percent in Ukraine. Developed countries had even higher GDP monetization owing to a more advanced financial system: in 2016, for example, the M2 to GDP ratio reached 142.5 percent in the United Kingdom, 190 percent in Switzerland.

2.1.3. Inflationary developments

Inflation in Russia stood at 2.5 percent at 2017 year-end, way below the value (5.4 percent) seen in 2016. In January-December 2017, the inflation rate continued to slide to 2.5 percent from 5.0 percent, with just a minor spike in June (*Fig. 8*). Furthermore, the target rate was for the first time achieved in mid-May 2017, and the Russian economy saw a deflation of – 0.5 percent in August and -0.1 percent in September 2017, for the first time since August 2011. Inflationary developments slowed on the back of ruble appreciation, good crop as well as a moderately tough monetary policy of the Bank of Russia. As a result, the inflation rate was down to a level surpassing the previous year’s all-time low.

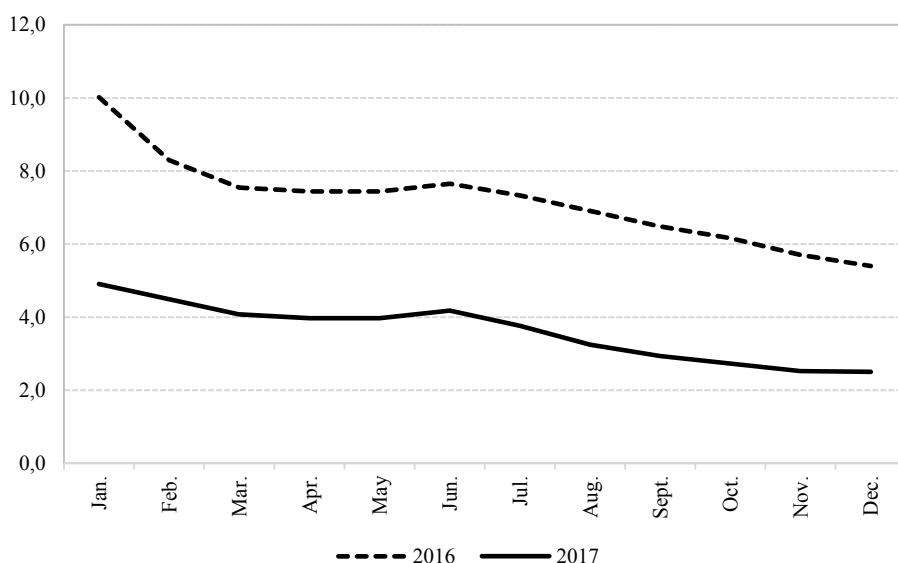


Fig. 8. CPI growth rate in 2016–2017, % change over the last 12 months

Source: Rosstat; Gaidar Institute’s calculations.

As shown in *Table 4*, the deceleration of inflation in 2017 was driven by price movements for foodstuff products, a decline of 1.1 percent in December 2017 over December 2016 compared with 4.6 percent in December 2016 over December 2015 (*Fig. 9*). For instance, the industry saw a deflation in July-September 2017 (down 1 percent in July, 1.8 percent in August, 0.7 percent in September) driven mostly by falling prices of fresh fruit and vegetables (down 8.3 percent in July, 15.5 percent in August, 6.9 percent in September) because of a record-high crop. Note that a similar slump of foodstuff prices (down 1.7 percent) was seen only in August 2003, with a 7.2 percent fall of prices for fresh fruit and vegetables. Prices of foodstuff products in December 2017 over December 2016 were pushed up by increase in prices for butter (up 9.6 percent), milk and dairy products (up 5.2 percent), fish and seafood products (up 3.8 percent), alcoholic beverages (up 2.9 percent).

Non-foodstuff price growth decelerated from 6.5 percent in December 2016 over December 2015 to 2.8 percent in December 2017 over December 2016. The deceleration of inflation was led primarily by prices of home appliances (down by an average of 2.3 percent in December 2017 over December 2016) and medicines (down 3.4 percent in December 2017 over December 2016) that were dragged down by the ruble’s appreciation given a large proportion of non-foodstuff imports. Note that prices of tobacco products (up 8.6 percent) and

motor gasoline (up 7.3 percent) rose at higher rate than other products of this group due to heightened excise duties.

In December 2017, prices of paid services to individuals increased 4.4 percent over December 2016. The major contributors to the increase in prices of paid services were educational services (up 7.5 percent), passenger transport services (up 6.8 percent), early childhood educational services (up 5.2 percent), medical services (up 5.0 percent), communication services (up 4.7 percent).

The core inflation, an indicator excluding changes linked to seasonal and administrative factors, was on a smooth slide in 2017, from 5.5 percent year-on-year in January 2017 to 2.1 percent in December 2017, thus evidencing that the deceleration of inflation in 2017 was overall resistant to temporary factors.

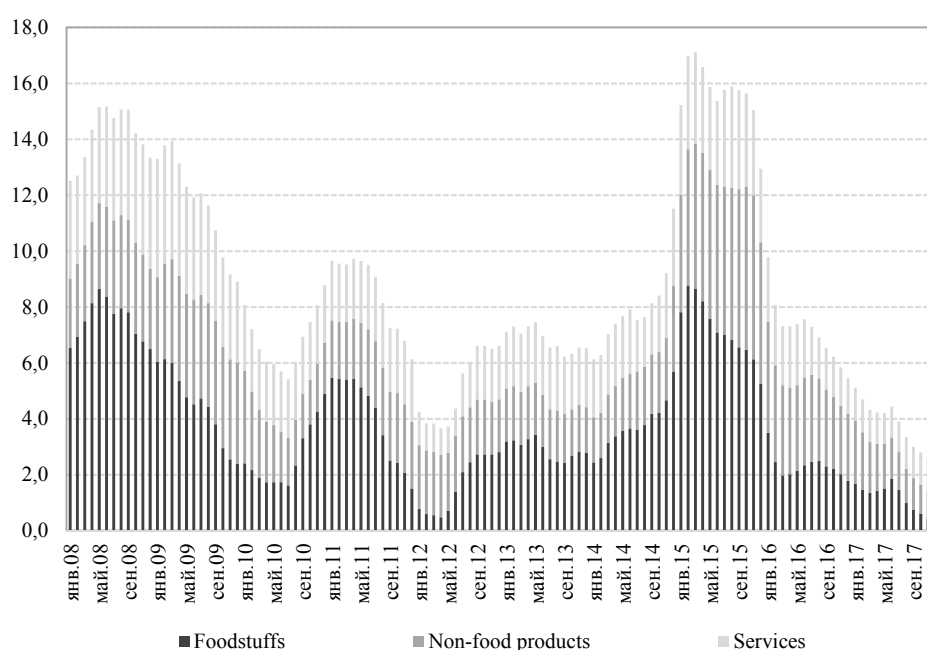


Fig. 9. Structure of inflation in 2008–2017, percent change compared to the previous year’s month

Source: Rosstat, Gaidar Institute’s calculations.

Household inflation expectations continued to fall in 2017. The median one-year ahead expected inflation rate was down from 10.9 percent in January to an all-time low (during the period of monitoring) of 8.7 percent in November and December 2017, according to InFOM’s survey published by the Bank of Russia. Bank of Russia’s estimates based on the data from respondents of an inflation expectation survey is another evidence of declining household inflation expectations. The inflation probability in December was estimated 2.4 percent, down 2.2 percentage points from the value recorded in January.¹ Note that the median one-year ahead expected inflation rate in January–November 2017 was higher than the actual inflation rate seen over the past 12 months by 5.8–7.1 percentage points. Overall, relatively heightened inflation expectations, including their unstable and sluggish nature, was a headwind to the transition

¹ The Bank of Russia Bulletin “Inflation Expectations and Consumer Sentiment”, No. 8 August 2017.

from a tight to a neutral monetary policy. Note, however, that the fact that inflation expectations are higher than the target inflation rate is typical of both developed and developing countries. It's therefore unlikely that inflation expectations will slip to 4%. Inflation expectations in 2018–2019 will probably reach a steady-state level thus allowing the Russian central bank to switch to a neutral monetary policy.

Note that consumer demand recovery on the back of real wage increase amid decelerating inflation remained a source of risks of inflation. The retail trade turnover increased since April 2017 (for the first time since December 2014) to an average of 1.9 percent year-on-year in April–November, most likely due to the growth in consumer lending. Another source that can possibly boost inflation in the next few months is persisting uncertainty about external environment for the Russian economy; in particular, the oil market remains unstable, and capital inflows into Russia can be decreased if the Federal Reserve tightens its monetary policy along with a key interest rate cut in Russia.

Table 4

**Annual growth rate of prices for certain consumer goods and services
in 2015–2017, % change, December over December**

	2015	2016	2017	2015–2017
CPI	12.9	5.4	2.5	22.0
Foodstuff products	14	4.6	1.1	20.6
Butter	10.6	20.5	9.6	46.1
Fish, other seafood and products thereof	20.9	8.6	3.8	36.3
Sunflower oil	37.2	3.4	-8.6	29.7
Milk and dairy products	11.5	9.5	5.2	28.4
Pasta-based food products	19.5	4.5	-0.7	24.0
Bread and bakery products	13.2	5.9	2.7	23.1
Alcoholic beverages	10.7	6.4	2.9	21.2
Fresh fruits and vegetables	17.4	-6.8	1.2	10.7
Grains and legumes	15.5	6.4	-13	6.9
Meat and poultry	4.3	1.6	-2.3	3.5
Eggs	9.8	-0.7	-14.2	-6.5
Nonfoodstuff products	13.7	6.5	2.8	24.5
Tobacco products	26.6	17.8	8.6	62.0
Textiles	19.7	7.6	3.7	33.6
Washing and cleaning agents	22.4	6.3	0.6	30.9
Footwear	15.1	9.2	4	30.7
Textile goods	13	7.5	3.3	25.5
Clothing and underwear	12.8	7.3	3	24.7
Medicines	19.6	4.9	-3.4	21.2
Motor gasoline	4.8	3.8	7.3	16.7
Services	10.2	4.9	4.4	20.7
Early childhood educational services	16.8	9.3	5.2	34.3
Passenger transport services	10.7	6.6	6.8	26.0
Medical services	11.1	7.8	5	25.8
Educational services	8.7	4.9	7.5	22.6
Utility services	10.1	5.4	4.6	21.4
Communication services	2.9	3.7	4.7	11.7

Source: Rosstat.

We finally compare Russia's consumer price growth rates with those of other countries (Table 5).

Table 5

Consumer price index dynamics of various countries in 2015–2017, percent a year

	2015	2016	2017	2015–2017
Azerbaijan	7.6	15.7	12.9	40.6
Armenia	-0.1	-1.1	2.6	1.4
Belarus	12.0	10.6	4.6	29.6
Kazakhstan	13.6	8.5	7.3	32.3
Kyrgyzstan	3.4	-0.5	3.7	6.7
Moldova	13.6	2.4	7.3	24.8
<i>Russian Federation</i>	<i>12.9</i>	<i>5.4</i>	<i>2.5</i>	<i>22.0</i>
Tajikistan	5.0	6.1	6.7	18.9
Ukraine	43.3	12.4	13.7	83.1
Germany	0.2	0.5	1.7	2.4
France	0.0	0.2	1.2	1.4
United States	0.1	1.3	2.1	3.5
The Netherlands	0.6	0.3	1.3	2.2

Sources: Interstate Statistical Committee of the Commonwealth of Independent States (<http://www.cisstat.com/>), OECD database (<http://stats.oecd.org/>).

The Russian Federation ranked 1st among CIS countries with slowest consumer price growth rates at 2017 year-end. Ukraine and Azerbaijan ranked 1st and 2nd, respectively, among CIS countries with highest rates of inflation (13.7 and 12.9 percent, respectively). While the 2016 inflation rate in Russia averaged 16 times the inflation rate in developed countries, in 2017 Russia had consumer price growth rates comparable with developed countries (1.7 percent in Germany, 2.1 percent in the United States). Given the said risks and the ongoing inflationary dynamics, inflation can be expected to gear up in the first half of 2018, but it's highly likely that inflation will stay at about 4 percent, similar to the target inflation set by the Russian central bank.

2.1.4. Balance of payments and ruble exchange rate

In 2017, the Russian ruble appreciated substantially in nominal and real terms against national currencies of Russia's trade partners. In nominal terms, the ruble posted a 14.7 and 12.6 percent y-o-y annual average gain against the US dollar and the euro, respectively. The ruble nominal effective exchange rate against foreign currencies advanced 15.5 percent in 2017, which, given the consumer price dynamics deceleration to a historical low, became the key factor of ruble's 15.9 percent appreciation in real terms by 2016 (*Fig. 10*).

The ruble's appreciation in 2017 was determined mostly by rising energy prices in the global markets. At the same time, notwithstanding the continuing close correlation between crude oil prices and the ruble exchange rate, the 2017 average intramonth volatility of the US dollar and Euro exchange rate against the Russian ruble¹ fell further to 1 percent (compared with previous year's 1.6 percent) and to 1.1 percent (compared with 1.8 percent a year earlier), respectively. Note that the ruble exchange rate was generally in line with the dynamics of currencies of developing countries and of primary commodities' exporting countries, although the ruble appreciated at substantially high rates (*Fig. 11, 12*).

Data for the 2017 Balance of Payments show that the current account surplus increased considerably over 2016. At the same time, private capital net outflow increased mostly because Russian banks slimmed their foreign liabilities.

¹ Intramonth volatility of the ruble exchange rate against foreign currencies is calculated using daily official exchange rates and is expressed as a percentage ratio of exchange rate standard divergence to its average monthly value.

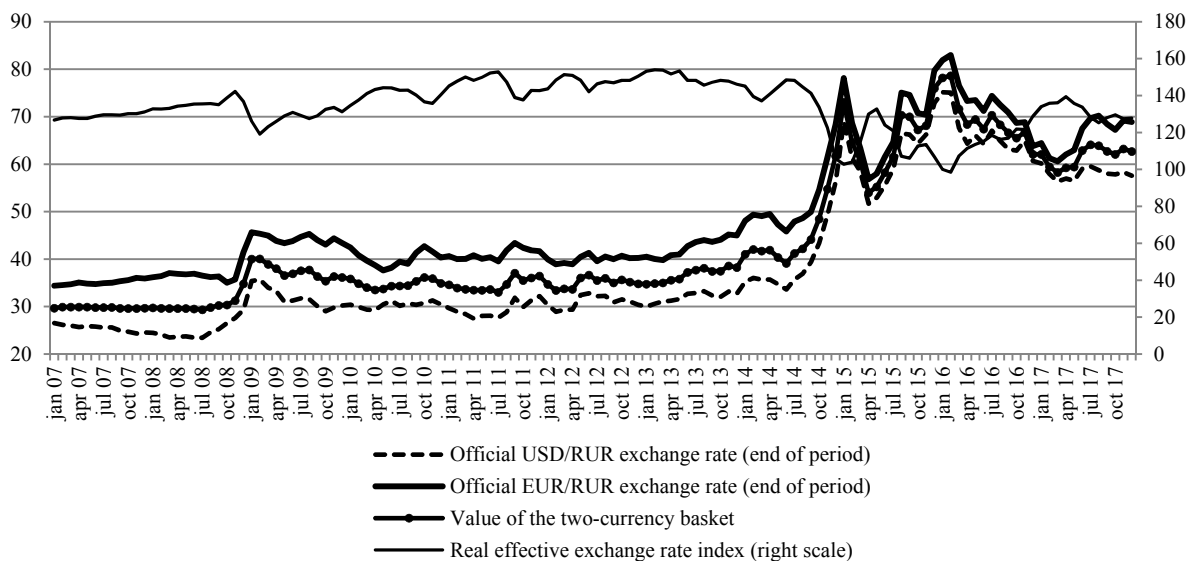
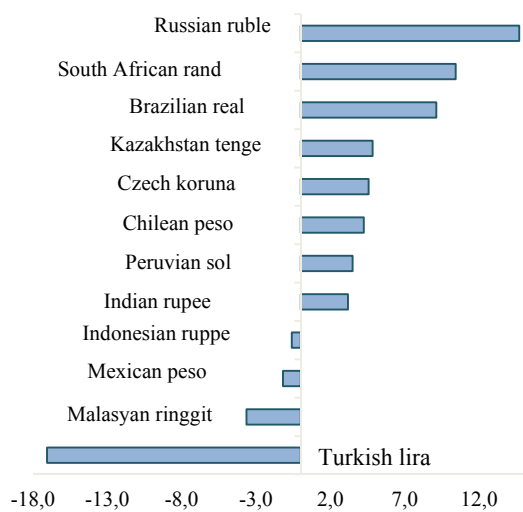


Fig. 10. Dynamics of Russian ruble exchange rate, 2003–2017

Sources: Bank of Russia, own calculations.



Note: The signs “+” and “-“ denote appreciation and depreciation, respectively, of a national currency against the US dollar.

Fig. 11. Dynamics of nominal exchange rate for developing countries’ currencies in 2017, percent change year over year

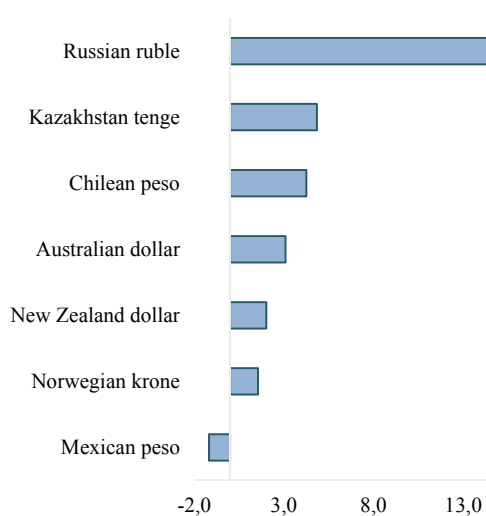


Fig. 12. Dynamics of nominal exchange rate for primary commodities’ exporting countries in 2017, percent change year over year

Sources: data posted on central banks’ official websites, own calculations.

According to Bank of Russia's preliminary data on the 2017 Balance of Payments, the current account balance ran at USD 40.2 billion, gaining 58 percent (or USD 14.7 billion in absolute terms) over 2016.¹

The balance of trade in goods reached USD 115.8 billion, adding 28 percent, USD 25.5 billion in absolute terms, to the value (USD 90.3 billion) seen in 2016 (*Fig. 13*). The pivotal contribution came from increased exports, up 26 percent in value terms, USD 71.9 billion in absolute terms, from USD 281.8 billion in 2016 to USD 353.7 billion in 2017, governed by heightened average annual crude oil prices amid stable supplies in volume terms (crude oil export prices averaged ~USD 364 a ton in January-November 2017, whereas in 2016 they stood at an average of USD 289 a ton). That also pushed average annual prices for refined petroleum products (export prices of refined petroleum products averaged ~USD 388 a ton in January-November 2017, whereas in 2016 the average price was USD 295 a ton) and natural gas (export prices of natural gas averaged ~USD 179 TCM in January-November 2017, USD 157 TCM in 2016). Therefore, crude oil, refined petroleum products and natural gas accounted for 55.2 percent of Russia's total exports, adding 0.6 percentage points to the value recorded in 2016 (*Fig. 14*).

Prices for other Russian primary exports rose on the back of further global economic growth and therefore heightened demand for resources such as ferrous metals (up from USD 321 to USD 440 a ton), hard coal (an increase from USD 52 to USD 74 a ton), wheat and meslin (wheat-rye mixture) (up from USD 166 to 176 USD a ton), nonferrous metals (up 10–30 percent for aluminum, copper, nickel).

The balance of trade in goods was also influenced by a 24 percent growth in imports (up USD 46.3 billion in absolute terms) from USD 191.6 billion in 2016 to USD 237.9 billion in 2017, mostly as a result of the ruble's appreciation, leading to a substantial relative fall of costs of imports for Russian economic agents.²

In 2017, the balance of trade in services worsened to -USD 30.2 billion, which is (in absolute terms) 27 percent above -USD 23.8 billion seen in 2016. Export of services in 2017 increased 15 percent to USD 58.1 billion from USD 50.6 billion mostly due to inbound tourism and transport services as import of services gained 19 percent to USD 88.3 billion from USD 74.4 billion, mostly on the back of outbound tourism, transport services and other types of business services, with the latter surpassing the former both in relative and absolute terms. If the ruble's real effective exchange rate continues to appreciate, import of services would continue to outpace export of services, and therefore a negative balance of import of services would further deteriorate. However, since the ruble's appreciation may be led mostly by increasing prices for primary export items, such a deterioration is known to be offset by increase in the trade in goods balance.

Both the investment income balance and the compensation of employees balance underwent minor changes in 2017, with the former down USD 0.7 billion (from -USD 2.2 billion to - USD 2.9 billion) as the latter dropped USD 2.8 billion (from -USD 32.5 billion to - USD 35.3 billion). Like in 2016, the rent balance in 2017 came out to be zero as the secondary income balance contracted to -USD 7.2 billion (-USD 6.3 billion in 2016).

¹ See A. Bojehkova, A. Knobel, P. Trunin. Russia's Balance of Payments of 2016 // Russian Economic Developments. 2017. Vol. 24. No. 2. PP. 3–6.

² For more details on the exchange rate influence on trade see A. Knobel, A. Firanchuk. Specifics of Russia's exports and imports in January-August 2017 // Economic Development of Russia. 2017. Vol. 24. No. 11. PP. 12–18.

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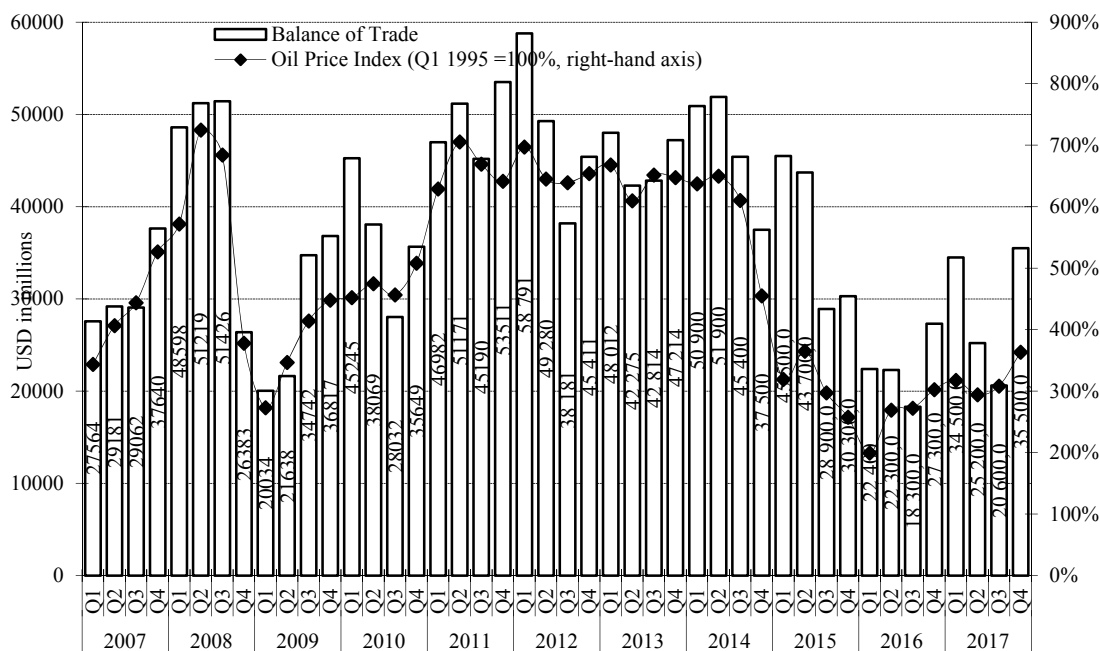


Fig. 13. Russia's balance of trade and global oil price index in 2006–2017

Sources: Bank of Russia, own calculations.

Therefore, the trade in services balance and the trade in goods balance, with the latter being heavily reliant on hydrocarbon price movements, continued to be the principal driver of the amount of the current account balance in the Russian economy.

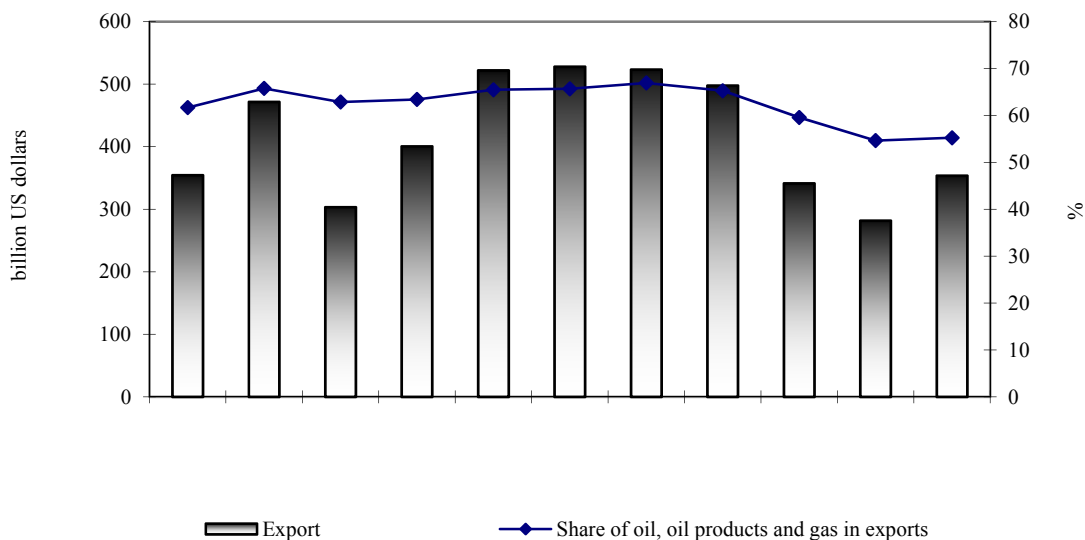


Fig. 14. Dynamics of exports of goods and of percentage share of fuel and energy sector products in 1994–2017

Source: Bank of Russia.

The increase in the current account surplus occurred with a comparable increase in financial account deficit, up USD 21.0 billion in 2017 (up USD 11.9 billion in 2016). In 2017, the non-government sector of the Russian economy saw a net capital outflow of USD 31.3 billion, a 1.6-fold increase over 2016 (*Fig. 15*). The dynamics of capital outflow was driven mainly by banks' transactions. In particular, banks saw a net capital outflow of USD 28.6 billion in 2017, whereas there was an inflow of USD 1.1 billion in 2016. The major contribution to the balance of bank transactions with the rest of the world came from the repayment of banks' foreign liabilities which in 2017 were trimmed by USD 31.4 billion (USD 27.1 billion in 2016) as banks' foreign exchange assets in 2017 were down USD 2.9 billion (USD 28.3 billion in 2016).

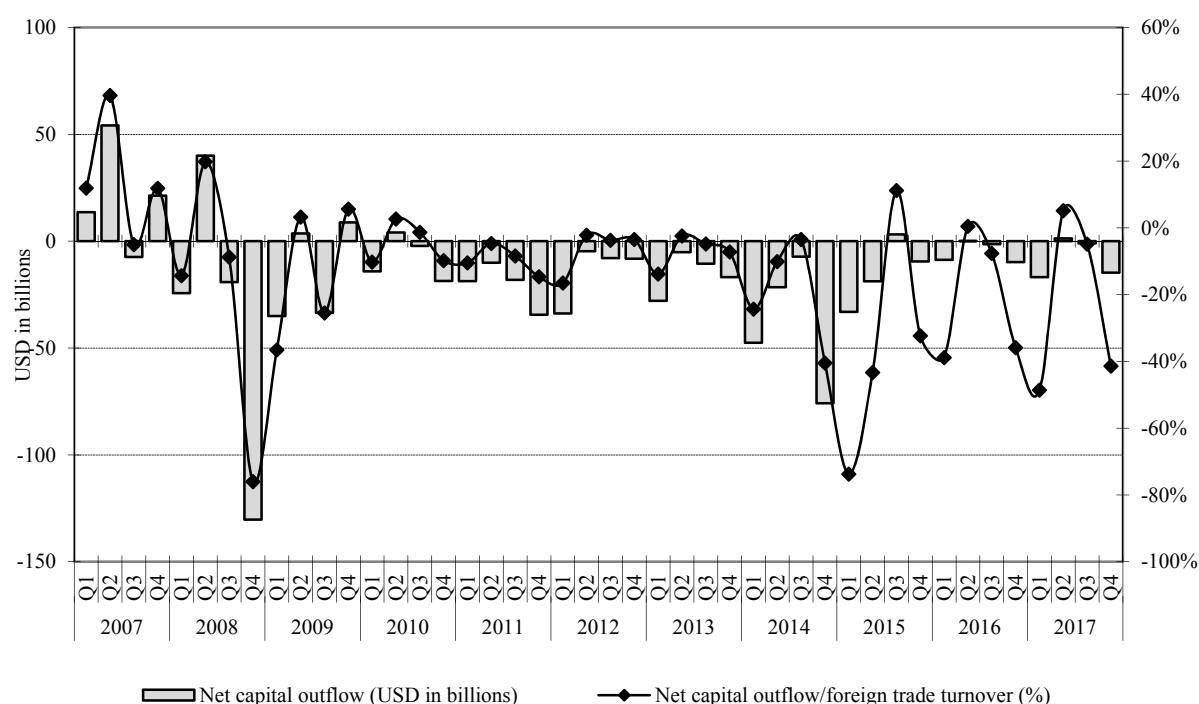


Fig. 15. Private sector's net capital outflows in 2005–2017

Sources: Bank of Russia, Gaidar Institute's calculations.

Meanwhile, other sectors saw a considerable decline in net capital outflow in 2017, down to USD 2.7 billion from previous year's USD 20.9 billion. The non-bank sector's foreign liabilities increased USD 15.7 billion compared with previous year's increase of USD 17.6 billion, mostly on the back of USD 23.2 billion in direct investment (USD 30.9 billion in 2016). At the same time, portfolio investment liabilities decreased by USD 5.9 billion (no changes were recorded in 2016) as total loans and credits dropped USD 1.7 billion (a decrease of USD 12.0 billion in 2016), whereas other liabilities increased USD 0.1 billion (an outflow of USD 1.3 billion in 2016). Overall, positive growth in foreign liabilities was indicative of the fact that the non-bank sector in 2017 managed to raise more funds than was needed for foreign debt repayments. That was also due to non-bank sector's successful foreign debt refinancing despite sanctions-induced limited access to global capital markets. Other sectors' foreign debt increased USD 10.7 billion to USD 354.0 billion (a decline

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of USD 1.9 billion in 2016). Other sectors' foreign exchange assets increased USD 22.7 billion in 2017 (up USD 34.9 billion in 2016), mainly as a result of outbound foreign direct investments of USD 30.1 billion (USD 20.1 billion in 2016). Other sectors' portfolio investments increased USD 5.0 billion (USD 3.6 billion in 2016).

Note that substantial contribution to the increase in foreign liabilities in 2017 also came from the growth in portfolio investments in liabilities of federal agencies of state administration (USD 15.3 billion in 2017 vs. USD 5.2 billion in 2016). That was due to foreign investors' heightened interest in the Russian Federal Loan Obligations (OFZs) amid a relatively high level of interest rates in Russia. A point to note, however, is that public sector inbound portfolio investments dropped considerably by the end of 2017 (down to RUB 1.2 billion in Q4 2017), probably as a result of weakening foreign investment demand for this type of assets amid lower interest rates in Russia and concerns surrounding an extension of Western sanctions against Russia.

In 2017, Russia saw its external debt increase USD 15 billion to USD 529.1 billion as of January 1, 2018 (*Table 6*). The debt of federal agencies of state administration increased by 1.8 times to USD 55.6 billion as a result of considerable foreign investment in Russian federal bonds (OFZ) was offset by a decline of 20.7 percent to USD 104.5 billion in banks' external outstanding loans.

Table 6

Balance of payments' principal accounts and dynamics of external debt in 2015–2017, USD in billions*

Indicator	2015					2016					2017				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Balance of current accounts and of capital accounts	30.0	16.5	7.7	14.5	68.8	12.9	2.0	0.4	10.3	25.5	22.6	2.3	-2.5	17.8	40.2
Financial account (excluding reserve assets)**	37.2	19.3	2.1	11.1	69.8	7.5	-1.7	-1.0	7.1	11.9	11.4	-2.2	-10.2	22.1	21.0
Change in foreign exchange reserves ('-' denotes decrease in reserves)	-10.1	-2.2	9.7	4.3	1.7	2.6	4.4	3.1	-1.8	8.2	11.3	7.5	6.5	-2.7	22.6
Net errors and omissions	-2.9	0.8	4.1	1.0	2.9	-2.8	1.9	1.7	-5.5	-4.6	0.1	3.2	-1.1	1.7	3.8
Change in Russia's external debt ('-' denotes decrease of debt)	-43.5	-0.4	-18.9	-18.0	-80.8	2.1	3.3	-4.3	-6.2	-5.0	11.4	7.1	4.0	-7.6	15.0
Change in Russia's sovereign external debt	-8.1	2.9	-4.1	-1.8	-11.1	1.5	3.9	4.4	-1.2	8.6	6.7	0.7	7.8	1.3	16.5
Change in Russian private sector's external debt	-36.0	-2.3	-15.0	-17.5	-70.9	1.4	-0.4	-8.9	-6.3	-14.2	2.7	3.4	-8.1	-2.2	-4.1

* preliminary estimate.

** excluding foreign currency reserves.

Source: Bank of Russia.

Our capital flight estimate for 2017 year-end (*Fig. 16*) came out to be positive, at a level of USD 6.1 billion (USD 4 billion in 2016).¹

¹ We use the IMF method to measure capital flight, that is, the sum of "trade credits and advances", "dubious operations" and "net errors and omissions."

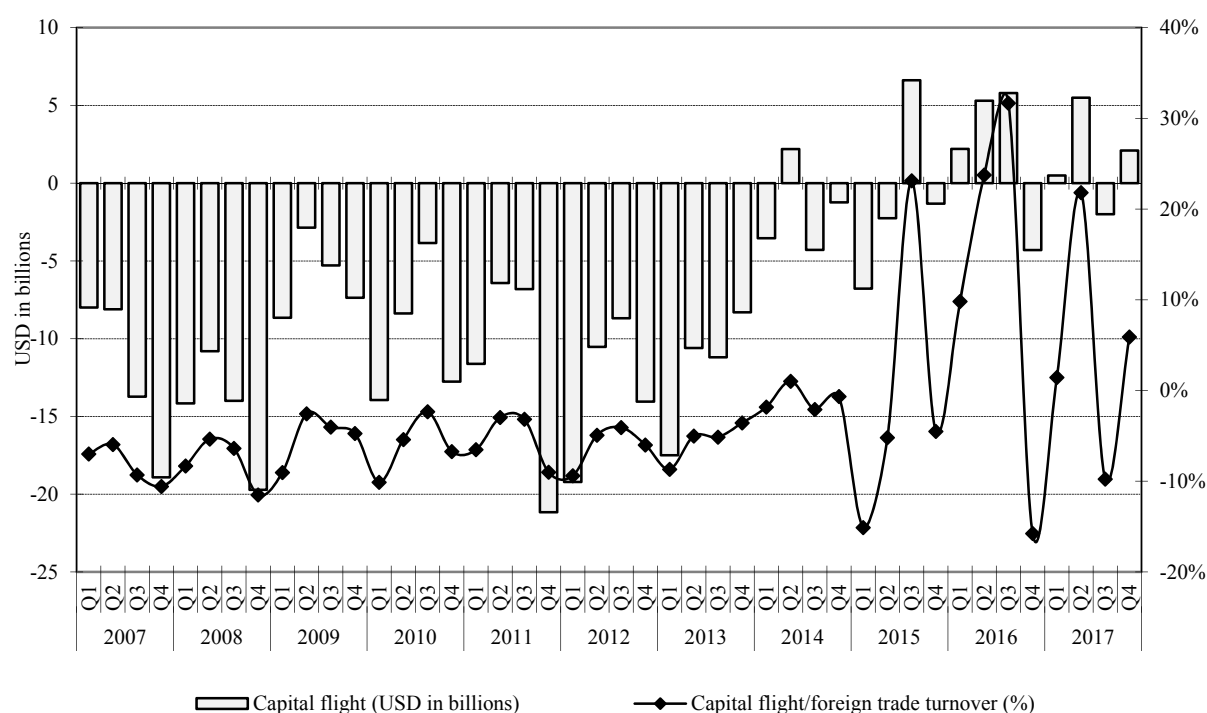


Fig. 16. Capital flight dynamics in 2005–2017

Sources: Bank of Russia, Gaidar Institute’s calculations.

If the ongoing trends in the Russian economy and in the global energy market continue further, Russia’s Balance of Payments and therefore the ruble’s exchange rate will remain stable: a possible growth in the average annual crude oil price will be offset by increased imports as well as Ministry of Finance’s much bigger foreign exchange purchases under a new budgetary rule. In addition, the ruble’s appreciation will be dampened by a decline in short-term foreign capital inflows as the central bank continues to ease its monetary policy. What should not be left unnoticed, however, is risks that may come from a possible fall of crude oil prices induced by increased output and from new tough sanctions against Russian assets.

2.2. Fiscal policy¹

2.2.1. The characteristic features of budgets across the RF budgetary system

The basic parameters of the RF budgetary system

The year 2017 saw some notable changes in the main parameters of the execution of the general government budget of the Russian Federation: the budgetary system’s revenue gained nearly 1 percentage point of GDP, while expenditure, on the contrary, lost 1.2 percentage points of GDP. Thus, the revenue volume amounted to 32.6 percent of GDP, and that of expenditure –

¹ This section is written by Igor Arlashkin, IAES-RANEP; Natalya Barbashova, the Gaidar Institute, IAES-RANEP; Sergey Belev, the Gaidar Institute, IAES-RANEP; Alexander Deryugin, IAES-RANEP; Maria Deshko, the Gaidar Institute; Arseny Mamedov, the Gaidar Institute, IAES-RANEP; Ilya Sokolov, VAVT under Russian Ministry of Economy, IAES-RANEP; Tatina Tishchenko, IAES-RANEP.

to 34.1 percent of GDP. As a result, the budgetary system's deficit shrank by 2.2 percentage points of GDP, to 1.5 percent of GDP (*Table 7*).

Table 7

The main parameters of the RF budgetary system

	2013		2014		2015		2016*		2017*		Change in 2017 relative to 2016, percentage points of GDP*
	trillions of rubles	percentage points of GDP	trillions of rubles.	percentage points of GDP	Trillions of rubles	percentage points of GDP	trillions of rubles	percentage points of GDP	trillions of rubles	percentage points of GDP	
Revenue	24.4	33.3	26.7	33.7	26.6	31.9	27.6 (27.2)*	32.1 (31.6)*	30.0	32.6	1.0
Expenditure	25.2	34.5	27.5	34.8	29.4	35.3	30.7 (30.3)*	35.7 (35.2)*	31.4	34.1	-1.2
Deficit (-) / Suplus (+)	-0.8	-1.2	-0.8	-1.1	-2.8	-3.4	-3.1	-3.7	-1.3	-1.5	2.2
<i>For reference: GDP, trillions of rubles</i>	73.13		79.20		83.39		85.92		92.08		-

Note: The total volumes of revenue and expenditure volume are adjusted by the 'duplicated' records of insurance contributions for the non working population.

*To achieve full comparability with 2017, the indices for 2016 are supplemented by data (shown in brackets) derived from reports of the Federal Treasury as of January 1 for each relevant year (cash basis accounting); these indices are lower than the indices taken from the annual reports for each relevant year (accrual basis accounting), first of all due to the specificities of the Federal Social Insurance Fund's operations. Growth in terms of share in GDP (last column) reflects data from the reports as of January 1 for each relevant year.

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

When reviewing the main parameters of the budgetary system in 2017, it is worthwhile to note that the government has indeed succeeded in halting the trend that began to emerge in 2015–2016 – that of a budget deficit surge. The budget volume returned to its level observed in 2013–2014. This was achieved thanks in part to the budget consolidation measures, and in part to the positive budget revenue movement. As a result, the movement of the deficit and expenditure over the period 2015–2017 displayed a counter-cyclical pattern, i.e., their indices rose during the period of economic decline, and then shrank when the rate of economic growth returned into positive zone by the year-end of 2017 (according to Rosstat's preliminary data, the growth rate of GDP amounted to 1.5 percent).

It became possible to suppress budget expenditure growth, the necessity to comply with the goals set by the May 2012 Presidential Executive Orders notwithstanding, by saving the surplus oil and gas revenues through their conversion into foreign currency, and also by the early redemption, in 2016, of a significant portion of the loans issued to enterprises of the defense-industrial complex, thus significantly reducing the amount of expenditure earmarked for defense in 2017. The reduction of both budget expenditure and the budget deficit alongside an aggressive monetary policy translated into an inflation plunge from 5.4 percent at year-end of 2016 to 2.5 percent in 2017.

The Main Tax Receipts in the RF Budgetary System

According to data for 2017, the level of general government budget revenue rose by 1.0 percentage point GDP, from 31.6 to 32.6 percent of GDP. Revenue growth was observed across nearly all the components of the aggregate tax load (see *Table 8*).

Table 8

The main tax receipts in the general government budget of the Russian Federation, percent of GDP

	2013	2014	2015	2016	2017	Change in 2017 relative to 2016	
						percentage points of GDP	growth in real terms, percent
Revenue, total	33.3	33.7	31.9	32.1 (31.6)*	32.6	1.0	7.9
Corporate profit tax	2.9	3.0	3.1	3.2	3.6	0.4	15.9
PIT	3.5	3.4	3.4	3.5	3.5	0.0	5.1
Insurance contributions	6.3	6.3	6.4	6.6 (6.3)*	6.4	0.1	6.3
VAT	5.0	5.0	5.1	5.4	5.6	0.2	8.2
Excises	1.4	1.4	1.3	1.6	1.7	0.1	15.1
MRET	3.6	3.7	3.9	3.4	4.5	1.1	37.5
Customs duties and fees	7.0	6.9	4.0	3.0	2.8	-0.2	-2.6

Note. Total revenue and insurance contributions are adjusted by the ‘duplicated’ records of insurance contributions for the non working population.

* To achieve full comparability with data for 2017 taken from the Federal Treasury’s report as of 1 January 2018 (cash basis accounting), the indices for 2016 are supplemented by data (shown in brackets) derived from reports of the Federal Treasury as of 1 January 2017 (cash basis accounting); these indices are lower than the indices taken from the annual reports for each relevant year (accrual basis accounting), first of all due to the specificities of the Federal Social Insurance Fund’s operations. Growth indices (last two columns) relative to data in the corresponding rows are taken from the reports as of 1 January for each relevant year.

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

The amount of the budgetary system’s oil and gas revenues, after having shrank in 2016, then significantly increased in 2017 due to the rising global prices for raw materials, and primarily energy resources. Thus, in particular, the amount of MRET receipts increased by 1.1 percentage points of GDP (or 37.5 percent in real terms). At the same time, the overall volume of customs duties and fees continued to decline (by -0.2 percentage points of GDP relative to 2016, or -2.6 percent in real terms), which can be explained by the ongoing ‘tax maneuver’ in the oil and gas sector (for more details, see below). Insurance contributions, excises and VAT increased at about 0.2 percentage points of GDP. PIT receipts remained practically unchanged.

Oil and gas revenues. The movement patterns of MRET and customs duties on energy carrier exports are shown in *Table 9*.

Table 9

The receipts of MRET and export duties on energy carriers, percent of GDP

	2013	2014	2015	2016	2017
MRET	3.6	3.7	3.9	3.4	4.5
Export duties for:					
- energy carriers	5.7	5.8	3.3	2.3	2.1
- crude oil	3.3	3.3	1.7	1.2	1.1
- petroleum products	1.7	1.9	0.9	0.5	0.4
- natural gas	0.7	0.6	0.7	0.6	0.6

Source: Rosstat; RF Central Bank; RF Federal Customs Service, RF Federal Tax Service; Gaidar Institute calculations.

An analysis of the movement patterns of the tax and customs bases demonstrates that in 2017, exports and crude oil production remained practically unchanged relative to 2016. Exports amounted to 256.9 million *t* (+3.2 million *t* relative to 2016), and the production volume – to 546.7 million *t* (-0.5 million *t* relative to 2016).

The growth of oil and gas revenues was positively influenced by the movement pattern of the price of Urals crude. Meanwhile, the USD to RUB exchange rate responded weakly to changes in oil price (see *Fig. 17*).

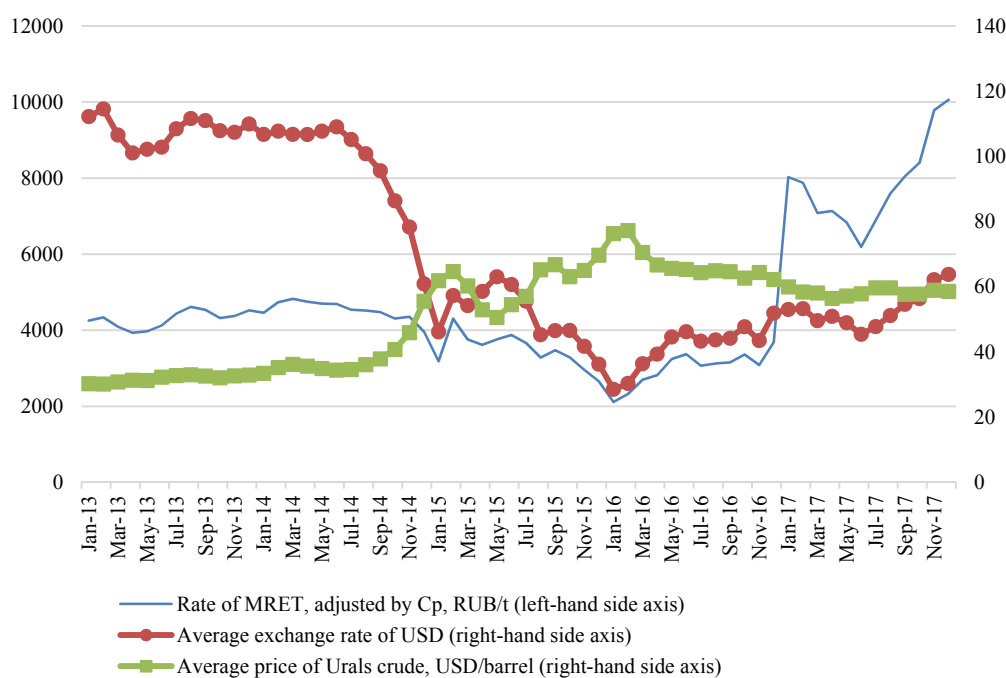


Fig. 17. The movement patterns of the actual rate of MRET, prices of Urals, and the exchange rate of USD

Note. Cp is the coefficient describing the movement of world oil prices (in ruble terms, i.e., prices in USD and the USD to RUB exchange rate)

At the same time, the main input in the oil and gas revenue increase was made by the continuing tax maneuver in the oil and gas sector: from January 1, 2017, the basic rate of MRET for oil was raised from RUB 857 to RUB 919 per *t*, while the rate of export duty was reduced from 42 to 30 percent. In response to the combined effects of the price factor (the price of oil in rubles) and the legislative factor (raised basic rate), the actual ruble denominated rate of MRET amounted on the average in 2017 to more than RUB 7,800 per *t*, while in 2016 it was on the average slightly above RUB 3,000 per *t*, thus not only compensating for the shrinkage of the amount of customs duties in the framework of the tax maneuver, but also triggering growth of the total volume of oil and gas revenues.

As before, the bulk of the tax burden associated with MRET is borne by the oil industry: the tax receipts generated by crude oil production increased, in 2017, by 0.9 percentage points of GDP, or 43.1 percent in real terms, while those generated by natural gas production gained only 0.2 percentage points (48.1 percent in real terms). It should be noted that the budget dependence on MRET has been gradually on the rise: while in 2013 the receipts of MRET accounted for

38.0 percent of the total volume of oil and gas revenue and for 19.1 percent of total federal budget revenue, in 2017 these indices amounted to 67.7 and 26.8 percent respectively.

Corporate profit tax. The year 2017 saw a rather notable growth of the corporate profit tax receipts (by 0.4 percentage points of GDP). As can be seen in *Fig. 18*, the profits of profitable companies slightly increased (by 0.1 percentage points of GDP), while the share of loss-making ones declined (by 3.2 percent). At the same time, a significant additional factor shaping the movement pattern of the tax receipts was the restriction on the possibility of carry-forward of the losses of previous periods in the amount of not more than 50 percent of the amount of taxable profit, which entered into force on January 1, 2017.

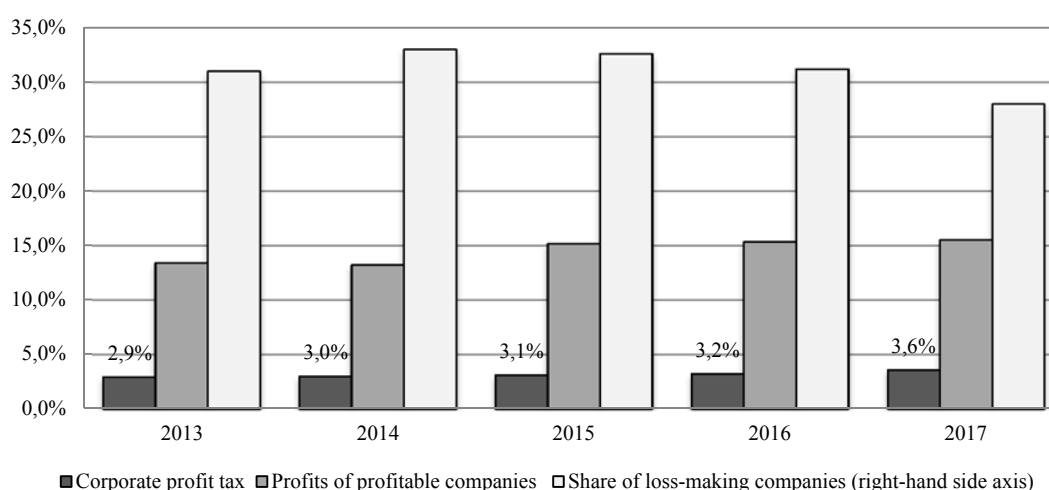


Fig. 18. The movement patterns of the corporate profit tax receipts in the RF budgetary system

Source: RF Federal Tax Service; Rosstat.

Value added tax. In 2017, the receipts of VAT on goods sold in RF territory ('domestic VAT') somewhat increased in terms of share in GDP (by 0.2 percentage points), while the receipts of VAT on goods imported into RF territory slightly decreased, returning to their 2014 level (*Table 10*). As before, Russia's typical feature is the higher collectability of VAT on imports than that of VAT on goods produced in RF territory.

Table 10

The movement patterns of VAT receipts in the RF budgetary system, percent of GDP

	2013	2014	2015	2016	2017
Revenue generated by VAT	5.0	5.0	5.1	5.4	5.6
VAT on goods sold in RF territory	2.6	2.8	2.9	3.1	3.3
VAT on goods imported into RF territory	2.4	2.2	2.1	2.3	2.2
<i>For reference:</i>					
<i>Effective rate of VAT,¹ percent</i>	6.8	7.0	7.3	7.7	7.7
<i>Effective rate of VAT on goods sold in RF territory²</i>	5.0	5.4	6.0	6.3	6.3
<i>Effective rate of VAT on goods imported into RF territory³</i>	11.2	10.8	10.4	10.8	10.8

¹VAT receipts to final consumption ratio.

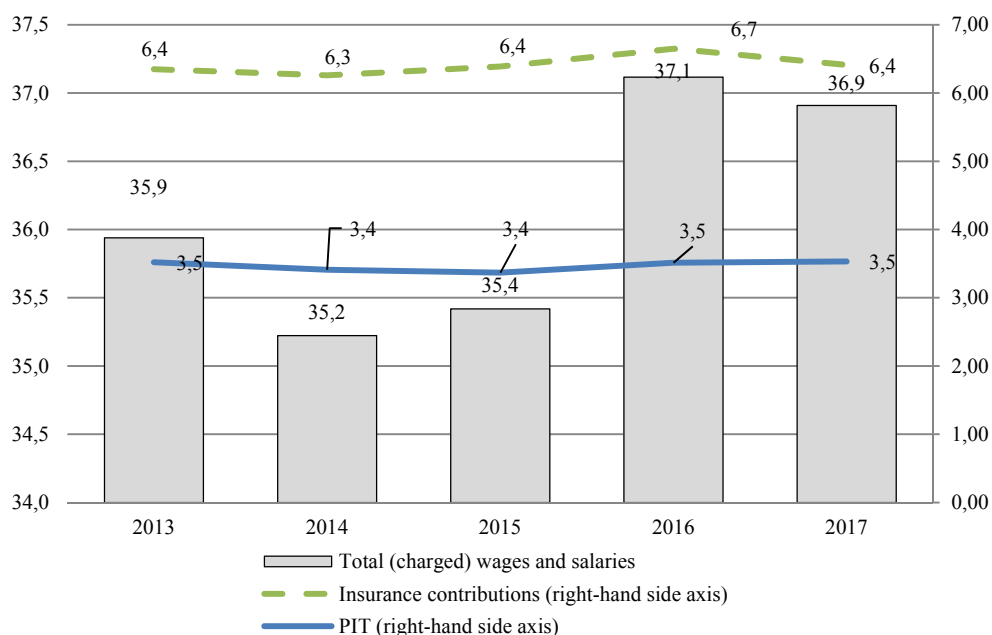
²Ratio of receipts of VAT on goods sold in RF territory to final consumption, less value of imports.

³Ratio of receipts of VAT on imported into RF territory to value of imports.

Source: Rosstat; RF Ministry of Finance; Gaidar Institute calculations.

Payroll taxes. The year 2017 saw no changes in the rates of insurance contributions. The total charged wages and salaries in terms of share in GDP lost nearly 0.2 percentage points of GDP; however, the receipts of insurance contributions gained 0.1 percentage points of GDP, in the main due to the increased wage and salaries level in the groups with incomes below the income threshold, to which the basic rate applies.

The receipts of PIT in terms of share in GDP remained at the same level as in 2016.



Note. Insurance contributions data are derived from the monthly reports released by Roskazna (RF Federal Treasury) (as of January 1 of the corresponding year) and adjusted by the 'duplicated' records of insurance contributions for the non working population.

Fig. 19. The receipts of insurance contributions and PIT, total (charged) wages and salaries, percent of GDP

In 2017, the total volume of mandatory social insurance contributions amounted to RUB 4,495.3 billion (or 4.9 percent of GDP). When taken in nominal terms, the volume of social insurance receipts increased by 8.5 percent, and in real terms – by 4.6 percent. The compulsory medical insurance contributions of the working population (including self-employed individuals) amounted in 2017 to RUB 1,089 billion, and the compulsory medical insurance contributions for the *non working population* – to about RUB 619 billion.

Excises. In 2017, the aggregate revenues generated by excises on tobacco and alcohol products significantly increased, rising above 1 percent of GDP (see Table 11).

Table 11

The input to the budget of the excises on tobacco and alcohol products

	2012	2013	2014	2015	2016	2017
Receipts of excises on tobacco products, billions of rubles	183	253	319	386	483	591
Receipts of excises on alcohol products, billions of rubles	255	307	333	294	349	397

Source: RF Federal Tax Service.

The data presented above are sufficiently positive, considering the fact that over recent years, both the tobacco and alcohol markets have been displaying a downward trend in consumption in terms of physical volume.¹ So, there exist some grounds for arguing that at present, two possible excise policy goals can be achieved in the addictive product markets:² consumption decline and budget revenue increase. Thus, increasing excises translate into increasing consumer prices, and these, in their turn, influence retail sales volumes. However, due to the low price elasticity of demand, raised excises, as a rule, trigger growth of their receipts in the national budgetary system. According to these data, in 2017 the revenues generated by excises on tobacco products amounted to RUB 591 billion vs. RUB 483 billion a year earlier, while those generated by excises on alcohol products increased from RUB 349 to RUB 397 billion.

Among the revenues from alcohol products, the biggest input was made by those from beer and liquor, in particular in 2017, the share of excises on liquor gained 2.5 percentage points relative to 2016, rising to 54.7 percent; meanwhile, the share of excises on beer lost 4.4 percentage points, shrinking to 38.9 percent. Due to the significantly raised rates, the input of revenues from wines increased.

The Expenditure Side of the RF Budgetary System

The total expenditure of the budgetary system of the Russian Federation shrank in 2017 by 1.2 percentage points of GDP relative to 2016 (see *Table 12*). Meanwhile, the changes in the volume of general government budget expenditure, when broken down by function, varied in the range from -1.3 to +0.18 percentage points of GDP.

Table 12

General government budget expenditure, percent of GDP

	2013	2014	2015	2016	2017	Change in 2017 relative to 2016, percentage points
Expenditure, total	34.5	34.8	35.3	35.7 (35.2)*	34.1	-1.2
Nationwide issues	2.1	2.1	2.2	2.2	2.1	-0.0
National defense	2.9	3.1	3.8	4.4	3.1	-1.3
National security and law enforcement activity	3.0	2.8	2.5	2.3	2.2	-0.1
National economy, including:	4.5	5.7	4.5	4.5	4.7	0.2
agriculture and fisheries	0.5	0.4	0.4	0.4	0.4	-0.0
transport	0.7	0.8	0.8	0.8	0.9	0.1
motor road system (road funds)	1.6	1.5	1.5	1.6	1.6	0.0
communications and IT	0.1	0.1	0.1	0.1	0.1	0.0
Housing and community amenities	1.4	1.3	1.2	1.2	1.3	0.2
Environmental protection	0.1	0.1	0.1	0.1	0.1	0.0
Education	3.9	3.8	3.6	3.6	3.5	-0.1
Culture, cinematography	0.5	0.5	0.5	0.5	0.5	0.0
Healthcare	3.1	3.1	3.1	3.0	3.1	0.1
Social policies	12.0	11.1	12.5	12.6 (12.1)*	11.9	-0.2
Physical culture and sports	0.3	0.3	0.3	0.3	0.4	0.1
Mass media	0.2	0.1	0.2	0.1	0.1	0.0
Government and municipal debt servicing	0.6	0.7	0.8	0.9	0.9	0.0

¹ For example, there have been a stable decline in the consumption of tobacco products: while in 2006 total tobacco product consumption amounted to 380 billion units, in 2016 this index was 290 billion units. The situation in the alcohol market, according to Rosstat data, has been similar: the consumption record high, observed in 2007, amounted to 1.47 billion dal for all types of products, and in 2016, the total market volume did not exceed 1.07 billion dal.

² Addictive products are those that, once consumed, may trigger addiction effects. The majority of products in this category are demerit goods, i.e. goods that can have a negative impact on the consumer.

Note. The total expenditure volume, as well as the government spending under the *Healthcare* and *Social Policies* sections are adjusted by the ‘duplicated’ records of insurance contributions for the non working population.

*To achieve full comparability with data for 2017 taken from the Federal Treasury’s report as of 1 January 2018 (cash basis accounting), the budget system expenditure indices for 2016 are supplemented by data (shown in brackets) derived from the Federal Treasury’s report released as of 1 January 2017 (cash basis accounting); these indices are lower than the indices taken from the annual reports for each relevant year (accrual basis accounting), first of all due to the specificities of the Federal Social Insurance Fund’s operations. Growth indices (last column) relative to data in the corresponding rows are taken from the reports as of 1 January for each relevant year.

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

The most significant cuts were made in the government spending under the *National Defense* section (-1.3 percentage points of GDP), thus interrupting the constantly upward trend in military expenditure observable over recent years. In addition to the early redemption (in 2016) of the loans issued to defense enterprises, the shrinkage of expenditure allocated to *National Defense* may also have to do with the fact that the new government armaments program was approved only as late as 2018 (for 2018–2027), which means that this movement pattern may simply represent a ‘technical pause’.

At the same time, the latest federal budget for 2018–2020 envisages a volume of spending to be allocated to this budget function that is slightly below the level of 2017, even when taken in absolute terms. In this connection it should be borne in mind that in accordance with the practice typical of recent years, the initial budget version is drawn up less the funding earmarked for the repayment of bank loans to the organizations belonging to the defense-industrial complex, received by the latter against government guarantees granted to secure the fulfillment of state defense orders. It is not known if the corresponding spending volumes are included in the approved budget functions for the period 2018–2020, or not. So, the possibility of an upward adjustment of the allocations to defense relative to the planned targets already in the course of execution of the 2018 federal budget cannot be ruled out, and we should not make any definite conclusion as to the sustainability of this change in trend from growth to a gradual reduction in the volume of government spending.

In 2017, a slight decline on 2016 (in the range of 0.1 percentage points of GDP) was also demonstrated by allocations to *National Security and Law-Enforcement Activity* and *Education*.

At the same time, there was an increase in the amount of funding designated to some expenditure functions: *National Economy* (by 0.2 percentage points of GDP), *Housing and Community Amenities* (0.2 percentage points of GDP), and *Healthcare* (0.1 percentage points of GDP). If we take a closer look at the items listed in the *National Economy* section, it can be noticed that more than half of the increased government spending was accounted for by infrastructure projects (allocations to transport, roads, and communications), and this should be interpreted as a positive fact.

As far as social policy is concerned, we may note the reinstatement of the long-established practice of indexation of pensions and social benefits (in this connection it was decided that the size of pensions should be adjusted not by the actual inflation rate, but by the targets approved alongside the budget projections for 2017).

On the whole, from the point of view of the ratio of ‘productive’ to ‘unproductive’ spending (the former meaning the allocations to infrastructure and human capital), the year 2017 saw a certain improvement in the general government budget expenditure structure.¹ However, this

¹ For more details concerning ‘productive’ and ‘unproductive’ spending, see Kudrin A., Sokolov I. *Fiscal maneuver and restructuring the Russian economy*. Voprosy Ekonomiki, 2017, No. 9, pp. 5-27. (In Russian).

happened largely due to a sizable shrinkage of the government spending on defense coupled with a slight increase of that allocated to infrastructure, and a somewhat decreased amount of government spending on education. As a result, even without our earlier considerations concerning changes in the government spending under the *National Defense* section, it can still be concluded that so far, there has been no definite trend reversal and a switchover to a systematic and targeted shift in the government expenditure structure in favor of ‘productive’ spending items.

The Deficit of the RF Budgetary System

Table 13 presents data concerning the sources of general government budget deficit financing in 2013–2017.

Table 13

The sources of deficit financing in the RF budgetary system

	2013		2014		2015		2016		2017		Change in 2017 relative to 2016, percentage points of GDP
	billions of rubles	percent of GDP	billions of rubles	percent of GDP	billions of rubles	percent of GDP	billions of rubles	percent of GDP	billions of rubles	percent of GDP	
Sources of deficit financing, total	849	1.2	845	1.1	2,814	3.4	3,142	3.7	1,349	1.5	-2.2
Deficit financing from domestic sources	797	1.1	992	1.3	3,110	3.7	3,127	3.6	1,475	1.6	-2.0
Government securities	436	0.6	1,016	1.3	9	0.0	524	0.6	1,221	1.3	0.7
Loans issued by credit institutions	283	0.4	217	0.3	102	0.1	-103	-0.1	-126	-0.1	0.0
Movement of residuals	-715	-1.0	-3,047	-3.8	1,339	1.6	3,492	4.1	632	0.7	-3.4
Other sources	793	1.1	2,805	3.5	1,660	2.0	-786	-0.9	-250	-0.3	0.6
Deficit financing from external sources	52	0.1	-147	-0.2	-296	-0.4	15	0.0	-126	-0.1	-0.2
Government securities	185	0.3	-47	-0.1	-183	-0.2	110	0.1	41	0.0	-0.1
Credits granted by foreign states	-22	0.0	-25	0.0	-51	-0.1	-17	0.0	-20	0.0	0.0
Loans denominated in foreign currencies, issued by credit institutions	-1	0.0	0	0.0	0	0.0	-28	0.0	0	0.0	0.0
Other sources	-110	-0.2	-74	-0.1	-63	-0.1	-50	-0.1	-147	-0.2	-0.1

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

In 2017, the entire general government budget deficit was covered by financing from domestic sources (in the amount of approximately RUB 1,475 billion (or 1.6 percent of GDP), whereas the repayment of borrowings from external sources exceeded that of new borrowings, thus producing a negative balance of RUB 126 billion (or -0.1 percent of GDP).

The bulk of financing that was used to offset budget deficit in 2017 (to the value of approximately RUB 1,221 billion, or 1.3 percent of GDP) was received from the source *Government Securities*. The section *Movement of Residuals in Budget Accounts* generated a total of RUB 632 billion (or 0.7 percent of GDP). This budget function is formed in the main by the operations involving the use of sovereign reserves.

Generally speaking, we may note the increased importance of government bonds as a source of financing to cover the budgetary system deficit in 2017, alongside an emerging upward trend in government borrowing in the domestic market. If this trend should persist over the course of next year, it may give rise to some potentially negative macroeconomic effects, when private investment will be replaced by government funding.

2.2.2 The characteristics of the federal budget

The Basic Parameters of the Federal Budget

In 2017, federal budget revenue amounted to 16.4 percent GDP, which is 0.7 percentage points of GDP above its 2016 level (*Table 14*). The growth of aggregate federal budget revenue was caused by the increase of its oil and gas component by 0.9 percentage points of GDP, while the volume of non-oil and gas revenues shrank by 0.2 percentage points of GDP.

Table 14

The main parameters of the federal budget, percent of GDP

	2013	2014	2015	2016	2017			Change in 2017 relative to 2016, percentage points of GDP
					2017 Federal Budget Law*	2017 Federal Budget Law, as amended **	Budget execution	
Revenue	17.8	18.3	16.4	15.7	15.5	16.0	16.4	0.7
oil and gas revenues	9.0	9.4	7.0	5.6	5.8	6.3	6.5	0.9
non-oil and gas revenues	8.8	8.9	9.4	10.1	9.7	9.7	9.9	-0.2
Expenditure	15.7	18.7	18.7	19.1	18.7	18.1	17.8	-1.3
Deficit (-) / surplus (+)	2.1	-0.4	-2.3	-3.4	-3.2	-2.1	-1.5	2.0
Non-oil and gas deficit	-6.9	-9.8	-9.3	-9.0	-9.0	-8.4	-7.9	1.1
<i>Price of Urals crude, USD/barrel</i>	<i>108.0</i>	<i>97.6</i>	<i>51.2</i>	<i>41.9</i>	<i>40.0</i>	<i>49.9</i>	<i>53.0</i>	-

* Federal Law No 415-FZ dated December 19, 2016 'On the Federal Budget for 2017 and the Planning Period 2018-2019'.

** As amended by Federal Law No 326-FZ dated November 14, 2017.

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

In 2017, the volume of federal budget expenditure amounted to 17.8 percent of GDP, which is 1.3 percentage points of GDP below the 2016 level, and 0.9 percentage points of GDP below the initially approved expenditure projection for 2017. The amount of deficit in 2017 shrank by 2.0 percentage points of GDP relative to 2016, while at the same time staying at -1.5 percent GDP, a level that was sufficiently high to ensure budget sustainability. Meanwhile, the actual amount of federal budget deficit turned out to be far below both the projection entered in the first version of the budget law for 2017–2019 (-3.2 percent of GDP) and that approved in the latest amendment thereto (-2.1 percent of GDP). This can be explained by the reduced volume

of expenditure relative to the planned target, as well as by the high volume of revenue. On the revenue side, this effect was produced by its oil and gas component in a situation where the actual prices of oil turned out to be far above the corresponding budget projection (*Table 14*).

It should be noted that there was a shrinkage of the non-oil and gas deficit: its volume, in 2017, amounted to 7.9 percent of GDP, which is 1.1 percentage points of GDP below the 2016 level, and 1.9 percentage points of GDP below the record high of the past 5-year period (-9.8 percent of GDP in 2014). At the same time, the year 2017 interrupted the downward trend displayed by the index of the federal budget's dependence on the situation in the global markets for energy carriers: the share of oil and gas revenues in total budget revenue consistently declined from 51 percent in 2014 to 43 and 35 percent in 2015 and 2016 respectively, and then, in 2017, it surged to 39.6 percent.

In 2017, the RF Budget Code was amended, with the introduction of the basic parameters of a new budgetary rule (hereinafter – BR)¹. Although the new BRs formed the foundation only of the Law of the Federal Budget for 2018–2020, the parameters of the 2017 federal budget were also projected with due regard for their structure (e.g., the oil price level projected in the budget for 2017), in order to ensure a smoother transition to the new set of rules.

The new BR determines the expenditure cap as a sum of the following three components: 1) the basic volume of oil and gas revenues calculated at a constant baseline price of Urals crude amounting to USD 40 per barrel (with a subsequent annual upward adjustment by 2 percent, from 2018 onwards); 2) the volume of non-oil and gas revenues calculated in accordance with the basic medium-term economic development scenario of the RF Ministry of Economic Development; 3) the cost of debt servicing.

Importantly, the new budgetary rule has a number of significant drawbacks.²

Firstly, it should be noted that the new BR lacks flexibility. The justification for setting price of oil at USD 40 per barrel (even with the subsequent annual 2-percent upward adjustment). The current long-term forecasts place the oil price significantly above that level, while oil price is influenced by multiple factors, and it is very difficult to predict technological and other shifts in the structure of demand over a period longer than 3 years. Besides, these BRs do not protect the National Welfare Fund (NWF) from political pressures aiming at a revision of the basic oil price applied; these pressures will potentially mount as the amount of accumulated sovereign reserves increases (as it already happened in 2005), which in its turn casts doubt on the possibility of properly implemented fiscal maneuver.

Secondly, the new BRs lack counter-cyclical effects. Because the non-oil and gas revenues are pegged to GDP and display a pro-cyclical behavior, the pattern of government spending allocated to debt servicing is acyclical, and oil and gas revenues are correlated with the price of oil (it is exogenous relative to the structural cycle of Russia's economy), none of the components of the BRs takes into account the cyclical character of Russia's economic development, and this means that they neither sustain the economy during its decline phase (by functioning as a substitute for the diminished market demand), nor restrain the economic growth rate during the upward movement phase (and thus avoid economy overheating).

Thirdly, the RF Ministry of Finance, by means of introducing the BR, aims only at smoothing the shocks of oil and gas revenues caused by the behavior of price of oil. However,

¹ Federal Law No 262-FZ dated July 29, 2017 'On the Introduction of Alterations in the Budget Code of the Russian Federation in the Part Regulating the Use of the Oil and Gas Revenues of the Federal Budget'.

² Kudrin A., Sokolov I. Fiscal rules as an instrument of balanced budget policy. *Voprosy Ekonomiki*, 2017, No. 11, pp. 1–28. (In Russian).

global experience demonstrates that non-oil and gas revenues may also be sensitive to shocks produced by price of oil (first of all, corporate profit tax), and at the same time incorporate a cyclical component unrelated to price of oil.

Fourthly, there is the issue of approaches to spending the NWF. In the current version, it is suggested that a cap of 1 percent of GDP should be set on the amount of spending if the NWF has accumulated no more than 5 percent of GDP. However, if the government of the Russian Federation should attempt to launch a comprehensive anti-crisis program (as it happened in 2009), the rule will not allow it, and so the rule will have to be suspended.

The Main Revenue Sources

The parameters of execution of the revenue side of the federal budget for 2017 are presented in *Table 15*. In 2017, the aggregate revenue of the federal budget increased by 0.7 percentage points of GDP relative 2016.

Table 15

The main tax receipts in the federal budget

	Percent of GDP					Change in 2017 relative to 2016, percentage points of GDP
	2013	2014	2015	2016	2017	
Revenue, total	18.3	18.3	16.4	15.7	16.4	0.7
Oil and gas revenues	9.2	9.4	7.0	5.6	6.5	0.9
<i>including:</i>						
MRET	3.5	3.6	3.7	3.3	4.4	1.1
export duties	5.7	5.8	3.3	2.3	2.1	-0.2
Non-oil and gas revenues	9.1	8.9	9.4	10.1	9.9	-0.2
<i>including:</i>						
corporate profit tax	0.5	0.5	0.6	0.6	0.8	0.2
VAT on goods sold in RF territory	2.6	2.8	2.9	3.1	3.3	0.2
VAT on goods imported into RF territory	2.4	2.2	2.1	2.2	2.2	0.0
excises on goods produced in RF territory	0.6	0.7	0.6	0.7	1.0	0.3
excises on goods imported into RF territory	0.1	0.1	0.1	0.1	0.1	0.0
import duties	1.0	0.8	0.7	0.7	0.6	-0.1
export duties	0.2	0.2	0.1	0.0	0.0	0.0
other revenues	1.7	1.6	2.3	2.7	1.9	-0.8

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

As noted earlier, thanks to the ongoing tax maneuver in the oil and gas sector, the increased MRET fully offset and even overshot the shrinkage of receipts of export duties, and thus the volume of oil and gas revenues gained 0.9 percentage points of GDP.

In 2017, the non-oil and gas component of tax-generated revenues in the federal budget increased, relative to 2016, thanks to receipts of corporate profit tax (by 0.2 percentage points of GDP), of VAT on goods sold in RF territory (by 0.2 percentage points of GDP), and of excises on goods produced in RF territory (by 0.3 percentage points of GDP). At the same time, there was a drop in the receipts of import duties — by 0.1 percentage points of GDP. The growth of receipts of corporate profit tax in the federal budget was generated, in part, by the centralization, in 2017, of 1 percentage point of the tax rate, with a subsequent redistribution of these receipts in the form of equalization subsidies transferred to regional budgets.

The volume of non-tax revenues in the 2017 federal budget lost 0.8 percentage points of GDP relative to 2016. This revenue shrinkage was caused by the absence of any sizable income generated by state property, in contrast to 2016, when this revenue category notably surged at year-end in response to the additional inflow of proceeds generated by the partial privatization of PAO *Rosneft*.

Federal Budget Expenditure

In 2017, the volume of federal budget expenditure amounted to 17.8 percent of GDP, which represented a drop by 1.3 percentage points of GDP relative to 2016, or by 0.3 percent in nominal terms (see *Table 16*).

Table 16

Federal budget expenditure (by-function classification of federal budget expenditure)

	2016	2017	Change		Budget execution, relative to approved annual budget projections, percent	
	percent of GDP	percent of GDP	nominal growth rate, percent	percentage points of GDP	2016	2017
Expenditure, total	19.1	17.8	-0.3	-1.3	98.7	96.1
Nationwide issues	1.3	1.3	7.6	0.0	97.1	94.5
National defense	4.4	3.1	-24.4	-1.3	99.2	93.2
National security and law enforcement activity	2.2	2.1	1.0	-0.1	100.4	97.8
National economy	2.7	2.6	4.8	-0.1	95.9	93.5
Housing and community amenities	0.1	0.1	64.0	0.0	95.5	94.8
Environmental protection	0.1	0.1	46.4	0.0	99.6	99.2
Education	0.7	0.7	2.9	0.0	99.1	98.7
Culture and cinematography	0.1	0.1	2.0	0.0	96.3	90.5
Healthcare	0.6	0.5	-13.1	-0.1	97.6	97.3
Social policies	5.3	5.4	8.8	0.1	99.7	99.2
Physical culture and sports	0.1	0.1	61.4	0.0	88.7	93.8
Mass media	0.1	0.1	8.6	0.0	99.9	99.9
Government debt servicing	0.7	0.7	9.3	0.0	97.1	92.9
General-purpose inter-budgetary transfers	0.8	0.8	17.6	0.0	99.8	95.3

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

The deepest drop was demonstrated by the government spending under the *National Defense* section (by 1.3 percentage points of GDP) as a result of cuts of allocations to the '*Armed Forces*' stream from 4.4 percent of GDP in 2016 to 3.1 percent of GDP in 2017, while its cash execution amounted to 95.1 percent. Besides, downward movement could be observed in the *National Security and Law-Enforcement Activity* and *Healthcare* sections (by 0.1 percentage points of GDP each). The increased volume of financing allocated to *Social Policy* by 0.1 percentage points of GDP in 2017 occurred in response to growth in the amount of on pension provision liabilities, including the one-time payment, in the amount of RUB 5,000 in January 2017, by way of compensation for the lack of full pension indexation in 2016. As far as all the other significant budget expenditure functions are concerned, these in 2017 did not change on 2016 in terms of share in GDP.

With regard to the cash execution level of federal budget expenditure over the period 2016–2017, it can be noted that, while in 2016 the execution level was at 98.7 percent the budget revenue and expenditure targets, in 2017 that index plunged to 96.1 percent. As in the previous year, the highest budget execution level in 2017 relative to the total amount of budget allocations (above 99.0 percent) was noted under the sections *Environmental Protection*, *Social Policy*, and *Mass Media*. At the same time, the lowest year-end cash execution index for 2017 was achieved for *Culture and Cinematography* (90.5 percent), *Government Debt Servicing* (92.9 percent), *National Defense* (93.2 percent), *National Economy* (93.5 percent), and *Housing and Community Amenities* (94.8 percent). In this connection, it is worthwhile to note that the

cash execution level of budget expenditure allocated to defense declined from 99.2 percent in 2016 to 93.2 percent in 2017.

In the framework of by-department classification of federal budget expenditure, we can analyze the evenness and the implementation rate of budget spending by each of the government ministries and departments. *Table 17* shows the list of chief budget funds managers (CBFMs) with the least year-end indices of federal budget expenditure implementation over the period 2016–2017. It is noteworthy that 6 out of 9 CBFMs improved their cash execution indices in 2017 relative to 2016.

Table 17

**CBFMs with the least degree of budget expenditure implementation
relative to annual targets***

No	CBFMs	CBFM code	Budget execution, percent	
			2016	2017
1	Federal Agency for Ethnic Affairs	380	67.1	61.5
2	Federal Agency for Air Transport	107	70.9	83.5
3	RF Ministry of Justice	318	86.9	94.5
4	RF Ministry of Economic Development	139	88.1	91.3
5	RF Ministry of Sport	777	88.8	93.9
6	State Duma of the Federal Assembly of the Russian Federation	330	91.9	92.8
7	Executive Office of the President of the Russian Federation	303	92.2	95.2
8	Federal Agency for Mineral Resources	49	93.1	88.9
9	Federal Water Resources Agency	52	93.5	92.9

* Annual budget revenue and expenditure projections as of October 1, 2017 (with due regard for amendments introduced into the Law on Federal Budget for 2017).

Source: Federal Treasury; Gaidar Institute calculations.

Deficit and Debt at the Federal Level

The volume of the federal budget deficit in 2017 amounted to RUB 1,338 billion, or 1.5% of GDP, having shrunk more than by half on the previous year (the corresponding indices for 2016 are RUB 2,956 billion, or 3.4 percent of GDP). *Table 18* presents data concerning the sources of federal budget deficit financing in 2013–2017.

Table 18

The sources of federal budget deficit financing

	In absolute terms, billions of rubles					Percent of GDP				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Sources of deficit financing, total	323	334	1,955	2,956	1,338	0.4	0.4	2.3	3.4	1.5
Deficit financing from domestic sources	270	480	2 251	2 914	1464	0.4	0.6	2.7	3.4	1.6
Government securities	358	1,025	15	492	1,123	0.5	1.3	0.0	0.6	1.2
Movement of residuals	-951	-3,248	954	3,506	852	-1.3	-4.1	1.1	4.1	0.9
Other sources	863	2,703	1,282	-1,085	-518	1.2	3.4	1.5	-1.3	-0.6
Deficit financing from external sources	53	-147	-296	43	-126	0.1	-0.2	-0.4	0.1	-0.1
Government securities	185	-47	-183	110	41	0.3	-0.1	-0.2	0.1	0.0
Credits granted by foreign states	-22	-25	-51	-17	-20	0.0	0.0	-0.1	0.0	0.0
Other sources	-110	-74	-63	-50	-147	-0.2	-0.1	-0.1	-0.1	-0.2

Note. The difference between the total and the corresponding indices in each row is explained by smoothing of the resulting values, as well as by the exclusion, from this table, of some subsections with a negligible financing volume (of not more than several billion rubles).

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

In 2017, most of the funds spent on financing the federal budget deficit came from domestic sources (RUB 1,464 billion, or 1.6 percent of GDP), while the balance of external sources provided was negative: -RUB 126 billion (or -0.1 percent of GDP), that is, the volume of redemption was higher than that of new borrowing.

In the contrast to the period 2015–2016, the federal budget deficit in 2017 was covered in approximately equal proportion from the following two sources: *Government Securities* (about RUB 1,123 billion, or 1.2 percent of GDP) and *Movement of Residuals in Budget Accounts* (about RUB 852 billion, or 0.9 percent of GDP). The balance for 2017 of the section *Other Sources* was negative, amounting to about -RUB 511 billion (-0.6 percent of GDP). As a result, the role of government ruble-denominated bonds in the structure of federal budget deficit financing became much more prominent in 2017, surging above the balance for *Movement of Residuals*.

The section *Movement of Residuals* in the main reflects the operations involving the use of the Reserve Fund, which covered much of the deficit in the 2017 federal budget, and thus the Fund was eaten up. However, given that the amount of deficit turned out to be notably below its target projected in the previous autumn,¹ and also that according to data released by the Federal Treasury,² operations in the Reserve Fund's accounts were conducted only in December 2017, to the amount of slightly over RUB 1 trillion (entered in records as financing to cover federal budget deficit), it may be assumed that the fact that the Fund was totally expended as of January 1, 2018 can be viewed in part as a 'technicality'. The reason may be that, in accordance with the recent amendments to the RF Budget Code,³ the Reserve Fund is expected to cease to operate (from 2018). (It should be added that in this connection, the new legislative provisions allowed the transfer of the Reserve Fund's residuals to the accounts of the National Welfare Fund before February 1, 2018).

Table 19 shows the composition of the government debt of the Russian Federation in 2013–2017.

Table 19

Government debt of the Russian Federation

	In nominal terms, billions of rubles					percent of GDP				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
RF domestic debt, billions of rubles	5,722	7,241	7,308	8,003	8,690	7.8	9.1	8.8	9.3	9.4
<i>less government guarantees, billions of rubles</i>	4,432	5,476	5,573	6,100	7,247	6.1	6.9	6.7	7.1	7.9
RF foreign debt										
billions of rubles, at RF Central Bank's exchange rate	1,822	3,057	3,647	3,106	2,870	2.5	3.9	4.4	3.6	3.1
<i>less government guarantees, billions of rubles</i>	1,450	2,377	2,781	2,395	2,273	2.0	3.0	3.3	2.8	2.5
Total, billions of rubles	7,544	10,298	10,955	11,109	11,560	10.3	13.0	13.1	12.9	12.6
<i>less government guarantees, billions of rubles</i>	5,882	7,853	8,354	8,495	9,520	8.0	9.9	10.0	9.9	10.3

Source: RF Ministry of Finance; Rosstat; Gaidar Institute calculations.

The aggregate year-end 2017 government debt of the Russian Federation amounted to 12.6% percent of GDP vs. 13.2 b percent of GDP a year earlier. The shrinkage in the amount of

¹ In accordance with the materials attached as an explanatory note to the draft federal budget for 2018–2020, the deficit target projected for 2017 was to be at the level of RUB -2,008.1 billion.

² URL: <http://www.roskazna.ru/finansovye-operacii/svedeniya-o-dvizhenii-sredstv-po-schetam/rezervnyj-fond/>

³ Federal Law No 262-FZ dated July 29, 2017 'On the Introduction of Alterations in the Budget Code of the Russian Federation in the Part Regulating the Use of the Oil and Gas Revenues of the Federal Budget'.

government debt by 0.1 percentage points of GDP was caused by Russia's domestic debt having increased by 0.1 percentage points of GDP against the background of a 0.5 percentage point drop in the amount of foreign debt (recalculated in rubles in accordance with the official exchange rate of the ruble set by the Central Bank). In 2017, the amount of government guarantees contained in the federal budget was 2.2 percent of GDP. It can be noted that for the second year in a row, the volume of government guarantees as a share of GDP has been on the decline. Besides, while in 2016 the volume of government guarantees shrank by only 0.1 percentage points of GDP, in 2017 its plunge amounted to 0.8 percentage points of GDP.

In 2017, the share ruble-denominated debt in the total volume of government debt of the Russian Federation increased from 72 percent at the start of the year to 75 percent at year-end, due to a significant surge in the value of the market component of ruble-denominated domestic debt – by more than RUB 1.1 trillion. Meanwhile in 2017, the RF Ministry of Finance placed two Eurobond issues on the international debt market: one with a 10-year maturity to the value of approximately USD 2.4 billion, and the other with a 30-year maturity, to the amount of USD 4.5 billion. However, these operations had to do with refinancing of the previously issued debt liabilities, and so they did not produce an increase in the amount of total federal budget debt in US dollar terms.

2.2.3. Interbudgetary relations and subnational finance

Analysis of the Main Parameters of the Consolidated Budgets of RF subjects

The main trend observed in the relations between different levels of state authority are also reflected by the revenue and expenditure structure in the consolidated budget of the Russian Federation. *Fig. 20* presents data on the relative shares of the tax-generated and non-tax revenues and the final expenditure of subjects of the Russian Federation in the total amount of the tax-generated and non-tax revenues and the final expenditures of Russia's budgetary system (the consolidated budget of the Russian Federation and government extrabudgetary funds).

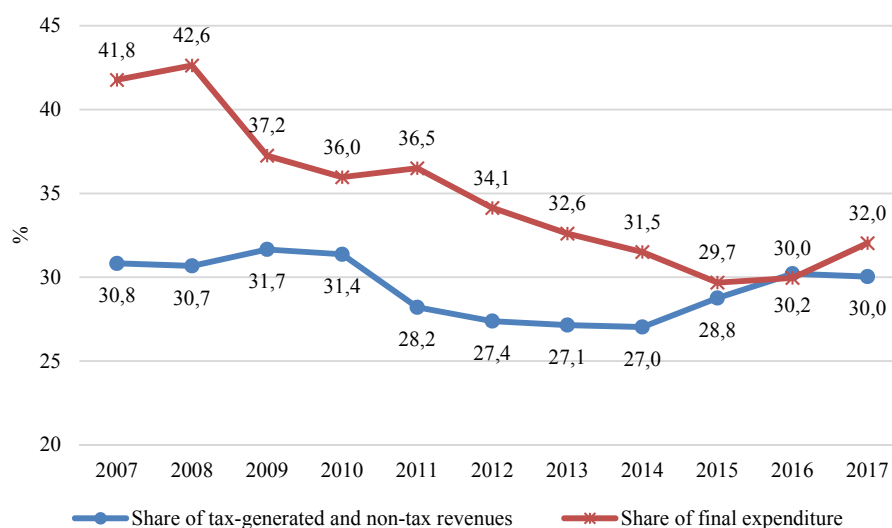


Fig. 20. Share of tax-generated and non-tax revenues

Source: Federal Treasury; Gaidar Institute calculations.

The share of tax-generated and non-tax revenues and subnational budget expenditures in the revenue and expenditure of the budgetary system of the Russian Federation in 2007–2017

In *Fig. 20*, it can be seen that the period 2014–2016 saw some decentralization of the tax-generated and non-tax revenues, and that in 2016, the closest correlation between the revenue and expenditure decentralization levels was achieved. However, the year-end results of 2017 demonstrate that the degree of centralization of tax-generated and non-tax revenues once again slightly increased, thus giving rise to an increase in the volume of the regions' spending obligations. More particularly, the share of tax-generated and non-tax revenues of the regions in the total tax-generated and non-tax revenues of the budgetary system declined from 30.2 percent in 2016 to 30.0 percent in 2017, while that of the regions' final expenditure in the budgetary system's total expenditure over the same period increased from 30.0 percent to 32.0 percent.

Let us take a closer look at the revenue side of the subnational budgets. The movement pattern of the main revenue components in the consolidated budgets of the subjects of the Russian Federation is presented in *Table 20*. On the right-hand side, revenue growth is shown in real terms.¹

Table 20

Consolidated Budget Revenue of Subjects of the Russian Federation

	Revenue volume (in nominal terms), billions of rubles					Growth in real terms, percent			
	2013	2014	2015	2016	2017	2014/ 2013	2015/ 2014	2016/ 2015	2017/ 2016
Revenue, total	8,165	8,906	9,308	9,924	10,758	-2.0	-7.4	1.2	5.8
Tax-generated and non-tax revenues	6,589	7,177	7,625	8,289	8,986	-2.2	-5.9	3.2	5.8
<i>including tax-generated revenues:</i>	<i>5,967</i>	<i>6,493</i>	<i>6,925</i>	<i>7,574</i>	<i>8,205</i>	<i>-2.3</i>	<i>-5.5</i>	<i>3.8</i>	<i>5.7</i>
Corporate profit tax	1,720	1,964	2,108	2,279	2,528	2.6	-5.0	2.6	8.2
PIT	2,499	2,693	2,808	3,019	3,252	-3.2	-7.7	2.0	5.1
Excises	491	480	487	662	612	-12.3	-10.2	29.1	-9.8
Taxes on aggregate income	293	315	348	388	447	-3.4	-2.3	6.0	12.2
Taxes on property	901	957	1,069	1,117	1,250	-4.5	-1.2	-0.8	9.2
<i>Non-tax revenues</i>	<i>622</i>	<i>685</i>	<i>700</i>	<i>715</i>	<i>781</i>	<i>-1.2</i>	<i>-9.4</i>	<i>-3.0</i>	<i>6.5</i>
Transfers from other budgets	1,515	1,671	1,617	1,578	1,703	-1.0	-14.3	-7.4	5.3
Other revenues	62	58	66	56	69	-16.1	2.0	-19.2	18.7

Source: Federal Treasury; Gaidar Institute calculations.

As demonstrated by data in *Table 20*, in 2017, the consolidated budget revenue of the subjects of the Russian Federation increased relative to 2016 by 5.8 percent in real terms. Thus, the regions' revenue movement pattern has been dominated by an upward trend since 2016. The receipts of the following taxes displayed significant growth in real terms: corporate profit tax (8.2 percent); taxes on aggregate income (12.2 percent); other revenues (18.7 percent). For the first time over the entire period 2013–2017, growth in real terms was demonstrated by the inflow of interbudgetary transfers in the consolidated budgets of the subjects of the Russian Federation (5.3 percent relative to 2016). At the same time, there was a shrinkage in the volume of excise receipts (9.8 percent in real terms relative to 2016); nevertheless, as excises take up only a small part in the overall structure of subfederal budgets, this change had practically no effect on the total revenue movement pattern.

Now let us consider in more detail the situation concerning the by-region pattern of tax-generated and non-tax revenues (*Table 21*).

¹ Adjusted by the inflation index in 2017 (-2.5 percent), according to Rosstat data.

Table 21

Russia's regions, grouped according to the movement of main tax-generated and non-tax revenues in the consolidated budgets of the subjects of the Russian Federation

	Change in main tax-generated and non-tax revenues in consolidated budgets of subjects of Russian Federation, relative to previous year											
	growth by more than 25 percent		growth between 10 and 25 percent		growth by less than 10 percent		decline by less than 10 percent		decline between 10 and 25 percent		decline by more than 25 percent	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
in nominal terms												
Tax-generated and non-tax revenues, total	5	5	47	16	26	48	5	13	0	3	2	0
Corporate profit tax	35	18	26	29	7	18	3	9	9	5	3	6
PIT	1	1	11	9	72	69	2	5	0	1	0	0
in real terms												
Tax-generated and non-tax revenues, total	0	3	16	12	49	48	16	18	3	4	2	0
Corporate profit tax	29	18	23	22	11	24	8	8	8	7	6	6
PIT	1	0	4	1	46	72	31	11	1	1	0	0

Source: Federal Treasury; Gaidar Institute calculations.

A comparative analysis of changes in the volume of major revenue sources in the regional budgets for 2016 and 2017 has led to the following conclusions. Since 2016, the average movement patterns of regions' revenues across Russia has changed their vector from decline to growth. At the same time, the growth rates of tax receipts were sufficiently high: out of a total of 78 regions with positive movement patterns of their tax-generated and non-tax revenues in 2016, 52 regions demonstrated revenue growth by more than 10 percent in nominal terms. When taken in real terms, revenue growth was observed in 65 regions, and in 16 of them the rate of growth was above 10 percent. The highest input into revenue growth was made by corporate profit tax. In 2016, the receipts of that tax in real terms increased in 68 regions, and the growth rate of that index was above 25 percent in 29 subjects of the Russian Federation.

In 2017, the revenue movement patterns in the consolidated budgets of the Russian Federation's subjects continued their positive trends. However, after the 'breakthrough' of 2016, the tax receipts in regions' budgets began to display more moderate growth rates, both in nominal and real terms. Over the course of 2017, the amount of revenues increased in 69 regions in nominal terms, and 63 regions – in real terms. The growth rates of corporate profit tax receipts became slower. While the number of regions where the amount of revenues generated by corporate profit tax had increased in real terms remained approximately at the same level as in 2016 (64 regions), the number of regions with the growth rates of corporate profit tax receipts above 25 percent plunged from 29 to 18.

It is necessary to point out the increased number of regions demonstrating growth of PIT receipts in real terms. In 2016, their number was 51, and in 2017 it jumped to 73. In 2016, PIT receipts were on decline in real terms in 33 regions. In 2017, the number of such regions shrank to 12.

In 2017, the best movement patterns of tax-generated and non-tax revenues were demonstrated by the Republic of Crimea (47 percent¹), Yamalo-Nenets Autonomous Okrug (43 percent), the Republic of Kalmykia (29 percent), Belgorod Oblast (26 percent), and Kemerovo Oblast (26 percent). All these regions became leaders in growth thanks to their

¹ Hereinafter, the indices are presented in nominal terms.

increased corporate profit tax receipts. Besides, in all these regions the rates of growth displayed by corporate profit tax receipts in 2017 were exceptionally high: 239 percent in the Republic of Kalmykia (vs. 26 percent in 2016); 222 percent in the Republic of Crimea (vs. decline by 18 percent in 2016); 108 percent in Yamalo-Nenets Autonomous Okrug (vs. decline by 55 percent in 2016); 99 percent in Belgorod Oblast (vs. growth by 5 percent in 2016); 97 percent in Kemerovo Oblast (vs. growth by 11 percent in 2016). It is worthwhile to note that among the regions with the highest growth rates of corporate profit tax receipts relative to the previous year, only the Republic of Tyva retained its leader position (139 percent in 2016, and 70 percent in 2017) In the Republic of Ingushetia, corporate profit tax receipts displayed 100-percent growth in 2016, which in 2017 gave way to a plunge by 10 percent.

Some regions, according to their consolidated budget data, demonstrated a notable decline in the amount of their tax-generated and non-tax revenues. Thus, the tax-generated and non-tax revenues in Chukotka Autonomous Okrug and Sakhalin Oblast shrank by 22 percent and 17 percent respectively on the previous year, and the same index for the Republic of Kabardino-Balkaria – by 15 percent. A notable decline of that index could also be observed in Khanty-Mansi Autonomous Okrug, where the downward movement of tax-generated and non-tax revenues had persisted since 2016 (-9 percent in 2016, and -7 percent in 2017.)

Thus, in 2017 relative to 2016, the rates of growth, in the regions budgets, of aggregate receipts from tax-generated and non-tax sources, as well as those of corporate profit tax receipts, became lower. At the same time, there was growth of PIT receipts in real terms, which is an indirect indication that personal income was on the rise.

Let us now analyze the changes in the consolidated budget expenditure of the subjects of the Russian Federation that occurred in 2017 (*Table 22*).

Table 22

Expenditure of the consolidated budgets of the subjects of the Russian Federation

	Percent of total		Percent of GDP		Change	
	2016	2017	2016	2017	in nominal terms, percent	as percentage points of GDP
Nationwide issues	6.3	6.1	0.73	0.71	5.2	-0.02
National security and law enforcement activity	1.1	1.1	0.13	0.13	3.1	0.00
National economy, including:	20.2	21.2	2.33	2.49	14.3	0.16
agriculture and fisheries	2.8	2.5	0.32	0.29	-1.9	-0.03
transport	4.4	5.2	0.51	0.61	28.2	0.10
motor road system (road funds)	8.7	8.8	1.01	1.03	9.4	0.02
other national economy issues	2.3	2.6	0.27	0.31	24.1	0.04
Housing and community amenities	9.4	10.4	1.09	1.22	20.5	0.13
Environmental protection	0.2	0.3	0.03	0.03	25.2	0.00
Education, including:	25.6	24.9	2.96	2.92	5.6	-0.04
pre-school education	6.8	6.7	0.79	0.78	6.5	-0.01
general education	14.7	12.2	1.70	1.43	-10.0	-0.27
vocational training	1.9	1.9	0.22	0.22	6.0	0.00
other education issues	1.2	1.3	0.14	0.15	11.9	0.01
Culture, cinematography	3.4	3.8	0.40	0.45	20.5	0.05
Healthcare	12.9	7.8	1.49	0.92	-33.9	-0.57
Social policies	16.6	20.4	1.93	2.40	33.4	0.47
Physical culture and sports	2.1	2.3	0.25	0.28	19.8	0.03
Mass media	0.4	0.4	0.05	0.05	1.9	0.00
Government and municipal debt servicing	1.5	1.2	0.18	0.15	-12.9	-0.03
Expenditure, total	100.0	100.0	11.57	11.74	8.8	0.17

Source: Federal Treasury; Gaidar Institute calculations.

From *Table 22* it can be seen that in 2017, the by-function structure of regions' budget expenditure changes only slightly relative to the previous year. We should make note of the

increased allocations to transport in the National Economy section (while those to agriculture were reduced), as well as the shrinkage of expenditures earmarked for the social sphere, especially the allocations to general education. The notable cuts in the allocations to *Healthcare* and increased allocations in the *Social Policy* section can largely (though not exclusively) be explained by technical procedures: from 2017 onwards the insurance contributions paid by the regions for their non-working population have been entered in records under the *Social Policy* heading, whereas in 2016, in the majority of regions these allocations were treated as part of the *Healthcare* section. However, on the whole over the period 2016–2017, the composition of the regions’ budget expenditure followed the same trends as over the previous period.

Now we are going to look at the movement patterns of the main parameters of consolidated budgets of the Russian Federation’s subjects in terms of share in GDP (*Table 23*).

Table 23

The movement of revenue and expenditure in the consolidated budget of the subjects of the Russian Federation, percent of GDP

	2013	2014	2015	2016	2017
Revenue	11.16	11.24	11.16	11.55	11.68
including:					
corporate profit tax	2.35	2.48	2.53	2.65	2.75
PIT	3.42	3.40	3.37	3.51	3.53
transfers from FB	2.03	2.03	1.92	1.82	1.68
Expenditure	12.04	11.81	11.37	11.57	11.74
Deficit (-) / Suplus (+)	-0.88	-0.57	-0.21	-0.01	-0.06

Source: Federal Treasury; Gaidar Institute calculations.

The data in *Table 23* demonstrate that over the last three years, both subnational budget revenue in general and the receipts of PIT and corporate profit tax in particular have been on the rise in terms of share in GDP. Meanwhile, the amount of transfers from the federal budget over the period 2013–2017 continued to decline. Subnational budget expenditure has been increasing since 2016. The budget deficit in 2016 hit its five-year low, and then in 2017 it somewhat increased. Let us consider in more detail the by-region execution of the consolidated budgets of RF subjects (deficit/suplus) (see *Table 24*).

Table 24

The execution (deficit/suplus) of the consolidated budgets of subjects of the Russian Federation

Year	Number of RF subjects executing their budget	
	with deficit	with surplus
2013	77	6
2014	74	11
2015	76	9
2016	56	29
2017	47	38

Source: Federal Treasury; Gaidar Institute calculations.

The by-region data demonstrate that the consolidated budgets in most RF subjects have become more balanced. So, aggregate deficit growth has been caused by the dramatic deterioration of the situation in a few regions against the backdrop of increasingly well-balanced budgets in the majority of regions.

Financial Assistance from the Federal Budget

In 2017, the total volume of interbudgetary transfers from the federal budget to the regions shrank relative to 2016 both in nominal terms (-1.5 percent) and in terms of share in GDP (-0.15 percentage point GDP) (Table 25). Shrinkage was typical of all categories of targeted interbudgetary transfers, and especially the transfers earmarked for properly balancing regional budgets. At the same time, the total volume of equalization transfers was on the rise, because the increased amount of transfers earmarked for budget equalization (+0.07 percentage point GDP) was offset by the reduced amount of those earmarked for ensuring well-balanced regional budgets (-0.03 percentage points of GDP). The deepest plunge, both in nominal terms and in terms of share in GDP, was demonstrated by subsidies, and this was especially true of subsidies earmarked for the support of the national economy. These changes were also reflected by the structure of federal financial assistance to the budgets of RF subjects. Thus, in 2017 relative to 2016, the share of subsidies lost 5 percentage points, while that of equalization transfers, on the contrary, gained 7.3 percentage point

Table 25

Federal budget transfers to the budgets of subjects of the Russian Federation

	2015		2016		2017		Growth in 2017 relative to 2016	
	billions of rubles	percent of total	billions of rubles	percent of total	billions of rubles	percent of total	in nominal terms, percent	percent points of GDP
Transfers to regions, total	1,603.7	100.0	1,567.8	100.0	1,543.5	100.0	-1.5	-0.15
Equalization transfers	651.0	40.6	656.2	41.9	759.0	49.2	15.7	0.06
including:								
transfers to budget sufficiency equalization	487.7	30.4	513.7	32.8	614.5	39.8	19.6	0.07
transfers to support measures designed to ensure well-balanced budgets	152.4	9.5	131.7	8.4	113.8	7.4	-13.6	-0.03
Subsidies	400.2	25.0	356.5	22.7	273.2	17.7	-23.4	-0.12
including:								
subsidies to sustain national economy's development	258.2	16.1	231.9	14.8	106.1	6.9	-54.2	-0.15
Subventions	336.6	21.0	334.3	21.3	326.1	21.1	-2.4	-0.03
Other interbudgetary transfers	216.0	13.5	220.8	14.1	185.2	12.0	-16.1	-0.06

Source: Federal Treasury; Rosstat; Gaidar Institute calculations.

Changes in the volume of subventions point to the increasing independence of subnational budgets in executing the powers delegated to them. At the same time, in 2017, the total number of subventions was 30 – that is, the same as in 2016. Of these, 10 subventions were allocated to the Republic of Crimea and to the city of Sevastopol; some of these subventions duplicate those allocated to other subjects of the Russian Federation.

Formally speaking, the total number of subsidies allocated in 2017 was 79. However, the subsidies funded from the Reserve Fund of the Government of the Russian Federation are now entered in records as separate budget expenditure lines, and thus the total number of subsidies is artificially inflated. If one takes into account only the subsidy targets, and not their sources, the number of subsidies would shrink to 66 (in 2016 – 98). The Government Program of the Russian Federation *Development of Federative Relations and Creation of proper Conditions for Efficient and Responsible Administration of Regional and Municipal Finance* (hereinafter – GP *Development of Federative Relations*) envisages that the total number of subsidies in 2017

should be reduced to 60. Thus, in 2017, their number was significantly optimized (first of all, by pooling the subsidies allocated to agriculture), but the planned target was still not achieved.

The volume of other interbudgetary transfers shrank both in nominal terms and in terms of share in GDP, which should be regarded as a positive development, considering their inadequate transparency and distribution on the basis of formal principles.

One of the budgetary policy priorities, as before, has been the reduction of targeted financial assistance. Overall, the relative share of equalization subsidies in the total volume of federal transfers to RF subjects has increased, and in accordance with the corresponding target set by the *GP Development of Federative Relations (Table 26)*. In 2017, that target was met, even if we take into consideration the fact that transfers earmarked for the compensation of additional expenditures to cover the raised salaries in the budget-funded sector are essentially subsidies, and not equalization transfers.

It should be noted that the increased share of equalization transfers in the overall structure of interbudgetary transfers to regions in 2017, in contrast to 2016, was achieved not only thanks to cuts in the amount of targeted interbudgetary assistance, but also as a result of the significantly increased volume of non-targeted transfers.

Table 26

The movement pattern of the share of equalization transfers in the total volume of interbudgetary transfers

Index	2015	2016	2017
Share of equalization transfers in total volume of interbudgetary transfers as stated in government program (plan), percent	40.0	41.0	46.0
Share of equalization transfers in total volume of interbudgetary transfers (estimate), percent	40.6	41.9	49.2
Share of equalization transfers in total volume of interbudgetary transfers, less transfers earmarked for compensation, in part, of additional expenditures on increased salaries in budget-funded sector (estimate), percent	36.9	39.9	46.6

Source: Federal Treasury; Government Program of the Russian Federation Development of Federative Relations and Creation of Proper Conditions for Efficient and Responsible Administration of Regional and Municipal Finance; Gaidar Institute calculations.

When analyzing the process of transfer allocation by the federal center to the regions, it is essential to review the impact of federal budget assistance on the differentiation of the budget revenue across all subjects of the Russian Federation, and to assess its actual equalizing effect (*Table 27*).

Table 27

The variance coefficient of the consolidated regional budget revenue (per capita, with due regard for the budget expenditure index), percent

Year	Tax-generated revenues	Tax-generated revenues and equalization transfers	Tax-generated revenues, transfers, subsidies
2013	63.7	55.3	48.1
2014	59.0	51.2	49.9
2015	66.1	60.3	56.0
2016	55.6	42.1	37.3
2017	55.8	41.3	37.7

Source: Federal Treasury, RF Ministry of Finance; Gaidar Institute calculations.

As seen from *Table 27*, in 2017 relative to the previous year, the degree of differentiation of tax-generated revenues in the subnational budgets somewhat increased. At the same time, the equalizing effect of budget equalization transfers became stronger in response to their increased

total volume and the more prominent emphasis on equalization in the methodology of their distribution, while the equalizing effect after the allocation of budget transfers and subsidies weakened as a result of the reduced total volume of interbudgetary subsidies and other budget transfers.

Deficit and Debt at the Regional Level

Table 28 presents the structure of deficit financing sources in the consolidated budgets of RF subjects over the period 2013–2017.

Table 28

The sources of deficit financing in the consolidated budgets of RF subjects, billions of rubles

	2013	2014	2015	2016	2017
Deficit financing sources – total	642.0	447.8	171.6	12.6	51.9
Deficit financing from domestic sources	642.8	447.8	171.6	40.8	51.9
Government (municipal) securities	77.6	-9.2	-5.8	32.0	97.0
Loans issued by credit institutions	282.6	217.4	101.6	-102.6	-126.3
Budget loans	43.0	169.3	167.4	181.6	19.7
Movement of residuals	98.1	19.2	77.4	-32.0	-21.2
Other sources	139.3	52.2	-168.9	-37.6	83.4
Deficit financing from external sources	-0.8	0.0	0.0	-28.2	0.0

Source: Federal Treasury; Gaidar Institute calculations.

As seen from the data in this table, overall across the consolidated budgets of RF subjects, as a year earlier, the situation remained better than it had been in 2012–2015: budget deficit amounted to only RUB 51.9 billion, which is significantly below the corresponding indices for 2012–2015. At the same time, the downward trend displayed by the amount of deficit in nominal terms was reversed – now it more than tripled in nominal terms.

The balance of bank loans in 2017 was negative and, moreover, rather high in absolute terms (RUB -126.3 billion), which means that the volume of loan repayment exceeded that of new loans. At the same time, the balance of budgeting loans, on the contrary, was positive (RUB 19.7 billion); however, in contrast to the previous year, this index was lower than the balance of commercial loans. These figures reflect the changed priorities in the federal center's policy with regard to budgeting loans: the volume of newly issued loans shrank significantly, and those that had been issued previously, were restructured. In December 2017, the RF Ministry of Finance concluded 410 additional agreements with 73 RF subjects, which envisaged annual repayment of budgeting loans: over the period 2018–2019 in the amount of 5 percent of total debt; in 2020 – 10 percent of total debt; and over the period 2021–2024 – in equal annual installments, 20 percent each. According to the RF Ministry of Finance's estimations, the budgeting effect, in the form of reduction of the amount of loan repayment by the regions, in 2018–2019 will be up to RUB 418 billion (including RUB 238 billion in 2018, and RUB 180 billion in 2019). On the whole, all these changes are positive, because the massive-scale continual issuance of budgeting loans to many regions only resulted in an artificially inflated volume of regional debt and lower transparency of the interbudgetary relations.

At the same time, in conditions of diminishing accessibility of cheap budgeting loans, the role of securities grows in importance – their balance has been positive for the second year in a row (RUB 97.0 billion); besides, in contrast to the situation in 2016, it surged significantly above that of budgeting loans.

On the whole over the period 2012–2015, the regional debt movement pattern, in terms of share in GDP, displayed a stable upward trend, that index increasing from 2.38 percent of GDP at year-end 2013 to 2.78 percent of GDP at year-end 2015 (*Table 29*). Over the same period, the volume of debt owed by municipal formations somewhat declined – from 0.50 to 0.44 percent of GDP.

Table 29

**The volume of government and municipal debt in subnational budgets,
as a percentage of GDP**

	2013	2014	2015	2016	2017	Growth in 2017 relative to 2016
Government debt of subjects of Russian Federation	2.38	2.64	2.78	2.74	2.51	-0.22
Debt of municipal formations	0.50	0.46	0.44	0.42	0.40	-0.02

Source: RF Ministry of Finance; Rosstat; Gaidar Institute calculations.

The year 2017 saw the emergence of a downward trend in the volume of debt owed by the subjects of the Russian Federation: according to the year-end result of 2016, it declined by 0.16 percentage points of GDP, and by the year-end 2017 – already by 0.2 percentage points of GDP, to 2.51 percent of GDP. Simultaneously, the volume of debt for the first time was reduced not only in terms of share in GDP, but also in absolute terms – by RUB 37.8 billion, or 1.6 percent (in 2016, this index had also slightly increased in nominal terms – by 1.5 percent, or RUB 35 billion). At the municipal level, the downward trend displayed by the volume of debt in terms of share in GDP was still present – that index declined by 0.02 percentage points to 0.40 percent of GDP (meanwhile, when taken in nominal terms, it demonstrated slight growth by RUB 3.6 billion, or by 1.0 percent).

Thus, in 2017, in the framework of cooperation between the RF Ministry of Finance and the authorities of RF subjects, it became possible to consolidate the trend towards halting the accumulation of sizable budget debt at the subnational level, as well as to adopt relevant decisions concerning the amount of budgeting loans already accumulated by the regions. On the whole, these measures should result in establishing more understandable ‘rules of the game’ and increasing the transparency of interbudgetary relations. At the same time, there still remain some unresolved issues with regard to the medium- and long-term sustainability of regional budgets, in view of the continuing trend towards reducing the volume of transfers from the federal budget and discontinuing the issuance of new budgeting loans. It is expected to become clear in 2018 if the regions will indeed possess sufficient finance resources, including the resources needed for the ultimate achievement of ‘the goals set by the May 2012 Presidential Executive Orders’.

Section 3. Financial markets and financial institutions

3.1. The stock market recovery¹

In 2017, the Russian stock market once again reaffirmed its reputation of being one of the most volatile in the world. In contrast to the situation in 2016, when Russia's stock market, in terms of its rates of return, set a world record among the other 36 stock markets included in the analysis, in 2017 it joined the group of outsiders. Over that year, the RTS Index gained only 0.1 percent vs. 52.3 percent in 2016, and the MICEX Index (MOEX Russia Index)² at year-end demonstrated a negative rate of return of 5.5 percent, while over the previous year it had gained 26.8 percent (*Fig. 1*). The different movement patterns of the two Russian indexes with the same issuer portfolio can be explained by the higher rate of return of the RTS Index (which is denominated in foreign currencies) relative to the (ruble-denominated) MOEX Russia Index that it displays in response to the weakening USD-to-RUB exchange rate.

After the global financial crisis of 2008, Russia's stock market segment taken up by domestic issuers has never fully recovered, which is manifest in the negative accumulated rate of return of the RTS Index as the foreign-currency equivalent of the value of long-term domestic saving. The compound annual growth rate of the RTS Index over the 11 years encompassing the period from the pre-crisis year 2007 through 2017 amounted to -6.6 percent per annum (*Fig. 2*). Out of the stock market indexes of 36 countries, lower return rates (relative to the RTS Index) were demonstrated only by the indexes of Greece and Cyprus, the two countries that in the early 2010s were in the epicenter of the eurozone financial crisis. Over the same period, the MICEX Index was demonstrating a positive mean rate of return of 1.1 percent per annum, largely thanks to the ruble's weakening over a long-term horizon.

¹ Sections 3.1–3.8 are authored by Alexander Abramov, IAES-RANEPА.

² From November 27, 2017, the Moscow Exchange's MICEX Index was renamed the MOEX Russia Index.

RUSSIAN ECONOMY IN 2017

trends and outlooks

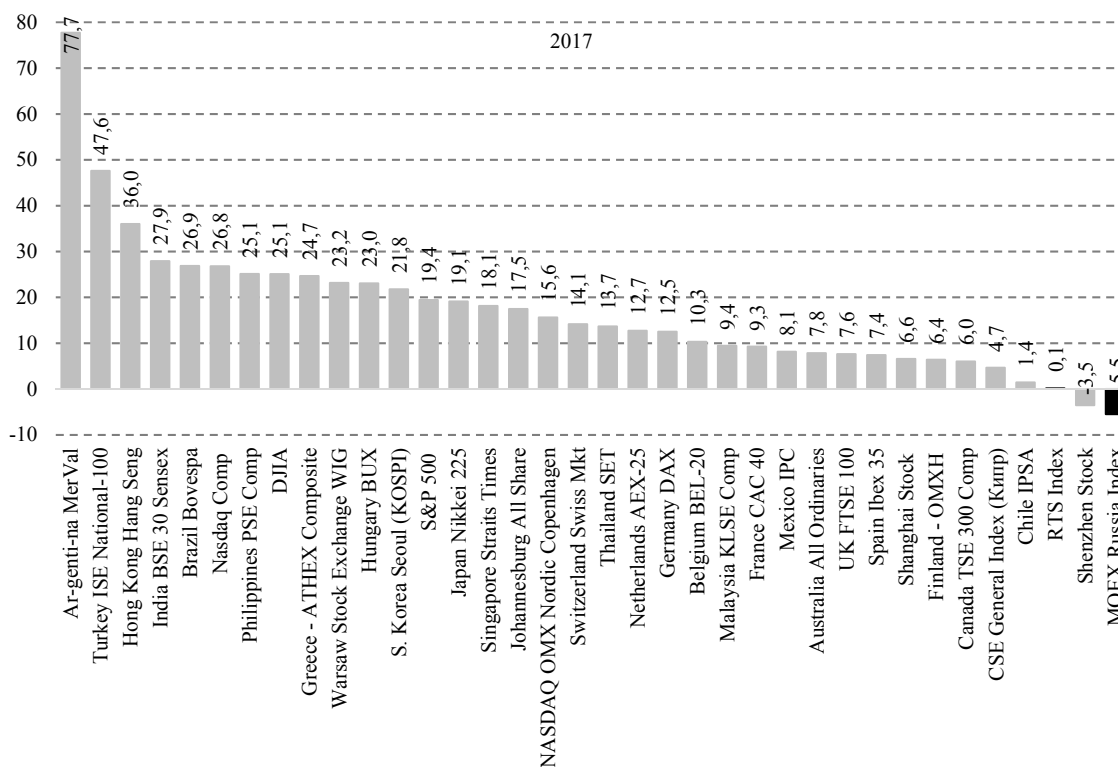


Fig. 1. The rates of return of the 36 major stock indices on the world's biggest exchanges in 2017, percent per annum

Source: own calculations based on data released by Factiva and The Wall Street Journal.

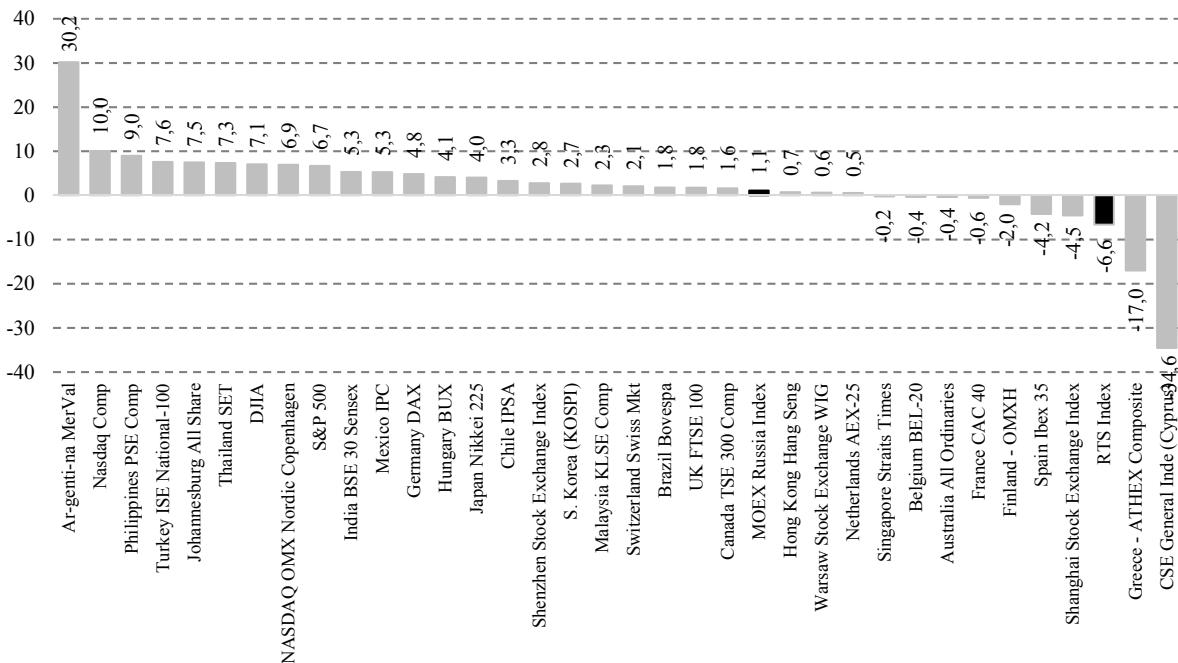


Fig. 2. The compound annual growth rates (CAGR) of 36 stock market indexes on the world's major stock exchanges in 2007–2017, in per annum terms

Source: own calculations based on data released by Factiva and The Wall Street Journal.

The low recovery rates of Russia's stock indexes after the 2008 crisis can be explained by the structural problems in the Russian economy, and by its dependence on the global prices of mineral resources. This specificity becomes distinctly visible if we compare two recovery scenarios – the domestic stock market recovery after the crisis of 1997–1998, which was cyclical in nature, and that after the 2008 crisis, which was structural. Formally, both those crises followed the same scenario: the collapse of stock indexes in response to plunging oil prices, depreciation of the ruble and foreign speculative capital outflow, followed by their recovery alongside rising prices of oil, stabilization of the ruble at a lower level, and the return of foreign portfolio investments. However, after the crisis of the late 1990s the stock market indexes rebounded relatively promptly, while now, 10 years after the 2008 crisis, the RTS Index still has not fully recovered. The essence of the current problem is that, for objective reasons (the shale oil and gas revolution due to the advent of new technologies, the progress in energy saving, etc.), prices of oil have failed to rise to their pre-crisis level, and some experts believe that they will not recover to that level in the foreseeable future.¹ Consequently, the necessary conditions for growth of Russia's stock market and its full recovery have been structural reforms in the Russian economy and qualitative changes in its investment climate.

The two recovery scenarios, mentioned earlier, of Russia's stock indexes are illustrated in *Fig. 3* and *4*. After its downfall in 1998, the ruble-denominated MICEX Index regained its pre-crisis quotes in just 8 months, largely due to the 5-fold depreciation of the ruble (*Fig. 3*). For the RTS Index, it took nearly 5 years (58 months) to recoup all its losses, and it happened thanks to the recovering prices of oil. Russia's stock market had fully recovered only by H2 2003, and this coincided with Russia being assigned an investment grade rating by international rating agencies (Moody's – as of 8 October 2003; Fitch's – as of 17 November 2004; and S&P's – as of 31 January 2005). The investment grade ratings triggered an inflow of foreign portfolio investments and foreign loans.

Relative to its June 2008 level, the MICEX Index (MOEX Russia Index) recovered in 7.5 years, or 92 months; the RTS Index, after nearly 10 years, or 115 months, has regained only 50.8 percent of its pre-crisis quote as of March 31, 2018 (*Fig. 4*). The weak growth of both these indexes was influenced by the slow recovery of oil prices. Besides, the delayed recovery, after 2008, of the ruble-denominated MICEX Index in contrast to its behavior in the aftermath of the 1997–1998 crisis can be explained by the more moderate decline of the ruble over the recent decade compared with its breathtaking downfall in the late 1990s. Over the period from May 2008 through March 2018, the ruble plunged 2.4 times, compared with its previous 5-fold depreciation.

¹ In the next few years, oil prices are going to stay at a moderate level, thus demonstrating a 'New Oil Reality', as Rector of the RANEPA Vladimir Mau put it (Mau, V. *To remember the 1980s*. *Vedomosti*, February 16, 2016). The International Energy Agency allows that, given the rising shale oil production factor and growth of the electromobile industry, price of oil may well stay at USD 50-70 per barrel until 2040 (IEA. *World Energy Outlook 2017*, Russian version, p. 9).

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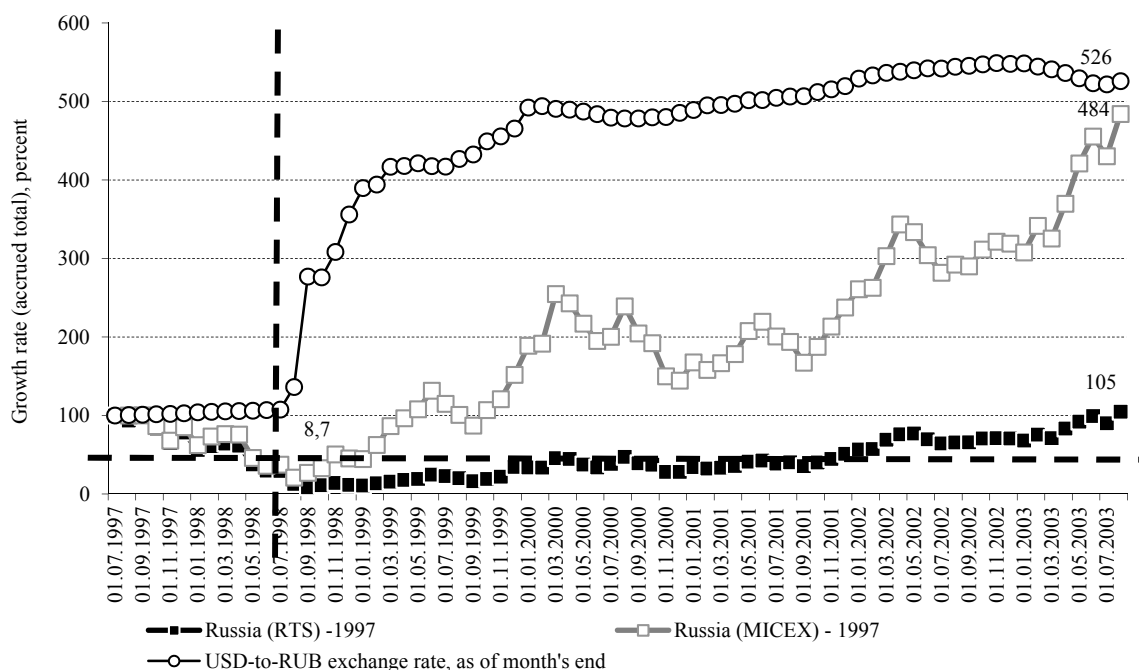


Fig. 3. The movement of the USD-to-RUB exchange rate, the RTS Index, and the MICEX Index in 1997–2003 (July 1997 = 100 percent)

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

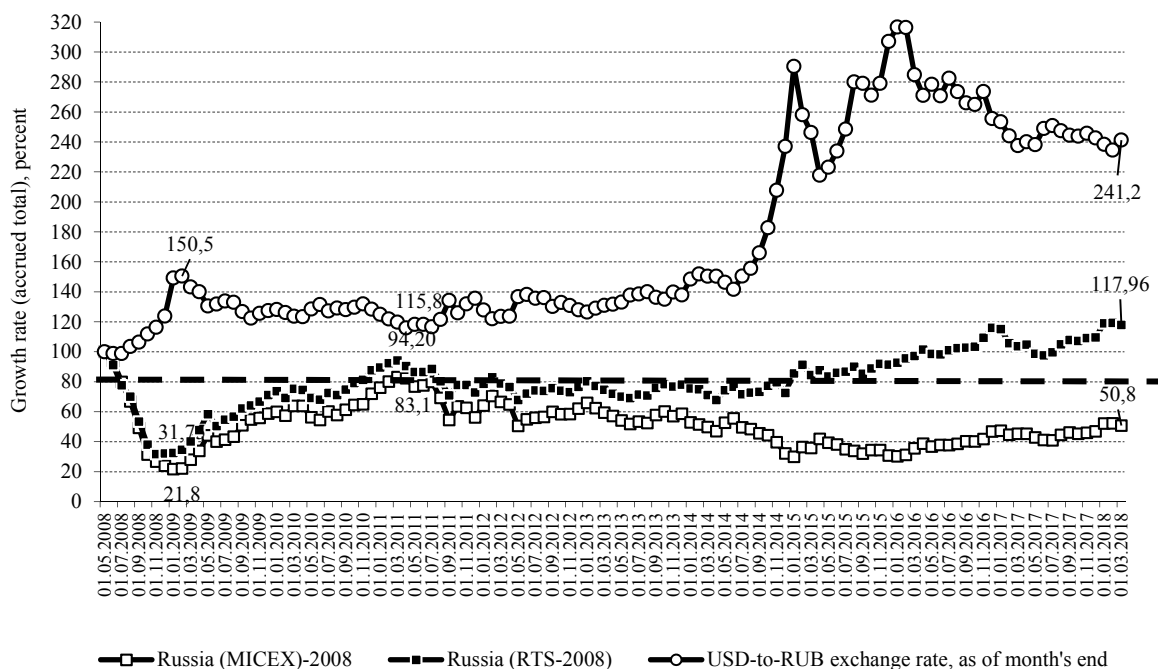


Fig. 4. The movement of the USD-to-RUB exchange rate, the RTS Index, and the MICEX (MOEX Russia) Index from May 2008 through March 2018 (May 2008 = 100 percent)

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

As shown in *Fig. 5*, after the 1997–1998 crisis and the plunge of oil prices to 31.1 percent of their pre-crisis record high of December 1996, the period of their full recovery lasted 3 years, or 36 months. So far, as of March 2018, over the 115-month period (or 9.6 years) since its peak of USD 133.90 per barrel in July 2008, to this day Brent prices have climbed to only 40.7 percent of that level. In absence of any notable structural reform shifts in the Russian economy, it is the stagnating oil prices that account in the main for the slow pace of recovery of the RTS Index.

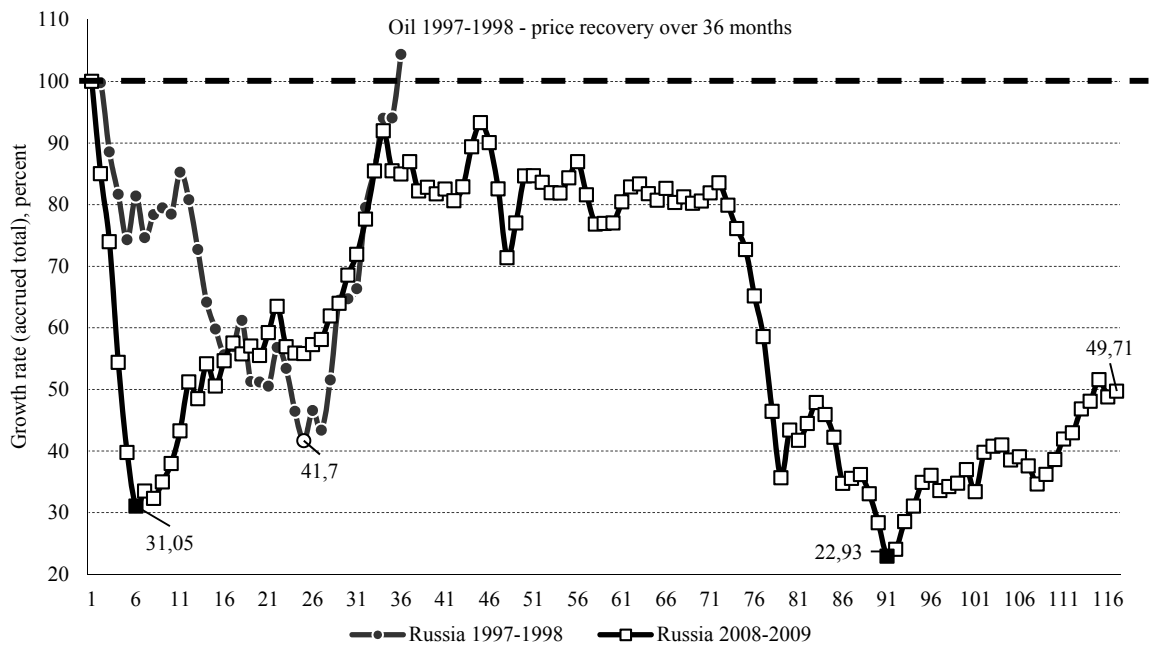


Fig. 5. The growth rate of the price of Brent crude oil during the financial crises in Russia (peak price = 100 percent), as of March 2018

Source: own calculations based on data released by IFS IMF and the International Energy Agency.

Against the backdrop of the previous short-term financial crises around the world (in the USA in 1987, 2000 and 2007; in Mexico in 1994; in Indonesia, Brazil and Russia – in 1997–1998), which lasted for 5–6 years, the current downturn of the RTS Index, followed by its slow 118-month long (9.8-years) recovery, has already become a record (*Fig. 6*). This crisis, which is being experienced by Russia alongside some other developing countries, has evolved into a medium-length one.

A W-shaped trajectory of an index recovery is typical of the countries where financial crises were caused by structural disproportions in the national economy, as exemplified by South Korea in 1989 and the US market for shares in hi-tech innovation companies in 2000 (*Fig. 7*). Those crises lasted for 183 and 177 months respectively; however, both stock indexes are now above their pre-crisis highs. As shown in the graph, the current trajectory of the RTS Index, which after the 118 months elapsed since May 2008 reached the point of 50.8 percent of its pre-crisis record high, largely follows the recovery trajectories of KOSPI and NASDAQ.

The longest crisis cycles in the history of stock markets are the slump in the US stock market triggered by the Great Depression of 1929–1933 and that in the market for Japanese shares from 1989 onwards. The recovery of the stock index Dow Jones Industrial Average (DJA) in the

USA after the Great Depression took 303 months, or 25.3 years. In 2015, that record was broken by the Japanese index NIKKEI-225, which as of March 2018 had been unable to recover its initial quote for 339 straight months (or slightly more than 28 years), amounting to only 55.1 percent of its average-monthly record high of 1989.

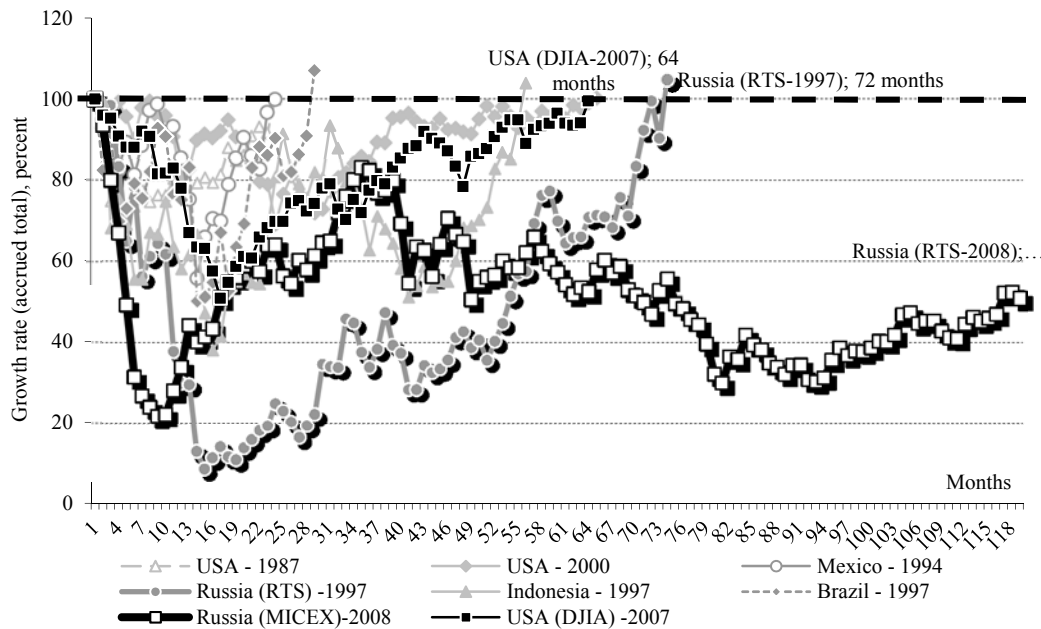


Fig. 6. The depth and length of short-term financial crises around the world, as of February 2017 (peak = 100 percent)

Source: own calculations based on data released by the Moscow Exchange, Factiva, and www.finance.yahoo.com

As shown in *Fig. 7* (the area inside the dotted line), the current value of the RTS Index is now at the fork point, beyond it may follow either the recovery trajectory of KOSPI and NASDAQ after a medium-term crisis, or plunge in accordance with the Japanese scenario, where the stock index recovery lasts for an indefinitely long period. In a medium-term crisis, the market recovers alongside the disappearance of those structural problems that has triggered it in the first place: in South Korea it was financial stability regained by domestic banks, non-financial companies and households; in the USA, it was a new wave of innovations and investment in innovations. A typical situation under a long-term crisis scenario is when the accumulated structural problems, for a variety of reasons, cannot be resolved in the framework of government economic policy. In this sense, there is a risk that the recovery trajectory of the RTS Index may indeed follow the long-term crisis pattern, because the structural problems that have piled up across Russia's economy have so far been dealt with in a slow fashion.

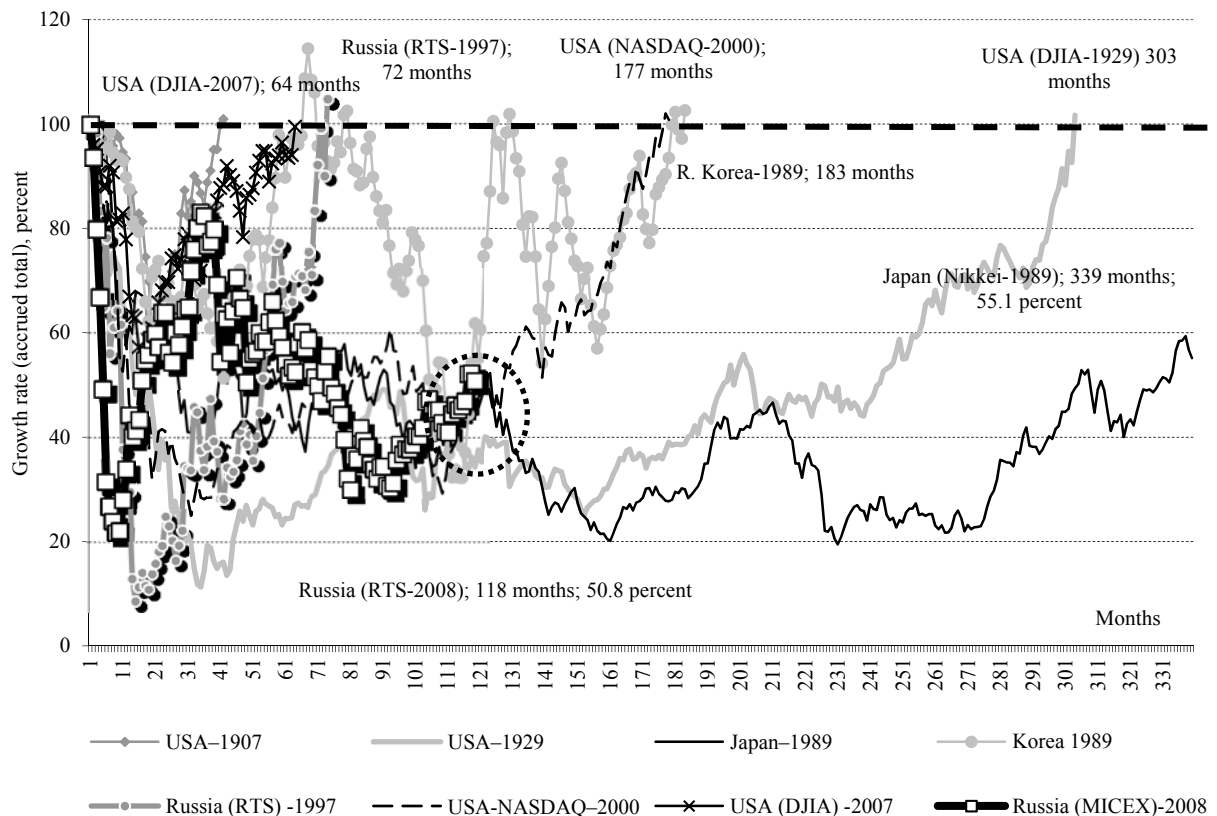


Fig. 7. The depth and length of long-term financial crises around the world, as of February 2017 (peak = 100 percent)

Source: own calculations based on data released by the Moscow Exchange, Factiva, and www.finance.yahoo.com

Among all the BRICS members, slow stock market recovery has been an issue not only for Russia, but also for China (Fig. 8). The indexes of the Johannesburg Stock Exchange (JTOPI), the Indian Stock Market (BSE Sensex), and the Brazilian stock index Bovespa regained their pre-crisis quotes over 44, 70, and 114 months respectively. In 2016, the list of recovered stock indexes in the BRICS group was joined by the MOEX Russia Index. The Shanghai Composite Stock Exchange Index (China), on the contrary, over the previous 125 months since its November 2007 plunge had gained only 53.2 percent of its pre-crisis peak level. The similar recovery patterns displayed by the RTS Index and the Shanghai Composite Stock Exchange Index can be explained by a variety of factors. The stock prices in both indexes are denominated in relatively stable currencies (USD and Yuan), and so the factor of national currency depreciation cannot be used as a growth level, as in the case of JTOPI, BSE Sensex, Bovespa, and MOEX Russia. At the same time, similarly to the RTS Index, the Shanghai Composite Stock Exchange Index reflects the existing structural problems, in particular the presence of bad debt on the balance sheets of major national financial companies alongside the measures designed to toughen the domestic financial market regulation by the Chinese authorities.

Thus, the slow recovery of the Russian stock market during the post-crisis decade was, for most part, the upshot of multiple problems in the Russian economy coupled with instability of the national currency's exchange rate. However, the stock market is also strongly influenced by its certain internal development factors.

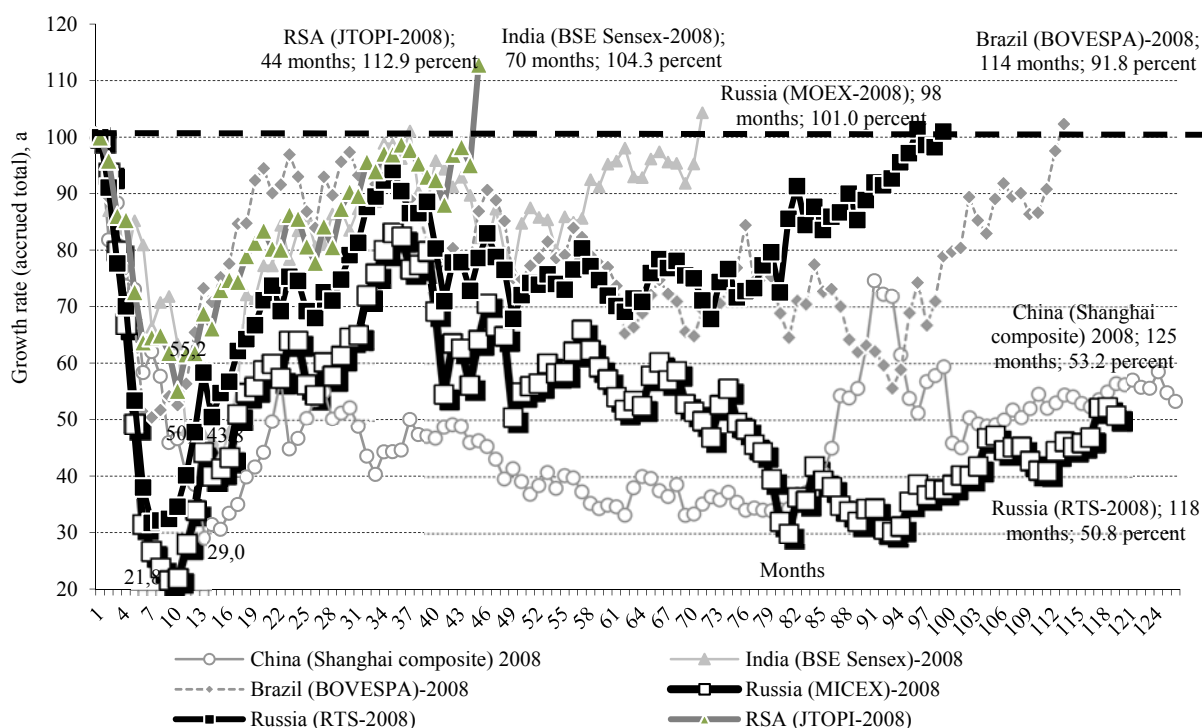


Fig. 8. The depth and length of the current financial crises in the BRICS countries, as of February 2017 (peak = 100 percent)

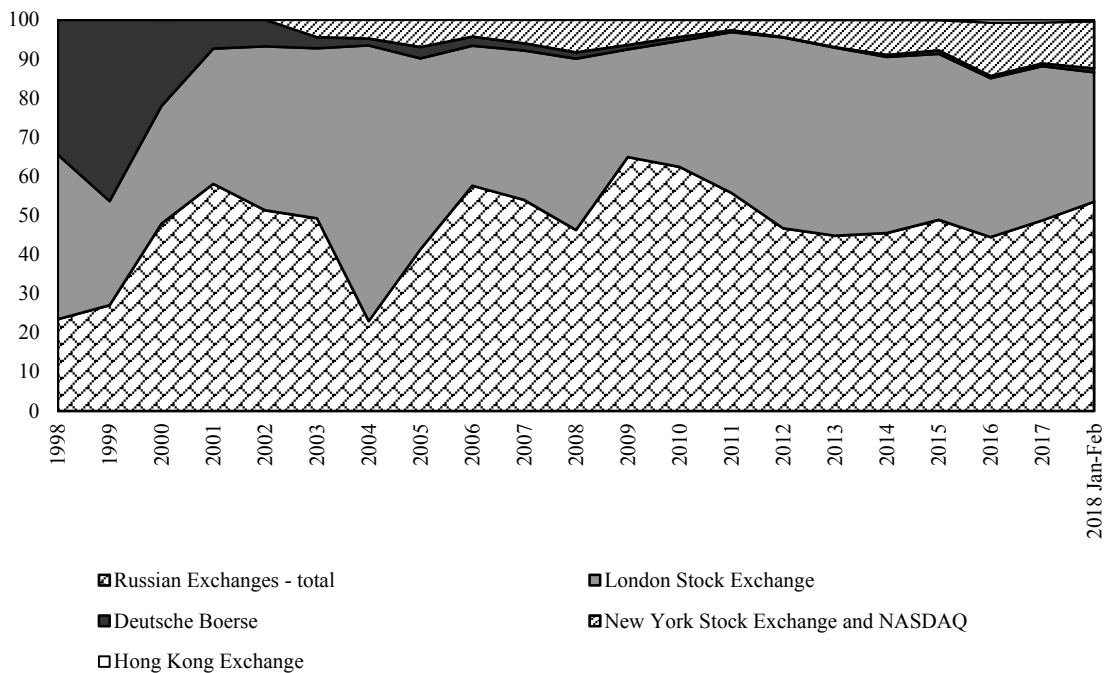
Source: own calculations based on data released by the Moscow Exchange, Factiva, and www.finance.yahoo.com

3.2. The stock market

The year 2017 saw some important positive developments in the domestic stock market: the IPO-SPO sector demonstrated a revival relative to the previous year; the market activity of households increased, first of all thanks to the advent of individual investment accounts; the basic broker activity standards were adopted; the volume of exchange market transactions increased, albeit slightly, in absolute terms. At the same time, the downward trend displayed by the number of listed issuers of securities could not be reversed, and the stock market liquidity and capitalization indices could not be significantly improved.

In its competition with the other global exchanges for the listings of shares issued by Russia's biggest market players, the Moscow Exchange has managed to hold its leading position as a major center for transacting, settlement and pricing with regard to these financial instruments. After the merger of the two Russian exchanges in late 2011, the relative share of the Moscow Exchange in the total volume of these transactions increased from 41.2 percent in 2012 to 48.7 percent in 2017 (Fig. 9). Over the same period, the relative share of the main rival of Russia's exchanges – the London Stock Exchange (LSE) – on the contrary, shrank from 48.8 percent to 39.4 percent; that of the other foreign exchanges increased from 10.0 percent to 11.9 percent.

A notable development in the market for Russian issuers of shares in 2017 was the listing, on the main market of the LSE, of the global depository receipts placed by EN+ GROUP PLC (controlled by Russian billionaire Oleg Deripaska and registered in Jersey Channel Islands) to the total value of USD 1.5 billion.



Note. Out of all trading modes on the Moscow Exchange, our calculations here include only data on the volume of market transactions.

Fig. 9. The relative shares of stock exchanges in the volume of trade in equity financial instruments issued by Russian JSCs over the period from 1998 through February 2018, percent

Source: own calculations based on data released by stock exchanges.

One serious issue typical of the equity financial instruments issued by Russian companies traded on various stock exchanges around the globe is the dramatic shrinkage, over the past few years, of the volume of market transactions, which has been pushing up the liquidity risk premium demanded by the investors in a given company. As shown in *Fig. 10*, the aggregate volume of market transactions in these equity securities on all exchanges shrank from USD 1.1 trillion in 2011 to USD 0.3 trillion in 2017, including from USD 0.6 trillion to USD 0.1 trillion on the Russian exchanges.

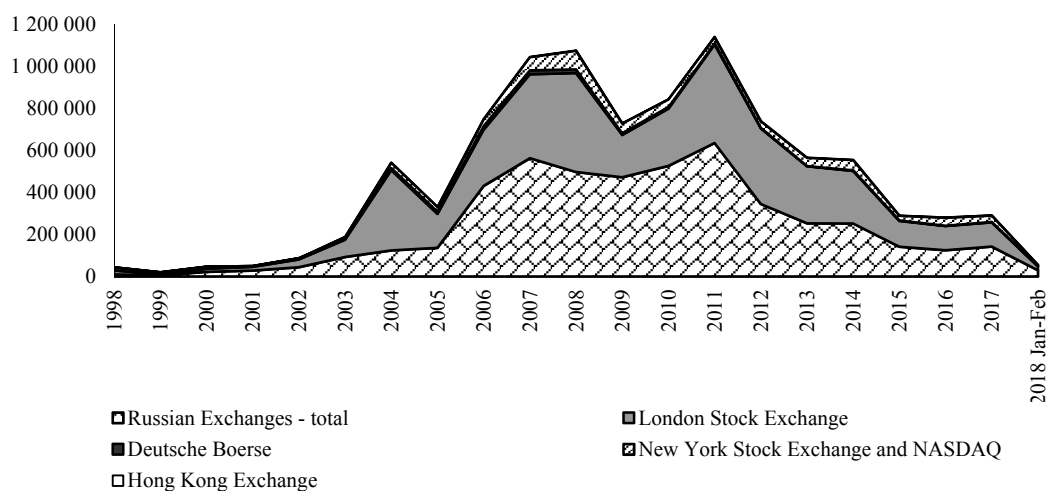
One of the key issues faced by the stock exchange market for equity securities issued by Russian JSCs has been its low liquidity. In 2017, by its volume of equity market transactions, the Moscow Exchange came 28th among the 82 world exchanges in the World Federation of Exchanges' database, having moved one place down relative to its 2016 index.

Nevertheless, the low exchange share market liquidity represents a problem not only for the Moscow Exchange, but also for the organized market in the majority of countries around the world. In 2017, the total volume of equity market transactions on all the exchanges amounted to only 92.7 percent of the exchange liquidity index for 2007 (*Table 1*). Such a situation was typical of the global exchange trade centers like the USA, Japan, the UK, Germany, Australia, Hong Kong, and major international exchanges like NASDAQ OMX Nordic Exchange and Euronext. Significant growth of their stock market volumes could be observed only on the two Chinese exchanges, where the aggregate trading volumes increased 2.7 times. Russia's stock exchange market differs only by its more pronounced liquidity shrinkage, as the volume of trade

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in equity securities on the Moscow Exchange in 2017 amounted to only 26.4 percent of its 2007 level.



Note. Out of all trading modes on the Moscow Exchange, our calculations here include only data on the volume of market transactions.

Fig. 10. The volume of trade in equity financial instruments issued by Russian JSCs on various stock exchanges over the period from 1998 through February 2017, millions of USD

Source: own calculations based on data released by stock exchanges.

Table 1

The movement of the value volume of market transactions in shares on major stock exchanges in 2007–2017 (2007 = 100 percent)¹

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
USA (NYSE and NASDAQ)	100	120.1	72.6	71.0	71.7	54.2	54.3	65.5	69.9	66.2	60.3
China (two exchanges)	100	63.0	128.9	132.8	106.9	81.8	124.9	198.0	674.2	314.4	274.5
Japan	100	87.3	61.2	63.2	66.3	57.5	103.9	86.8	88.3	89.6	92.7
UK	100	89.0	62.9	63.5	65.7	50.8	51.7	64.1	60.2	52.9	53.9
Euronext	100	84.7	42.7	44.5	47.1	34.8	36.7	43.1	45.8	39.0	42.9
Germany	100	95.5	45.1	48.4	52.3	37.9	39.7	43.7	46.3	38.9	44.1
Hong Kong	100	77.3	70.1	74.1	71.5	54.7	65.5	75.3	105.2	66.8	96.9
Canada	100	105.3	75.5	83.0	93.5	82.3	83.2	85.4	71.9	71.3	75.5
Australia	100	77.5	57.9	77.1	86.8	67.9	63.9	58.6	58.0	59.7	60.2
Russia (MOEX – market transactions)	100	89.0	77.3	75.5	95.2	55.8	44.0	46.0	25.8	23.6	26.4
NASDAQ OMX Nordic Exchange	100	84.5	48.8	52.6	58.0	41.1	43.8	50.6	52.9	49.8	56.2
Total, all members of World Federation of Exchanges (WFE)	100	103.1	77.7	83.2	89.0	69.8	77.2	87.5	90.7	95.7	92.7

Source: own calculations on the basis of data released by the World Federation of Exchanges and the Moscow Exchange.

¹ Including transactions in securities issued by foreign companies on the corresponding stock exchanges.

For the reasons mentioned earlier, the explanation for the low liquidity phenomenon observed on the Moscow Exchange should be looked for among the factors that are common for the majority of other stock exchange markets around the world. Meanwhile, there is no commonly recognized reason behind the plunging liquidity indices on the world stock markets. Besides, their plunge, most likely, has been caused by several factors.

In response to the 2008, administrative constraints were imposed on risky transactions in securities, including toughening of regulation with regard to biggest market makers, in particular the introduction of requirement that the capital of banks and some other financial units should be increased when they choose to take additional risks when dealing in financial instruments.¹ One example is the enactment of the Dodd-Frank Act in 2010 in the USA, whereby banks were restricted in their ability to carry out risky operations and required to hold a higher percentage of their assets in cash.²

The effects of cyclical factors have made less profitable the traditional 'active management' investment strategies, such as stock-picking, market timing, and sectoral investment. Against this background, passively managed portfolios have become more attractive in the eyes of investors due to their lower costs, and the big collective investment markets (e.g., in the USA) demonstrated a reorientation of investors' money flows from actively managed equity funds to index funds.³ Consequently, the continuing reduction in the turnover rate of securities held in the portfolios of US mutual funds and other portfolio investors⁴ likewise translated into liquidity shrinkage.

And finally, yet another reason may be the growth of mistrust towards exchange markets due to a negative impact of high-frequency trading (HFT), strengthening of segmentation of share markets in the developed countries due to accelerated growth of alternative stock exchange systems,⁵ etc.

In Russia, the liquidity shortage issues that were common to all world stock market were further aggravated by the ruble's depreciation, the geopolitical risks that emerged in 2014–2016, and by the deficient market regulation system that prevented domestic institutional investors from developing properly (one example being the pension savings freeze in 2014–2016).

By its market capitalization index in 2017, the Moscow Exchange was 22nd among the 78 world exchanges entered in the WFE database. Its capitalization index amounted to USD 623.4 billion, which represents a plunge by 2.0 percent relative to 2016.⁶

In contrast to stock indexes, the movement pattern of the market capitalization index is shaped not only by changes in stock prices, but also by the number of share issues listed on the

¹ About the post-crisis regulation effects on the propensity of market participants to take risks and on the liquidity of different financial instruments see, e.g., PricewaterhouseCoopers. Global financial markets liquidity study. August 2015.

² For more details, see, e.g., IMF Financial Stability Reports released in October 2012 and October 2015.

³ For example, according to Morningstar, investors pulled USD 318 billion out of actively managed US equity funds in 2016, and USD 7 billion in 2017. At the same time, net inflows into passively managed US equity funds amounted to USD 487 billion in 2016, and USD 693 billion in 2017. (Morningstar. Tom Lauricella. Tracking U.S. Asset Flows in 11 Charts. 01-20-18).

⁴ According to Investment Company Institute (ICI), in 2016, the asset-weighted annual turnover rate experienced by equity fund investors was only 34 percent, well below the average of the period 1984-2016 which had amounted to 57 percent. (Investment Company Fact Book, 2017. ICI, 57th Edition, p.38).

⁵ Lewes, M. Flash Boys: A Wall Street Revolt / Michael Lewis; Translated from the English. Moscow: Alpina Publishers, 2015, p. 51.

⁶ Over the same period, the market capitalization index of Russian public companies increased from RUB 32,740 billion in 2007 to RUB 35,896 billion in 2017, or by 9.6 percent.

national exchanges. As shown in *Table 2*, the market capitalization indices of Russian companies after the 2008 crisis have been recovering at a slow pace. In 2017, the recovery rate in US dollar terms amounted to only 41.5 percent of the 2007 level. Over the same period, the market capitalization indices of practically all major stock exchanges around the world were significantly above their pre-crisis level of 2007.

Table 2

The movement patterns of market capitalization indices, calculated in US dollars, on major stock exchanges in 2007–2017 (2007 = 100 percent)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
USA (NYSE and NASDAQ)	100	58.3	76.7	87.9	79.5	94.9	122.2	133.9	127.5	139.1	163.3
China (Shanghai SE)	100	38.6	73.2	73.5	63.8	68.9	67.6	106.4	123.1	111.1	137.8
Japan (Tokyo Stock Exchange)	100	71.9	76.3	88.4	76.8	80.3	104.9	101.1	113.0	116.9	143.7
UK	100	48.6	89.8	93.9	84.9	88.3	115.1	104.3	100.8	90.9	115.8
Euronext	100	49.8	68.0	69.4	57.9	67.1	84.9	78.6	78.3	82.7	104.0
Germany	100	52.8	61.4	67.9	56.3	70.6	92.0	82.6	81.5	82.3	107.5
Hong Kong	100	50.1	86.8	102.1	85.1	106.7	116.8	121.8	120.0	120.3	163.9
Canada (TMX Group)	100	47.3	76.7	99.3	87.4	94.2	96.7	95.8	72.8	93.4	108.3
Australia (Australian SE)	100	52.7	97.2	112.0	92.3	106.8	105.2	99.3	91.4	101.4	116.2
Russia	100	26.4	57.3	91.7	72.9	71.8	69.3	34.4	26.2	42.3	41.5
NASDAQ OMX Nordic Exchange	100	45.3	65.8	83.9	67.8	80.1	102.1	96.3	102.0	101.4	123.4

Source: own calculations on the basis of data released by the World Federation of Exchanges and the Moscow Exchange.

The stock market capitalization level depends not only on macroeconomic factors and the investment climate, but also on the performance of biggest corporations. The bulk of Russia's stock market capitalization has been created by a limited number of companies. In 2015, the top ten public JSCs taken together accounted to 46.1 percent of total market capitalization; as demonstrated by the period-end result of Q1 2018, their relative share jumped to 62.5 percent (*Table 3*). Meanwhile, in recent years, Russia's top four public corporations – Gazprom PJSC, Rosneft PJSC, Sberbank PJSC, and LUKOIL PJSC – have been tensely competing for leadership in terms of their market capitalization indices. In 2015, the indisputable and long-standing leader was Gazprom PJSC with its market capitalization index of RUB 3.2 trillion; second came Rosneft PJSC (RUB 2.7 trillion), followed by Sberbank PJSC and LUKOIL PJSC (RUB 2.2 trillion and RUB 2.0 trillion respectively). By the year-end result of 2017, the highest market capitalization index among Russian companies was demonstrated by Sberbank PJSC (RUB 4.9 trillion), while Gazprom PJSC with its market capitalization index of RUB 3.1 trillion was pushed to second place. As shown by the period-end result of Q1 2018, the highest market capitalization index of RUB 5.8 trillion was demonstrated by the same unrivaled leader – Sberbank PJSC, while Gazprom PJSC (RUB 3.4 trillion) was pushed to third place by the only private company on that list – LUKOIL PJSC with its market capitalization index of RUB 3.4 trillion.

Rosneft PJSC, which had topped the Russian stock market in 2016 with its market capitalization index of RUB 4.2 trillion, according to the period-end result of Q1 2018, came only fourth, its market capitalization index amounting to RUB 3.3 trillion.

Table 3

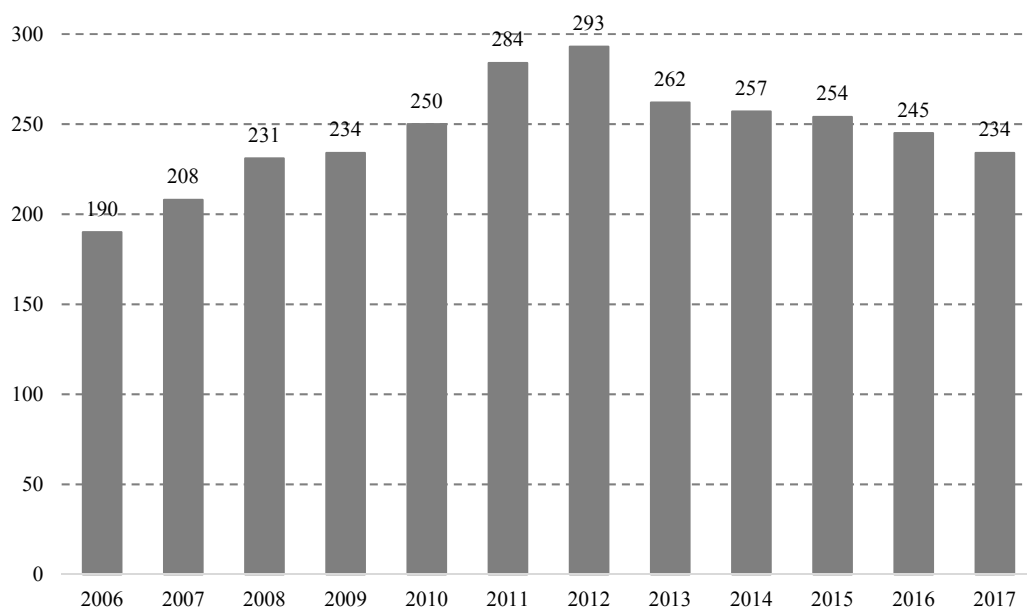
The market capitalization indices of Russia's top 10 public joint-stock companies from 2015 through Q1 2018

	Issuer	2015			Issuer	2016			Issuer	2017			Issuer	Q1 2018	
		capitalization, billions of rubles	Relative share, percent			capitalization, billions of rubles	Relative share, percent			capitalization, billions of rubles	Relative share, percent			capitalization, billions of rubles	Relative share, percent
1	Gazprom PJSC	3,226	8.5	1	Rosneft PJSC	4,240	11.2	1	Sberbank PJSC	4,859	13.5	1	Sberbank PJSC	5,479	14.2
2	Rosneft OJSC	2,715	7.2	2	Sberbank PJSC	3,710	9.8	2	Gazprom PJSC	3,074	8.6	2	LUKOIL PJSC	3,386	8.8
3	Sberbank PJSC	2,184	5.8	3	Gazprom PJSC	3,635	9.6	3	Rosneft PJSC	3,072	8.6	3	Gazprom PJSC	3,377	8.7
4	LUKOIL PJSC	2,001	5.3	4	LUKOIL PJSC	2,916	7.7	4	LUKOIL PJSC	2,823	7.9	4	Rosneft PJSC	3,343	8.6
5	NOVATEK OJSC	1,808	4.8	5	NOVATEK OJSC	2,379	6.3	5	NOVATEK PJSC	2,048	5.7	5	NOVATEK PJSC	2,255	5.8
6	Norilsk Nickel PJSC	1,452	3.8	6	Norilsk Nickel PJSC	1,589	4.2	6	Norilsk Nickel PJSC	1,701	4.7	6	Norilsk Nickel PJSC	1,704	4.4
7	Surgutneftegas OJSC	1,220	3.2	7	Surgutneftegas OJSC	1,105	2.9	7	Gazprom Neft PJSC	1,162	3.2	7	Gazprom Neft PJSC	1,406	3.6
8	Magnit PJSC	1,052	2.8	8	Magnit PJSC	1,031	2.7	8	Tatneft PJSC	1,035	2.9	8	Tatneft PJSC	1,334	3.5
9	VTB Bank (PJSC)	1,026	2.7	9	Gazprom Neft PJSC	1,024	2.7	9	Surgutneftegas OJSC	991	2.8	9	Surgutneftegas OJSC	1,021	2.6
10	Gazprom Neft PJSC	729	1.9	10	VTB Bank (PJSC)	960	2.5	10	NLMK PJSC	885	2.5	10	NLMK PJSC	865	2.2
	Capitalization, all issuers, MOEX	37,748	100.0		Capitalization, all issuers, MOEX	37,748	100.0		Capitalization, all issuers, MOEX	35,896	100.0		Capitalization, all issuers, MOEX	38,651	100.0
	Capitalization, top 10 issuers	17,412	46.1		Capitalization, top 10 issuers	22,591	59.8		Capitalization, top 10 issuers	21,650	60.3		Capitalization, top 10 issuers	24,170	62.5

Source: own calculations on the basis of data released by the World Federation of Exchanges and the Moscow Exchange.

In 2017, the Moscow Exchange, by its number of listed companies, ranked only 39th among the 78 exchanges included in the World Federation of Exchanges' reports. It still retained the same place in 2016. Fig. 11 shows the movement pattern of the number of companies listed by the MICEX and the Moscow Exchange (its legal successor) over the period 2006–2017. These indices demonstrate that after the merger of Russia's two largest exchanges (MICEX and RTS), the number of listed companies hit its record high of 293 in 2012. Then, in 2013–2017, it began to steadily decline. In 2017, this index amounted to only 234, or 80.0 percent of its 2012 level. The main reasons for the shrinking number of listed companies were as follows: OMPK OJSC, RAO Energy Systems of the East PJSC, Krasnoyarsk GES PJSC, Fort OJSC, and Pharmstandard PJSC requested to be delisted; Otkrytie FC Bank PJSC, Transaero Airlines OJSC, Razgulay PJSC, Platforma Utinet.ru PJSC, and Idzhat PJSC were delisted for reasons of bankruptcy and reorganization in the framework of bankruptcy procedures; for LIVE OFFICE OJSC, Selestra OJSC, etc. delisting was recommended by the exchange; another reason was the reorganization of public companies into private entities as a result of their purchase by strategic investors, which was not followed by the entry of new companies on the exchange market for investment resources.

The problem of the shrinking number of companies listed on the Moscow Exchange has to do not only with the continual delisting, but, more importantly, the low number of new companies desiring to launch a public offering. In 2017, the Moscow Exchange, by its number of newly listed companies, ranked only 39th among the 62 exchanges submitting to the World Federation of Exchanges their new listing statistics. The number of new companies listed on the Moscow Exchange increased from 4 in 2016 to 5 in 2017. Meanwhile, according to the WFE statistics, the number of newly listed companies per stock exchange was 37 in 2016 and 48 in 2017.



Note. Data for the period 2006–2011 are taken from MICEX's reports; data for 2012–2016 – from the Moscow Exchange's listing reports.

Fig. 11. The number of companies listed on the Moscow Exchange in 2006–2017

Source: own calculations based on data for 2006–2008 released by NAUFOR (Russian National Association of Securities Market Participants) in *Russian Stock Market: 2015 Events and Facts*; and data for 2009–2017 released by the World Federation of Exchanges.

In 2017, according to data released by the National Settlement Depository (NSD), it opened issuer accounts for 636 joint-stock companies, and that number is much lower than the number of currently listed issuers. This fact point to the existence of an untapped potential for listing more new companies on the exchange.

The downward trend in the number of listed national issuers of shares could not be reversed even after the enactment, from September 1, 2014, of the amendments to the RF Civil Code and the alterations to Federal Law of February 26, 1995 'On joint-stock companies,' which was augmented by the new Article 7.1,¹ whereby it was established that, in order to obtain the status of a public joint-stock company, prior to the entry of the official documents concerning its new legal status into the single state register, a company must sign a contract with an organizer of trade concerning its shares being listed on the exchange.

¹ In accordance with Federal Law of June 29, 2015, No 210-FZ.

From July 2017, the Moscow Exchange, with the support of the Corporation for the Support of Small and Medium-sized Entrepreneurship (SME Corporation), the Industrial Development Fund (IDF), the Russian Direct Investment Fund (RDIF), the Russian Export Center (REC), the RF Ministry of Economic Development, the RF Ministry of Industry and Trade, and the Bank of Russia, launched its Growth Sector in order to attract small and medium-sized businesses and help them raise capital via the exchange. This will probably translate into an increasing number of listed new companies and involving them in the public investment market.

Shares on the Moscow Exchange are traded in its three main segments: the stock market; the futures market; and the money market (repo transactions). The universality of the Moscow Exchange is its major competitive advantage over many other foreign exchanges. In an ideal model, the stock market should attract capital in the form of medium- and long-term investments, the futures market should help in hedging against the risks associated with such investments, and the money market should maintain an appropriate liquidity level for the participants in trading. The merger of the RTS and MICEX in late 2011 and the creation, in 2017–2018, of a single account and trading pool servicing the participants in trading on several markets, created even better advantages for the clients. As a result, a participant in trading can use a single account to handle transactions with different instruments in different segments of the financial market.

However, the situation with the development of different market segments for trading in shares is still far from being perfect. Contrary to expectations, the consolidation, in 2011, of the two Russian exchanges failed to trigger an accelerated growth of the futures market segment (FORTS) of the RTS due to the inflow of new liquidity from the MICEX. Other financial market infrastructure segments and the broadening range of its participants. The stock market, instead of expanding, lost some of its potential to the money market in the form of repo transactions. At present, the exchange market is dominated by short-term speculative deals, including repo.¹

Shortly after the merger of the two exchanges, the futures market's share in the total volume of equity financial market transactions increased from 46.7 percent in 2010 to 64.2 percent in 2015 (*Fig. 12, Table 4*). However, in 2017, in response to the accelerated growth of the money market (repo), the relative share of the futures market shrank to 54.4 percent. A more dramatic plunge was demonstrated by the relative share of the market (auction) spot trades – from 19.8 percent in 2010 to 5.3 percent in 2017. The relative share of repo transactions, on the contrary, increased from 26.7 percent in 2010 to 39.7 percent in 2017.

In order to create a well-developed domestic equity market on the basis of exchanges, it will be necessary to provide it with more sustainable sources for financing its growth, by reducing the role of short-term resources redistributable between market participants through repo transactions, and promoting instead an accelerated growth of spot trades and stocks futures oriented to the medium- and long-term strategies of different groups of investors (domestic institutional and private investors, foreign investment and pension funds). In view of the shrinking relative share of repo transactions in the stock exchange market from 39.7 percent to 31.0 percent in Q1 2018 as a result of the lower-key activity on the money market of several banks whose licenses were suspended or revoked by the Bank of Russia, as well as the new opportunities for market participants to finance their operations by settling through the clearing

¹ Repo is used as a money-making instrument that increases opportunities for brokers and their clients to borrow money against the collateral of shares.

center, it can be hoped that the stock exchange market will be evolving towards a better-performing model.

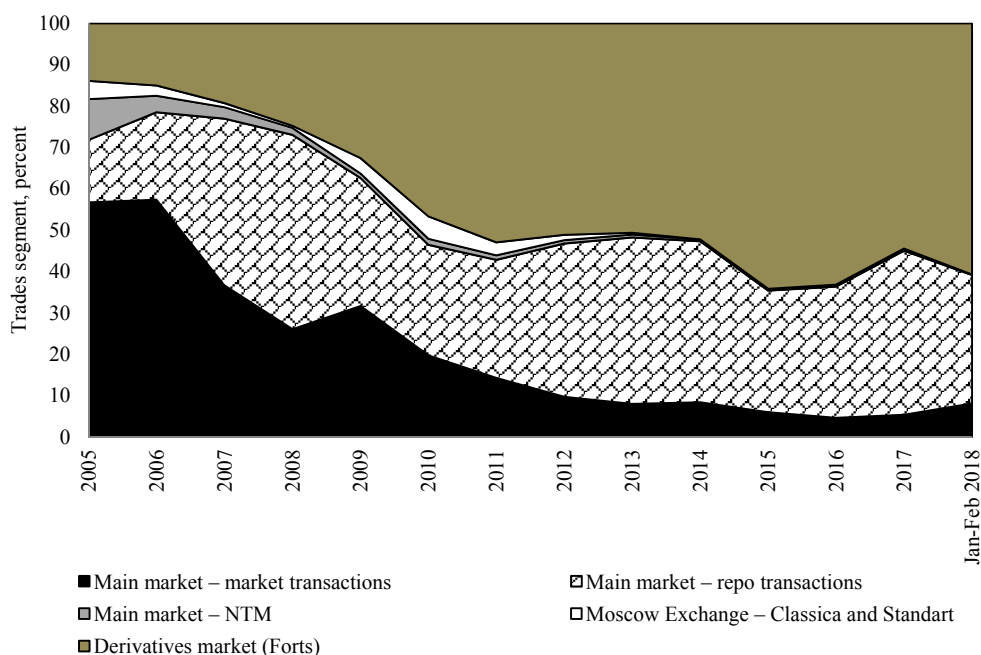


Fig. 12. The structure of markets for shares and derivatives on the Moscow Exchange from January 2005 through February 2018

Source: own calculations based on data released by Russian stock exchanges.

Table 4

The structure of financial markets for shares on the Moscow Exchange from January 2005 through February 2018

	2005	2010	2015	2016	2017	Jan-Feb 2018
Market transactions (auction market)	56.7	19.8	6.0	4.6	5.3	8.1
Repo transactions	15.1	26.7	29.4	31.8	39.7	31.0
NTM	9.8	1.5	0.4	0.4	0.5	0.1
Moscow Exchange – Classica ¹ and Standart	4.4	5.4	0.0			
Derivatives market (formerly Forts)	13.9	46.7	64.2	63.2	54.4	60.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: own calculations based on data released by Russian exchanges.

Fig. 13 and 14 show the structure of the equity market on the Moscow Exchange broken up into market transactions (anonymous auctions), negotiated trades (NTM) and repo transactions. A typical feature of that market has been the accelerated growth rate of the money market segment in the form of equities repos, which has been visible since mid-2006, with a short pause during the 2008 crisis. The relative share of this type of transactions in the total volume of trading in on the Moscow Exchange increased from 18.5 percent in 2005 to 85.9 percent in 2017 (Fig. 13). The essence of this phenomenon is that in conditions of low long-term return rates of investment in shares in the domestic market² and low investment demand for shares

¹ Trading in the Classica sector was officially terminated by the exchange from August 3, 2015.

²As was demonstrated in Fig. 2, over the 11-year period from 2007 through 2017 the return rate of the MICEX Index was 1.1 percent per annum, and that of the RTS Index was negative -6.6 percent per annum.

displayed by domestic investors, repo market repo participants, by resorting to leverage, could increase the return of their shares. At the same time, the programs launched by the Russian monetary authorities after the global financial crisis of 2008 and the Eurozone crisis of 2011–2012 with the purpose of ensuring the sustainability of banks and system-forming non-financial organizations produced a situation where some financial market participants acquired significant spare funds that they were ready to invest in the money market.

The accelerated growth in the equities repo market alongside liquidity stagnation in the market transactions and NTM segments resulted in a dramatic contraction of the share of market transactions in the total turnover on the main equity market on the Moscow Exchange. It fell from 69.5 percent in 2005 to 13.2 percent in 2017 (Fig. 13). The relative share taken up by the NTM segment likewise shrank from 12.3 percent in 2005 to 0.9 percent in 2017.

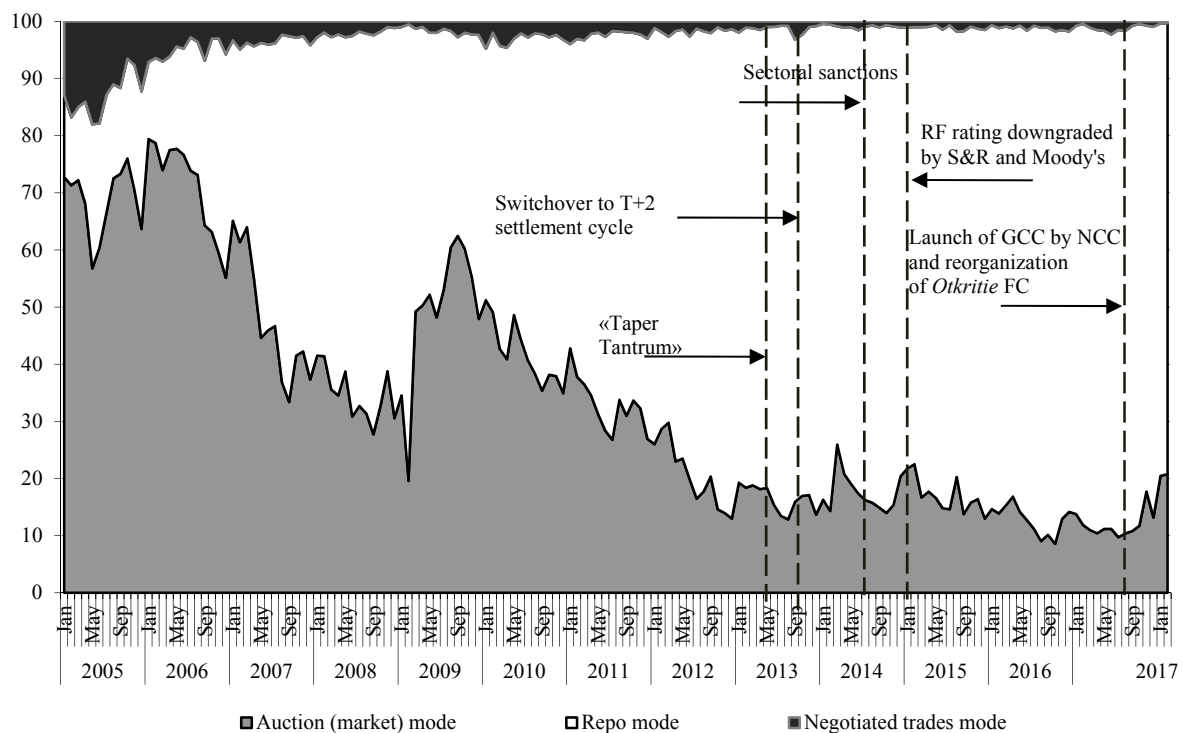


Fig. 13. The structure of trades in shares on the Moscow Exchange’s Main Market from January 2005 through February 2018, percent

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

In Fig. 14, it can be seen that changes in the main equity market structure on the Moscow Exchange were produced, for most part, by the accelerated growth in the equities repo market alongside liquidity stagnation in the market (auction) transactions and NTM segments. Over the period from 2005 through 2017, i.e., in 13 years, the value volume of transactions in the auctionном market jumped from RUB 2.8 trillion to RUB 8.3 trillion, or 3 times; the volume of transactions in NTM – from RUB 0.5 trillion to RUB 0.8 trillion, or by only 60.0 percent; and the equity repo market turnover increased from RUB 0.7 trillion to RUB 61.5 trillion, or 87.9 times.

After the merger of the two exchanges in 2011, a number of events took place that triggered an accelerated growth of equity capital market in comparison with the spot market shares. The

sudden foreign capital outflow in May 2013 in response to rumors that the US Federal Reserve was planning to raise its key rate (known as Taper Tantrum); the introduction of sectoral sanctions from July 2014; and Russia's sovereign credit rating downgraded below the investment grade by two out of the three global rating agencies (S&P and Moody's) in January-February 2015, which had a very negative effect on the attractiveness of Russian market for shares in the eyes of investors, at the same time conducted to Russia's monetary policy easing and an inflow of liquidity into the domestic repo market in the form of a variety of financial instruments^в, including shares (*Fig. 14*).

Meanwhile, another important event - the completion of the MICEX Equity & Bond Market's switchover to a T+2 settlements cycle in September 2013, which had been expected to trigger an inflow of new money from foreign investors into the stock market, - in fact, failed to produce any notable effects on liquidity in the market transactions and NTM segments. However, this could be prevented by some objective factors that restricted the entry of foreign investors into the domestic market, such as the introduction of sectoral sanctions in July 2014 and Russia's downgraded sovereign credit rating by international rating agencies. These developments have confirmed the hypothesis, put forth by the Bank of Russia, that the behavior of non-residents on Russia's stock exchange market, which exerts a strong influence on its liquidity, is largely determined by global factors, and not local ones,¹ because the switchover to a T+2 settlements cycle is more likely to be a specifically local factor.

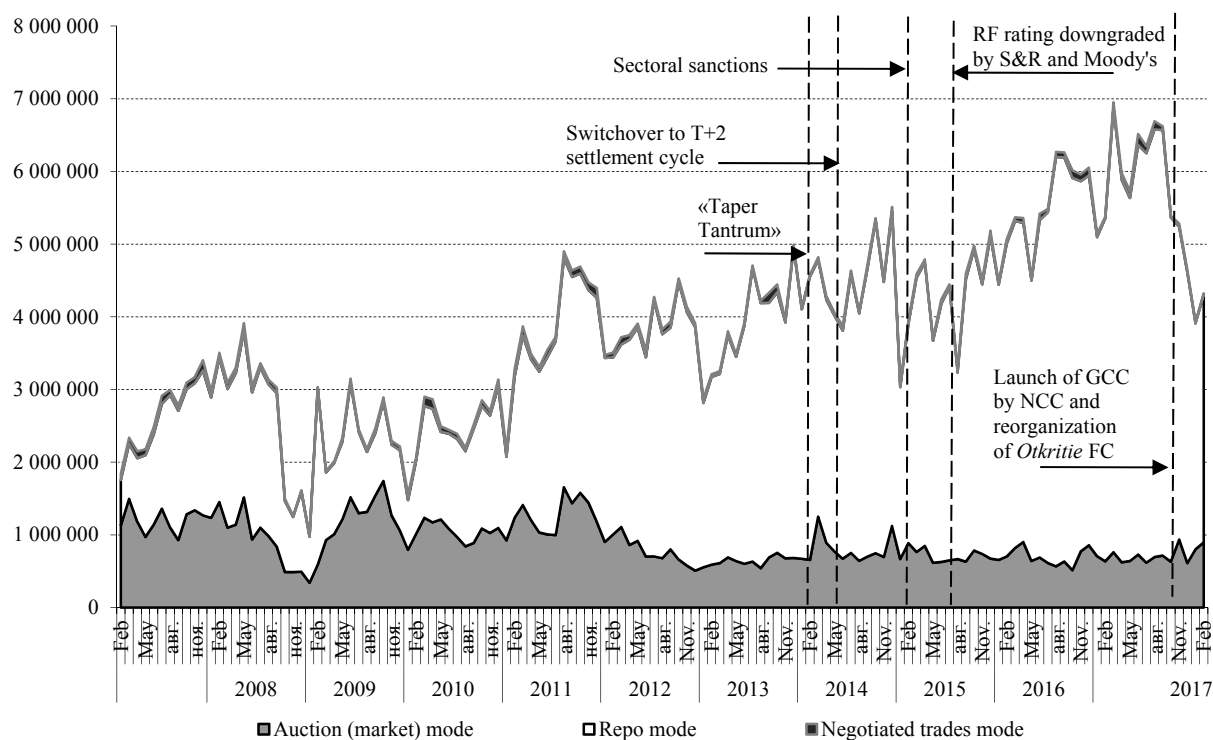


Fig. 14. The volume of trades in shares on the Moscow Exchange's Main Market from January 2005 through February 2018, millions of rubles

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

¹ Money Market Review. Information and Analytical Materials, Bank of Russia, No 4, Q3 2016, p. 15.

Fig. 15 shows the volume of trades in shares, less that of repo transactions. The graph clearly outlines two active growth periods: from 2005 through May 2008, when the domestic equity market was rapidly expanding in response to carry trading strategies and an inflow of foreign investment funds with their speculative strategies; and from March 2009 through September-October 2011, when the returns on equity were demonstrating a recovery growth after the financial crisis of 2008. From the year-end of 2012 – that is, the first year after the merger of two exchanges – the volume of market transactions demonstrated practically a zero growth rate, despite certain internal and external developments that could influence the exchange market's behavior.

It seems that, when elaborating new strategic documents addressing Russia's domestic stock market, special attention should be paid to the issue of creating appropriate conditions for a positive shift in the liquidity situation specifically in its market trades in shares segment. To achieve this goal, it will be necessary, first of all, to promote accelerated development of non-bank financial organizations (private pension funds (PPF)), collective investment funds, life insurance companies, asset managers, brokers, and investment consultants). The measures designed to develop this particular segment of the stock market are described in detail in the Report of the Center for Strategic Research titled *Reform of Financial Markets and Non-banking Financial Sector*.¹

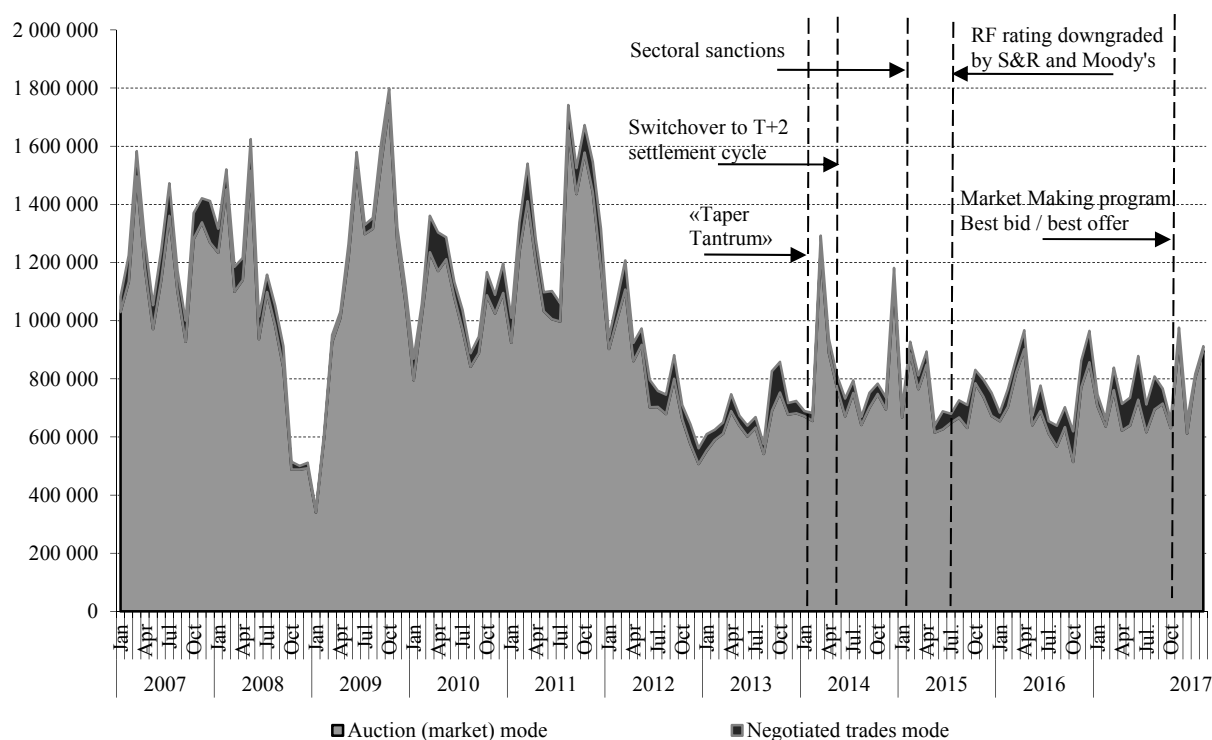


Fig. 15. The volume of market and negotiated trades in shares on the Moscow Exchange from January 2005 through February 2018, millions of rubles

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

¹ Danilov Yu. A., Abramov A. E., Buklemishev O. V. *Reform of Financial Markets and Non-banking Financial Sector*. CSR, Moscow, July, 2017. See <http://csr.ru/wp-content/uploads/2017/07/Report-Financial-markets-v2-web.pdf>

The accelerated growth in the equities repo market poses certain threats. First of all, no information is publicly available as to how reliably the existing risks are being managed in this segment, especially the risks associated with those transactions that are settled inside broker companies and banks. The basic indicators of the scale of repo operations and the risks for their participants are disclosed neither by the regulator nor by the brokers actually handling them. The public has no access to information concerning the asset coverage ratios¹ of brokers' or their clients', nor concerning the scope of the use of financial levers in equity deals by brokers, nor concerning the integrated asset turnover ratios of brokers' clients. Moreover, non-bank broker companies, in contrast to asset managers or private pension funds, are not required to release their financial reports drawn up in compliance with the IFRS, from which their estimated risks could be learned.

The plunge of the volume of repo transactions from September 2017 onward (*Fig. 13 and 14*)² was triggered by two factors: the bailout by the Bank of Russia of *Otkritie FC Bank* from May 2017 and the accelerated growth of repo transactions with general collateral certificates (GCC) issued by the National Clearing Center (NCC). The reorganization of *Otkritie FC Bank* reduced its short-term demand for borrowed funds that used to be satisfied through repo deals, as now it has been supplied with cheaper resources from the Bank of Russia via a non-market channel. And the advent of GCCs, together with the direct access to that market segment granted to major non-financial companies possessing surplus liquidity, has turned that instruments into a market source of cheaper short-term resources for financial companies, and so it has replaced the other, more costly mechanisms, including equity repo transactions.

As shown in *Fig. 16*, the monthly volume of equity repo transactions shrank from RUB 5.9 trillion in September 2017 to RUB 3.4 trillion in February 2018, or by 42.4 percent. Over the same period, the GCC repo segment, on the contrary, increased from RUB 0.8 trillion to RUB 1.9 trillion, or 2.4 times.

In *Fig. 17* and *Table 5*, the structure of equity deals with the participation of private brokers and state-owned enterprises (SOE) is shown.³ As before, the bulk of trades in shares on the Moscow Exchange is carried on by private brokers; however, their share shrank from 79.8 percent in 2016 to 60.2 percent in 2017; meanwhile, in February 2018 the share of private participants in trading once again rose to 68.2 percent.

A notable phenomenon in recent years has also become the increasingly prominent role in equity deals on the Moscow Exchange of broker companies affiliated to big foreign banks (GIBsubs).⁴ In spite of the tricky geopolitical situation and sectoral sanctions, the segment taken up by GIBsubs increased from 6.3 percent in 2016 to 9.2 percent in December 2017, and to 11.0 percent in February 2018. This is an indirect indication of the growing interest of foreign

¹ The asset coverage ratio is the ratio of the current value of marketable assets functioning as collateral in repo transactions carried on by a broker or a broker's client to the total current value of their securities.

² The relative share of repo transactions on the stock exchange market contracted from 88.4 percent in September 2017 to 78.9 percent in February 2018.

³ As of 2016, the study sample of state-controlled entities participating in trading on the exchange, was as follows: Sberbank of Russia, Sberbank CIB, VTB, VTB Capital and its affiliates, VTB-24, Gazprombank, Russian Agricultural Bank, Sviaz-Bank, KIT Finans, VEB. From August 2017, that group was joined by *Otkrytie FC Bank*; from September 2017, by B&N Bank and Rost Bank; and from December 2017, by Promsvyazbank.

⁴ Our sample is as follows: Goldman Sachs, Deutsche Bank, UBS, ING Bank (Eurasia), Credit Suisse (Moscow), Raiffeisenbank, Citibank, UniCredit Bank, CB J.P. Morgan Bank International, Rosbank, Barclays Capital LLC, Merrill Lynch, Morgan Stanley Bank, HCBC Bank.

investor – clients of GIB-subs – in the shares issued by certain Russian market players, especially in view of the continuing strengthening, over the last few years, of the ruble relative to the US dollar.

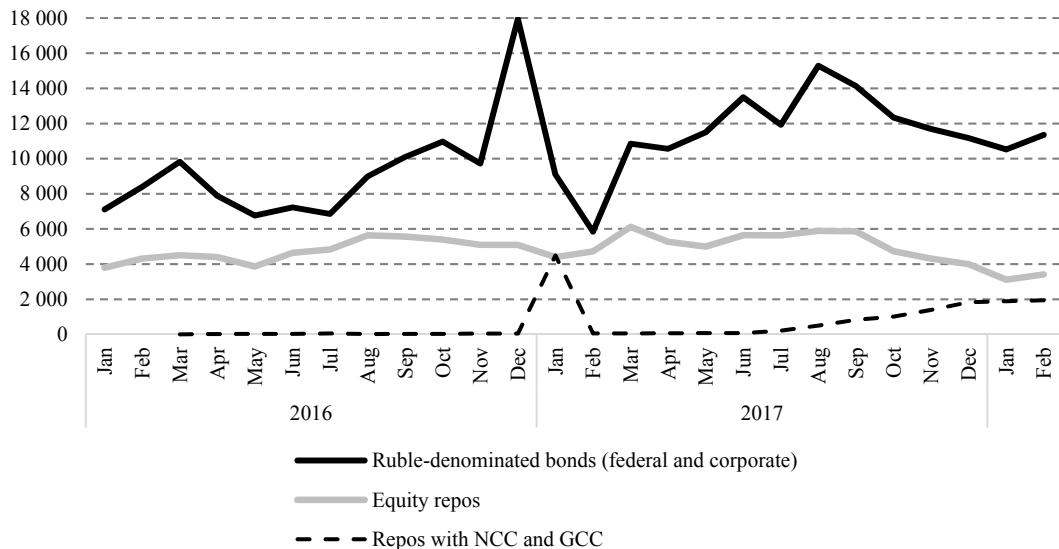


Fig. 16. The volumes of repo deals using equities, ruble-denominated bonds and general collateral certificates (GCC) on the Moscow Exchange from January 2016 through February 2018, billions of rubles

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

The relative share of state-controlled companies in the total volume of equity transactions on the exchange jumped from 20.2 to 39.8 percent, and then slid to 31.8 percent. This movement pattern can be explained by the reorganization into SOEs of the formerly private entities like *Otkrytie FC Bank*, B&N Bank, Rost Bank, and Promsvyazbank, where temporary administration teams were set up by the Bank of Russia in order to review and correct their activities. At the same time, these banks, as a result of the implementation of special programs aimed at increasing their capitalization and their financial recovery, are no longer in need of the more expensive repo deals as a sources of money, and this change is reflected in the February 2018 statistics.

Previously, a surge of SOEs' activity on Russia's stock exchange market could be observed whenever it was undergoing a difficult phase in its evolution – for example, in late 2008 and H1 2009, when special centralized loans were issued through *Vnesheconombank* (VEB) for the support of the domestic stock market. Another peak of their activity on the organized equity market occurred over the period 2011–2015 when, due to the restrictions on borrowing on the global capital market imposed on Russian financial organizations – first as a result of a crisis in the Eurozone, and then by way of sectoral sanctions, the Bank of Russia had to resort to active refinancing of banks through repo transactions, including with shares in Russian companies offered as collateral. Over that period, the aggregate share of SOEs and the Bank of Russia in the total volume of trades in shares increased from 26.4% in 2010 to 41.0% in 2013, and thereafter shrank to 23.5% in 2015.

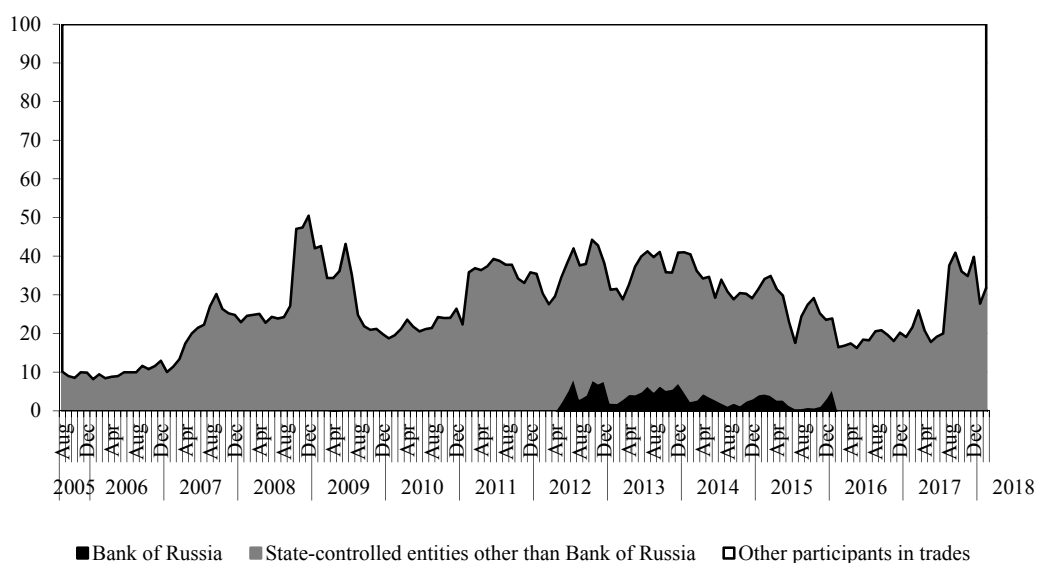


Fig. 17. The relative shares of private broker companies and SOEs in equity trades on the Moscow Exchange over the period from August 2005 through February 2017, percent

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

Table 5

The relative shares of private broker companies and SOEs in equity trades on the Moscow Exchange as of the end of reporting period, percent

	2005	2010	2011	2012	2013	2014	2015	2016	2017	Feb 2018
Bank of Russia		0.0	0.0	7.9	7.5	3.2	3.3	0.0	0.0	0.0
SOEs	9.9	26.4	35.8	30.3	33.5	25.8	20.2	20.2	39.8	31.8
Other equity market participants	90.1	73.6	64.2	61.8	59.1	70.9	76.5	79.8	60.2	68.2
of these:										
GIB-subs*				7.3	8.9	4.8	5.7	6.3	9.2	11.0

* GIB-subs are companies affiliated to global investment banks, granted the status of a legal entity under legislation of the Russian Federation, and licensed to act as brokers in the securities market.

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

Fig. 18 demonstrates the structure of equity transactions on the exchange relative to their final beneficiaries – i.e., investors.¹ As can be seen from the graph, private dealers and non-residents account for about a half of all equity deals; however, the relative share taken up by non-residents is much higher than that of private dealers. At the same time, their proportional distribution has remained approximately the same since 2013. The relative share of resident individuals slightly declined from 6.1 percent in December 2016 to 5.9 percent in December 2017, and then increased to 9.4 percent in February 2018. The relative share of non-residents over the same period increased from 36.8 to 37.3 percent, but then plunged to 35.6 percent.

¹ These data, calculated on the basis of available public exchange statistics, are far from being perfect. They do not show separately the net relative shares of domestic private investors and non-residents in market transactions and NTM. Besides, the group of non-residents does not include the affiliations of broker companies through which the latter frequently borrow money and then lend it to their clients. However, on the whole these data make it possible to estimate the relative shares of private dealers and non-residents in trades in shares on the Moscow Exchange.

So far, it can be assumed that there is no visible sustainable growth trend displayed by the relative share of domestic private investors in the equity market on the stock exchange. However, in this connection it should be remembered that in 2016–2017, citizens received additional incentives for investing in shares issued by Russian companies in the form of individual investment accounts (IIA) and certain categories of exemptions from personal income tax. However, in order to ensure comprehensive involvement of households in investing in the stock market, it will be necessary to de-freeze the pension saving system, create adequate conditions for the development of corporate and individual pension plans, and promote collective investment schemes.

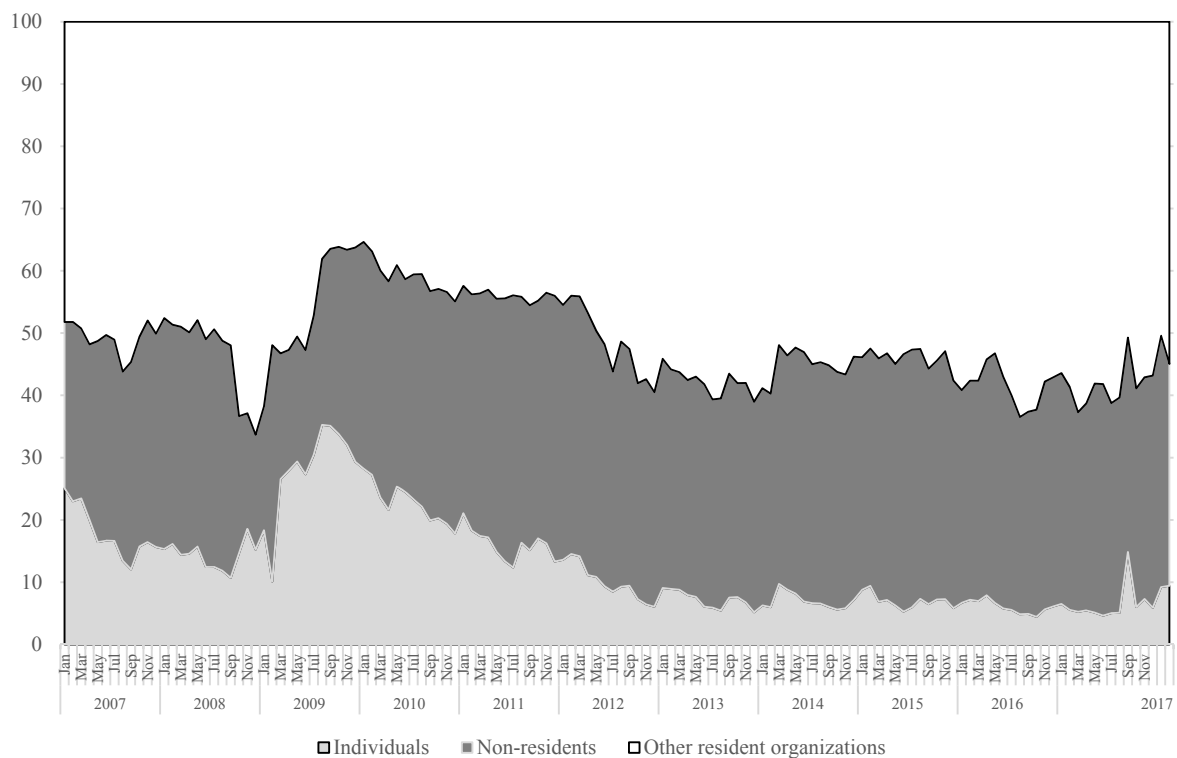


Fig. 18. The structure of investors participating in trades in shares on the Moscow Exchange from January 2005 through February 2018, percent

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

Although domestic competition represents one of the most acute issues of Russia's stock market, it is relatively weakly outlined in the official reports of government bodies, both in terms of methodological approaches to its assessment and the quality of empirical data. Therefore, in this review we are going to discuss only some of its aspects.

Fig. 19 demonstrates the movement of the Herfindahl–Hirschman Index, or HHI,¹ on the Moscow Exchange's Equity & Bond Market from January 2005 through February 2018. As estimated by the Federal Antimonopoly Service (FAS) of the Russian Federation, the market

¹ The market concentration Herfindahl–Hirschman Index (HHI) is defined as the sum of squares of the volumes of participation of each participant in trading on an exchange: $HHI = (D_1)^2 + (D_2)^2 + \dots + (D_m)^2$, where D_i is the per cent market share of i^{th} participant; $i = 1, 2, \dots, m$.

has a low concentration if HHI is below 800; moderate concentration if $800 < \text{HHI} < 1,800$; and high concentration if HHI is above 1,800.

Over the entire observation period, with some rare exceptions that occurred during the 2008 crisis, when the Bank of Russia was compelled to resort to repos where shares were used as collateral, and also in 2016, the HHI for the transactions on the Moscow Exchange’s main equity market remained stable at a level of approximately 500, which means that this market segment was low-concentrated. The trends observed in the market for bonds followed their own patterns, and we can distinguish three periods there, over each of which HHI behaved differently. From August 2005 through August 2011, the HHI for the bonds market was hovering around 500, demonstrating signs of a low-concentrated market. From September 2011 until early 2015, when the Bank of Russia conducted a substantial number of repos using bonds as collateral, the HHI for this segment of the equity exchange market moved into the interval between 800 and 1,800, which is typical of a moderately concentrated market. As the volume of refinancing channeled by the Bank of Russia into the banking system by means of repo transactions began to decline, from February-March 2015 the bonds market once again became low-concentrated, with the HHI close to 500. From September 2017, when several big banks began reorganization procedures, the HHI for bonds dived below the corresponding index for shares, which point to a high competition level in the domestic bonds market. Some surges of the HHI over that period occurred in December 2015 and December 2016, in response to the placement, by PJSC *Rosneft*, by massive issues of its corporate bonds.

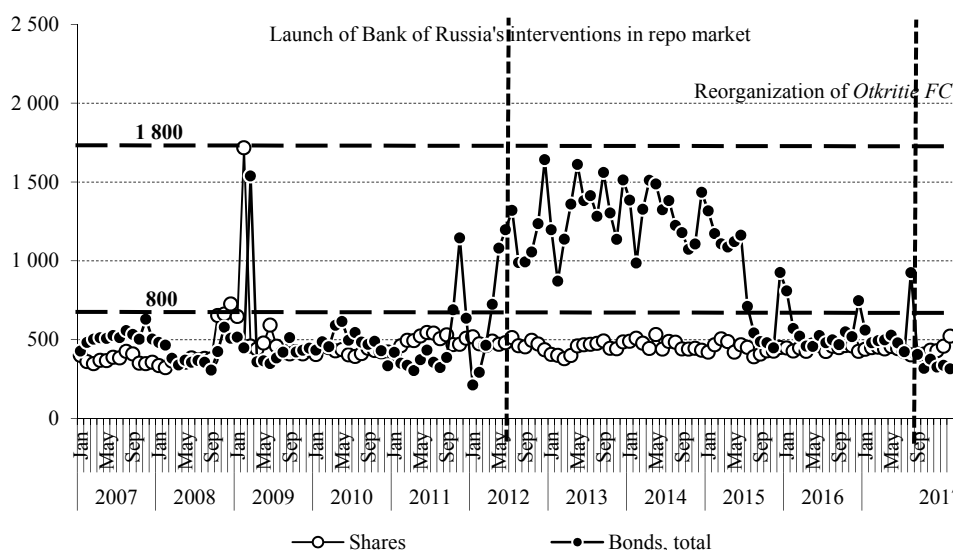


Fig. 19. The Herfindahl–Hirschman index, based on volume of trades in shares and bonds on the Moscow Exchange (all trade modes)¹

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

¹ As from August 2015, the Moscow Exchange no longer discloses its by-category data on trades in corporate, regional and government bonds, and releases only aggregate data on deals involving all types of bonds, and considering the fact that information on OFZ transactions has been released by the exchange only from February 2012, our calculations of HHI values rely on a number of assumptions. For the period prior to February 2012, the HHI for the bonds market incorporates only trades in corporate and regional bonds, and from February 2012 onwards it incorporated all types of bonds.

The main channels whereby the equities market conveys its impact on economic growth is through primary offer of securities by companies as a way of attracting investment resources, as well as through merger and takeover deals.

As follows from *Table 6*, in 2016–2017, in spite of the difficulties in attracting foreign investors created by sectoral sanctions, there was a noticeable revival in the market for IPO-SPOs launched by registered in Russia or operating in RF territory. In 2017, there were IPO-SPOs by 12 companies to the total value of USD 4.4 billion; a year earlier, such deals, to the total value of USD 2.1 billion, were completed by only 7 companies. Meanwhile, the segment of merger and takeover deals continued to demonstrate a decline, and an annual shrinkage in the total number of deals over the period 2014–2017. In 2013, the volume of completed merger and takeover deals amounted to USD 156.1 billion, and in 2017 it tumbled to USD 31.4 billion.

Table 6

The parameters of market for shares in Russian companies (billions of US dollars)

	Capitalization	Secondary market, including on foreign exchanges	IPO-SPOs of shares	Investment in fixed assets of capital generated by IPOs			Volume of closed merger and takeover deals
				Bn USD	as percent of capitalization	as percent of IPO volume	
2000	41	47	0.5	0.2	0.5	40.0	5.0
2001	75	49	0.2	0.1	0.1	50.0	12.0
2002	106	87	1.3	0.2	0.2	15.4	18.1
2003	176	188	0.6	0.2	0.1	33.3	32.4
2004	230	541	3	0.1	0.0	3.3	27.1
2005	549	374	5.2	3.2	0.6	61.5	60.2
2006	1,057	914	17	3.2	0.3	18.8	61.9
2007	1,503	1,687	33	3.6	0.2	10.9	127.7
2008	397	1,983	1.9	2.1	0.5	110.5*	117.0
2009	861	1,156	1.7	2.0	0.2	117.6*	55.7
2010	1379	1,431	6.3	2.4	0.2	37.9	55.1
2011	1,096	2,222	11.3	2.6	0.2	23.1	94.3
2012	1,079	1,931	9.5	3.1	0.3	32.6	72.7
2013	1,041	1,801	9.0	3.1	0.3	34.4	156.1
2014	517	1,739	1.7	3.1	0.6	182.0*	58.7
2015	393	997	0.6	0.9	0.2	150.0*	56.9
2016	635	1,154	2.1	0.7	0.1	32.0**	41.7
2017	623	1363	4.4	no data	no data	no data	31.4

* the value is above 100% because part of capital invested in fixed assets could be generated by way of private offering of shares; ** the amount of proceeds of IPOs by *Rosneft* and *Otkrytie Holding* on the Moscow Exchange in 2016.

Source: own calculations based on data released by *Rosstat*; the Bank of Russia; the Moscow Exchange; Merger.ru.

In 2016, the proceeds raised by issuance of shares accounted for only 0.1 percent of total investments in fixed assets. This means that the bulk of new cash raised by Russian companies in the domestic market for shares and corporate bonds continued to be spent on refinancing projects, debt redemption, merger and takeover deals, and used for other purposes that had little to do with investing in fixed assets. From 2017, Rosstat has no longer disclosed this type of statistics, thus increasing uncertainty with regard to the information that is very important if we want to really understand the effects of IPO-SPO of shares.

Thus, the exchange market for equities has so far contributed rather moderately to real asset accumulation by companies and to economic growth. The domestic stock market's potential has not yet been fully relied upon in dealing with the key problems faced by the Russian economy.

3.3. The market for non-government bonds

In 2017, the Russian financial market displayed relatively favorable conditions for growth of the domestic corporate bonds segment. Thanks to the ruble's stability and low inflation, the returns of corporate bonds finally climbed back to their 2013 level, prior to the introduction of sectoral sanctions. Besides, in spite of the year-end reduction of the key rate to 7.75 percent, the record-low inflation rate of 2.5 percent ensured high returns, in real terms, of fixed rate instruments. The returns of corporate bonds launched by reliable issuers rose significantly above the interest rates on bank deposits, thus making them an attractive instrument to be invested in by private dealers and collective investment funds.

Moreover, from January 1, 2017, in accordance with Federal Law No 242-FZ dated July 3, 2016, the rate of tax on bond yield for legal entities was reduced from 20 to 15 percent. From January 1, 2018, individuals were made exempt from personal income tax on the coupon yield of ruble-denominated corporate bonds issued over the period 2017–2020, if the coupon rate is not higher than the refinancing rate of the Bank of Russia. Thus the income tax rate for corporate bond holders was brought to the same level as the tax rate for interest rate on individual deposits.

In 2017, the value of bonds loans in Russia continued to climb, amounting to RUB 19.4 trillion, which represents a 19.9 percent growth relative to 2016 (*Fig. 20*). Over that year, the value of corporate bonds, including non-marketable bond issues, increased from RUB 9.4 trillion to RUB 11.4 trillion, or by 21.3 percent; that of regional bonds – from RUB 0.63 trillion to RUB 0.72 trillion, or by 14.3 percent; and that of federal bonds (OFZ, government saving bonds (GSO), etc.) – from RUB 6.1 trillion to RUB 7.2 trillion, or by 18.0 percent. In spite of the high demand for money resources necessary for covering budget expenditure, the RF Ministry of Finance in 2017 took a moderate stance in its policy and abstained from dramatically increasing government domestic debt, leaving some room for growth of the borrowings of Russian companies and regional administrations.

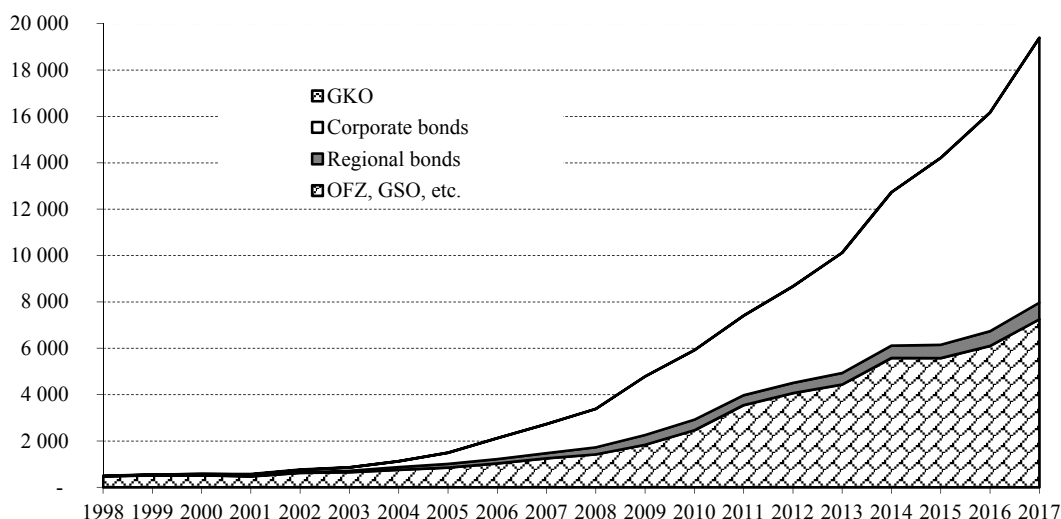


Fig. 20. The movement of the volume of ruble-denominated bonds in circulation from 1998 through 2017, billions of rubles.

Source: own calculations based on data released by the RF Ministry of Finance and Cbonds.ru.

The specific feature of bond offers in 2017 was that the value volume of corporate bond issues was increasing at a faster rate than that of federal and regional bonds. The value volume of corporate bond issues increased from RUB 2.4 trillion in 2016 to RUB 2.9 trillion in 2017, or by 21.6 percent. The main factor behind that growth was the placement of a bond issue by *Rosneft*, its relative share in the total value volume of new bond offers over that year being 36.8 percent (*Fig. 21*). Meanwhile, the value volume of federal bond issues increased from RUB 1.1 trillion in 2016 to RUB 1.8 trillion in 2017, or by 63.1 percent. Over the same period, the value volume of regional bond issues soared from RUB 159.1 billion to RUB 210.9 billion, or by 32.6 percent. The growth drivers for all categories of bonds were the increasing demand of businesses and the government alike for money resources that they needed to cover their expenditures and fund their projects in conditions of restricted access to foreign financial markets and limited income sources, and on demand side - growth of excess liquidity in the banking sector and the demand for ruble-denominated assets displayed by some categories of foreign portfolio investors. In 2017, the first OFZ, corporate and regional bond issues targeting retail investors were launched.

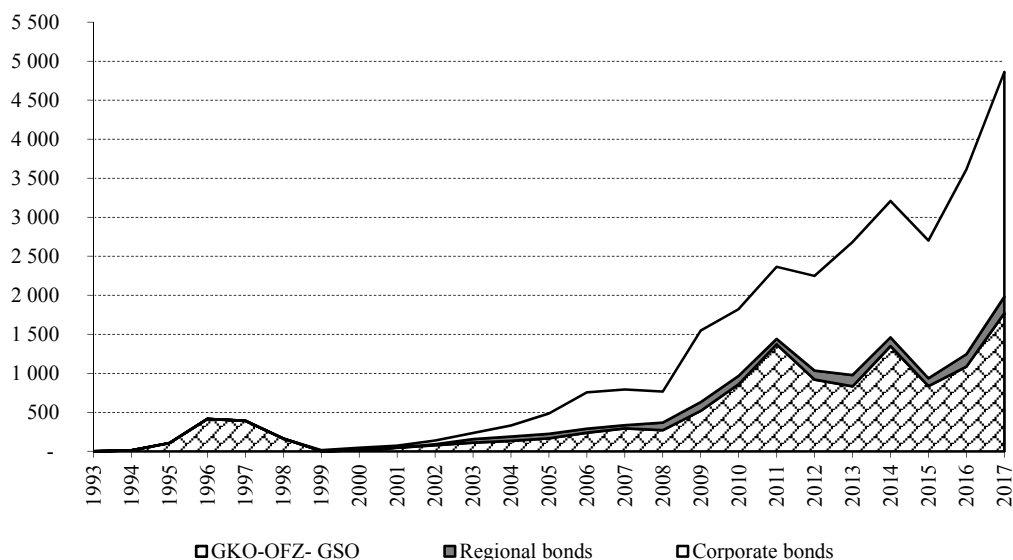


Fig. 21. The value volume of ruble-denominated bond issues placed in 1993–2017, billions of rubles

Source: own calculations based on data released by the RF Ministry of Finance and the Moscow Exchange.

Although the Moscow Exchange now lists nearly 400 bond issuers, the primary market for corporate bonds is a highly concentrated one, being dominated by bond issues placed by state-owned enterprises (SOE). As follows from data presented in *Table 7*, over the period 2010–2017, 24 biggest issuers accounted for 58–88 percent of the total value volume of corporate bond offers; in 2017, this index amounted to 82 percent, thus getting near its record high of 2009.

Among big bond issuers, state-controlled companies prevailed; the top-24 alone, over the period 2009–2017, accounted for 37–75 percent of the total value volume of new corporate bond offers. In 2017, that index hit its record high of 75.0 percent. Thus, the corporate bond market

is currently functioning as a mechanism for redistributing financial resources in the market in favor of big players, represented in the main by SOEs.¹

Table 7

**The concentration rate of ruble-denominated corporate bond issues
and the relative share of state-controlled issuers in 2009–2016**

	Top 5 issuers		Top 10 issuers		Top 24 issuers		Market, total
	Total	including SOEs	Total	including SOEs	Total	including SOEs	
2009							
Billions of rubles	440	390	610	441	803	513	917
Market share, percent	48.0	42.5	66.5	48.1	87.6	55.9	100.0
2010							
Billions of rubles	177	147	304	200	513	317	855
Market share, percent	20.7	17.2	35.6	23.4	60.0	37.1	100.0
2011							
Billions of rubles	241	191	389	309	642	405	1089
Market share, percent	22.1	17.5	35.7	28.4	59.0	37.2	100.0
2012							
Billions of rubles	265	265	429	334	690	443	1199
Market share, percent	22.1	22.1	35.8	27.9	57.5	36.9	100.0
2013							
Billions of rubles	550	550	705	640	1035	830	1741
Market share, percent	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
Market share, percent	50.3	47.6	60.4	53.7	76.7	59.7	100.0
2015							
Billions of rubles	683	683	861	788	1180	891	1919
Market share, percent	35.6	35.6	44.9	41.1	61.5	46.4	100.0
2016							
Billions of rubles	972	882	1228	1038	1653	1176	2439
Market share, percent	39.9	36.2	50.3	42.6	67.8	48.2	100.0
2017							
Billions of rubles	1518	1518	1890	1803	2329	2139	2852
Market share, percent	53.2	53.2	66.3	63.2	81.7	75.0	100.0

Source: own calculations based on data released by cBonds.ru, rusBonds.ru and the Moscow Exchange.

¹ For more details on the role of state-owned companies in the market capitalization of securities issued by Russian companies, see Abramov A., Radygin A., Chernova M. State-owned enterprises in the Russian market: Ownership structure and their role in the economy. Voprosy ekonomiki (in Russian), No 12, 2016).

The low competition rate in the markets for underwriting and consulting services associated with offers of corporate and regional bonds is confirmed by the movement of the Herfindahl–Hirschman index (*Fig. 22*). From 2009 onwards, the market for investment and banking services rendered in the corporate bond market began to transform from a highly competitive into a moderately concentrated one, when the monthly HHI moved within the interval between 800 and 1,800. In 2017, the HHI in the segment of services for corporate bonds amounted to 1,009. From 2011, the market of services for issues of regional bonds has been balancing between moderately and highly concentrated zones. In 2017, when the HHI rose to 2,442, it shifted into the category of markets with a high concentration rate.

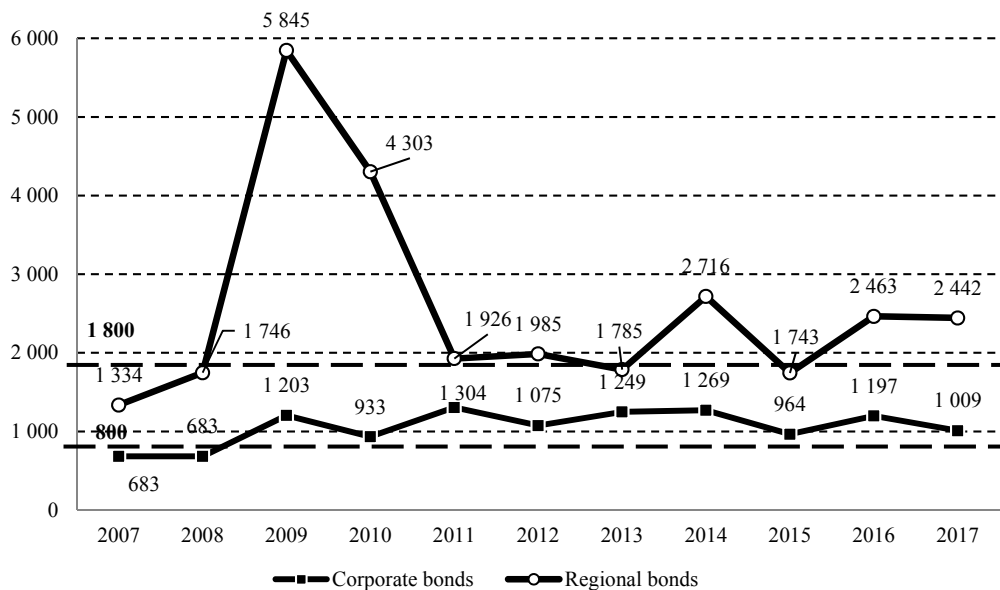


Fig. 22. The Herfindahl–Hirschman index, based on data on trade organization services for ruble-denominated corporate and regional bonds in 2007–2015

Source: own calculations based on data for 2007–2016 released by cBonds.ru.

After the introduction of sectoral sanctions in July 2014, Russian companies began to actively re-enter the Eurobond market only from 2016 onwards. In 2016, Russian corporate Eurobond issuers raised a total of USD 15.7 billion; in 2017, that index amounted to USD 27.4 billion, which represents a 74.5 percent rise on the previous year. Over the first three months of 2018 alone, they placed Eurobonds to the total value of USD 9.6 billion.

In 2016, the value volume of ruble-denominated corporate bonds was estimated to be USD 141 billion, that of Eurobonds – USD 136 billion; a year earlier, these two indices amounted to USD 133 billion and USD 139 billion respectively (*Fig. 23*). On the whole, over the period since the emergence of new geopolitical risks in 2014, the value volume of Eurobonds issued by Russian companies shrank from USD 182 billion in 2013 to USD 136 billion in 2016, or by 25.3 percent. Over the same period, the value volume of domestic corporate bonds in US dollar terms tumbled from USD 165 billion to USD 141 billion, or by 14.6 percent.

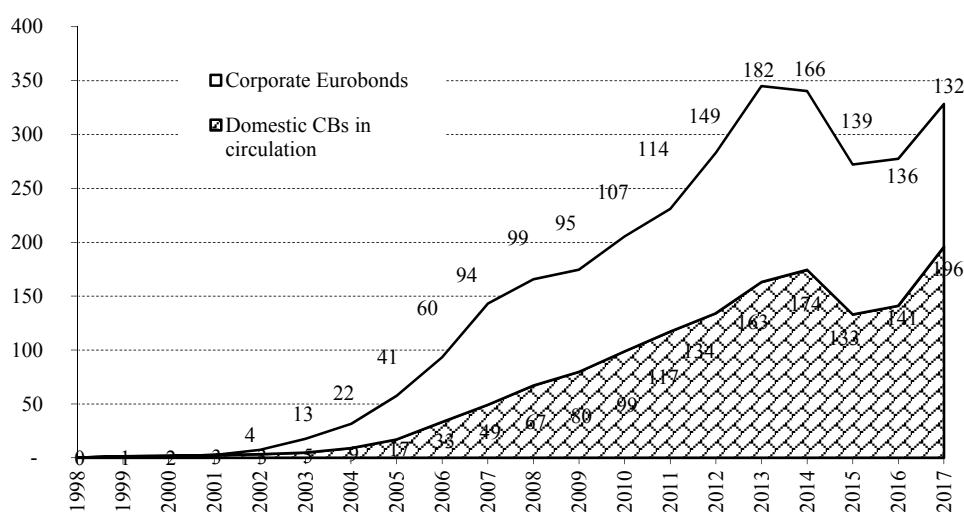


Fig. 23. The volume of Russian corporate bonds (CB) in circulation, billions of USD

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

Over the period 2015–2016, the Eurobonds issued by Russian companies became an integral part of the domestic financial market, thus greatly contributing to the reinstatement of the return rates of this type of securities at a normal level after their downfall in December 2014 – January 2015. Similarly to the liquidity level of ruble-denominated bonds, that of Eurobonds was actively sustained by resorting to the FX repo mechanism. In 2016, the value volume indices for repos in Eurobonds recalculated in ruble terms were stably above the corresponding index for repos in ruble-denominated bonds (*Fig. 24*). In 2017, as the Bank of Russia discontinued FX repos for the period of one year and 28 days, the FX repo segment gradually dwindled to zero.

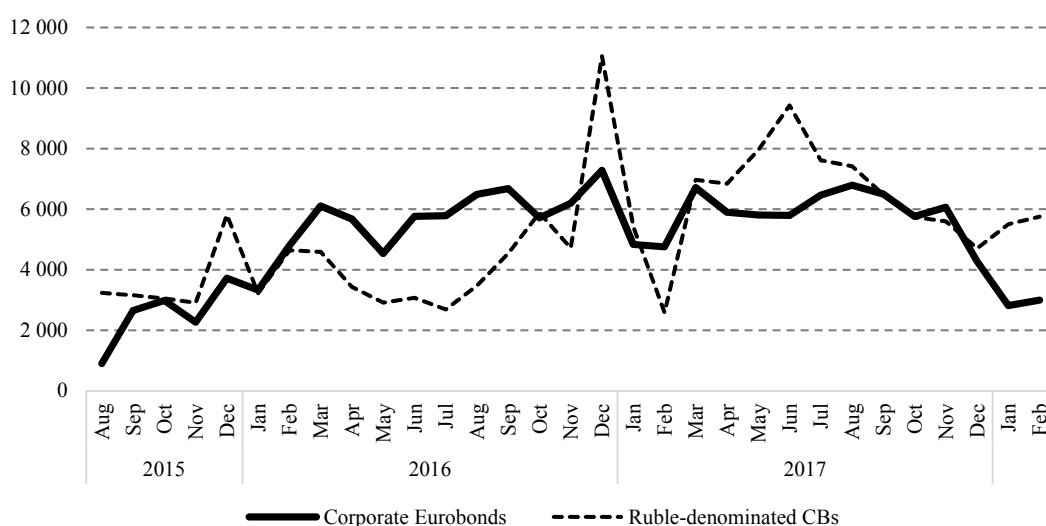


Fig. 24. The volume of repos in ruble-denominated corporate bonds and corporate Eurobonds on the Moscow Exchange, billions of rubles

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

In 2016, the primary market witnessed increased issuer and underwriter activity associated with the introduction of new forms of financial instruments. Among the most significant innovations we may point to the placement of perpetual subordinated bonds by Russian Agricultural Bank, the issuance of overnight bonds by VTB, and the asset-backed securities issued by the Agency for Housing Mortgage Lending in the framework of its Mortgage Factory project. In 2017, several big state banks – Sberbank of Russia, VTB Bank, and Russian Agricultural Bank began to actively sell their bonds to retail investors. In early 2018, Alfa Bank issued perpetual Eurobonds likewise oriented to retail investors.

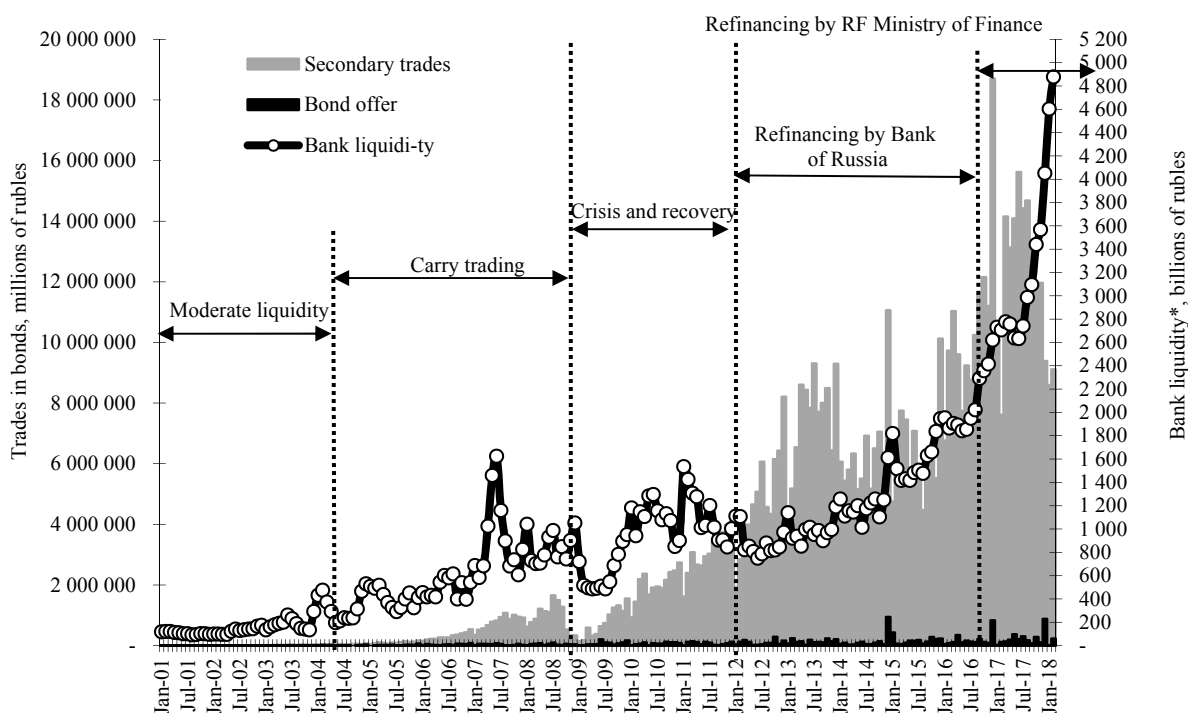
The demand for new corporate bond issues and the volume of transactions on the secondary market was largely determined by the domestic money market's liquidity index. Since the early 2000s, we may note several periods, each of them differing by the specific factors that were responsible for market liquidity behavior, which in its turn influenced the market for corporate bonds (*Fig. 25*). This, over the period from January 2001 through July 2004, the liquidity index was moderate, the demand for corporate bonds being sustained by domestic banking sources and the monies in the type-C accounts of non-residents, which had been frozen after the default. Over the period from August 2004 through August 2008, after Russia was granted an investment grade rating by international rating agencies and until the onset of crisis in 2008, alongside the ruble's stabilization, carry trading strategies were employed,¹ when both the liquidity index and the demand for bonds were sustained by cheap foreign loans. The period from September 2008 through August 2011 was that of crisis and post-crisis recovery, when the monetary authorities were keeping the banking system's liquidity at an acceptable level by relying on centralized funding sources, while at the same time imposing a constraint on it being used as corporate and consumer loans in the form of a high rate of refinancing. Over the period from September 2011 through January 2016, liquidity was sustained in the main by the Bank of Russia's repo transactions designed to refinance banks.

From January 2016 until the present day, the principal factor sustaining the banking system's liquidity has been the accumulation of funds in the bank accounts of budget funding recipients resulting from budget expenditures being covered by allocations from the Reserve Fund, i.e. budgetary sources. It is this particular factor that produced, from 2016 onwards, the excess liquidity phenomenon (money overhang) in the banking system, when ruble-denominated bonds and the Bank of Russia's deposit auctions became the main liquidity absorption mechanisms. In 2017, yet another mechanism was launched - general collateral certificates (GCC) issued by the National Clearing Center of the Moscow Exchange. The low returns of these instruments were secured by the direct access of biggest non-financial companies to the National Clearing Center's services.

In 2017 and in January-February 2018, the rapid money overhang growth in the banking system, its mean index for February 2018 amounting to RUB 4.9 trillion, was followed by a sharp plunge in the volume of trades in corporate bonds, from RUB 15.6 trillion in June 2017 to RUB 9.1 trillion in February 2018, or by 41.7 percent. That plunge was caused by the shrinking value volume of repos in corporate bonds resulting from the reorganization, by the Bank of Russia, of three major Russian banks and the switchover of borrower demand from

¹ According to the Bank of Russia's definition, carry trade is a trading strategy that involves borrowing at a low interest rate and investing in a financial asset that provides a higher rate of return. It is employed by forex and stock market participants for deriving income in the form of the positive interest rate differential between two currencies or two different forward points. (Financial Overview: Monetary Policy. Information and Analytical Materials, Bank of Russia, No 4, Q4 2016, pp. 36–37).

repos in bonds to repos in GCCs caused by their desire to reduce the cost of short-term loans, and also some other factors.



* Bank liquidity is understood as banks' residuals on correspondent accounts and deposits with the Bank of Russia.

Fig. 25. Operations with corporate bonds and bank liquidity over the period from January 2001 through February 2018

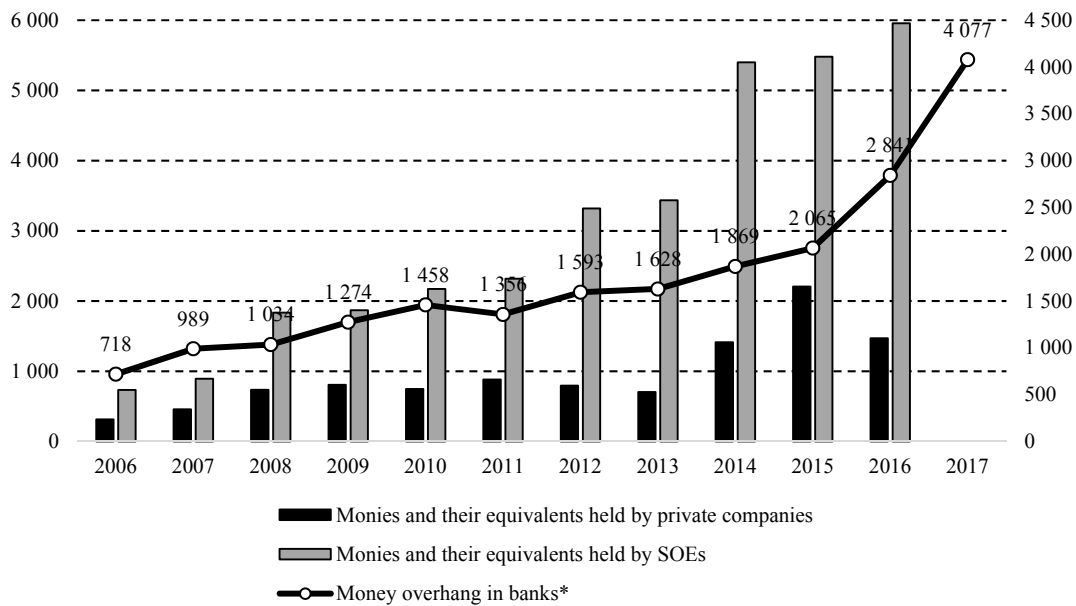
Source: own calculations based on data released by the Bank of Russia and the Moscow Exchange.

The speedy money overhang growth in the banking system, which over the period 2006–2017 jumped from RUB 0.7 trillion to RUB 4.1 trillion, or 5.7 times, can largely be explained by the increasing idle money kept as residuals on the accounts of non-financial companies with banks, meaning first of all biggest state-owned enterprises (SOE). This is confirmed by data in *Fig. 26*, describing the amount of cash residuals kept by 145 public companies with the highest capitalization indices, including 44 SOEs.¹ The total amount of residuals kept by SOEs on their bank accounts increased from RUB 2.3 trillion in 2011 to RUB 6.0 trillion in 2016, or 2.6 times; over the same period, the amount of residuals kept by private companies increased from RUB 0.9 trillion to RUB 1.5 trillion. The residuals growth peak in the SOE sector occurred in 2014–2016.

In a sense, the emergence of money overhang demonstrated by the banking system and biggest public companies, and primarily by SOEs, is an irrational process, because it actually means a redistribution of resources from investment in and development of businesses in the real sector to short-term speculative deals like repos in the financial market. The factors preventing the overflow of these resources into the real sector have to do with the investment climate issues and the Bank of Russia's high key rate relative to the current inflation index. The

¹ In this case, SOEs are understood as those companies where the aggregate stake held by the state, both directly and indirectly, is above 25 percent of voting shares.

existence of money overhang in the economy and the banking system is one more factor that is fraught with inflation and national currency depreciation risks.



* Banks' residuals on correspondent accounts and deposits with the Bank of Russia.

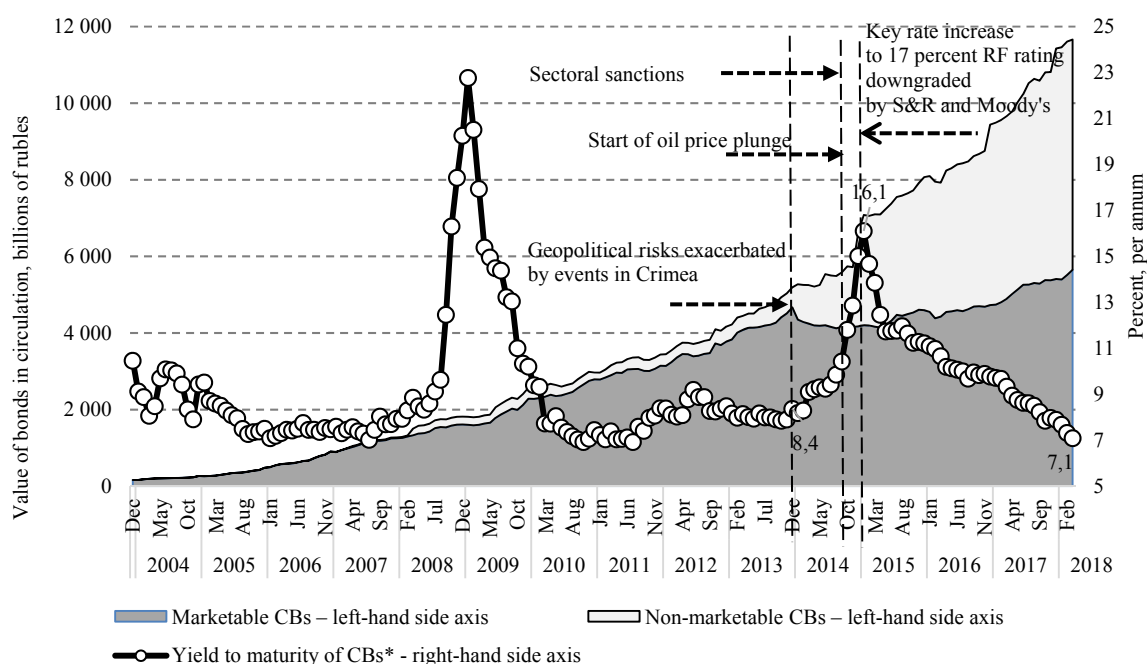
Fig. 26. Banks' money overhang and the cash residuals in the accounts of private and state-owned companies (SOEs), billions of rubles

Source: own calculations based on data released by the Bank of Russia and financial reports released by public companies.

In February 2018, the average yield of IFX-Cbonds portfolio amounted to 7.1 percent per annum, thus diving below its 2013 index,¹ the latter being observed prior to the geopolitical shocks and the introduction of sectoral sanctions in 2014 (*Fig. 27*). This was achieved in the main by the moderately tough monetary policy, maintained sustainability of the budgetary system, and lowering inflation.

At the same time, in 2014, growth of the corporate bond market began to be secured by the increasing volume of non-marketable bond issues that had no market quotes on the exchange. In 2017, the relative share taken up by the marketable issues of ruble-denominated corporate bonds in their aggregate market capitalization index shrank to 47.3 percent vs. 50.1 percent in 2016. In 2017, the value growth rate of marketable corporate bond issues in circulation was 14.5 percent, while that of non-marketable issues amounted to 27.7 percent. The lower value growth rate of marketable corporate bond issues was strongly linked to the freeze of pension savings, the latter previously having been one of the major sources of new money inflow on the corporate debt market.

¹ The yield to maturity of IFX-Cbonds portfolio in December 2013 was 8.4 percent per annum.



* The yield to maturity of IFX-Cbonds portfolio.

Fig. 27. The value of Russian corporate bonds in circulation and the yield to maturity of IFX-Cbonds portfolio over the period from December 2003 through March 2018

Source: own calculations based on data released by cBonds.ru

As demonstrated in *Fig. 28*, over the period from July 2003 through March 2018, Russia's domestic corporate bond market experienced two shocks: in February 2009, when the yield index of IFX-Cbonds portfolio rose to 24.8 percent per annum with the subsequent plunge of its duration index to 0.8 years; and then in late December 2014, when its average yield increased to 17.0 percent per annum, and its duration index declined to 0.7 years. The shock of 2014 was caused in the main by the introduction of sectoral sanctions in July 2014 and the sharp tumble of oil prices from September 2014.

From H2 2015 onwards, thanks to the efforts of Russia's monetary authorities, the situation in the domestic debt market became more stable. By April 2, 2018, the yield index of IFX-Cbonds portfolio had dropped to 7.24 percent per annum, and its duration index increased to 2.82 years. These parameters are significantly better than those recorded as of December 30, 2013, when its yield index amounted to 8.39 percent per annum, and its duration index – to 1.99 years.

Among the corporate bonds issues, the highest volume of trades on the exchange market in 2017 was demonstrated by Issue 3 of Transneft bonds, several issues of Rosneft bonds, and one issue of VEB bonds.

Thus, the drivers of growth in the corporate bonds market differed over time, but were nevertheless represented in the main by short-term sources of funds and short-term strategies. The deficit on the market for long-term assets and investment climate instability are the factors that suppress growth in the market for non-government borrowing.

The dominating role of the money market in the overall structure of transactions in the secondary market for corporate bonds on the Moscow Exchange is illustrated by *Fig. 29*. In February 2018, the relative share of repos in the total value volume of trades in corporate bonds

amounted to 96.0 percent. At the same time, only 1.6 percent of these were market transactions, i.e., corporate bonds were traded in an anonymous auction market; and 2.4 percent, in terms of their value volume, were traded in the NTM segment. For reference: in 2005, the relative share of repos was 28.0 percent, and that of market transactions – 11.5 percent; the remaining 60.6 percent were negotiated trades.

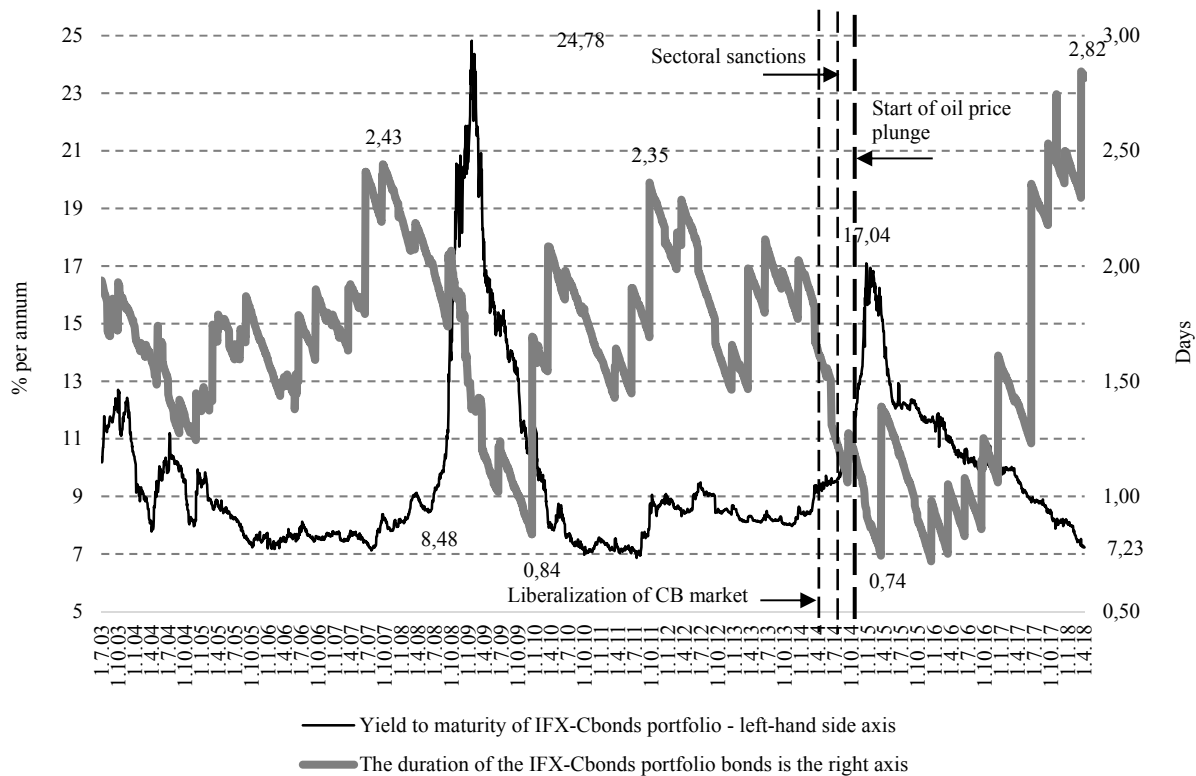


Fig. 28. The yield to maturity and duration indices of IFX-Cbonds portfolio over the period from July 1, 2003 to April 2, 2018

Source: own calculations based on data released by cBonds.ru

The low liquidity of market transactions in corporate bonds on the exchange makes market-based and fair pricing of these instruments difficult and gives rise to risks for the accounting policies of financial institutions.

As shown in Fig. 30, a surge in the volume of repo deals in the corporate bond market usually coincides with the 'government support wave' sweeping across the money market in response to shock-triggered situation. The first wave occurred after the 2008 crisis and continued until H2 2011. The next wave of the Bank of Russia's support for the market through the repo mechanism was launched in late 2011 in response to the Eurozone crisis and continued until December 2015. From January 2016 onwards, the major money market growth factors became the support provided by the RF Ministry of Finance and the increasing money overhang in banks, the latter being redistributed through the repo market by settlements with the National Clearing Center. In this connection, an important role in supporting the Eurobond market was played by FX repos, their volume increasing from 2015 until H2 2017(Fig. 24).

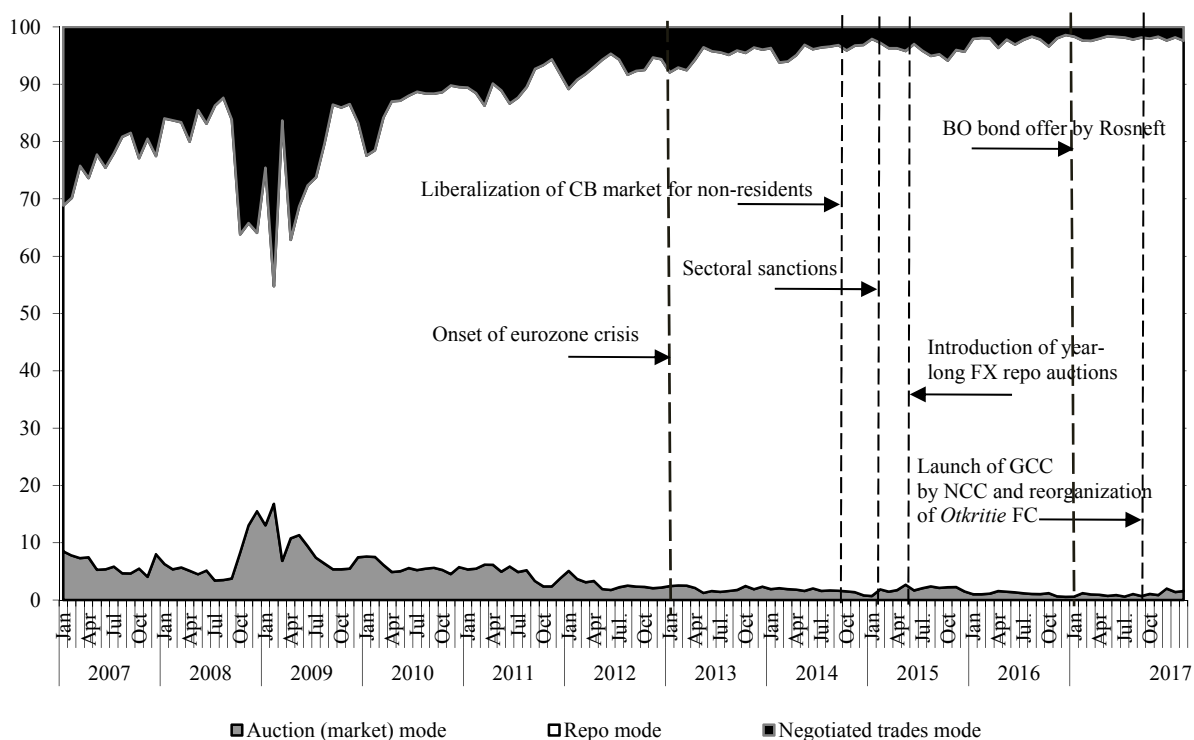


Fig. 29. The structure of trades in corporate bonds, including Eurobonds, on the Moscow Exchange, percent

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

The total value volume of trades in corporate bonds on increased from RUB 126.8 trillion in 2016 to RUB 150.7 trillion in 2017, or by 18.9 percent. Meanwhile, over the same period, the volume of repo transactions was increasing at an accelerated rate relative to the other trading modes. Thus, the volume of repo deals jumped from RUB 122.6 trillion in 2016 to RUB 146.4 trillion in 2017, or by 19.4 percent; that of market transactions increased from RUB 1.3 trillion to RUB 1.4 trillion, or by 5.1 percent; and that of negotiated trades increased from RUB 2.9 trillion to RUB 3.0 trillion, or by 3.1 percent.

However, from H2 2017 onwards, the value volumes of trades in corporate bonds began to shrink at a significant rate, the deepest plunge being demonstrated by the money market segment. In February 2018, relative to August 2017, the monthly volumes of trades in corporate bonds declined as follows: in the repo segment – from RUB 14.2 trillion to RUB 8.7 trillion, or by 38.4 percent; in the segment of market transactions – from RUB 154 billion to RUB 143 billion, or by 7.3 percent; in the segment of negotiated trades – from RUB 321 billion to RUB 220 billion, or by 31.6 percent. If the plunging volume of market transactions can be explained by the fewer workdays in February than in August, the plunge of the repo market was caused by more serious factors, the three most important ones being as follows: The reorganization procedures in several major bank; the curtailing, by the Bank of Russia, of FX repo deals; and growth of the alternative liquidity market in the form of GCC. In H2 2017, the Bank of Russia appointed temporary administration teams and began to audit several big banks that had previously been active players in the repo market: in August – *Otkrytie FC Bank*; in September – *B&N Bank* and *Rost Bank*; in December – *Promsvyazbank*. Their reorganization and recovery, financed from the central source, saved them from the necessity to refinance by

resorting to the more expensive repo market instruments. In November 2017, the Bank of Russia announced that it would discontinue FX repos for the period of 28 days and one year, this being an important method of maintaining the liquidity of corporate Eurobonds. Besides, the fast growth of the market for repos with GCCs made it unnecessary, in many cases, to resort to the more expensive repos in bonds.

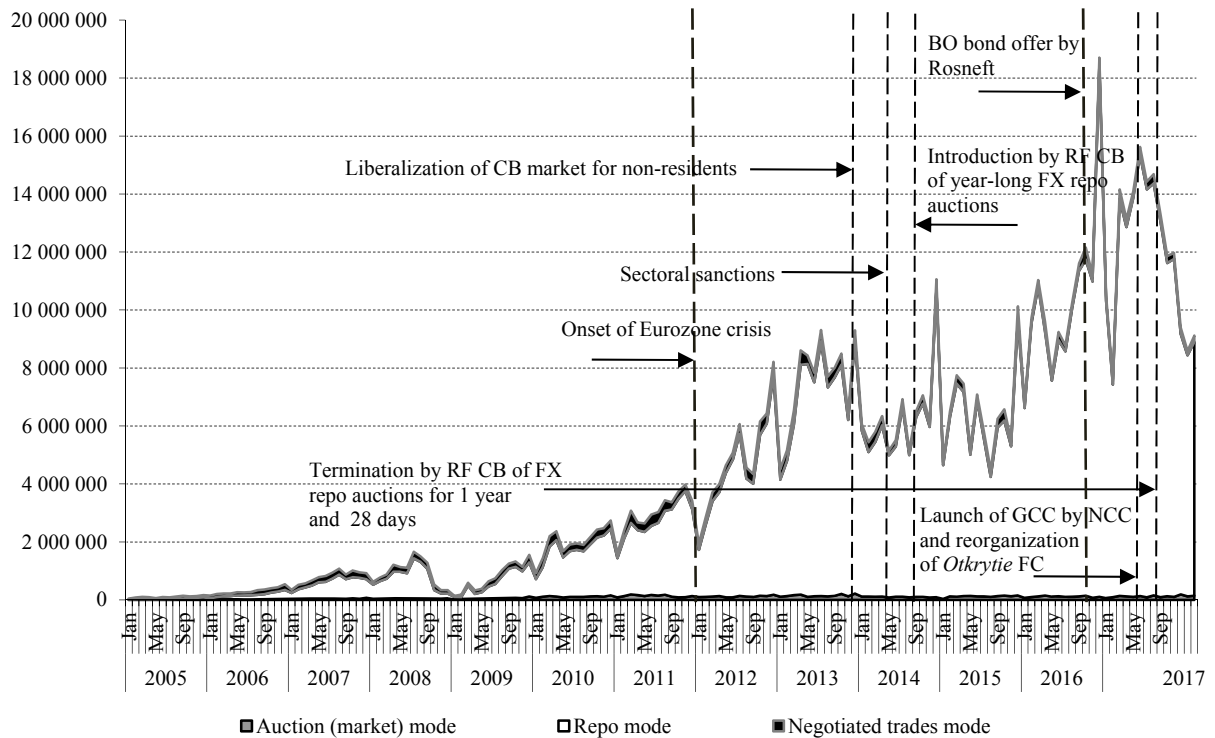


Fig. 30. The value volume of trades in corporate bonds, including Eurobonds, on the Moscow Exchange, millions of rubles

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

Thus, over the past 10–12 years, the corporate bonds market's behavior has been shaped in the main by changes in the money market segment. So far, the role of the segments of market transactions and negotiated trades has been relatively modest. As shown in Fig. 31, from 2011 onwards, market transactions and negotiated trades have not been demonstrating such strong growth trends as the repo segment that we discussed in the previous subsection. Among all the events that influenced the market transactions and NTM segments, the most noteworthy one is the decision concerning the pension savings freeze, introduced from January 1 2014, and still in effect.

As can be seen from Table 8, the average annual volume of market trades in corporate bonds over the three year preceding the pension savings freeze (2011–2013) was RUB 1.6 trillion vs. RUB 1.3 trillion over the three subsequent years (2014–2016), i.e., after the freeze the volume of market trades in corporate bonds shrank by 17.0 percent. It is also demonstrated that the freeze caused a shrinkage in the NTM segment by 24.1 percent. At the same time, over the same period, the average trading volume in the money market gained nearly 60 percent. With certain reservations, on the basis of these facts it can be assumed that the pension savings freeze from 2014 onwards produced a significant negative effect on the liquidity index of the corporate

bonds market on the stock exchange. This negative effect could not be offset by the effects of liberalization of depository services in the corporate bonds market for non-residents, introduced from February 2014.

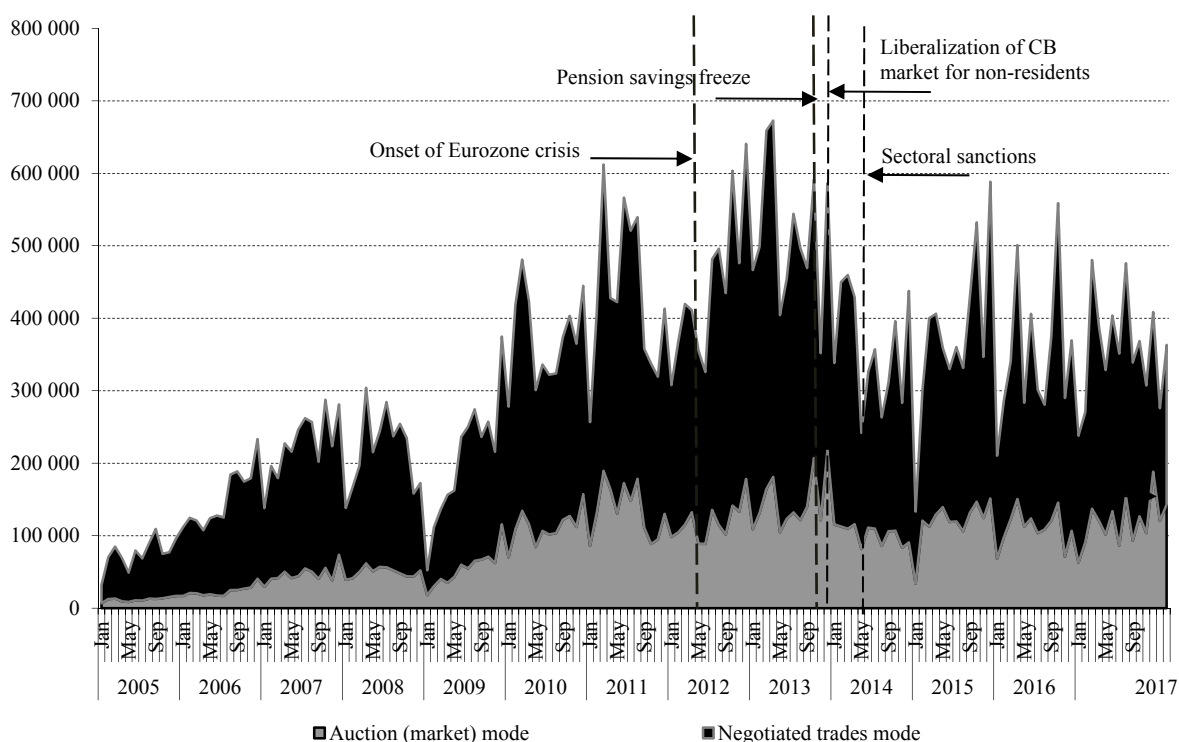


Fig. 31. The value volume of market transactions and negotiated trades in corporate bonds, including Eurobonds, on the Moscow Exchange, millions of rubles

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

Table 8

Analysis of the effects of pension savings freeze on liquidity in the corporate bonds market on the Moscow Exchange

Trading modes	Average annual trading volume on Moscow Exchange, billions of rubles		Change, percent
	2011–2013	2014–2015	
Market transactions	1,604	1,332	-17.0
NTM	3,961	3,006	-24.1
Repo	55,977	89,468	59.8

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

Fig. 32 analyses the relative shares of different groups of financial organizations (private and public companies, the Bank of Russia) in the aggregate volume of trades in bonds on the Moscow Exchange, including market transactions, negotiated trades and repos.¹ The distribution of relative shares of various participants in trades in bonds in the total trading turnover on the exchange strongly depends on the banking system's refinancing methods.

¹ Including corporate, regional and government bonds. From August 2015, the Moscow Exchange no longer discloses information on its monthly trades volume for each bond category.

During the period of the Bank of Russia's active refinancing of the banking system through repo operations from September 2011 through January 2016, the role of Bank of Russia and big state banks in exchange trades in bonds was very prominent. Thus, for example, in 2012 the Bank of Russia and SOEs accounted for 35.5 percent and 29.1 percent respectively of the total volume of exchange trades in bonds, or for 64.6 percent if taken together.

As direct repos with the Bank of Russia gave way to refinancing through repos with the central counterparty where bonds were used as collateral, the relative share of the Bank of Russia shrank significantly, while that of SOEs increased, reflecting their increasing importance as liquidity sources in the banking system.

In H2 2017, several big banks (*Otkrytie FC Bank*, B&N Bank, Rost Bank, and Promsvyazbank), which used to play a major role in exchange trades in bonds, especially in the repo segment, were taken over by the Bank of Russia, and so became state-controlled entities. This translated into a soaring relative share of SOEs and the Bank of Russia as their source of borrowing in the total volume of trades in bonds. Thus, for example, in August 2017, the relative shares of SOEs and the Bank of Russia amounted to 37.1 percent and 20.6 percent respectively. However, later on, after the reorganization of those banks and their switchover to other centralized funding sources instead of repo deals, the relative shares of the Bank of Russia and SOEs shrank back to their previous level. In February 2018, the Bank of Russia's relative share amounted to 1.8 percent, that of SOEs – to 27.2 percent. It may be assumed that alongside the reorganization of these banks, the volume of repos in bonds will decline further, because these deals will no longer be used as funding sources by the banks experiencing financial difficulties.

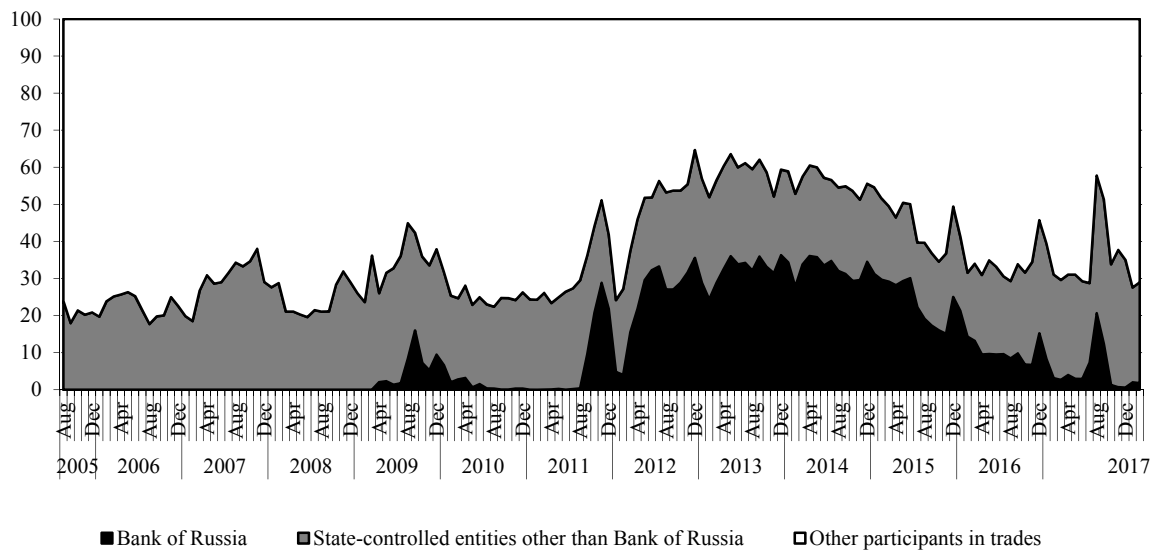


Fig. 32. The relative shares of private brokers and state-owned entities in trades in bonds on the Moscow Exchange, percent

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

As shown in *Fig. 33*, the role of non-residents and domestic private investors in exchange trades in bonds (all bond categories) has been relatively modest. In February 2018, non-residents accounted for only 7.4 percent of their total value volume, and individuals – for 0.8 percent. One exception is the category of federal bonds (OFZ), where non-resident take up more than a third of total investment.

In 2017, the OFZ-N issue was launched that targeted retail investors. Some regional administrations and corporations likewise began to encourage individuals to buy their bonds. However, the progress so far achieved in that sphere has been modest in qualitative terms. It could be said that some additional measures are needed in order to encourage households to get more actively involved in the domestic market for debt-based financial instruments.

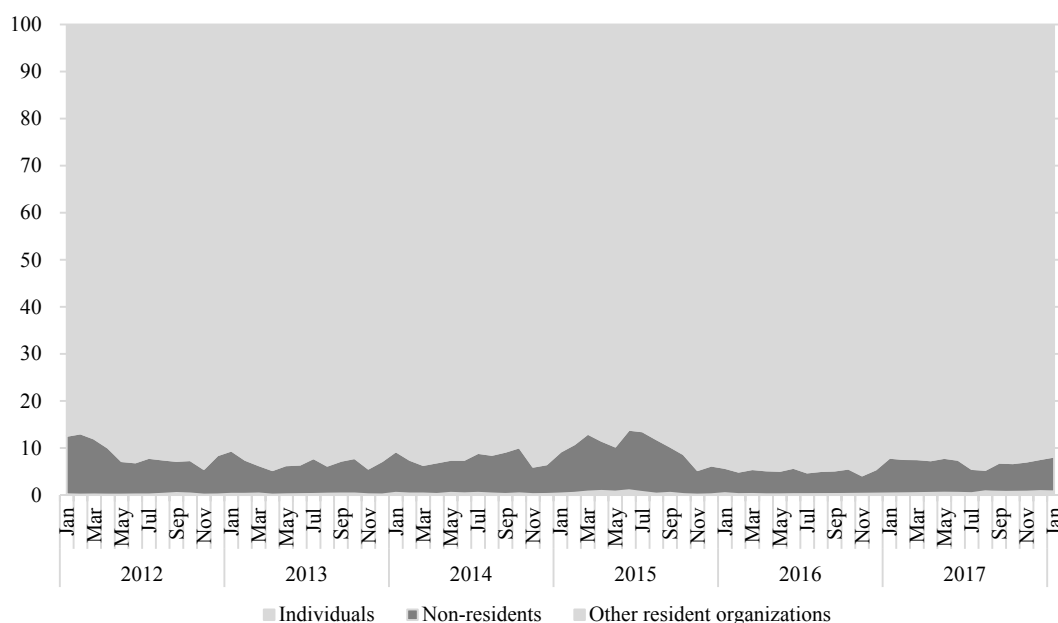


Fig. 33. The structure of investors participating in trades in bonds on the Moscow Exchange from January 2005 through February 2018, percent

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

An important criterion of the corporate bond market's performance is its ability to attract investments in the assets of companies operating in the real sector as well as in the assets held by banking structures. The information on how the resources attracted by Russian companies through bond offers are used by them to ensure growth of their fixed assets is released by *Rosstat* on the basis of surveys of companies-issuers of securities. *Rosstat's* data demonstrate that, over the period 2000 to 2015, only a small fraction of resources generated by corporate bond issues was actually invested in fixed assets.

In 2015, out of the total annual value volume of bond offers, which amounted to USD 26 billion, only USD 2.6 billion, or 6.6 percent, was invested in fixed assets (*Table 9*). Available statistics most clearly indicate that the market for corporate bonds has no noticeable effect either on investment in fixed assets or on the rate of economic growth. As was mentioned earlier, corporate bonds issues are *de-facto* the sources of short-term finance, and so companies prefer to use the income generated by bond placement mostly for replenishing their current assets and refinancing their old debt.

Since 2016, *Rosstat* no longer releases information on the relative share of bond issues in the structure of source of investment in fixed assets, which may be interpreted as the recognition of the insignificance of the stock market for this type of investment. However, this fact does

not rule out the importance of the issue represented by the still insufficient use of corporate bonds as a source of targeted funding for investment in the real sector and fixed assets.

Table 9

**The parameters of domestic market for ruble-denominated corporate bonds
(billions of USD)**

	Bonds in circulation	Secondary market, including repo	Bond offer	Investment in fixed assets generated by bond offer		
				billions of USD	the same, as percentage of capitalization	the same, as percentage of placement volume
2000	2	0.2	1.1			
2001	3	1	0.8			
2002	3	2	2	0.1	3.0	6.7
2003	5	8	3	0.1	2.1	3.8
2004	9	15	5	0.1	1.1	2.0
2005	17	44	9	0.3	1.8	3.3
2006	33	135	17	0.1	0.3	0.6
2007	49	371	18	0.2	0.4	1.1
2008	67	457	16	0.2	0.3	1.2
2009	80	293	29	0.1	0.1	0.3
2010	99	757	28	0.03	0.03	0.1
2011	117	1,237	31	0.014	0.01	0.05
2012	134	1,866	39	0.14	0.1	0.4
2013	163	2,839	54	0.05	0.03	0.1
2014	174	2,032	46	0.2	0.1	0.4
2015	133	1,277	29	2.6	1.9	6.6
2016	141	1,895	35	no data	no data	no data
2017	196	2,732	49	no data	no data	no data

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

3.4. The market for government bonds

Over the period 2016–2017, in contrast to the situation in 2014–2015, the volume of borrowings attracted by the RF Ministry of Finance through the issuance of government securities was higher than the volume of government debt redemption. Thus, these debt instruments became a true source of budget deficit financing, raising net borrowing, according to CBonds statistics, in the amount of RUB 547 billion and RUB 1,270 billion respectively.

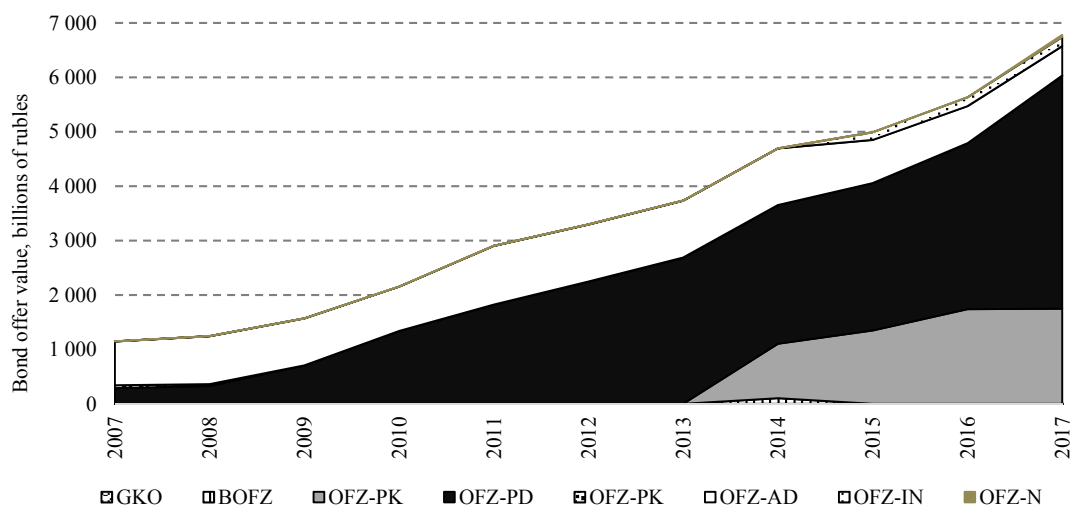
The evolution of the OFZ structure (*Fig. 34*) was largely determined by the RF Ministry of Finance's debt policy priorities and the roles of various categories of investors. In the study by Lu and Yakovlev,¹ three phases in the OFZ market's development are identified: prior to the 2008 crisis; from mid-2009 through mid-2011; from mid-2011 onwards.²

Prior to the onset of financial crisis in 2008, when the budget was always drawn up with a surplus, the government had little interest in increasing the OFZ market. Against this background, the key sources of demand for government bonds were pension savings and bank assets, which were often targeted by the carry trading strategies. The participation of non-residents was still low-key, and they were represented in the main by speculative funds. Consequently, major roles in the structure of government bond issues were played by OFZ-AD (debt amortization federal loan bonds), because their parameters were convenient for pension funds, and by OFZ-PD (constant coupon income federal loan bonds) that were more oriented

¹ Lu, Y., Yakovlev, D. Exploring the Role of Foreign Investors in Russia's Local Currency Government Bond (OFZ) Market. IMF Working Paper, No WP/17/28, February 2017.

² It should be noted that this classification of phases in the OFZ market's development is very similar to the division of the corporate bond market's history periods suggested in our comments to *Fig. 25*.

to market investors because the coupon income was predetermined for the entire period until their maturity date. The less marketable issues of OFZ-FK (federal loan bonds with a fixed coupon yield), which had been used as a tool of renewing the government domestic debt after the default on GKO, were gradually leaving the market. In 2008, the relative shares of OFZ-AD, OFZ-PD and OFZ-FK in the structure of government securities amounted to 70.9 percent, 26.4 percent, and 2.7 percent respectively.



Note. Hereinafter, the following abbreviations are used:

BOFZ – zero-coupon federal loan bonds;

GKO – short-term zero-coupon government bonds;

OFZ – federal loan bonds;

OFZ-AD – debt amortization federal loan bonds;

OFZ-IN – federal loan bonds with a face value tied to the Russian Federation's official inflation rate;

OFZ-PD – constant coupon income federal loan bonds;

OFZ-PK – federal loan bonds with a floating coupon tied to the RUONIA rate;

OFZ-N – federal loan bonds for retail investors ('people's bonds').

Fig. 34. The value volume of GKO-OFZ offering over the period from 1993 through March 2018

Source: own calculations based on data released by the RF Ministry of Finance.

From 2009 through mid-2011, the RF Ministry of Finance was interested in borrowing as a source for covering budget deficit. To achieve that goal, it relied on OFZ-PD issues oriented to banks with surplus liquidity. The new bond issues were offered at a premium of 5–10 basis points.¹ Non-residents' demand for OFZ was low due to the uncertainty concerning the interest rate.

Since mid-2011 and until the present time, the OFZ market has experienced many important developments that significantly boosted the role of the market for government securities and caused some shifts in its structure. The key change was that from mid-2012 onwards, non-residents became the main providers of liquidity in the OFZ.² Their high demand for OFZ-PD, and from 2015 also for OFZ-PD, resulted in further shrinkage of the relative share of OFZ-AD.

¹ Lu, Y., Yakovlev, D. Exploring the Role of Foreign Investors in Russia's Local Currency Government Bond (OFZ) Market. IMF Working Paper, No WP/17/28, February 2017, p.10.

² Ibid, p.14.

Another factor that worked in the same direction was the freeze of pension savings in 2014–2018, which curtailed the demand of pension funds for OFZ-AD pension funds. It was in the interests of the RF Ministry of Finance that the relative share of OFZ-AD should be reduced: in 2016, the replacement, uninitiated by the Ministry, of OFZ-AD with a face value of RUB 63.7 billion by OFZ-PD with a face value of RUB 56.4 billion raised a significant amount of cash for the budget. At the same time, from 2015, federal loan bonds with a face value tied to the inflation rate (OFZ-IN) for institutional investors, and from April 26, 2017, similar bonds targeting retail investors (OFZ-N), were launched onto the market. As a result, the topmost positions in the structure of OFZ issues as of March 31, 2018 were occupied by constant coupon income federal loan bonds (OFZ-PD) and bonds with a floating coupon (OFZ-PK), their relative shares amounting to 65.0 percent and 24.9 percent respectively. The relative shares of debt amortization federal loan bonds (OFZ-AD), bonds with a face value tied to the inflation rate (OFZ-IN), and federal bonds for retail investors (OFZ-N) amounted to 7.0 percent, 2.5 percent, and 0.6 percent respectively.

In 2017, the highest trading indices among OFZ issues were OFZ-PK 29006 maturing in January 2025; OFZ-PD 26207 maturing in February 2027; OFZ-PD 26221 maturing in March 2033; and OFZ-PD (26218 and 26219) maturing in 2026–2031.

One of the key issues that must be dealt with in order to make an investment in OFZ an attractive option is to make the portfolio's yield to maturity move ahead of the inflation rate (*Fig. 35*). The positive phenomena observed since early 2016, including the notable decline in the rate of inflation and the stabilization of the ruble's exchange rate against foreign currencies, made it possible to once again, from March 2016 onwards, to offer positive yields of OFZ Cbonds-GBI portfolio in real terms.

The month-end results of March 2018 demonstrated that, while inflation in per annum terms amounted to 3.3%,¹ the yield of the OFZ portfolio was 8.4%. At the same time, on the whole over the period under consideration (January 11, 2010 – March 31, 2018), the average yield of 8.3% per annum was still notably below the inflation rate, whose average index was 10.0%.

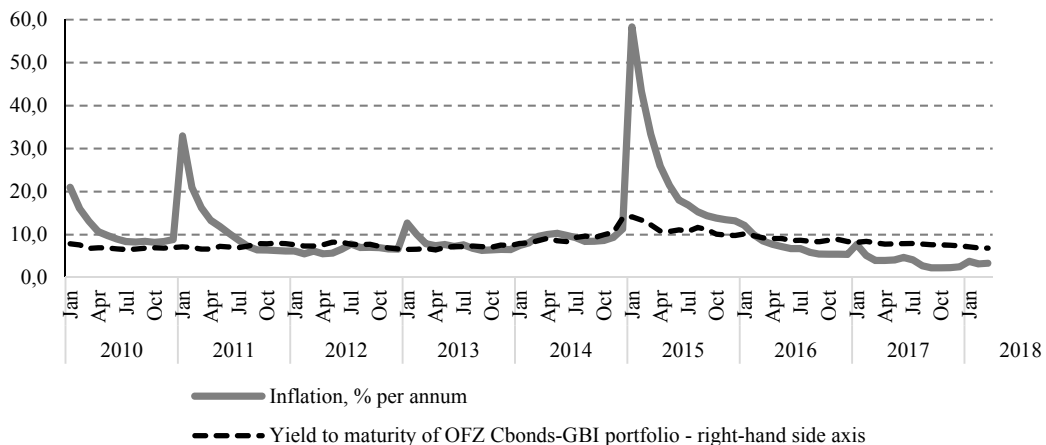


Fig. 35. The movement of inflation and yield to maturity of OFZ Cbonds-GBI portfolio over the period from January 11, 2010 to March 31, 2018

Source: own calculations based on data released by Rosstat and cBonds.ru

¹ When calculated as the inflation growth index for a current months relative to the previous month. According to Rosstat data, inflation in March 2018 amounted to 2.4 percent per annum relative to March 2017.

So, in spite of the complicated geopolitical and macroeconomic situation, the government securities market continued to develop smoothly and began to play an increasingly important role in budget deficit financing. Over the last three and a half years, the government and the Bank of Russia managed to stabilize the situation in the forex and financial markets. In terms of its yield indices in early 2017, the RF market for OFZ and Eurobonds was below its 2013 level, which was a time of relative geopolitical stability.

Similarly to the market for corporate bonds, the OFZ market displays more features of a money market than those of a stock market. The main stimulus for its domestic participants to acquire government bonds is the possibility to use them as collateral when borrowing money (*Fig. 36*). In February 2018, the share of repo transactions in the total value volume of trades in government bonds rose amounted to 90.5 percent. Only about 4.7 percent of all trades in government bonds were market transactions. In early 2017 – late 2018, the share of repo transactions in the total trades in government bonds gained 2–3 percentage points as a result of the shrinking repo market volume, for the same reasons as in the corporate bond market on the stock exchange (see comments to *Fig. 30*).

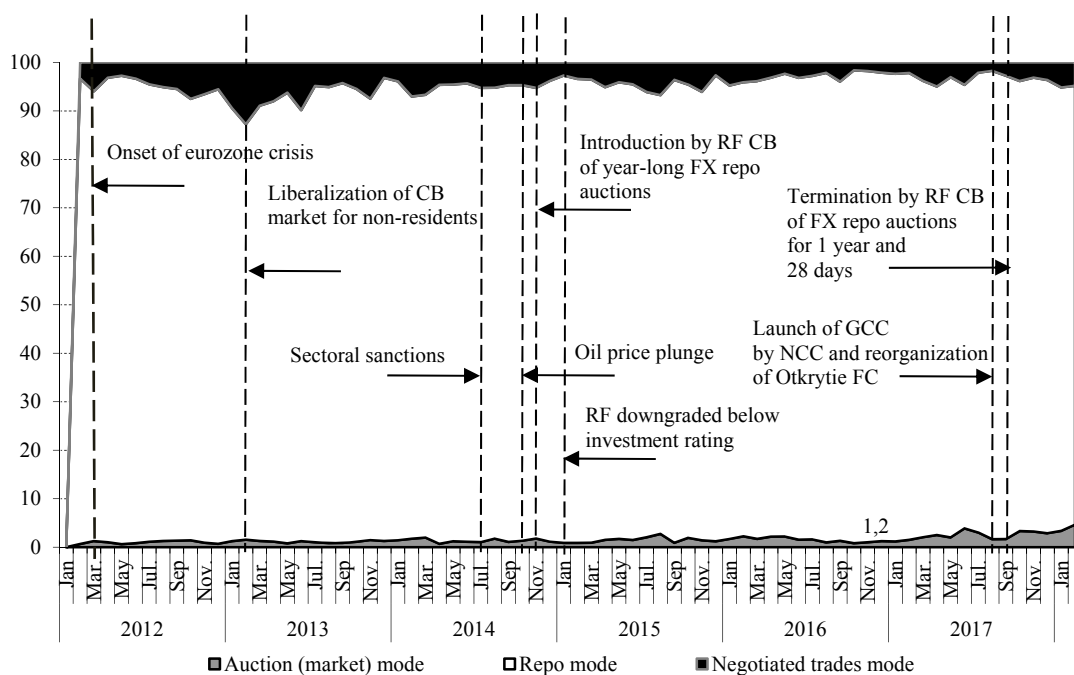


Fig. 36. The structure of transactions in federal bonds, including Eurobonds, on the Moscow Exchange from February 2012 through February 2018, percent

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

In 2017, the volume of repo transactions in government bonds increased relatively moderately, to RUB 117.2 trillion from RUB 113.6 trillion in 2016, or by only 3.2 percent (*Fig. 37*). A quite different situation was observed in the market transactions segment, where the volume of trades in government bonds soared from RUB 1.7 trillion in 2016 to RUB 2.9 trillion in 2017, or by 67.6 percent. The trading volume also increased in the negotiated trades sector - from RUB 3.3 trillion in 2016 to RUB 3.8 trillion in 2017, or by 12.7 percent. The growth rate slowdown in the government bonds sector of the money market occurred for the same reasons as in its corporate bonds segment: the reorganization of several formerly active participants in

the repo market, the termination of FX repos by the Bank of Russia, and a rise in the use of GCCs.

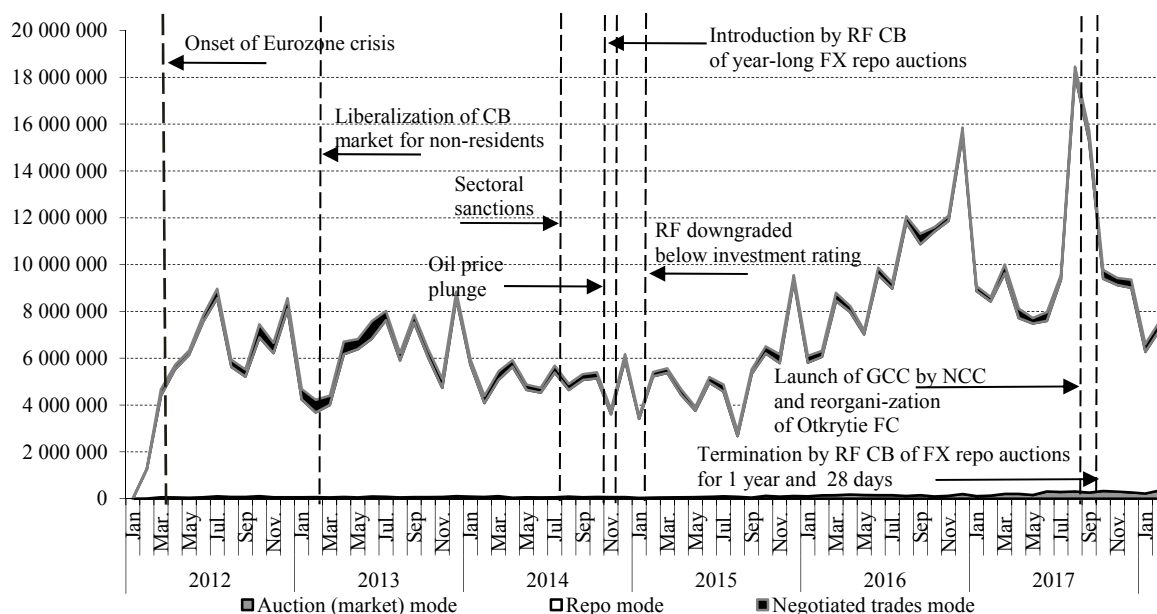


Fig. 37. The value volume of trades in federal bonds, including Eurobonds, on the Moscow Exchange from February 2012 through February 2018, millions of rubles

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

The decline of trading volume in money market for government bonds since September 2017 was even deeper than that in the corporate bond segment. The probable reason is that, in 2016–2017, in contrast to the situation in the market for corporate bonds, the most prevalent type of repos in government bonds, in terms of their value volumes, were RF Eurobond refinancing deals (Fig. 38). Therefore the ban on FX repos imposed by the Bank of Russia translated into a deeper plunge of the value volume of repos in government bonds compared with that of repos in bonds issued by private borrowers.

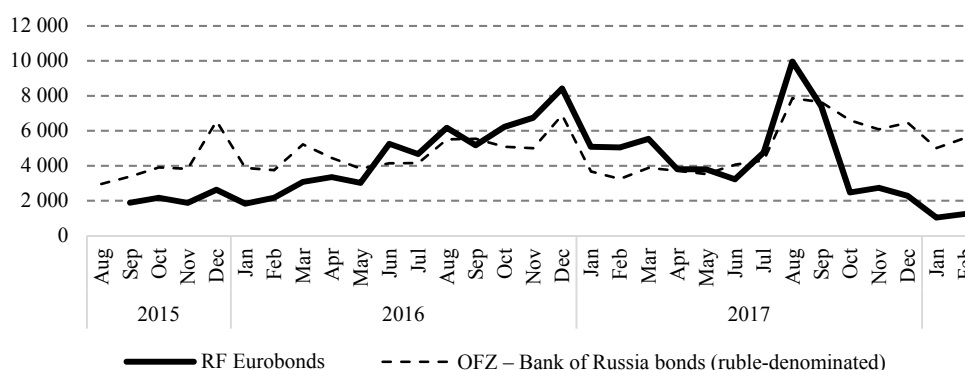


Fig. 38. The value volume of repos in OFZ and RF Eurobonds on the Moscow Exchange, billions of rubles

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

In contrast to the situation with corporate bonds (see *Fig. 31*), over the period from early 2015 through February 2018, the segment of market transactions in government bonds was demonstrating a positive growth trend. The value volume of market transactions in government bonds amounted to RUB 1.4 trillion in 2015, RUB 1.7 trillion in 2016, and RUB 2.9 trillion in 2017 (*Fig. 39*). The growth of market transactions in federal bonds was caused by an active inflow of non-residents into that market segment and the increasing interest in OFZ displayed by private investors in view of the high return rates of government securities in real terms, when the return rates of OFZ overshot those of bank deposits.

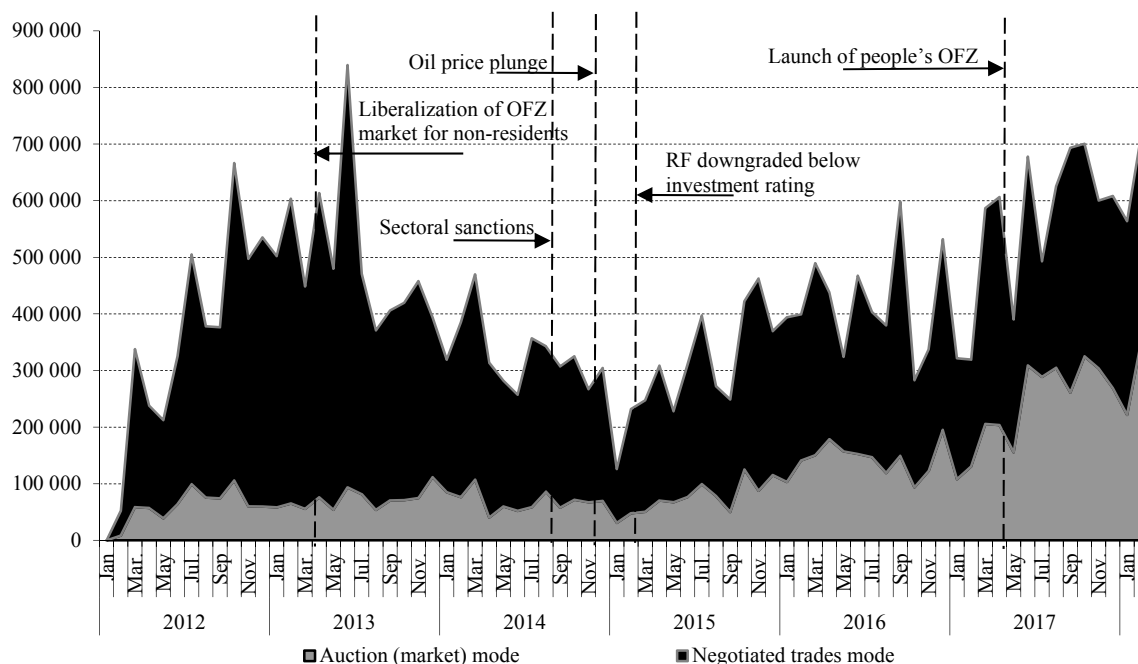


Fig. 39. The value volumes of market transactions and negotiated trades in federal bonds, including Eurobonds, in the Moscow Exchange from February 2012 through February 2018, millions of rubles

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

The opening, by Russia's central depository in February 2013, of nominal holder accounts for foreign clearing and settlement systems triggered an inflow of foreign investment into the domestic government debt market. The relative share of non-residents in the secondary market for OFZ increased from 6.5 percent in July 2012 to 28.1 percent in May 2013 (*Fig. 40*). After May 2013, it somewhat declined to 24.9 percent in December 2013 in response to the behavior of the global financial market caused by huge capital outflows from the developing markets after the US Federal reserve's announcement of its intention to raise its key rate. The period between January 2014 and January 2015 saw a succession of events that produced a very negative effect on Russia's financial market: the ever increasing geopolitical risks associated with the situation in the Crimea; the introduction of sectoral sanctions in July 2014; the downfall of prices in the oil market from September 2014; the ruble's depreciation; Russia's sovereign credit rating downgraded to junk by S&P as of 25 January 2015 and by Moody's as of 20 February 2015. As a result, in January 2015, the relative share of non-residents in the structure of trades in OFZ shrank to 18.7 percent. The measures introduced by Russia's

monetary authorities helped stabilize the situation in the financial and forex markets, thus creating incentives for non-residents to return to Russia's domestic market for OFZ, and so in January 2018 their relative share amounted to 33.9 percent.

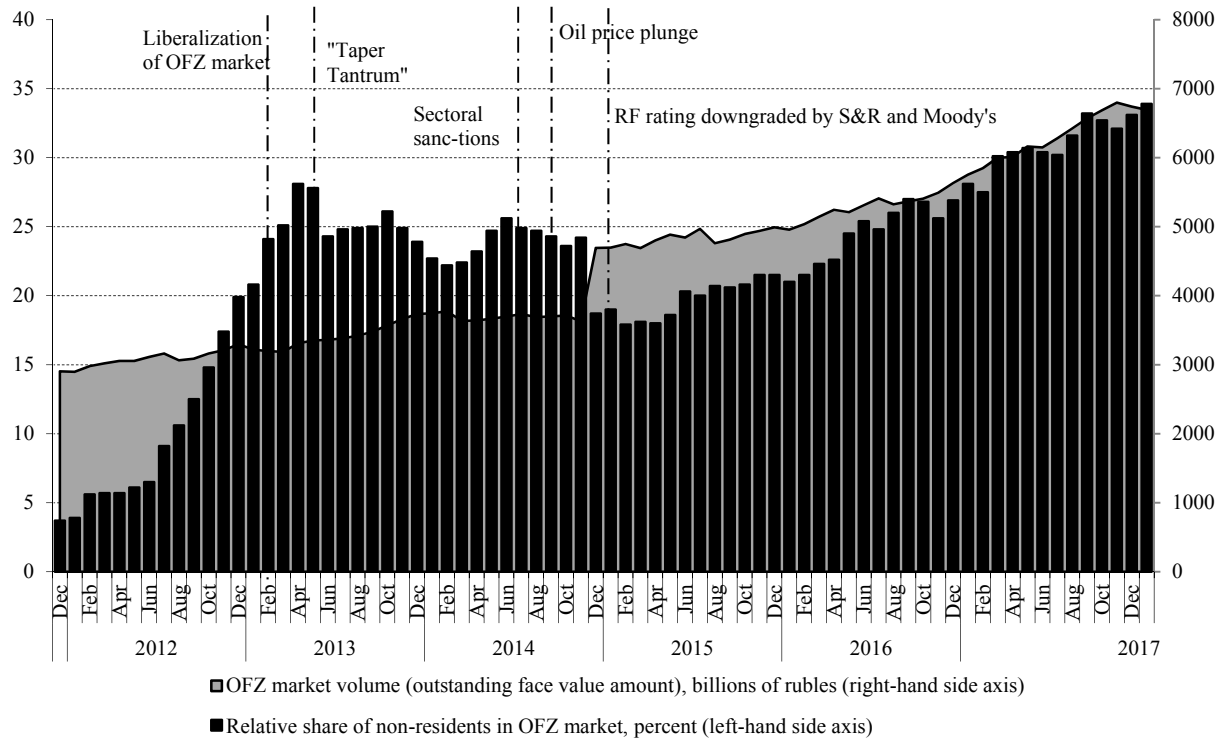


Fig. 40. The participation of non-residents in the OFZ market¹ from February 2012 through January 2018

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

Thus, due to the modest relative shares taken up in the domestic OFZ market by retail investors, pension savings and collective investments, and the concentration of banks predominantly in the money market for OFZ, non-residents were the most active group of investors trading in OFZ on the spot market (market and NTM transactions). In the future, the growth prospects of Russia's OFZ market will largely depend on whether or not it will manage to attract domestic institutional investors, and also, to a certain extent, retail investors, to the spot market for OFZ.

3.5. The derivatives market

The year 2017 saw a continuation of the trading activity decline in the market for derivatives with underlying securities, which had first become visible in March 2016 (*Fig. 41*).

The futures trading volume declined from RUB109.5 trillion in 2016 to RUB 77.6 trillion in 2017, or by 29.1 percent; the number of contracts – from RUB 1.89 billion to RUB 1.50 billion, or by 20.6 percent; and the number of transactions – from RUB 341.2 million to

¹ In this case, it is the relative share of transactions closed by non-residents in the total volume of market transactions and negotiated trades in OFZ on the Moscow Exchange.

RUB 254.1 million, or 25.5 percent. After having peaked in February 2016, the futures market turnover indices began to tumble rapidly.

The main factor behind the dwindling trading activity in the futures market for contracts with underlying securities from March 2016 onwards was the ruble's stabilization alongside the growth of Russian stock indexes in 2016 followed by their stagnation in 2017, which reduced the needs of market participants to hedge on the stock prices by trading in the derivatives market. The trading activity in the equity futures market was also kept in check by the raised stock exchange tariffs in that market segment and the replacement of flat fee by commission charged as a percentage of transaction value (introduced from October 2016), which made the derivatives market operations less attractive to high frequency traders.¹

In contrast to the futures market, the equity options trading segment managed to avoid a contraction in trading activity, both in 2017 and in 2016. The volume of options trading increased from RUB 3.9 trillion in 2015 to RUB 5.8 trillion in 2016, and to RUB 6.9 trillion in 2017, or by 47.9 percent and 18.9 percent respectively; the number of contracts jumped from 53.7 million to 72.5 million, and then to 83.7 million, or by 35.0 percent and 15.4 percent respectively; and the number of transactions – from 4.9 million to 6.1 million, and then to 6.7 million, or by 22.9 percent and 10.2 percent respectively.

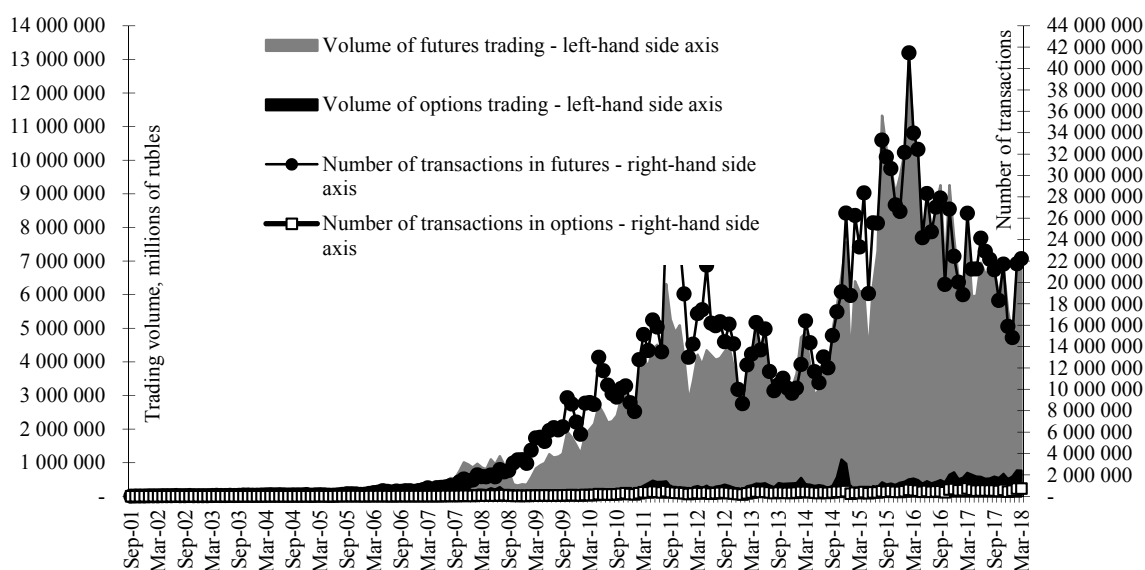


Fig. 41. The trading volume and number of transactions in the Moscow Exchange's futures market from September 1, 2001 through March 31, 2018

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

In response to the stabilization of the national currency's exchange rate, rising return rates of the stock indexes, and volatile commodity prices, the futures market structure on the Moscow Exchange in 2016–2017 tipped towards commodity and index futures, as the relative share of forex futures was shrinking (*Fig. 42*). The highest growth was demonstrated by the relative share of commodity futures; it was caused by the increasing demand for futures contracts for Brent crude, copper, sugar, and precious metals.

¹ M. Mesropyan. A lucrative October. *Vedomosti*, November 6, 2016.

In the futures market structure, the relative share of index futures jumped from 19.3 percent in 2015 to 28.6 percent in March 2018; that of equity futures – from 3.0 percent to 5.7 percent; and that of commodity futures – from 5.8 percent to 21.6 percent respectively. Meanwhile, the relative share of forex futures dived from 71.9 percent to 43.2 percent. As before, over the period 2016–2017 the demand for security futures remained low.

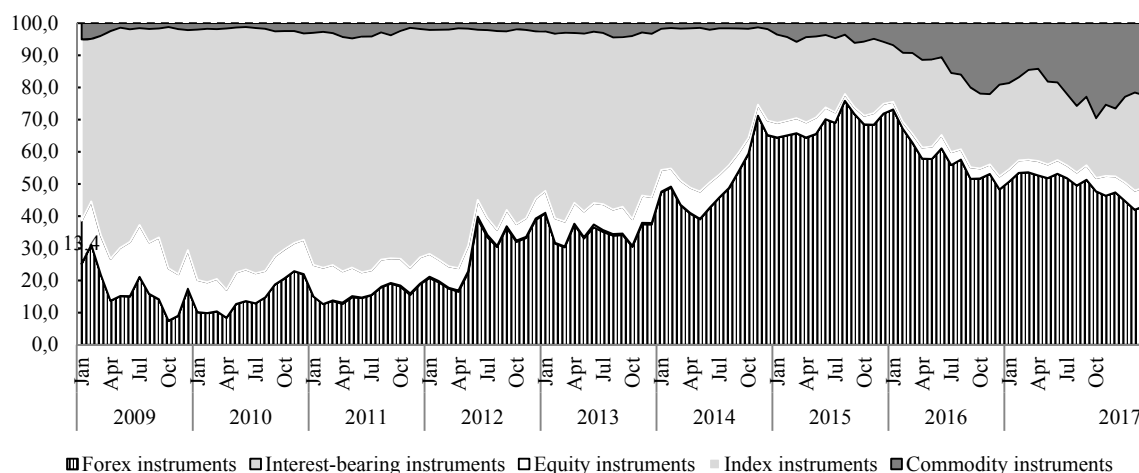


Fig. 42. The futures market structure on the Moscow Exchange over the period from January 2009 through March 2018, percent of value volume

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

In 2016–2017, the aforesaid factors were also shaping the structure of option transactions on the exchange market (*Fig. 43*). Within their structure, the relative share of transactions with index options increased from 50.7 percent in 2015 to 71.6 percent in March 2018, and that of commodity options – from 0.6 percent to до 2.6 percent. Over the same period, the relative share of forex options, on the contrary, shrank from 46.0 percent to 25.4 percent; and that of equity options – from 2.7 percent to 0.5 percent.

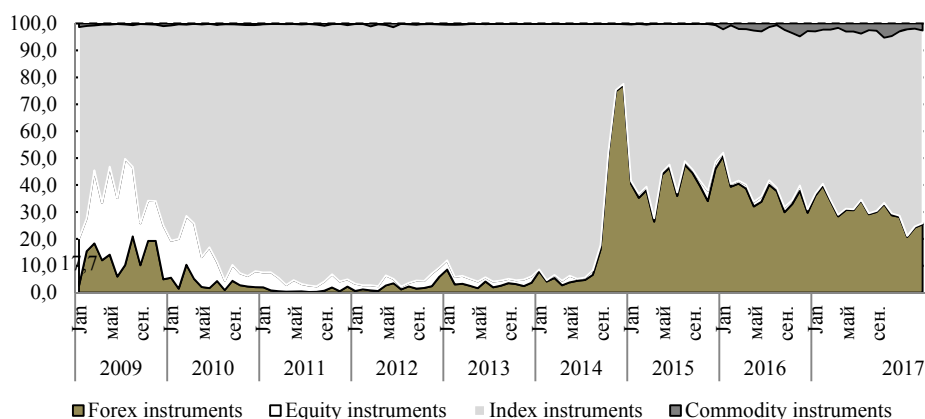


Fig. 43. The options market structure on the Moscow Exchange over the period from January 2009 through March 2018, percent of value volume

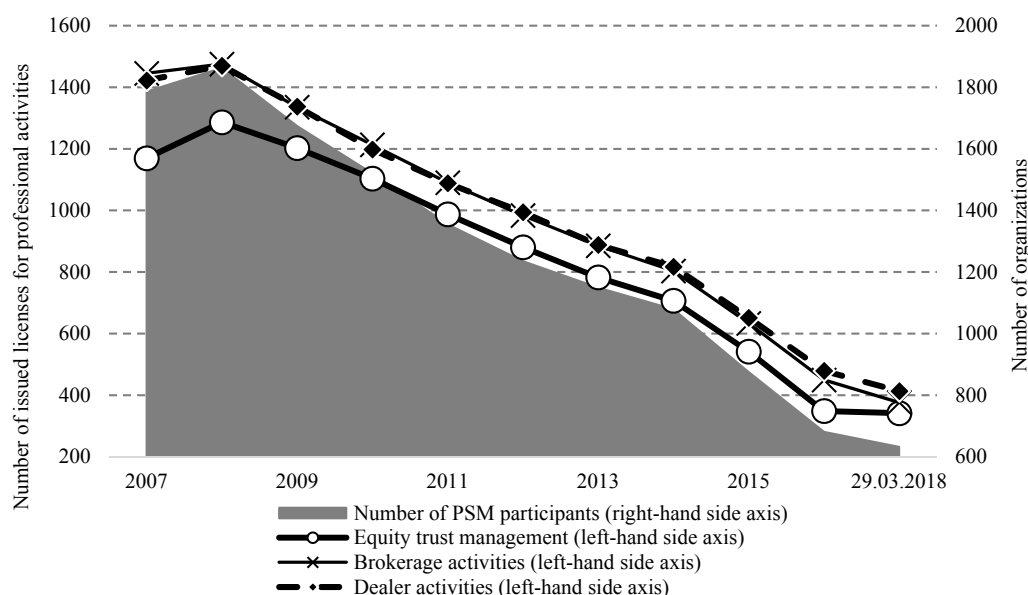
Source: own calculations based on data released by the Moscow Exchange.

3.6. Financial intermediaries and exchange infrastructure

The slow progress in the development of Russia's domestic stock market coupled with the tougher regulation of the activities of financial intermediaries have inevitable resulted in a shrinkage of the number of professional securities market participants (*Fig. 44*). The number of brokerage license holders plunged from 449 in 2016 to 376 in March 2018, or by 16.3 percent. Although a decade has passed since 2007, the number of active brokerage licenses in 2016 amounted to only 26.0 percent relative to 2007 (the pre-crisis year).

The number of market participants licensed to act as equity trust managers shrank from 348 in 2016 to 341 in March 2017, or by 2.0 percent. In 2016, the number of active licenses in this category amounted to only 29.2 percent relative to 2007.

Overall, the number of professional securities market participants in Q3 2017 was 632 vs. 681 in 2016, which represents a decline by 7.2 percent. The number of professional securities market participants in Q3 2017 amounted to only 35.4 percent relative to 2007.



* as of Q3 2017.

Fig. 44. The number of issued licenses covering brokerage activities, dealer activities, equity trust management and professional securities market (PSM) participants

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

In 2011, the two largest Moscow-based exchanges – MICEX and RTS – were merged. This merger had important positive consequences for the development of Russia's stock market. The transactions on the stock and futures markets became easier. All liquidity necessary for carrying on transactions in the markets for government and corporate securities, as well as the futures and forex markets, could now be concentrated in the accounts of participants in trading in the exchange's single clearing and settlement system. The diversification of the exchange in servicing the transactions with different types of monetary and investment assets improved its financial sustainability in face of the widespread decline in the trade volume indices displayed by world stock exchanges and the reluctance of investors to buy risky assets.

Alongside positive changes, the merger of the RTS and the MICEX also produced some controversial effects for the domestic financial market development. First of all, now there was

no competition between the two exchanges, while previously it had acted as a powerful tool that boosted stock exchange activity in the interests of domestic investors and financial intermediaries. *Table 10* shows the cardinal changes that occurred in the ownership structure of Moscow Exchange PJSC. Initially after the merger in 2011, a 59.0 percent stake in its capital was held by the Bank of Russia and several other state-controlled entities, while the other 41.0 percent was held by Russian participants in exchange trading and other resident entities. In 2017, the stake held by state-controlled structures now amounting to 43.1 percent, the aggregate stake held by non-residents had increased to 56.5 percent. In this connection, the main issue associated with the ownership structure of the Moscow Exchange is the absence therein of Russian private financial intermediaries, while those intermediaries, as was shown earlier (see *Fig. 17* and *32*), account for the bulk of transactions in financial instruments effected on the exchange market.

Table 10

The stakeholder structure of the two Russian exchanges before and after their merger

	Before reorganization, as of 2011		After merger, as of February 1, 2012	2013	2014	2015	2016	2017
	RTS OJSC	MICEX CJSC						
State stake – total	0.0	64.0	59.0	64.5	51.0	53.4	44.3	43.1
including:								
Bank of Russia	0.0	28.6	24.3	24.7	12.1	11.8	11.8	11.8
Sberbank of Russia	10*	7.5	10.4	9.8	10.0	10.0	10.0	10.0
Vnesheconombank	0.0	10.5	8.7	8.0	8.4	8.4	8.4	8.4
Non-residents	0.0	0.0	0.0	14.9	25.9	36.0	52.3	56.5
Residents – private entities	90.0	36.0	41.0	20.6	23.2	10.6	3.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Troika Dialog CJSC purchased by Sberbank of Russia.

Source: own calculations based on data released by public information sources. The stakes held by the Bank of Russia, Sberbank of Russia and Vnesheconombank (VEB) were calculated on the basis of the Moscow Exchange's reports for several years; the stakes held by the State and non-residents over the period 2013–2017 are calculated on the bases of data released by Bloomberg; the stakes held by RTS OJSC participants are estimated based on the reports released by the RTS.

One of the advantages of the Moscow Exchange over its rivals in the global market is the diversity of its market segments. However, this business model gives rise to some additional risks that have to do with the lower incentives to develop the less marginal segments of the exchange's activity. At present, this has become manifest in the lower significance of the equity market in the total volume of trading on the exchange. The high risks and low returns on investment in securities placed by Russian issuer, increased volatility of fore rates and financial assets, the persistently high refinancing rates in the banking system, the pension savings freeze and inadequacy of the other domestic saving sources have all translated into certain *привели к* shifts in the market structure of the Moscow Exchange. Over the course of seven years, the relative share of capital market in the total trading volume tumbled from 13.2 percent in 2010 to 4.0 percent in 2017 (*Table 11*).

The relative share taken up by the money and forex market (MFX), on the contrary, increased from 72.0 percent in 2010 to 86.5 percent in 2017. More particularly, over the period under consideration, the relative share of the fore market increased from 38.1 percent to 39.2 percent, and that of the money market – from 33.9 percent to 47.3 percent. Growth in the forex segment was boosted by the ruble's instability and the access to the forex market on the Moscow

Exchange granted to the private clients of brokers and banks. The money segment was expanding in response to money overhang in banks and the accelerated growth of repos with the central counterparty.

Over the period from January 2010 through February 2018, the relative share of transactions with derivatives in the total trading volume dropped from 14.8 to 9.5 percent. This movement pattern occurred due to the stabilization of the ruble's exchange rate and the inflation index, and rising return rates on the domestic market for shares, which reduced the need to use hedging tools for market participants. The raised tariffs on the futures market and the switchover to commission charged as a percentage of transaction value resulted in a lower trading activity of speculative investors. Meanwhile, the efforts to create on the exchange a liquid market for interest-rate derivatives have remained unsuccessful.

Table 11

The market structure on the Moscow Exchange, percent

	2010	2011	2012	2013	2014	2015	2016	2017	Jan-Feb 2018
Stock market	13.2	10.3	6.5	5.2	3.6	3.0	2.8	4.0	5.4
including:									
Shares, Russian depository receipts (RDR), investment fund units	8.0	6.6	3.1	1.9	1.8	1.4	1.1	1.0	1.3
Bonds	5.2	3.7	3.4	3.3	1.9	1.6	1.7	3.0	4.1
Secondary turnover	3.4	2.9	2.8	2.7	1.5	1.2	1.1	1.2	1.6
New offering	1.8	0.8	0.6	0.6	0.3	0.4	0.6	1.7	2.5
Money and forex market	72.0	70.6	80.0	84.3	85.6	83.3	83.6	86.5	84.0
including:									
Money market	33.9	41.3	48.3	50.7	45.7	38.0	44.8	47.3	41.5
Repo transactions	31.5	38.3	45.8	47.9	42.0	33.2	40.4	43.1	33.5
Lending market	2.4	3.1	2.5	2.8	3.7	4.8	4.4	4.2	8.0
Forex market	38.1	29.3	31.6	33.7	39.9	45.4	38.8	39.2	42.5
Spot trades	18.0	15.8	16.6	12.4	13.6	15.1	12.6	8.8	9.5
Swap trades	20.1	13.4	15.0	21.3	26.3	30.3	26.2	30.3	33.0
Futures market	14.8	19.1	13.5	10.5	10.7	13.7	13.6	9.5	10.5
Derivatives	0.0	0.0	0.0	0.0003	0.0002	0.0006	0.002	0.012	0.053
Commodity market	0.001	0.003	0.006	0.005	0.003	0.02	0.02	0.01	0.01
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

After the merger, it now became possible to create, on the basis of the MICEX Settlement Chamber, the National Settlement Depository (NSD) and the Depository Clearing Company (DCC). In accordance with Order of the FFMS of No 12-2761/PZ-I dated November 6, 2012, this status was granted to the non-bank credit institution National Settlement Depository (Close-end Joint Stock Company, NSD CJSC). In 2017, the NSD's equity, in compliance with Basel III standards, amounted to RUB 8.9 billion vs. RUB 11.3 billion in 2015, thus having declined by 21.2 percent. The value of securities kept by the NSD rose from RUB 31 trillion in 2015 to RUB 39 trillion in 2017, or by 25.8 percent.

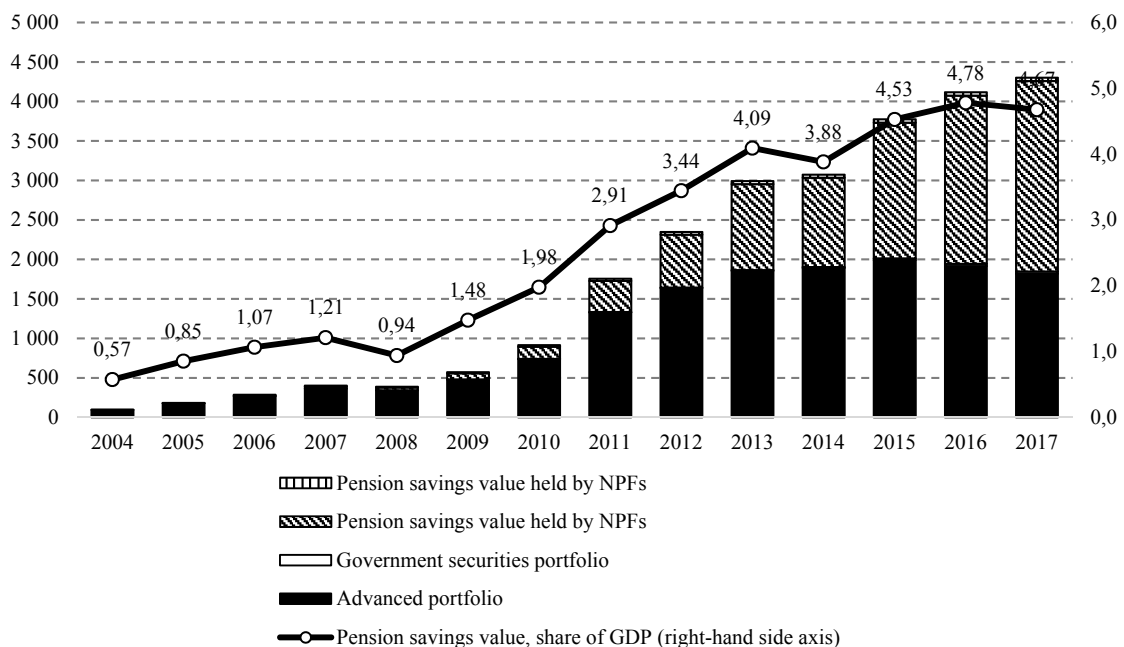
Another entity affiliated to the Moscow Exchange is the National Clearing Centre (NCC). From November 2011, the NCC had been functioning as a clearing organization in the stock market, and from December 2012 – also in the derivatives market. In October 2013, the Bank of Russia recognized the National Clearing Centre CJSC to be the only qualified central counterparty (Central Counterparty National Clearing Centre, or CCP NCC). The strategic objective of the CCP NCC is to provide members of various financial market segments with

integrated clearing services, implying the use of unified collateral and the management of single positions (limits) across all the markets of the Moscow Exchange Group. The CCP NCC's equity, in compliance with Basel III standards, was reduced from RUB 54.3 billion in 2015 to RUB 45.9 billion in 2016, or by 15.5 percent.

3.7. Investors in the domestic stock market

One of the main obstacles to smooth development of Russia's domestic stock market has been the relatively low development level of institutional investors (pension and investment funds, insurance organizations).

In Q3 2017, the total volume of pension savings held by non-governmental (private) pension funds (NPF) amounted to RUB 2.4 trillion; the amount of pension savings held in the accounts of the RF Pension Fund and managed by government and private asset managers rose to RUB 1.9 trillion (*Fig. 45*). Considering the effects of the pension savings freeze and the recovery growth of GDP, the size of pension savings as a share of GDP declined for the first time in many years – from 4.8 percent in 2016 to 4.7 percent in 2017.



Note. For 2017, the value of pension savings and pension reserves held by the NPFs reflects the index for the year's first 9 months.

Fig. 45. The structure of pension savings in 2004–2017, billions of rubles

Source: own calculations based on data released by Rosstat, the Bank of Russia, and the RF Pension Fund.

As shown in *Table 12*, over the decade that has elapsed since 2007, pension savings have become an important financing source for corporate and regional bonds. Their relative share in the structure of sources of financing for corporate bonds increased from 0.8 percent in 2007 to 11.4 percent in 2016. The corresponding index for the regional bond market leaped from 2.0 percent to 10.1 percent respectively. By their relative share in the sources of financing for non-government bonds, the pension savings held by NPFs have already achieved the average level typical of the OECD member states. As for their involvement in money market

instruments, government securities and shares issued by Russian companies, the corresponding index is still below 1.0 percent.

Table 12

The relative shares of pension savings invested by NPF in different financial asset classes in Russia, 2007–2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Monies and deposits with banks	0.01	0.14	0.54	0.71	1.67	4.25	5.27	4.24	3.94	2.74
Corporate bonds	0.82	0.92	1.12	2.56	5.11	5.43	7.66	6.72	10.12	11.42
Federal bonds	0.16	0.08	0.14	0.11	0.54	0.46	1.07	0.49	1.56	2.49
Regional bonds	2.03	1.62	2.24	3.07	5.61	10.67	12.60	12.07	12.63	10.11
Shares	0.02	0.04	0.03	0.04	0.12	0.12	0.21	0.39	0.94	0.87

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

From mid-2015, sustainable growth has been demonstrated by another form of collective investment – open-ended unit investment funds (UIF), as can be seen in Fig. 36¹. The total net value of assets held by open-ended UIFs increased from RUB 110.2 billion in 2015 to RUB 216.9 billion in 2017, or nearly twofold. The total net value of assets held by interval UIFs over the same period dwindled from RUB 23.1 billion to RUB 6.2 billion, or by 73.2 percent (Fig. 46).

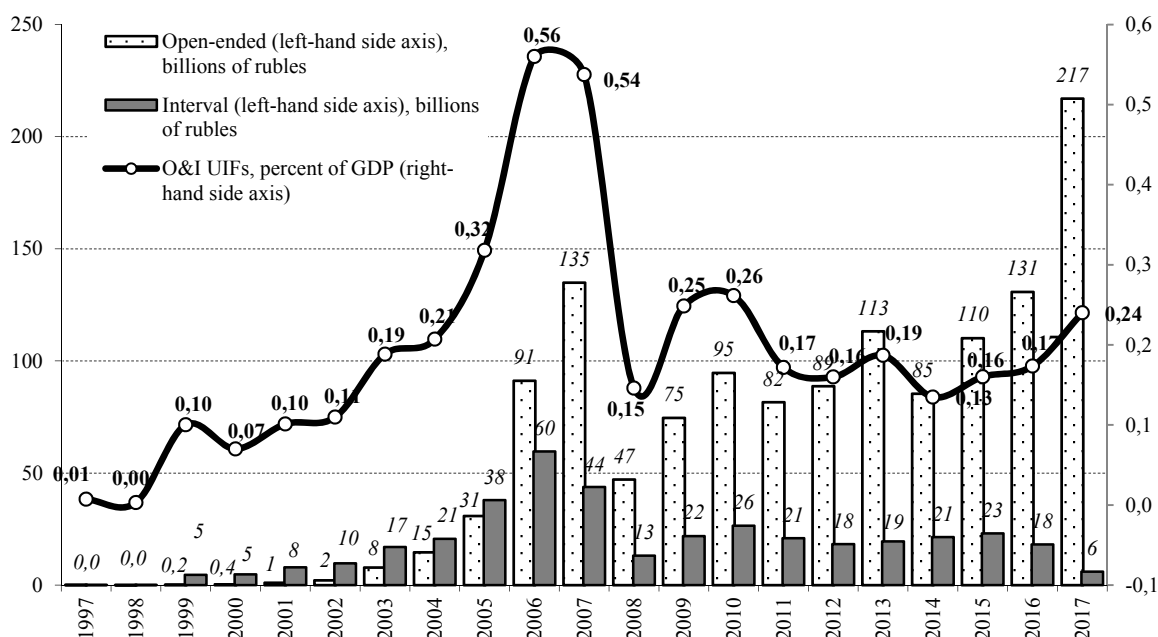


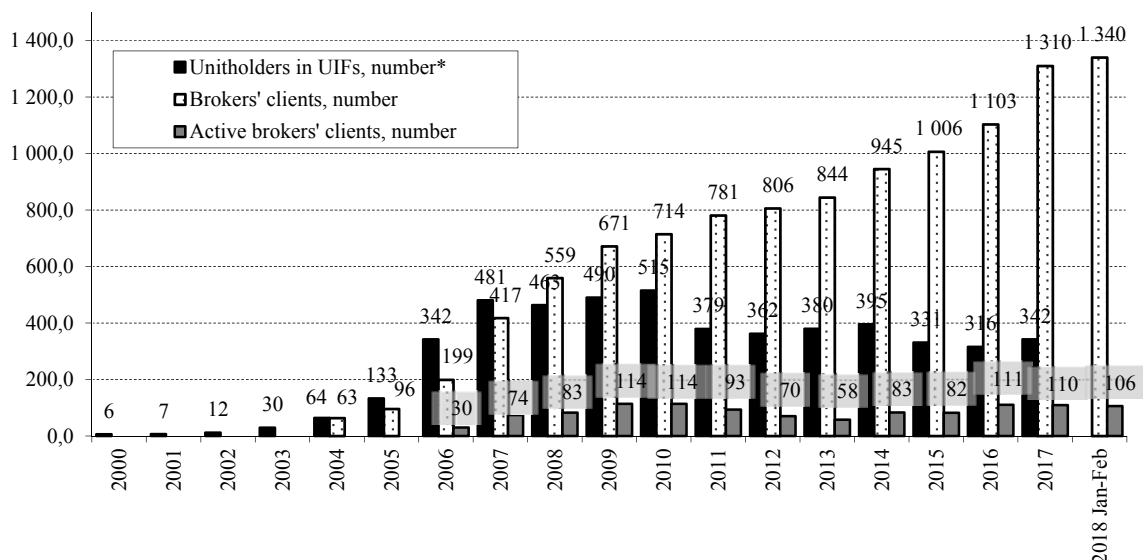
Fig. 46. The size of open-ended and interval unit investment funds, in relative and absolute terms

Source: own calculations based on data released by Rosstat, the National League of Management Companies (MLMC), and the Bank of Russia.

¹ For more details on this subject, see Abramov A., Radygin A., Chernova M. Russian institutional investors and privatization policy. Russian Economic Developments, No 12, 2016.

However, it is still too early to talk of a revival of collective investment activities in Russia. The obstacles to growth in this market segment are the underdeveloped infrastructure, outdated selling and marketing practices, legislative constraints on investing pension savings in UIFs, and low levels of public confidence and financial literacy. So far, this country lacks an efficient system through which the units of open-ended and interval UIFs could be properly marketed and sold.

Fig. 47 shows data on the number of individual investment accounts (IIA) opened by brokers and the number of individual accounts in the registers of unitholders in UIFs. Over the period from December 2016 through February 2018, the total number of accounts opened for retail clients of brokers on the Moscow Exchange increased from 1.10 million to 1.34 million, or by 21.5 percent. Over the same period, the number of active accounts opened or the clients of brokers operating in the exchange market declined from 111,000 to 106,000, or by 4.5 percent. According to estimated released by RAEX, the number of market retail investors in UIFs declined from 316,000 in 2016 to 342,000 in 2017, or by 8.2 percent.



* No data are available for February 2018.

Fig. 47. The number of retail clients of trust managers and brokers

Source: own calculations based on data released by the Moscow Exchange, the MLMC, and RAEX.

The year 2017 saw a notable revival in the brokerage services market for private clients. The four biggest stock brokerage companies – BCS, Finam, Sberbank of Russia, and VTB – have been intensely competing for leadership in servicing private clients (Fig. 48). Thanks to its skillful cooperation with Tinkoff Bank in attracting new clients, BCS, after having ranked only fourth in the brokerage services market, managed to get ahead of all its rivals, including some big state bank. The total number of its clients soared from 181,700 in December 2016 to 282,100 in February 2018, or by 55.2 percent. This case is interesting, in that it demonstrated the existing huge growth potential of non-bank financial companies, even in conditions of slow stock market growth and the heavy administrative burden imposed by the regulator.

In 2014–2017, the most noteworthy event in the sphere of private savings was the introduction of some revolutionary amendments to legislation, whereby it was envisaged that, from January 1, 2013, significant exemptions from PIT should be applied to income generated

by securities, provided that the individual to be made exempt from tax had held those securities for no less than three years; and from January 1, 2015, exemptions from PIT are also established for the contributions made by individuals to their so-called individual investment accounts (IIA).¹

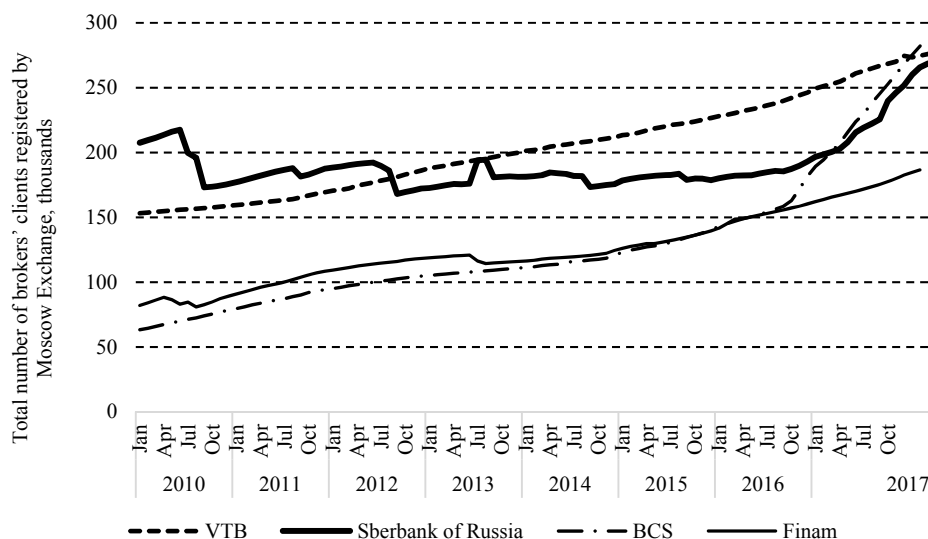


Fig. 48. The number of registered retail clients of the four biggest broker companies

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

In accordance with Federal Law No 420-FZ, dated December 28, 2013, ‘On the introduction of alterations into Article 27.5-3 of the Federal Law “On the securities market” and Parts One and Two of the Tax Code of the Russian Federation’, the income derived in the form of return on investment in newly purchased securities is to be made exempt from tax if their individual owner has been holding them for three or more years. The cap on deduction from the tax base is set at RUB 3 million for each year of holding a security or a unit. The exemption from PIT is not applicable to income derived in the form of dividends paid on shares and coupons paid on bonds, except in cases when individuals hold securities indirectly through open-ended unit investment funds. For this reason, the exemption will be most beneficial for long-term unitholders of open-ended funds.

Besides, from January 1, 2015, in accordance with the Federal Law 'On the securities market' and the RF Tax Code, Russian citizens are entitled to deductions from PIT when they open an individual investment account with a broker or trust manager. The cap on the amount of money to be placed on such an account is RUB 400,000 per annum.²

According to data released by the Moscow Exchange as of the end of February 2018, the number of IIAs was 317,300 compared to 25,900 as of the end of May 2015 (*Fig. 49*). Thus, in less than three years, the number of IIAs jumped 12.2 times.

¹ In terms of their status, these accounts are similar to two investment mechanisms popularly applied in many countries: individual retirement accounts (IRAs) (in the USA, Poland, the Republic of Korea, Canada, etc.) and individual savings accounts (ISAs) (in the UK). Because they are used for short-term saving, IIAs have more in common with ISAs than with IRAs.

² It is intended to amend existing legislation, so that the cap can be increased to RUB 1 million.

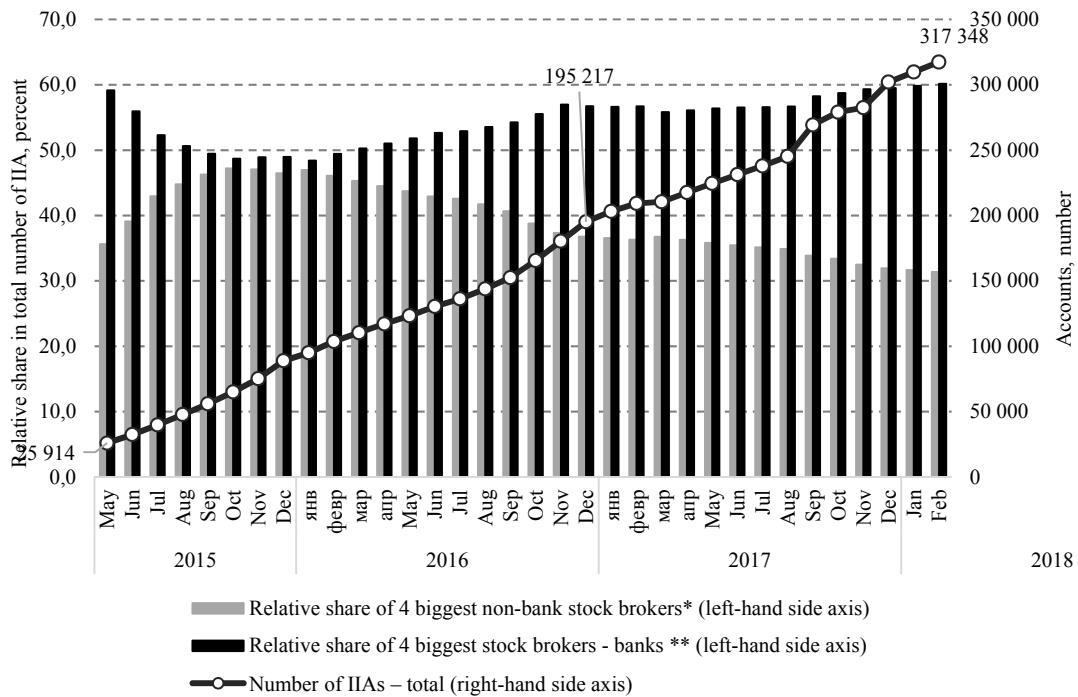


Fig. 49. The number of individual investment accounts (IIA) on the market over the period from May 2015 through February 2018

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

Thus, the statistics of retail investor participation in trading on the exchange and the movement of IIAs demonstrate that individuals are actually prepared to get more actively involved in the stock market. However, the insufficiently developed collective investment methods and the pension savings freeze have made it impossible to fully unravel the potential role of available domestic savings. As a result, the activity of individuals in the domestic stock market is focused mainly on short-term and speculative deals, which are fraught with significant risks for this investor category. In order to reorient private investors to more long-term investment strategies, it will be necessary to reform the business model followed by financial intermediaries, introduce new standards of their activity, and to boost competition in the financial services market.

In many developing markets, foreign portfolio investors frequently act in accordance with similar scenarios. Their decisions concerning investing in or withdrawing their investment from a given assets are made depending on the general cyclical trends and the weight of a given country in the global stock indexes, and not on the individual features of its national economy or the specificities of securities issuers based in different countries.¹

Judging from analytical data on global investment flows released by EPFR, the year 2017 was not remarkably successful from the point of view of attracting foreign investment funds to the Russian stock market. While in 2016 the net inflow of investment funds specializing on

¹ For more details concerning the investment strategies followed by these funds in Russia, see Abramov A. Differences in the behavior of domestic and foreign private investors on the Russian stock market. Russian Economic Developments, No 11, 2014.

Russian stocks amounted to USD 1.18 billion, the year-end result of 2017 demonstrated an outflow of this investor category from Russia to the value of USD 2.20 billion.

In 2017, the value of assets held by foreign investment funds specializing on Russia amounted to USD 12.8 billion (*Fig. 50*). The size of funds investing in Russia (Russia-EMEA-Equity) was notably smaller than that of funds investing in China, India, Brazil, and South Korea. Over the 1-year period from 2000 through 2017, the mean return on investment in Russian for foreign investment funds amounted to 12.5 percent per annum in terms of US dollars, while the geometric mean of return for the RTS Index over the same period was 13.1 percent per annum.

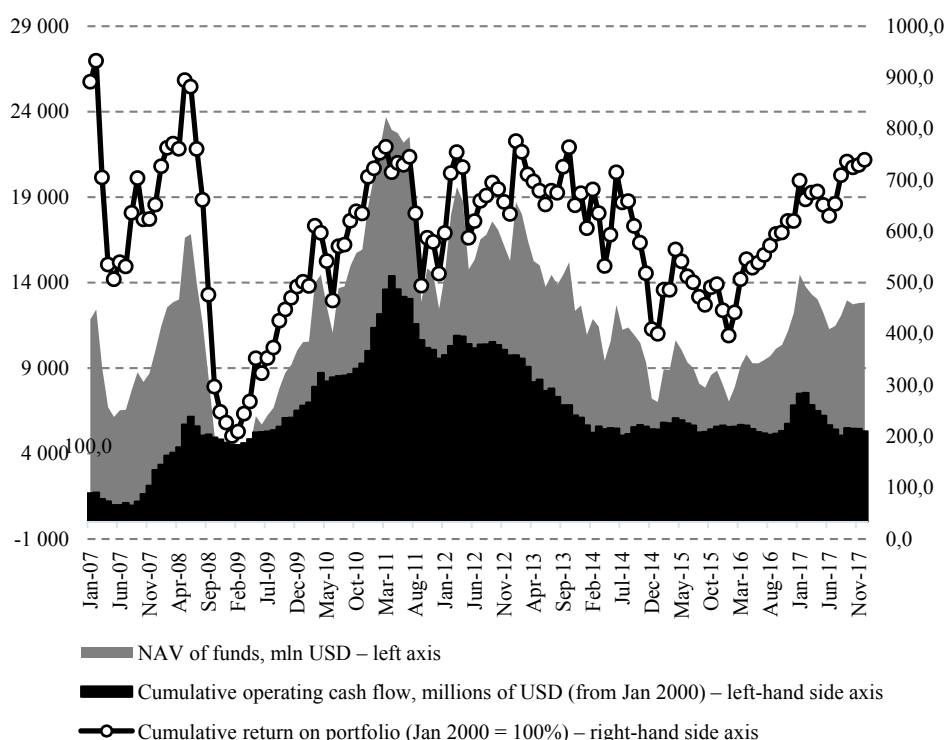


Fig. 50. Total size, cash flow and cumulative return of funds specializing on investment in Russia from January 2007 through December 2017

Source: own calculations based on data released by EPFR.

The attractiveness of Russia’s financial market for foreign investors in many ways depends on the domestic investment climate. In accordance with the goals set by Executive Order of the President No 596 dated May 7, 2012 ‘On long-term government economic policy’, Russia has managed to achieve remarkable progress in her ranking based on the World Economic Forum’s Global Competitiveness Index, where she moved from 67th place in 2013 to 38th in 2017 (*Fig. 51*). Among the BRICS members, Russia came ahead of Brazil, the Republic of South Africa and India, and was second only to China.

In our previous reviews of the situation in Russia's financial market, we identified several investment climate criteria applicable to Russia, which in the mid-2000s were viewed by conservative US investors as factors that made it undesirable to invest in shares and bonds of

Russian issuers of securities.¹ By way of example, we cited the data released by CalPERS (California Public Employees' Retirement System), a big US public pension fund, which until 2006 had published the list of criteria and indicators applied as a basis for its decision-making concerning investing in one or other developing market. The investment climate estimates are as follows: independence of the judicial system; compliance with international audit and reporting standards; the level of protection of minority investor rights; the domestic stock market as a financing source for the national economy; banks' reliability; the proficiency of the regulation of exchanges.

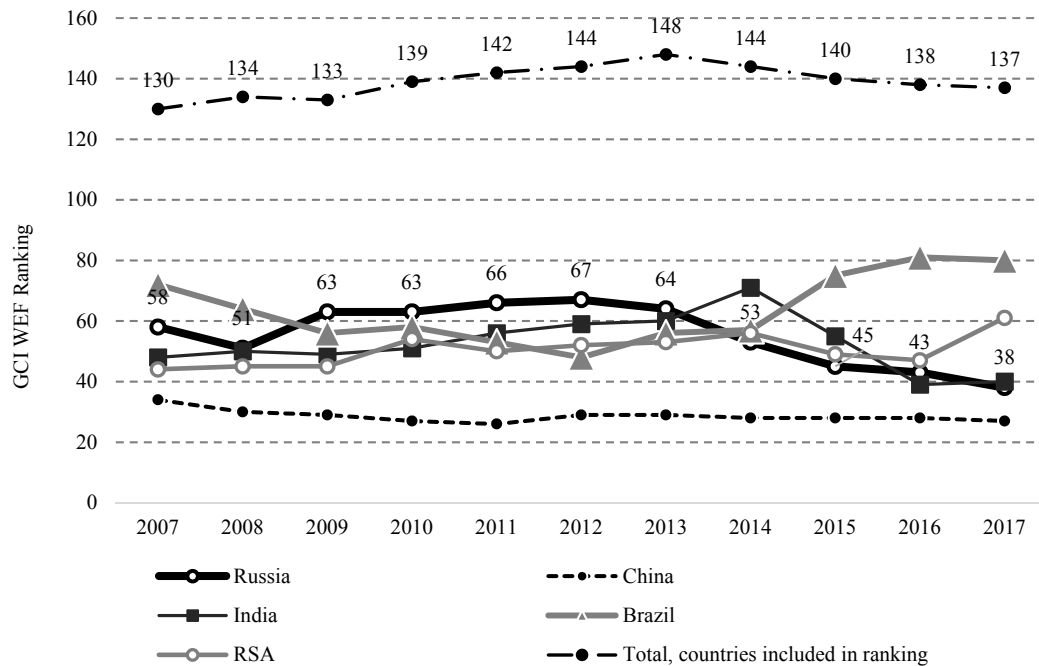


Fig. 51. BRICS members' rankings in the World Economic Forum's Global Competitiveness Index in 2007–2017

Source: own calculations based on data released by The Global Competitiveness Report, released by the World Economic Forum (WEF).

Table 13 analyzes the movement of these six investment climate estimates with regard to each member of the BRICS group over the 11-year period from 2007 through 2017 on the basis of data derived from the WEF annual Global Competitiveness Reports. Traditionally, Russia's economy was ranked by the criteria of her investment climate and availability of financial resources in the domestic market, and so we specifically focused on these factors.

If we take the year 2012 as baseline, it will become obvious that by all the six estimates, Russia managed to improve her investment climate quality and accessibility of financial resources (*Table 13* and *Fig. 52*). Thus, for example, in terms of judicial system independence, Russia moved from 122nd place in 2012 to 90th place in 2017; by the use of international reporting and audit standards – from 123rd to 100th; protection of minority investor rights – from 140th to 111th; by the potential for raising financial resources in the domestic market – from 10th

¹ Russian Economy in 2008. Trends and Outlooks. (Issue 30). Moscow, IET, 2009, pp. 513–516.

to 90th; and by reliability of banks - from 132nd to 121st. The least progress was achieved with regard to regulation of exchanges – since 2012, Russia moved only from 114th place to 112nd. At the same time, in spite of the significant improvement in these rankings, it can be assumed that over the past 5 years, no fundamental changes were noted in the domestic investment climate and availability of financial resources.

Table 13

**The most problematic aspects of Russia’s investment climate,
according to the World Economic Forum’s Global Competitiveness
Index ranking**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Independence of judicial system											
Russia	106	109	116	115	123	122	119	109	108	95	90
China	82	69	62	62	63	66	57	60	67	56	46
India	26	43	37	41	51	45	40	50	64	54	53
Brazil	89	68	78	76	71	71	65	76	92	79	59
RSA	23	30	38	44	35	27	22	24	24	16	36
Audit and reporting standards											
Russia	95	108	119	116	120	123	107	106	102	103	100
China	102	86	72	61	61	72	80	82	80	68	71
India	27	30	27	45	51	44	52	102	95	64	69
Brazil	63	60	70	64	49	42	31	41	70	72	58
RSA	6	4	2	1	1	1	1	1	1	1	30
Protection of minority investor rights											
Russia	125	128	127	132	135	140	132	118	116	116	111
China	114	94	71	66	60	68	75	67	71	48	38
India	27	33	36	55	62	52	52	76	69	37	42
Brazil	46	42	59	64	49	37	26	35	78	94	62
RSA	13	13	9	6	3	2	1	2	3	1	30
Access to financing in local stock market											
Russia	81	87	96	107	98	100	90	86	88	95	90
China	82	80	66	52	46	46	38	34	44	40	31
India	13	8	3	10	15	19	18	39	45	31	39
Brazil	61	56	44	45	33	40	48	55	75	83	72
RSA	4	4	4	7	4	3	2	3	1	1	25
Banks’ reliability											
Russia	108	107	123	129	129	132	124	118	115	121	121
China	128	108	66	60	64	71	72	63	78	79	82
India	46	51	25	25	32	38	49	101	100	75	78
Brazil	36	24	10	14	16	14	12	13	27	38	26
RSA	16	15	6	6	2	2	3	6	8	2	37
Regulation of exchanges											
Russia	103	110	113	118	116	114	102	91	97	113	112
China	111	109	91	61	53	58	63	58	52	57	60
India	30	25	11	15	26	28	27	62	69	58	64
Brazil	41	28	10	5	9	8	7	17	36	54	44
RSA	5	5	2	1	1	1	1	1	2	3	46

Source: own calculations based on data for a number of years released in The World Economic Forum’s Global Competitiveness Report.

Besides, as shown in *Fig. 52*, in 2007–2017 Russia ranked far below Brazil, India, China and the RSA by all the six estimates.

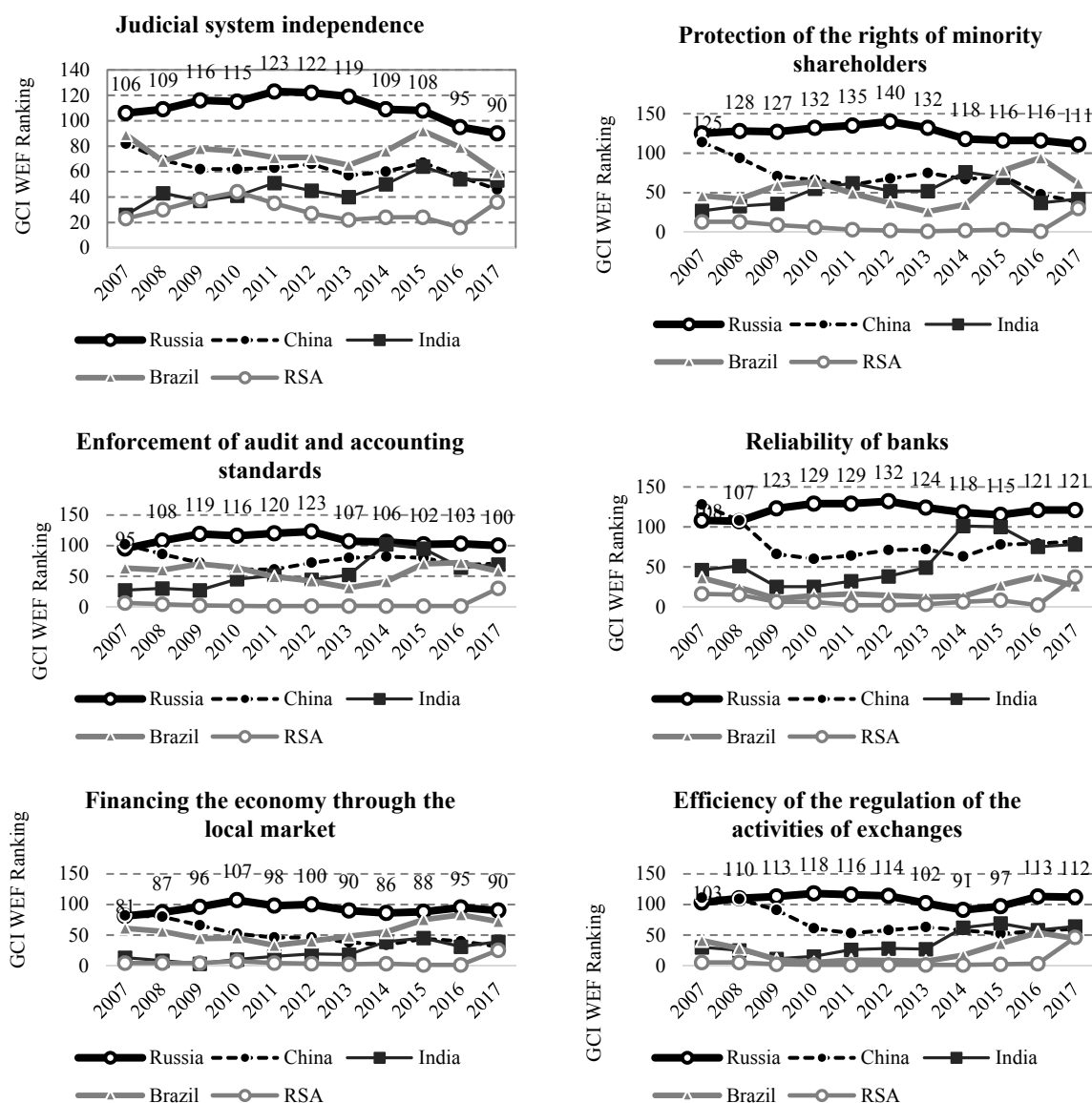


Fig. 52. BRICS members' rankings in the World Economic Forum's Global Competitiveness Index, by several criteria relevant for conservative portfolio investors' decision-making

Source: own calculations based on data for a number of years released in The World Economic Forum's Global Competitiveness Report.

3.8. Risk factors in the Russian financial market

By way of summing up, we are going to point out the most significant medium-term risks of the Russian stock market.

The greatest risks for domestic ruble-denominated savings have to do with the regular depreciation of the national currency. As a rule, the ruble's depreciation always follows one and the same scenario. The declining price of oil and capital outflow suddenly result in a sharp shrinkage in the value of the ruble, followed by a period, 7 or 8 years long, when the ruble level

remains stable, and the national currency even strengthens a little (*Fig. 53*). However, the main issue arising in this connection is that the abrupt depreciation undermined the value of ruble-denominated savings, and it never recovers its initial indices even during the periods of the ruble's stability.

The causes of depreciation are the structural disproportions inside the Russian economy; because of these disproportions, the ruble strongly depends on the situation on foreign markets and the behavior of foreign portfolio investors.

At present, the financial market is moving along an upward curve, when the ruble strengthened from RUB 83.59 per USD as of January 22, 2016, to RUB 57.11 per USD as of March 26, 2018. As the implementation structural changes in the economy even under a favorable development scenario will require a rather long period of time, the risks posed by a sudden worsening in the eternal economic situation will remain real in the medium-term perspective.

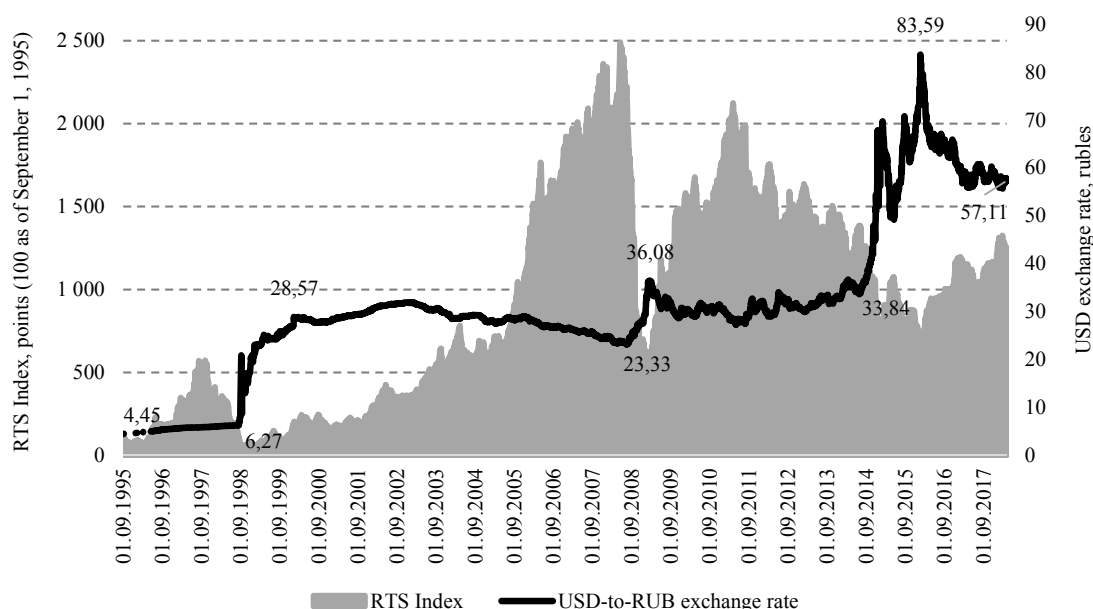


Fig. 53. The movement of the RTS Index and the USD-to-RUB exchange rate over the period from September 1, 1995 through March 26, 2018

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

The prices of shares issued by Russian companies strongly depend on the behavior of oil prices. The coefficient of determination (R^2) between the absolute monthly values of the RTS Index and the price of Brent crude over the period from September 1995 through February 2017 (*Fig. 54*) is equal to 0.8, which points to a very close interdependence of these two indicators. Oil prices also strongly influence the national currency's exchange rate.

Over the next few years, it is unlikely that oil prices may display growth; both demand and supply on the oil market are volatile indices. So, in the medium-term perspective we may expect, with a high degree of probability, that prices in the oil market will follow a cyclical behavior patterns, thus becoming a significant factor of volatility in the Russian stock market.

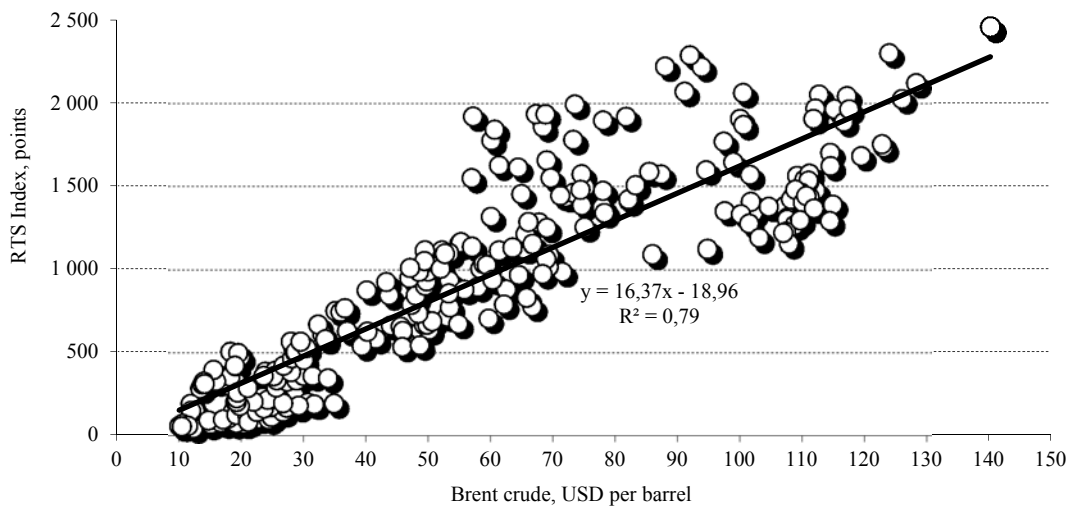


Fig. 54. The dependence of the RTS Index on the price of Brent crude, from September 1995 through March 2018

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

At present, the situation in Russia is relatively beneficial for growth in carry trades. The contributing factors are the ruble's strengthening, the stably high interest rates on the operations with ruble-denominated assets, and absence of any serious currency regulation constraints.

The negative consequences of carry trading strategy may become visible in several areas – as a surge in volatility of the national currency's exchange rate and prices for financial assets, or as a liquidity crisis in the banking system. The risks associated with the negative effects of carry trade on banks are currently rather low because, being restricted by the existing normative documents and some other factors, Russian banks so far have abstained from actively participating in such deals. Despite the relatively prominent position of non-residents in the structure of holders of shares and bonds placed by Russian issuers, the potential for implementing active carry trade strategies in this segment is limited due to the liquidity of the domestic stock market.

At the same time, according to the Bank of Russia's experts, the risks of a negative effect of carry trade on the financial market are frequently overestimated, because high returns are by no means the only factor determining the potential attractiveness of such operations, while the Sharpe ratio of transactions involving ruble-denominated assets, due to the ruble's high volatility, is lower than the corresponding ratios of the forex markets of other countries.¹

The high returns on the Russian market for shares against the backdrop of a strengthening ruble attracted an additional inflow of non-residents to that market segment in H2 2016. However, these developments did not produce any qualitative changes in the investment climate or economic policies. Oil prices have remained unstable. Besides, in 2018, the upward movement of interest rates in the USA became more intense. All these factors may translate into an onset of a new steady outflow of foreign portfolio investors from the Russian stock market.

¹ Bank of Russia. What do the trends say. Macroeconomics and markets. Bulletin of the Research and Forecasting Department. No 2 (14), March 2017, p. 38.

Some significant risks for the financial market are also created by the economic sanctions, although their effects on the market participant behavior so far have been rather limited. The main ways in which the sanctions can influence the financial market are the restricted access to borrowing for Russian companies, rising costs of borrowed resources, and foreign investment outflow from the share market. The available estimates of the effects of sanctions on Russia's financial market vary dramatically, but they are expressed mainly as a percentage of the expected slowdown in the GDP growth rate. Few studies have directly analyzed the actual consequences of the imposed sanctions for the financial market. Thus, according to E. Gurvich and I. Prilepskiy (2016), the additional cumulative net capital outflow triggered by the sanctions, was estimated to be at the level of USD 58 billion in 2014 and USD 160–170 billion in 2014–2017.¹ And the opinion of RF Minister of Finance Anton Siluanov, voiced in late 2014, was that Russia's loss from the sanctions was about USD 40 billion per annum.²

In the short-term perspective, the currently imposed economic sanctions, which have restricted the access to borrowing in the global markets for a number of companies, produced little effect on the domestic financial market. The interest rates on loans in the domestic market have remained at the same level as prior to the introduction of sanctions. Besides, many private companies are exempt from these sanctions, and so they can borrow in the eurobond market. The sanctions mostly affect the investment activities of companies, and their purchases of foreign equipment and technologies. Fearing the sanctions, many big companies have preferred to postpone their investments, accumulating their cash reserves in their bank accounts instead.

In this sense, the sanctions do restrain the investment activity of businesses and thus produce a negative impact on economic growth.

Nevertheless, the risks associated with the introduction of new tougher financial sanctions in response to a possible exacerbation of geopolitical situation cannot be completely ruled out. If that should be the case, sanctions may trigger financial shocks at the level of big companies, thus requiring some additional support measures for Russian businesses.

Thus, a typical feature of the year 2017 was stagnation in the movement of rates of return of shares issued by Russian companies alongside favorable conditions for investing in government and corporate bonds. The situation in the share market was negatively influenced by the outflow of foreign portfolio investors and the pension savings freeze. The growth drivers in the bond market were the low inflation rate and the interest rates on bank deposits in the presence of a significant money overhang in the economy and the emerging interest of retail investors in government and corporate bonds. The latter have at last 'got the taste' of individual accounts and certain collective investment instruments, mainly bonds and UIFs.

The yields of government and corporate bond issues stabilized at a level below that of the pre-crisis year 2013. This triggered an accelerated growth of new issues of corporate and government bonds. The OFZ market has become an important source of budget deficit financing.

At the same time, no changes for the better have occurred with regard to the domestic source of stock market growth. The money market continues to prevail over the stock market, which means that the demand for securities placed by Russian issuers is sustained in the main by short-term financing sources provided by banks and other financial intermediaries. Another strong restricting factor for stock market growth, as before, is the freeze of domestic pension savings

¹ Gurvich E., Prilepskiy I. The impact of financial sanctions on the Russian economy. *Voprosy Ekonomiki* (in Russian), No 1, January 2016, p. 33.

² Volkova O. Counter-sanctions against sanctions: which of these are worse. *RBC Daily*, March 21, 2016, p. 4.

and their uncertain destiny. No notable changes have occurred with regard to the investment climate, either, and this factor also restricts the demand of major foreign portfolio investors for Russian financial instruments.

In view of all these developments, a priority direction in the domestic market progress could become support of domestic institutional investors, introduction of unchangeable ‘rules of game’ in the treatment of pension savings, and improvement of the investment climate and competitive environment in the domestic stock market.

3.9. Municipal and sub-federal debt market ¹

3.9.1. Market development dynamics

According to the 2017 year-end data, the regional consolidated budgets and local government off-budget funds’ budgets ran a deficit of RUB 61.5 billion or 0.07 percent of GDP (*Table 14*).

To compare, the regional consolidated budgets and local government off-budget funds’ budgets amounted to RUB 303.5 million in 2016.

In 2017, the budgets of subjects of the Russian Federation ran a deficit of RUB 15.5 billion, urban districts’ budgets ran a deficit of RUB 29.5 billion, federal-status cities’ inner-city municipalities’ budgets ran a surplus of RUB 0.5 billion, municipal areas’ budgets ran a deficit of RUB 5.4 billion, urban and rural settlements’ budgets ran a deficit of RUB 1.0 billion, local government off-budget funds’ budgets ran a deficit of RUB 9.6 billion (*Table 15*).

As a comparison, in 2016, the budgets of subjects of the Russian Federation ran a deficit of RUB 2.4 billion, urban districts’ budgets ran a deficit of RUB 16.3 billion, federal-status cities’ inner-city municipalities’ budgets ran a surplus of RUB 0.3 billion, municipal areas’ budgets ran a surplus of RUB 11.4 billion, urban and rural settlements’ budgets ran a deficit of RUB 5.4 billion, local government off-budget funds’ budgets ran a surplus of RUB 12.3 billion.

Table 14

Ratio of regional consolidated budgets surplus (deficit) and of regional budgets to budget expenditure in 2007–2017, percent

Year	Regional consolidated budgets *	Regional budgets
2017	-0.5	-0.2
2016	...	0.003
2015	-1.6	-1.3
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 off-budget funds

Source: own calculations based on the data released by the Federal Treasury.

¹ This section is written by Artem Shadrin, Ministry of Economic Development of the Russian Federation, the Gaidar Institute.

Table 15

Local budgets surplus (deficit) to budget expenditure ratio in 2007–2017, percent

Year	Inner-city municipalities budgets in federal-status cities	Urban districts' budgets	Municipal areas' budgets	Urban and rural settlements' budgets
2017	1.9	-1.6	-0.4	-0.3
2016	1.3	-0.9	0.8	-1.5
2015	6.7	-3.0	-0.7	-0.6
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: own calculations based on the data released by the Federal Treasury.

As of January 1, 2018, the consolidated budget (including local government off-budget funds) of 59 subjects of the Russian Federation and the city of Baikonur ran a deficit (58 regions in 2016). The overall deficit amounted to RUB 194.8 billion, or 2.4 percent of the revenue side (RUB 198.0 billion in 2016, or 3.1 percent of the revenue side of budgets that ran a deficit).

The median budget deficit value stood at 3.5 percent relative to a given budget revenue. The highest ratio of budget deficit to budget revenue was recorded in the Republic of Mordovia – 21.4 percent, Toms oblast – 7.8 percent, and Orel oblast – 7.7 percent. St. Petersburg accounted for more than 21.8 percent or over RUB 42.5 billion of the total consolidated budget deficit, the Khanty-Mansi Autonomous Okrug accounted for around 8.9 percent or more than RUB 17.3 billion (Table 16).

Table 16

Execution of consolidated budgets of subjects of the Russian Federation in 2017

	Budget revenues, rubles in billions	Budget deficit (surplus), rubles in billions	Deficit (surplus) to revenue ratio, %	borrowing to revenues ratio, %	Net borrowing to revenues ratio, %	Redemption costs to revenues ratio, %	Net borrowings to deficit (surplus), %
1	2	3	4	5	6	7	8
Central Federal Okrug							
Belgorod Region	110.9	-1.1	-1.0	11.6	0.0	11.6	0.8
Bryansk Region	72.9	-2.0	-2.8	9.2	-1.8	10.9	62.5
Vladimir Region	78.0	-0.9	-1.1	4.5	0.0	4.5	-0.9
Voronezh Region	135.3	-5.7	-4.2	65.7	-1.6	67.2	36.9
Ivanovo Region	48.4	0.5	1.1	38.9	0.0	39.0	-3.7
Tver Region	80.2	-1.9	-2.4	21.6	-0.4	22.0	16.8
Kaluga Region	78.8	-0.7	-0.9	14.8	0.2	14.6	-20.0
Kostroma Region	35.0	2.7	7.8	118.4	4.3	114.1	55.0
Kursk Region	70.8	-0.9	-1.3	42.0	0.2	41.8	-15.0
Lipetsk Region	75.9	-1.6	-2.2	5.4	-1.1	6.5	51.7
Moscow Region	690.1	16.5	2.4	10.9	0.1	10.8	4.0
Orel Region	41.2	-3.2	-7.7	92.5	8.1	84.5	104.6
Ryazan Region	69.7	-4.2	-6.0	29.9	-2.8	32.6	46.2
Smolensk Region	54.2	-0.3	-0.5	75.1	-5.8	80.9	1 205.6
Tambov Region	58.4	2.5	4.3	62.4	3.7	58.7	84.8
Tula Region	96.7	4.7	4.9	20.3	4.1	16.2	83.1
Yaroslavl Region	82.4	2.8	3.5	81.4	1.5	80.0	42.0
City of Moscow	2 291.0	3.4	0.1	0.0	-1.2	1.2	-803.5
City of Baikonur	3.8	0.04	1.2	0.0	0.0	0.0	0.0
Total	4 173.8	17.0	0.4	12.8	-0.6	13.3	-139.9

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1	2	3	4	5	6	7	8
North-West Federal Okrug							
Republic of Karelia	50.7	2.5	4.9	57.0	4.9	52.1	100.1
Republic of Komi	97.3	-2.9	-2.9	91.3	-3.1	94.4	104.4
Arkhangelsk Region	101.3	1.5	1.5	111.5	0.0	111.5	0.6
Vologda Region	84.4	-6.9	-8.2	26.4	-6.1	32.6	74.7
Kaliningrad Region	119.8	2.9	2.4	22.4	1.2	21.2	51.0
Leningrad Region	149.5	8.7	5.8	0.2	-1.0	1.2	-16.9
Murmansk Region	86.2	0.6	0.7	68.1	-2.0	70.1	-286.7
Novgorod Region	40.8	0.03	0.1	37.0	1.5	35.4	1 829.1
Pskov Region	37.1	1.6	4.3	98.7	4.7	94.0	110.1
St. Petersburg	585.7	-42.5	-7.3	5.1	3.6	1.5	49.6
Nenets Autonomous Okrug	21.1	-0.7	-3.4	35.1	-1.3	36.4	38.2
Total	1 373.9	49.9	3.6	31.2	1.2	30.0	31.8
Southern Federal Okrug							
Republic of Kalmykia	15.6	0.6	3.8	56.7	3.3	53.5	85.3
Krasnodar Territory	346.8	-17.5	-5.0	16.6	-3.4	20.0	67.5
Astrakhan Region	53.0	-1.8	-3.5	58.2	-3.4	61.6	96.9
Volgograd Region	130.7	1.5	1.1	77.5	0.0	77.5	-1.0
Rostov Region	229.7	-1.4	-0.6	9.4	-0.3	9.6	42.5
City of Sevastopol	34.6	2.5	7.4	0.0	0.0	0.0	0.0
Republic of Crimea	177.1	0.8	0.4	2.3	-0.5	2.8	-123.3
Republic of Adygea (Adygea)	23.0	0.7	3.0	8.0	3.4	4.6	112.6
Total	1 010.6	-14.6	-1.4	22.4	-1.4	23.7	94.8
North-Caucasus Federal Okrug							
Republic of Dagestan	132.2	-3.6	-2.7	16.3	-2.7	19.0	98.7
Kabardino-Balkar Republic	36.3	2.6	7.2	118.4	5.3	113.1	73.6
Republic of Northern Ossetia-Alania	34.2	0.3	0.9	25.2	0.7	24.5	78.2
Republic of Ingushetia	26.9	-0.2	-0.7	20.9	-0.5	21.4	75.7
Stavropol Territory	139.2	-0.4	-0.3	67.4	-0.8	68.2	290.3
Karachay-Cherkess Republic	27.8	-0.08	-0.3	49.9	-0.2	50.2	78.0
Chechen Republic	89.9	-0.4	-0.4	1.2	-0.8	1.9	174.4
Total	486.6	-1.7	-0.4	38.5	-0.7	39.2	198.4
Volga Federal Okrug							
Republic of Bashkortostan	241.4	-11.7	-4.9	2.5	-1.8	4.4	38.0
Republic of Mariy-El	36.9	-0.1	-0.4	46.8	0.0	46.8	1.7
Republic of Mordovia	46.9	-10.1	-21.4	71.3	21.6	49.7	101.0
Republic of Tatarstan (Tatarstan)	321.7	-13.5	-4.2	5.8	0.0	5.8	0.3
Udmurt Republic	93.9	-0.2	-0.2	84.1	0.1	84.0	-45.6
Republic of Chuvashia – Chuvashia	63.4	0.5	0.8	20.1	-0.4	20.5	-51.7
Nizhniy Novgorod Region	205.2	3.8	1.9	98.9	-0.4	99.2	-19.5
Kirov Region	71.6	0.09	0.1	64.3	0.7	63.7	553.0
Samara Region	211.1	0.4	0.2	26.1	-0.4	26.5	-221.4
Orenburg Region	112.7	1.0	0.9	32.7	-0.3	33.1	-39.8
Penza Region	68.5	0.5	0.7	20.6	-0.8	21.4	-113.2

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1	2	3	4	5	6	7	8
Perm Territory	171.9	-0.5	-0.3	25.1	-1.8	26.9	612.9
Saratov Region	122.3	-0.7	-0.6	42.7	0.0	42.7	-5.4
Ulyanovsk Region	69.8	2.8	4.1	53.2	2.7	50.6	65.6
Total	1 837.5	-7.6	-0.4	35.7	0.1	35.5	-30.3
Urals Federal Okrug							
Kurgan Region	48.9	2.3	4.6	42.1	4.0	38.1	86.7
Sverdlovsk Region	307.0	1.5	0.5	38.6	1.1	37.5	221.9
Tyumen Region	173.8	0.8	0.5	0.0	0.0	0.0	0.0
Chelyabinsk Region	212.8	-7.1	-3.3	5.8	-1.9	7.7	57.7
Hanty-Mansiysky Autonomous Okrug – Yugra	257.4	17.3	6.7	3.6	0.7	2.8	10.6
Yamal-Nenets Autonomous Okrug	196.7	-14.9	-7.6	0.6	-2.9	3.4	38.0
Total	1 196.7	-0.1	0.0	13.5	-0.2	13.7	1 957.5
Siberia Federal Okrug							
Republic of Buryatia	69.4	2.9	4.1	64.8	1.9	62.8	46.9
Republic of Tyva	30.4	-0.4	-1.3	32.0	-1.4	33.4	106.4
Altai Territory	126.6	-2.1	-1.7	0.9	-1.0	1.9	58.7
Krasnoyarsk Territory	285.9	5.8	2.0	29.2	1.5	27.8	71.6
Irkutsk Region	196.8	0.5	0.2	7.6	0.0	7.6	-1.8
Kemerovo Region	195.5	-20.7	-10.6	27.4	-3.1	30.5	29.7
Novosibirsk Region	184.5	0.008	0.0	72.8	0.6	72.1	13 722.5
Omsk Region	107.1	3.0	2.8	131.2	1.2	130.0	44.4
Tomsk Region	78.6	-6.1	-7.8	84.4	3.5	81.0	44.7
Republic of Altai	21.1	-0.4	-2.1	8.5	-0.5	8.9	21.9
Republic of Khakassia	36.2	2.1	5.7	83.4	5.6	77.9	98.2
Zabaikalsky Territory	72.5	2.1	2.9	54.4	2.8	51.6	97.0
Total	1 404.6	-1.2	-0.1	44.2	0.5	43.7	-573.1
Far East Federal Okrug							
Republic of Sakha (Yakutia)	225.8	8.4	3.7	11.6	2.4	9.2	64.0
Primorsky Territory	147.3	-4.3	-2.9	5.3	-0.8	6.1	27.9
Khabarovsk Territory	130.1	6.3	4.8	33.5	4.0	29.5	82.3
Amur Region	69.3	-0.5	-0.7	17.2	-4.1	21.3	619.1
Kamchatka Territory	83.4	-0.8	-1.0	10.3	1.1	9.2	-112.4
Magadan Region	38.8	1.5	3.9	55.4	3.3	52.1	83.4
Sakhalin Region	140.0	7.1	5.1	0.0	0.0	0.0	0.0
Jewish Autonomous Region	13.0	0.8	6.0	52.0	2.8	49.2	46.4
Chukotka Autonomous Okrug	31.5	1.4	4.4	5.0	-2.5	7.5	-56.0
Total	879.4	20.0	2.3	14.6	0.9	13.6	41.6
Total Russian Federation	12 363. 2	61.5	0.5	23.8	-0.1	23.9	-16.9

Source: own calculations based on the data released by the Federal Treasury.

In 2017, the consolidated budgets of 36 subjects of the Russian Federation ran a surplus (compared to 27 regions in 2016). These regions ran an overall budget surplus of RUB 133.3 billion, or 1.9 percent of the revenue side (RUB 197.8 billion, or 3.7 percent of the revenue side, in 2016). The median budget surplus value stood at 1.8 percent relative to the revenue side.

The biggest ratio of surplus to consolidated budget revenues was recorded in Kemerovo region – around 10.8 percent, Vologda region – 8.2 percent. In 2017, Kemerovo region accounted for 15.5 percent of the overall surplus of regional budgets that ran a surplus, and Krasnodarsky Krai – 13.2 percent, and Yamal-Nenets AO – 11.2 percent.

3.9.2. Debt structure

According to the data released by The Russian Finance Ministry, the debt accumulated by the subjects of the Russian Federation in 2017 contracted by RUB 37.8 billion to RUB 2.315,4 billion as the debt accumulated by municipalities rose by RUB 3.6 billion to RUB 368.0 billion (*Table 17*)

Table 17

**Volume and structure of debt of the subjects
of the Russian Federation and debt of municipalities
as of January 1, 2017 and 2018**

Type of debt instruments	Debt volume of RF subject, RUB million			Municipalities debt volume, RUB million		
	2018	2017	increase/decrease 2018 to 2017, %	2018	2017	increase/decrease 2018 to 2017, %
Government securities	548 519.6	457 490.4	19.9	21 068.9	15 477.8	36.1
Loans issued by credit institutions, foreign banks and international financial organizations	666 961.2	808 509.1	-17.5	241 222.1	226 809.6	6.4
Public budget loans from other budgets of the budgetary system of the Russian Federation	1 010 337.7	990 494.1	2.0	90 429.9	103 751.3	-12.8
Government guarantees	81 535.6	88 297.2	-7.7	15 253.2	18 255.9	-16.4
Other debt instruments	8 050.3	8 400.5	-4.2	6.1	36.3	-83.3
Bcero	2 315 404.5	2 353 191.2	-1.6	367 980.1	364 331.0	1.0

Source: own calculations based on the data released by the Federal Treasury.

Regions and municipalities borrowed in 2017 a total of RUB 2,939.6 billion. The top-ranked borrowers were Nizhniy Novgorod Region – RUB 202.8 billion, Omsk Region – RUB 140.5 billion, Novosibirsk Region – RUB 134.3 billion, Sverdlovsk Region – RUB 118.4 billion, Arkhangel'sk region – RUB 112.9 billion, Volgograd region – RUB 101.4 billion, and Stavropol Territory – RUB 93.8 billion.

Securities issues accounted for 7.3 percent of the total consolidated regional budgets, loans from higher-level budgets (budget loans) constituted 39.9 percent thereof, loans from commercial banks and international credit institutions amounted to 52.8 percent thereof.

Total net debt of the consolidated regional budget was negative and constituted – RUB 10.4 billion. The highest ratio of net debt to budget revenues was recorded in the Republic of Mordovia – RUB 21.1 billion, and Orel region – 8.1 percent.

Largest net borrowers were: St. Petersburg – RUB 21.1 billion, the Republic of Mordovia – RUB 10.2 billion, Republic of Sakha (Yakutia) – RUB 5.4 billion, and Khabarovsk Territory – RUB 5.2 billion.

Regions had their accumulated debt reduced to the maximum extent by repaying more for outstanding debt instruments compared to new fundraising, were: Moscow – by RUB 27.1 billion, Krasnodar Territory – by RUB 11.8 billion, Kemerovo region – by RUB 6.1 billion, and Vologda region – by 5.2 billion

Table 18

**Regional and local budgets net borrowing,
as percent of GDP**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net borrowing by sub-federal and local governments	0.17	0.29	0.74	0.51	0.21	0.33	0.61	0.53	0.33	0.10	-0.01
Including:											
Repayable loans from budgets of different levels	-0.01	0.03	0.33	0.37	0.15	0.01	0.06	0.24	0.21	0.21	0.02
Sub-federal (municipal) bonds	0.08	0.17	0.24	0.07	-0.11	0.06	0.12	-0.01	-0.01	0.04	0.11
Other borrowings	0.10	0.09	0.17	0.07	0.17	0.26	0.43	0.30	0.13	-0.15	-0.14

Source: own calculations based on the data released by the Federal Treasury.

3.9.3. Domestic bond issues

Thirty four subjects of the Russian Federation and 3 municipalities had their bond prospectus registered in 2017 (as compared with 25 regions and 3 municipalities which issued bonds in 2016). The following regions had their bond prospectus registered with Russia's Ministry of Finance in 2017:

St. Petersburg, Krasnoyarsk and Krasnodar Territories, Republic of Sakha (Yakutia), Republic of Komi, Republic of Karelia, Republic of Mariy El, Republic of Chuvashia, Republic of Karachaevo-Cherkassia, Orenburg Region, Samara Region, Novosibirsk Region, Belgorod region, Yaroslavl region, Tambov region, Nizhny-Novgorod region, Sverdlovsk region, Tomsk region, Kaliningrad region, Irkutsk region, Volgograd region, Kursk region, Kemerovo region, Magadan region, Saratov region, Moscow region, Ivanovo region, Orel region, Kostroma region, Omsk region, Ulyanovsk region, Yamal-Nenets Autonomous District, Nenets Autonomous District, Khanty-Mansi Autonomous District – Yugra, city of Nizhny Novgorod, city of Novosibirsk, and city of Tomsk.

In 2016, the amount of placed bonds was RUB 215.3 billion, which is an increase of more than 34 percent in nominal terms compared to the level seen in 2016. Thus, sub-federal and municipal bond issues saw a YoY increase from 0.19 percent to 0.23 percent of GDP (Table 19).

Table 19

**Amount of issued sub-federal and municipal bonds,
as percent of GDP**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Issue	0.26	0.43	0.41	0.25	0.10	0.19	0.23	0.16	0.12	0.19	0.23
Redemption	0.18	0.26	0.16	0.18	0.21	0.13	0.12	0.17	0.13	0.15	0.13
Net financing	0.08	0.17	0.24	0.07	-0.11	0.06	0.12	-0.01	-0.01	0.04	0.11

Source: own calculations based on the data released by Russia's Ministry of Finance.

The top-ranked bond issuers were St. Petersburg – RUB 30.1 billion, or 14.0% of total domestic bond issue, Krasnoyarsk Territory – RUB 17.8 billion, or 8.3 percent, and Nizhny Novgorod region – RUB 17.0 billion, or 7.9 percent.

Hence the top-3 issuers accounted for 30.2 percent of the total regional and municipal bonds placed (Table 20).

Table 20

Sub-federal and municipal bond placement in 2017

Subject of the Russian Federation	Amount issued, rubles in millions	Issuer's percentage of total amount issued, percent	Amount issued to domestic borrowing ratio, percent
Central Federal Okrug			
Belgorod region	4 000,0	1,9	31,0
Kursk region	1 300,0	0,6	4,4
Moscow region	12 500,0	5,8	16,7
Orel region	5 000,0	2,3	13,1
Tambov region	6 500,0	3,0	17,8
Yaroslavl region	10 000,0	4,6	14,9
North-West Federal Okrug			
Republic of Karelia	2 000,0	0,9	6,9
Republic of Komi	10 000,0	4,6	11,2
Kaliningrad region	1 706,8	0,8	6,4
St. Petersburg	30 100,0	14,0	100,0
Nenets Autonomous District	625,5	0,3	8,4
South Federal District			
Krasnodar Territory	10 000,0	4,6	17,4
Volgograd region	10 000,0	4,6	9,9
North-Caucasus Federal Okrug			
Republic of Karachaevo-Cherkassia	1 748,6	0,8	12,6
Volga Federal Okrug			
Republic of Mariy-El	2 000,0	0,9	11,6
Nizhniy Novgorod region	17 000,0	7,9	8,4
Samara region	10 000,0	4,6	18,1
Orenburg region	4 000,0	1,9	10,8
Saratov region	5 000,0	2,3	9,6
Ulyanovsk region	5 000,0	2,3	13,5
Urals Federal Okrug			
Sverdlovsk region	9 950,0	4,6	8,4
Khanty-Mansi Autonomous District	7 000,0	3,3	76,4
Yamal-Nenets Autonomous District	1 000,1	0,5	90,9
Siberia Federal Okrug			
Krasnoyarsk Territory	17 800,0	8,3	21,3
Kemerovo region	9 000,0	4,2	16,8
Novosibirsk region	10 000,0	4,6	7,4
Tomsk region	6 098,2	2,8	9,2
Far East Federal Okrug			
Republic of Sakha (Yakutia)	5 000,0	2,3	19,1
Magadan region	1 000,0	0,5	4,6
Russian Federation – Total:	215 329,3	100,0	7,3

Source: own calculations based on the data released by Russia's Federal Treasury.

The highest level of securitization (79.8%) was observed in St. Petersburg – 100 percent, and Yamal-Nenets Autonomous District – 90.9 percent.

In 2017, the amount of bonds issued by subjects of the Russian Federation and municipalities exceeded by RUB 97.0 billion the amount of redeemed securities, while in 2016 – RUB 32.0 billion (*Table 21*).

Table 21

**Net borrowing in the domestic market for sub-federal
and municipal bonds, rubles billion**

	Consolidated regional budget	Regional budgets	Municipal budgets
2017			
Net borrowings	97.0	91.4	5.6
Attracted funds	215.3	205.2	10.1
Principal repayment	118.3	113.8	4.5
2016			
Net borrowings	32.0	26.7	5.3
Attracted funds	160.5	153.6	6.8
Principal repayment	128.5	126.9	1.6
2015			
Net borrowings	-5.8	-7.1	1.3
Attracted funds	98.4	94.2	4.2
Principal repayment	104.3	101.4	2.9
2014			
Net borrowings	-9.2	-7.4	-1.8
Attracted funds	111.5	110.1	1.4
Principal repayment	120.7	117.5	3.2
2013			
Net borrowings	77.6	75.4	2.2
Attracted funds	154.6	149.6	5.0
Principal repayment	77.0	74.2	2.8
2012			
Net borrowings	38.2	36.8	1.3
Attracted funds	119.8	115.9	3.9
Principal repayment	81.7	79.2	2.5
2011			
Net borrowings	-58.2	-57.1	-1.1
Attracted funds	55.0	53.4	1.7
Principal repayment	113.2	110.5	2.8
2010			
Net borrowings	29.8	28.6	1.2
Attracted funds	111.1	105.8	5.2
Principal repayment	81.3	77.2	-4.1
2009			
Net borrowings	95.5	97.9	-2.5
Attracted funds	158.1	154.0	4.1
Principal repayment	62.6	56.1	6.6
2008			
Net borrowings	68.9	73.0	-4.1
Attracted funds	178.6	177.3	1.2
Principal repayment	109.7	104.3	5.4
2007			
Net borrowings	25.9	23.7	2.2
Attracted funds	84.2	79.9	4.3
Principal repayment	58.3	56.2	2.1

Source: own calculations based on the data released by Russia's Federal Treasury.

Most of the regions that issue bonds on a regular basis continued doing so in 2017 (Table 22).

Table 22

Sub-federal and municipal bonds prospectus registration in 2007–2017

Issuer	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	2	3	4	5	6	7	8	9	10	11	12
Subjects of the Federation											
Krasnoyarsk Territory	*	*	*	*	*	*	*	*	*	*	*
Nizhniy Novgorod Region	*	*	*	*	*	*	*	*	*	*	*
St. Petersburg	*	*		*	*	*	*	*	*	*	*

Cont'd

1	2	3	4	5	6	7	8	9	10	11	12
Tomsk Region	*	*		*	*	*	*	*	*	*	*
Republic of Sakha (Yakutia)	*	*		*	*	*	*	*	*	*	*
Yaroslavl Region	*	*		*	*	*	*	*	*	*	*
Republic of Komi		*		*	*		*	*	*	*	*
Republic of Karelia	*	*	*	*	*	*	*	*		*	*
Novosibirsk Region	*						*	*		*	*
Omsk Region							*	*		*	*
Sverdlovsk Region				*	*	*		*		*	*
Hanty-Mansiysky Autonomous Okrug			*				*	*		*	*
Irkutsk Region	*	*	*			*			*	*	*
Moscow Region	*	*								*	*
Yamal-Nenets Autonomous District										*	*
Tambov Region										*	*
Volgograd Region	*	*	*	*	*	*	*	*	*		*
Krasnodar Territory	*			*		*			*		*
Republic of Chuvashia	*	*	*		*	*	*	*			*
Republic of Mariy-El						*	*	*			*
Magadan Region							*	*			*
Kemerovo Region							*				*
Ivanovo Region	*				*						*
Ulyanovsk Region	*	*									*
Nenets Autonomous District											*
Kursk region											*
Kaliningrad region											*
Saratov region											*
Orel region											*
Republic of Karachaevo-Cherkessia											*
Udmurt Republic	*	*		*	*	*	*	*	*	*	
Republic of Mordovia							*	*	*	*	
Republic of Khakassia				*		*	*	*	*	*	
Stavropol Territory		*			*	*	*	*		*	
Tyumen region										*	
Tver region	*	*	*	*	*	*	*	*			
Lipetsk region	*	*				*	*	*			
Voronezh region	*					*	*	*			
Smolensk region							*	*			
Leningrad region							*	*			
Republic of Bashkortostan	*				*	*	*	*	*		
Tula region						*	*	*	*		
Kostroma region	*				*		*				
Moscow		*	*	*			*				
Kaluga region	*	*			*	*					
Vologda region					*	*					
Ryazan region				*		*					
Republic of Buryatia					*						
Murmansk region				*							
Penza region	*	*									
Kurgan region		*									
Republic of Kalmykia	*										
Khabarovsk Territory											
Republic of Kabardino-Balkaria											
Briansk region											
Sakhalin region											
Primorsky Territory											
Municipalities											
City of Novosibirsk				*	*	*	*	*	*	*	*
City of Tomsk	*	*		*		*		*	*	*	*
City of Nizhniy Novgorod											*
City of Omsk								*		*	
City Volzhsky, Volgograd region								*			
City of Krasnoyarsk	*	*	*	*	*	*					

1	2	3	4	5	6	7	8	9	10	11	12
City of Kazan	*		*	*	*						
City of Krasnodar				*	*						
City of Ufa				*							
City of Elektrostal, Moscow region	*		*								
City of Smolensk			*								
City of Lipetsk	*	*									
City of Magadan	*	*									
City of Bratsk		*									
City of Novorossiysk		*									
City of Ekaterinburg	*										
Klin district, Moscow region	*										
Noginsk district, Moscow region	*										
City of Blagoveshensk	*										
City of Cheboksary	*										
City of Balashikha, Moscow region	*										
Odintsovo district, Moscow region											
City of Astrakhan											
City of Bryansk											
City of Voronezh											
City of Orekhovo-Zuevo, Moscow region											
City of Yaroslavl											
City of Voronezh											
City of Yuzhno-Sakhalinsk											
City of Novocheboksarsk											
City of Angarsk											
Vurnarsky district, Republic of Chuvashia											
City of Shumelia, Republic of Chuvashia											
City of Barnaul											
City of Perm											
City of Kostroma											
City of Arkhangelsk											
City of Dzerzhinsky											

Source: Ministry of Finance of the Russian Federation.

3.10. Russia's banking sector¹

3.10.1. Banking sector's main development trends

In 2017, banking sector demonstrated moderate development trends across main indicators. Asset holdings went up by 6 percent during the year somewhat below nominal growth rate of Russia's GDP. The ratio of banks' asset holdings and annual GDP remained at 91–92 percent for the second year in a row (*Fig. 55*).

The number of lending institutions decreased by 56 from 623 to 567 during the year. The process whereby some of the credit institutions were forced out of the market on the grounds of failing to meet the regulator's requirements notably slowed down. Around fifty banking licenses were revoked in 2017 – half of what was seen in 2015 and 2016 when ninety banking licenses were revoked annually.

¹ This section is written by Mikhail Khromov, the Gaidar Institute, IAES-RANEPA.

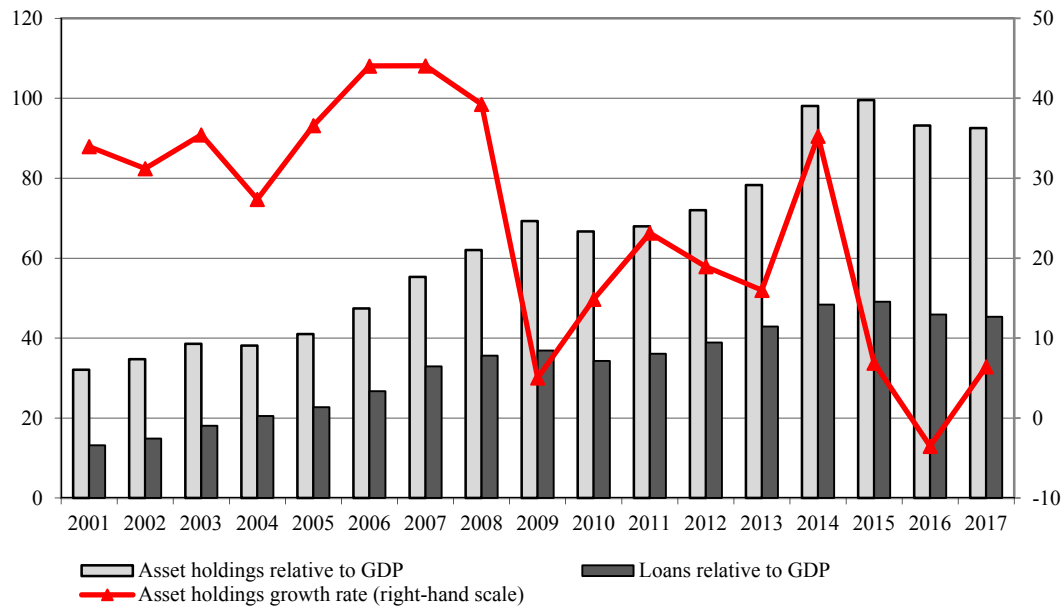


Fig. 55. Banks' asset holdings growth rate and banking sector size relative to Russian economy size, percent

Sources: Bank of Russia, Rosstat, own calculations.

3.10.2. Update of regulation procedure for bank resolution mechanism

The resolution of Bank Otkrytie FC will be the first case of applying a recently introduced new mechanism for the resolution of commercial banks. The mechanism enables the Bank of Russia to control more efficiently bank resolution costs and can tilt the balance between banking license revocation and solvency recovery in favour of the latter.

For the entire H2 2017, bank resolution mechanisms were applied to five banks, three of which were major Russian private banks, namely Bank Otkrytie FC, Promsviazbank, and Binbank.

Amendments to the federal law were adopted in spring 2017, which regulate procedures for bank resolution mechanisms.

New regulations securing an alternative mechanism for the resolution (solvency recovery) of banks are in force since June 2017. For this purpose the Bank of Russia has established an entity, the Fund for Banking Sector Consolidation (FBSC), and set up a FBSC management company fully controlled by the Bank of Russia. The updated mechanism has been proclaimed to be designed primarily for curtailing bank resolution costs and for increasing control over spending of appropriated resources.

Until recently bank resolutions have been performed basically at the cost of the Bank of Russia, involving Deposit Insurance Agency (DIA) and investing banks that are interested in bailing out a given bank so that it can develop its business. Quite often, however, investing banks used the money allotted for bank resolution for the purpose of their own business development. The new bank resolution mechanism prevents using the money prior to selling the rescued bank. Thus two elements – the DIA and the investing bank – have been removed

from the chain of financial aid for rescued banks and replaced with the management company controlled by the Bank of Russia

What are the DIA's provisional results concerning procedures for the recovery of Russian banks' solvency? As at 1 August 2017, the Deposit Insurance Agency was involved in recovering solvency of 26 banks using the old procedure. Bank resolution procedures had been completed by the same date for another 20 banks. As a result of such procedures, rescued banks generally affiliated with investing banks. As at 1 July 2017, the Deposit Insurance Agency allotted more than RUB 1.2 trillion in banks' solvency recovery procedures, most of which (RUB 1.14 trillion) were provided in the form of repayable loans from the Bank of Russia. Furthermore, actual maturity dates for such loans may be found to be long-term enough. DIA's repayments to the Bank of Russia within the bank resolution procedures in place have so far been less frequent than new loans. The DIA's debt in H1 2017 increased more than RUB 70 billion. Moreover, this happened under the circumstances when solvency recovery procedures had not yet started for new banks. There were only two such banks in 2016-H1 2017, one (Peresvet Bank) of which was already subject to a preliminary moratorium on the repayment of creditors' claims, that is, the insured event occurred from the perspective of the deposit insurance framework.

What should be kept in mind is that the financing of bank resolution procedures is just one of the channels available for crediting the DIA by the Bank of Russia. The DIA's core function – to provide insurance for retail bank deposits and to ensure that the depositors of shutdown banks are repaid on a continuous basis – is loss making. The *Mandatory Deposit Insurance Fund* ran out of its own money as early as summer 2015. Today, the deficit of the deposit insurance framework is covered by Bank of Russia's loans, with a credit limit being updated on a regular basis. At half-year (2017) end, the existing agreement between DIA and the Bank of Russia envisages to allocate RUB 820 billion, of which only RUB 657 billion were received. Over six months of 2017, the Bank of Russia actually allocated around RUB 108 billion for assistance to the deposit insurance system.

The ratio of these two items of Bank of Russia's spending on the DIA – on bank resolution and on payments to depositors – can be a criterion for making a decision on banking license revocation or for making attempts to revive a bank. As long as the *Mandatory Deposit Insurance Fund* is able to cover payments to depositors, the decision-making on resolution of a given bank, particularly a big enough bank, could be a way to continue running a deficit-free deposit insurance framework. These considerations have not been applied since summer 2015 until now because both processes – deposit insurance and bank resolution – have been financed in a similar manner, that is, through the Bank of Russia's loan to the Deposit Insurance Agency. Within the new bank resolution mechanism framework the Bank of Russia is supposed to increase its control over spending on solvency recovery of troubled banks, and therefore it may be assumed that bank resolution would be a more preferable regulatory tool than banking license revocation when it comes to controversial cases

The Bank of Russia decided 29 August to implement policies aimed at increasing the financial sustainability of *Bank Otkrytie FC*. Otkrytie thus became the first bank in which the new bank resolution mechanism was applied just two weeks after the Bank of Russia's new regulations came into effect. Although no exact amount of the required aid has to date been announced, such an amount may be much bigger than what the Bank of Russia allocated in H1 2017 for bank resolution procedures. The Bank of Moscow project is still the largest ever

solvency recovery project worth almost RUB 300 billion in 2011. The Otkrytie rescue project has very good chances to hit a new all-time high.

It is safe to say, on the one hand, that as a result of this operation the Russian banking market would de facto miss a private player until the Otkrytie package is sold at a public auction. Until then the rescued bank will be managed by the regulator, with its development strategy being determined by regulator's actions. Indeed, this will have a strong effect on the market because Otkrytie has been a country's largest private bank over the past two years. However, an attempt to save a top private bank seems rather a step towards promoting competition in the banking market in the long term. Had the Otkrytie's banking license been revoked, top state-owned banks would have had a big share of retail deposits.

What in this case should be regarded as definitely negative signal is that this has secured the 'too big to fail' concept in the Russian banking market. Let us recall the liquidity crisis of 2004 at Alfa Bank, representing the then largest private bank in Russia, facing a drastic deposit outflow. No deposit insurance framework was in place at that time. To prevent panic among customers and to compensate the owners for liquidity loss, the bank owners had to use their own money to prop up the bank in short order. The owners of Otkrytie seemed to have neither money nor incentives to save the bank in 2017. The bank's customers however received a signal from the regulator suggesting that their money will be intact regardless of the quality of management and whether or not the owners want to keep the bank alive. This indeed was a positive fact for the Otkrytie's customers, whereas the same fact is quite negative in terms of management of risks that may affect the financial system in the long term.

3.10.3. Banking sector financial result

The deceleration in the banking profit was caused by large losses in banks that were placed under financial recovery. The biggest banks continue accumulating the major share of profits among operating banks. Moreover, the yield from regular banking operations remains rather volatile.

The Russian banking sector ran a book profit of RUB 790 billion as of the 217 year-end, which was 15 percent less than a year earlier. The annualized return on assets (ROA) down from 1.1 percent to 1.0 percent and return on equity (ROE) down from 13.2 percent to 10.4 percent.

As we noted a year earlier, the banking sector profitability remains lower than what it was during the pre-crisis period of 2011–2012 and especially with the period of 2005–2007 when Russia's banking sector boasted of the highest investment attractiveness.

The deceleration in the banking sector growth rates in 2017 was caused by losses in large banks that were placed under financial recovery in Q3 2017. As of the end of three quarters of 2017, there were top four loss-making banks, namely *Bank Otkritie FC* (-RUB 279.3 billion), Rost Bank (-RUB 82.8 billion), Trust Bank¹ (-RUB 72.9 billion) and Binbank (-RUB 31.9 billion), making a total of -RUB 466 billion. These banks were loss making at year-end as a whole. However, starting with bank resolution Bank of Russia stopped opening their books. Moreover, in December resolution was opened regarding another large private bank – Promslyazbank. Its financial result as of 2017 year-end also turned out to be negative

¹ Financial recovery procedure for Trust Bank commenced as early as 2014, with active involvement of *Bank Otkritie FC*. This affiliation enables us to include Trust Bank in the group of banks that were placed under resolution in Q3 2017

The losses emerged following the appointment of provisional administration to the banks – a compulsory procedure as part of the financial recovery (resolution) process – moving a great deal of assets to higher risk categories, which required immediate increase in provisions for losses on such assets. Therefore, the banks had to spend more on increasing their provisions, thus deteriorating their financial performance figures. The financial performance figures were satisfactory enough until financial recovery came into force

For instance, *Bank Otkritie FC*, which was placed under resolution on 29 August 2017, reported a profit of RUB 7.1 billion as of the end of July 2017, whereas RUB 31.8 billion in losses were recorded shortly after in August. The primary negative financial performance results of RUB 254.5 billion were posted in September.

Binbank and Rost Bank, which were placed under financial recovery on 20 September 2017, were officially considered as profit-makers (RUB 2.1 billion and RUB 1.3 billion, respectively) as early as late August 2017, whereas substantial losses were recorded in September.

Trust Bank has disclosed its financial reports on an irregular basis since its resolution in December 2014. Its financial performance figures were most likely negative throughout the entire period of financial recovery. For example, the bank posted RUB 9.6 billion in losses as of the end of the first three quarters of 2016.

The banking sector profitability was heavily affected by the performance figures of problem banks, showing considerable growth in costs on loan loss provisions that increased RUB 605 billion during the first three quarters of 2017, including an increase of RUB 370 billion in September alone. The banking sector posted an increase of RUB 361 billion in loan loss provisions as of the end of the first three quarters of 2016.

The banking sector profit related to the revaluation of foreign exchange accounts turned out to be zero over the first three quarters of 2017, whereas bank losses totalled RUB 42 billion as a result of exchange rate dynamics over the same period previous year (*Fig. 56*).

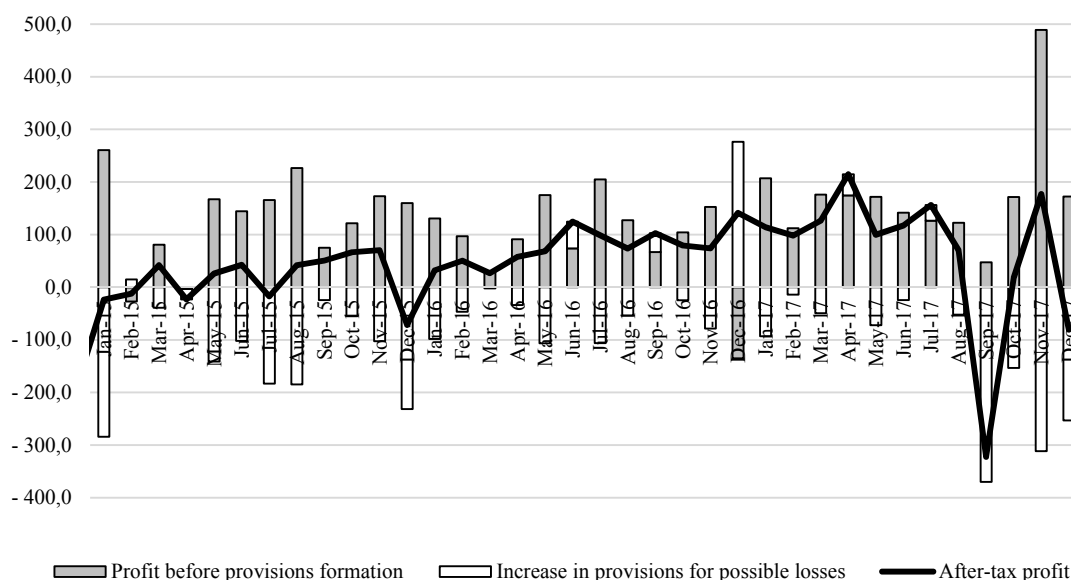


Fig. 56. Principal components of bank profit, billions of roubles

Source: Bank of Russia, own calculations.

Thus profit from regular banking operations in January-September 2017 amounted to RUB 1,279 billion, up by 28 percent from RUB 996 billion a year earlier. The result could have been regarded as a positive signal if it were not for the fact that profit from regular banking operations remains volatile enough. The profit from regular banking operations in January-September 2015 was higher than what it was over the first three quarters of 2016. The profit varied during the first nine months of 2017, from RUB 207 billion in January 2017 to RUB 47 billion in September.

The sharp decline in the performance figures of banks under resolution gives evidence of long-brewing problems facing the banks. This leads to a conclusion that the financial statements of these banks released shortly before the commencement of financial recovery contradicted the reality. This brings some scepticism towards the performance figures of other banks. The Bank of Russia, as a banking market regulator, de facto has turned out to have limited control over financial status of most banks.

Therefore, there is close relationship between Russian banking sector's financial performance figures and its high concentration, when financial performance figures of some banks, including also smaller banks, can have a strong effect on the entire banking sector. Excluding the top four loss-making banks, the rest of the banks reached a profit of RUB 1,141 billion in January-September 2017, up 80 percent from the same period of 2016.

Another aspect of such a concentration is a persistently big number of state-run banks. For instance, the four biggest state-run banks (Sberbank, VTB, VTB24 and Gazprombank) ran a profit of RUB 675 billion during the first three quarters of 2017, which means that the entire banking sector profit was generated by state-run banks. A significant contribution of state-run banks to the banking sector profit reflects their leading position in the market. Therefore, by accumulating a great deal of financial resources for equity build-up, these banks have a bigger development potential than private banks. A kind of vicious circle is therefore developing. Low profitability of private banks discourage their owners to increase equity, thus securing their subordinate position to the public segment of the banking sector.

3.10.4. Interaction between banks and households

Recovery of consumer lending has facilitated growth in final consumption expenditures and brought about stability of households' savings amid the ongoing decline in real income. However, in the long-term prospect this situation will put at risk both the financial stability of households and the resource base of the banking sector.

In 2017, households' budgets were formed amid the ongoing stagnation of real incomes. During 2017, households' cash incomes rose in nominal terms by 2.5 percent, however, in real terms they turned out to be 1.1 percent lower than a year earlier. In the same period, households' real disposable cash income fell even further by 1.7%.

Despite weak cash income growth in nominal terms, final consumption expenditures increased both in nominal and real terms. The volume of consumption in nominal terms rose by 5.3 percent notably outstripping income growth rates. Final consumption expenditure growth rates came to 1.1 percent in 2017. The share of expenditures on final consumption in the total volume of households' cash incomes amounted to 72.3 percent, which is 2.0 percentage points higher against 2016.

In 2017, households' savings saw mixed dynamics as regards various components thereof. In 2017, households' bank deposits increased by RUB 1.9 trillion, down 18.2 percent compared to the previous year. In 2016 savings on individuals' bank accounts and deposits rose by

RUB 2.3 trillion. In addition, the share of households' incomes used for replenishment of bank accounts fell from 4.3 percent in 2016 to 3.4 percent in 2017.

The fall in the households' cash inflow into banks affected both ruble deposits and, to a greater extent, accounts and deposits denominated in foreign currency. In 2017, the cash inflow to retail ruble accounts and deposits with Russian banks amounted to RUB 2.3 trillion unchanged compared to 2016. Dynamics of deposits denominated in foreign currency (with adjustment to the exchange rate revaluation) were already close to zero in 2016. In 2016, growth of foreign currency deposits constituted in ruble equivalent 52 trillion. In 2017, the decrease of bank deposits denominated in foreign currency constituted RUB 388 billion, constituting more than 7 percent of the total households' accounts and deposits denominated in foreign currency in Russian banks.

Against the background of deceleration of personal cash inflow into banks, cash turnover has picked up both in rubles and in foreign currency. Monetary aggregate M0 (physical paper and coin) increased over 2017 by RUB 731 billion up 54 percent against 2016.

The volume of foreign currency in cash notably increased in 2017. Over the year, the volume of foreign currency in cash went up by USD 11.8 billion. A year earlier, purchases of foreign currency were less by 60 percent—around USD 7.5 billion. However, in our view it would be premature to speak about substantial growth in foreign currency predominance. A larger portion of growth in foreign cash can be explained by the abovementioned reduction of foreign currency deposits with banks. In 2017, the aggregate deposits denominated in foreign currency (both cash and non-cash) turned out to be lower than a year before.

A greater appeal of cash as compared to bank deposits can be explained by a sustained decrease in interest on bank deposits. Therefore, as regards annual ruble deposits the average interest rate fell from 7.1 percent per annum in 2016 to 6.0 percent per annum in 2017. As regards annual ruble deposits, the reduction was even more dramatic (from 8.6% to 7.0% per annum).

The interest on foreign currency deposits fell notably. If in 2016 USD deposits could yield 1.2–2.1 percent per annum, in 2017 they earned only 0.7–1.4 percent. The interest on annual euro deposits constituted solely 0.3 percent compared to 0.7 percent in 2016.

Against the background of low interest on bank deposits households do not see any difference between keeping cash or have a bank deposit. By choosing the cash mode of savings in foreign currency, the depositor avoids risks related to the Russian banking sector, primarily, the risk of a bank license being revoked and the need to purchase foreign currency again and loose on the exchange rate transaction. It is noteworthy that deposits are compensated in rubles only.

As regards ruble deposits, the effect of the interest rate decrease happened to be less significant, but even in this segment households in general were less motivated to keep money on bank accounts.

Nevertheless, total amount of households' bank deposits and cash at 2017 year-end moved up by 9.2 percent from RUB 34.4 to 37.7 trillion.

Recovery of bank lending has become the main factor both behind growth in households' consumption expenditure and maintaining behavior of savings in 2017.

Personal debt on bank loans over 2017 up RUB 1.4 trillion, nearly 8-fold more than a year earlier (RUB 177 billion). Outstanding debt growth vis-à-vis households' cash income up from 0.3 percent seen in 2016 to 2.5 percent in 2017.

Consumer lending was the main contributor to the expansion of the loan portfolio. In this money market segment, the sustained decline of the debt gave way to its growth in March 2017. As a result, over 2017, households' consumer lending debt to banks rose by RUB 0.68 trillion following a drop of RUB 0.34 trillion in 2016.

Mortgages also demonstrate positive dynamics. Over the year, households' mortgage debt up RUB 0.68 trillion against RUB 0.52 trillion seen in 2016.

It appears that in the near future the existing situation with households' finances and relations between banks and households will stay highly unstable.

Firstly, as was stated above, consumption growth and even stability of households' savings are underpinned by growth in borrowed funds, rather than higher incomes. This source of households' well-being can be regarded only as a temporary one. In the long-term, any loan reduces the nominal value of households' disposable income by the value of interest payments. It means that amid a lack of sustainable cash income growth active refinancing of loan debts is inevitable. Probably, such a process is already underway driven by falling loan interest rates. However, reduction of interest rates has its own limits and both for borrowers and lenders it is crucially important that by the time when interest rates cease to go down the Russian economy could embark on the trajectory of sustainable growth ensuring a substantial increase in households' real incomes.

Secondly, in 2017 households ceased to be net creditor of the banking sector: growth in accounts payable turned out to be higher than that in deposits growth. The situation is likely to change for the better in December when bank deposits demonstrate notable growth by virtue of seasonal factors. However, generally, for banks such a trend means a loss of one of the most stable sources of their liabilities. Amid reduction of external borrowing volumes, corporate lending which is less profitable as compared to the retail one will continue to stagnate.

3.10.5. Bank lending as the main source of financing Russian economy

Corporate lending in Russia exhibited signs of buoyancy in 2017. New corporate bank loans have reached higher nominal volumes than prior to the crisis. Most importantly, the ratio of lending to economic activity volumes has also increased, albeit not higher than pre-crisis values. The quality of credit portfolios owing to large banks resolution does not provide visible improvements.

During 2017, banks issued new corporate loans worth RUB 38.4 trillion, up 8.1 percent from the previous year. At the same time, 2017 so far has not become a record one in new corporate loans issued – 2014 results were a little bit higher in nominal terms – RUB 38.53 trillion.

The rise in the lending market in 2017 was generally triggered by the increase in both ruble and foreign currency loans. Over the year, banks issued ruble loans worth RUB 34.8 trillion, up 7.5 percent from the previous year. The increase in foreign currency loans was more impressive. During 2017, banks increased foreign currency corporate loans by 29.4 percent in ruble terms and 8.1 percent in dollar terms.

However, the share of foreign currency loans remains small. In 2017, banks issued loans to the tune of USD 62 billion or RUB 3.6 trillion in ruble equivalent that constituted less than 10 percent of total new loans.

The loan market recovery has been seen not only in nominal terms but, most importantly, also in the size of economic activity. Over 2017, the volume of corporate bank loans reached 25.1 percent of companies' turnover against 24.2 percent a year earlier. However, the today's

ratio of lending to economic activity in the lending market is far behind the ratios seen in previous periods. At 2013 year-end, the ratio reached 30.4 percent (*Fig. 57*).

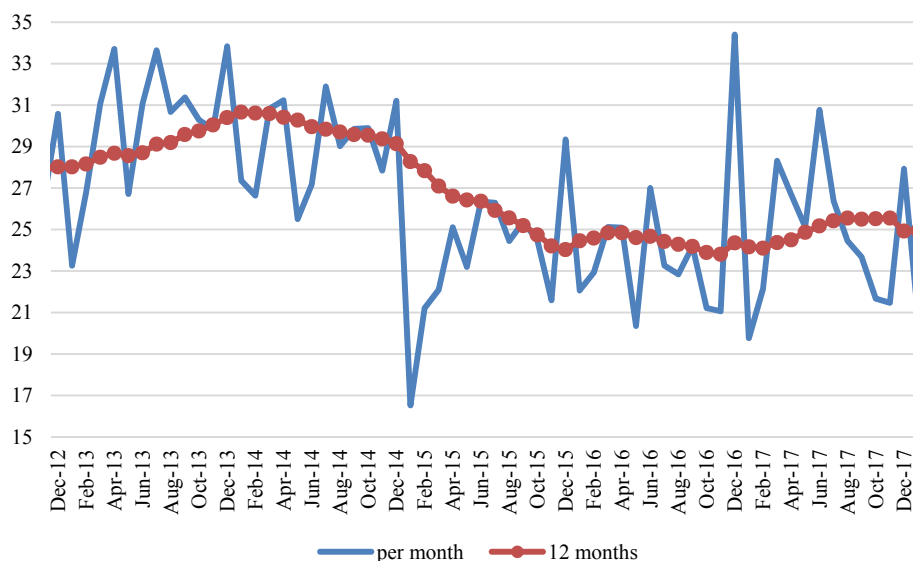


Fig. 57. Ratio of corporate bank loans to companies' turnover, %

Sources: Bank of Russia, Federal State Statistics Service, own calculations.

The upsurge in new loans has naturally led to a recovery in outstanding corporate bank loans. During 2017, total outstanding bank loans up 4.9 percent with adjustment to loans issued in foreign currency, meanwhile in 2016, outstanding debt shrank by 0.1 percent (*Fig. 58*).

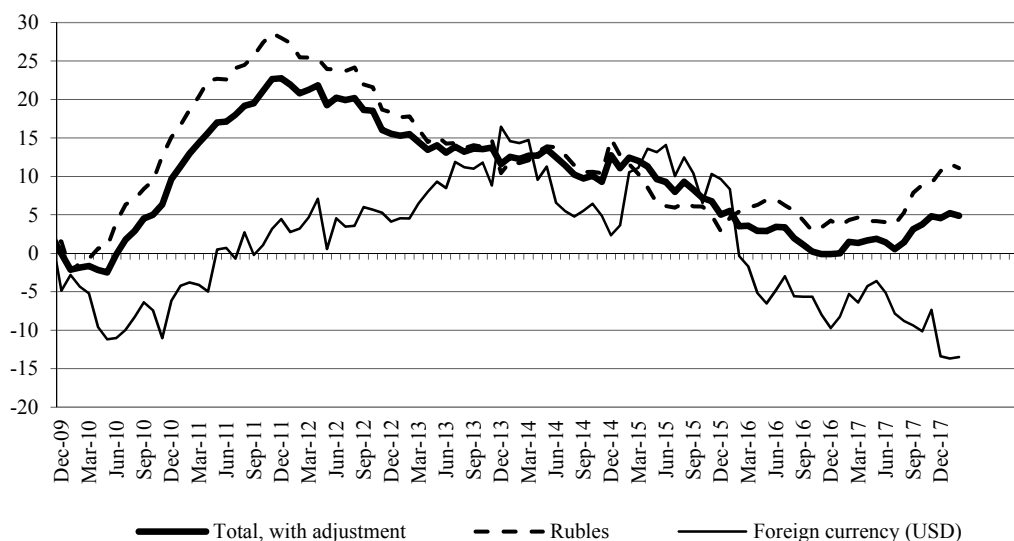


Fig. 58. Dynamics of corporate bank loans growth for 12 months

Sources: Bank of Russia, own calculations.

Current state of the corporate loan portfolio quality so far does not allow to speak about notable improvements. Over 2017, the share of outstanding loans in the total volume of

outstanding corporate bank loans contracted merely by 0.2 percentage point from 6.1 percent as of January 1, 2017 to 5.9 percent as of January 1, 2018.

Moreover, foreign-currency components of overdue loans exhibited mixed dynamics. The share of overdue ruble loans in total outstanding ruble loans dropped by 0.5 percentage point during 2017, whereas the share of overdue foreign currency loans shrank by merely 0.1 percentage point. This is due to the overall decline in outstanding foreign currency loans, in front of which the proportion of “bad” foreign currency loans becomes bigger.

A negative factor is the recovered growth in the ratio of loan loss provisions to total credit outstanding was due to large banks resolution, additionally quality of the credit portfolio deteriorates. Most likely, this issue can solely be resolved surgically – by keeping bad loans off the resolution banks’ banker books, for example, through setting up of toxic debt funds and dumping bad assets of resolution banks onto the funds balance sheets.

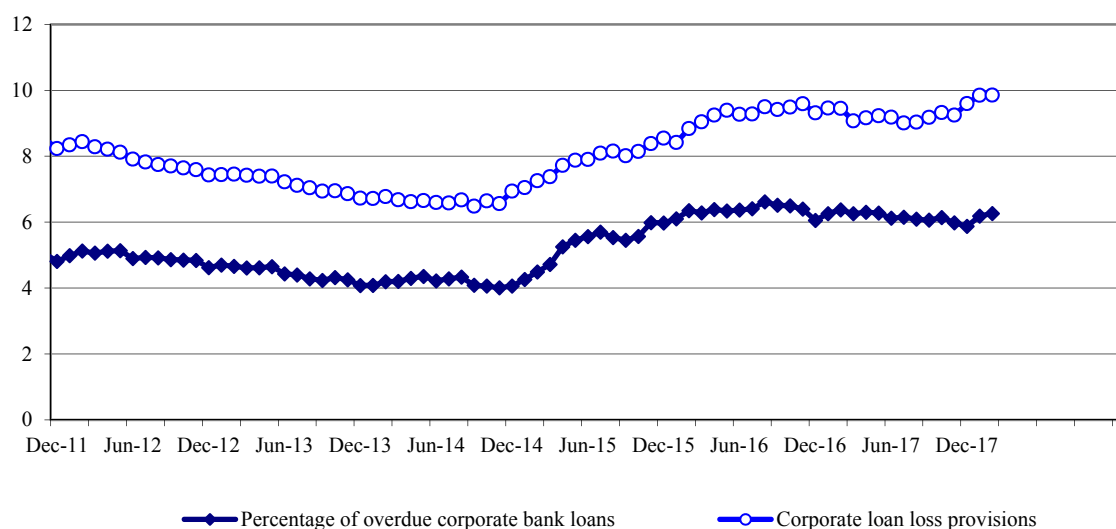


Fig. 59. Values of quality of bank corporate credit portfolio, percent

Sources: Bank of Russia, own calculations.

Section 4. The real sector of the economy

4.1. The macrostructure of production¹

4.1.1. The dynamics of the Russian economy in 2017: internal and external demand

The economic situation in 2017 was characterized by a gradual recovery of positive dynamics. GDP in 2017 constituted RUB 92.08 trillion up 1.5 percent compared to the previous year.

First signs of business revival were observed in H2 2016 driven by price growth on hydrocarbons and strengthening of the ruble affected the dynamic and structure of the external trade turnover and domestic production. However, instability of factors both stimulating and curbing economic development provoked changes of quarter-by-quarter GDP dynamics.

Year-on-year and quarter-on-quarter dynamics of macroeconomic indicators for 2016–2017 demonstrate gradual relaxation of the recession depth with regards to all major macroeconomic parameters brought about by a notable drop in the rate of inflation, changes in the structure of production costs resulting from the ruble's depreciation, and renewal of the external trade turnover growth. The share of net exports in GDP in current prices in H1 2017 rose to 6.6 percent, and at the year-end constituted 5.5 percent up 0.2 percentage point against last year.

Amid relatively favorable changes in external economic conditions, renewal of the domestic demand was the main prerequisite for meeting biennial recession. The structure of home demand seen in 2017 was characterized by growing volume of fixed investment and their increased contribution to GDP dynamics. In 2017, fixed investment increment constituted 4.4 percent, household final consumption expenditure up 3.4 percent during 2017. However, one should bear in mind that the dynamics of these indicators was markedly affected by recession in the construction/investment complex and shrinkage of consumer markets during previous three years. In 2017, household final consumption expenditure came to 92.8 percent, fixed investment–92.3 percent, and GDP–99.5 percent against 2013.

Behind the renewal of the Russian economy upward dynamics in 2017 was overcoming of economic recession practically in all basic types of economic activity. In comparison with 2016, increment of gross value added in industrial production constituted 0.8 percent, commerce – 3.1 percent, and transportation – 3.7 percent. In 2017, agricultural contribution to gross value added rose amid production growth by 1.2 percent compared to the previous year.

¹ This section is written by Georgy Malginov, the Gaidar Institute, RANEPa; Alexander Radygin, the Gaidar Institute, RANEPa.

Against the backdrop of gradual improvement of the investment climate the snail-paced adaptation of the construction complex to the changes in process, market structure of investment goods and against the background of borrowing on domestic and external capital markets was negatively affecting economic recovery. The factors behind the restriction of demand on construction works and services were retention of high bank interest rates, decline of both economic efficiency and profits of enterprises and organizations, contraction of the households' investment activity on the housing construction market amid decrease of personal income. Construction scope of works in 2017 constituted 98.8 percent of the same indicator of the previous year and 90.5 percent of the 2013 level when stagnation of business activity in the construction/investment complex was observed (*Table 1*).

Table 1

Characteristics of main economic development factors in 2016–2017, as percent to the same period of previous year

	2016	Quarter				2017	Quarter			
		I	II	III	IV		I	II	III	IV
GDP	99.8	98.8	99.4	99.6	99.3	101.5	100.5	102.5	101.8	101.3
External factors										
External trade turnover (calculated by the balance of payments methodology)	88.6	73.1	81.5	96.1	104.5	125.3	132.5	125.3	119.8	123.4
exports	82.5	67.1	74.2	90.1	101.9	125.3	136.5	123.4	118.8	124.2
imports	99.2	85.3	95.6	105.6	108.7	124.1	126.1	128.3	121.2	122.1
balance	60.8	48.8	50.6	64.0	91.1	127.8	154.1	113.3	121.2	128.4
Oil prices, USD/barrel	44.05	31.12	39.14	43.14	50.08	54.39	54.12	50.25	51.74	61.47
Official RUB/USD exchange rate, as of period's end	60.66	67.61	64.26	63.16	60.66	57.06	56.38	59.09	58.02	57.06
Internal factors										
Investment in fixed assets	99.8	96.5	96.9	99.2	103.2	104.4	101.4	105.0	102.2	106.4
Consumer demand										
Turnover of retail trade	95.4	95.0	95.1	96.1	95.4	101.2	98.4	101.0	102.1	103.0
Paid services rendered to population	99.7	99.8	99.5	100.0	100.3	100.2	100.2	100.6	100.2	100.4
Output of goods and services, by basic type of economic activity	100.5	100.3	100.3	100.6	100.8	101.4	100.6	103.8	102.1	99.5
Industry	101.3	101.1	101.5	101.0	101.7	101.0	100.1	103.8	101.4	98.3
Agriculture	104.8	103.6	103.3	105.6	105.0	102.4	100.9	100.1	105.4	99.8
Construction	97.8	97.3	95.7	97.8	99.4	98.6	95.5	97.4	100.0	99.4
Transport	101.8	101.5	101.0	102.8	101.7	105.4	105.3	109.3	105.5	101.8
Social parameters										
Real disposable income	94.2	96.7	94.6	93.1	93.4	98.3	99.4	97.1	98.2	98.7
Real charged wage	100.8	99.4	100.3	101.2	101.8	103.4	101.8	103.4	103.1	105.2
Real size of allotted pension	96.6	97.2	95.6	96.2	97.1	103.6	112.0	99.9	100.7	101.6
Labor market										
Number of employed	100.1	99.8	100.0	100.2	100.4	99.0	99.7	99.1	99.0	99.4
Unemployment rate	5.5	5.9	5.7	5.3	5.4	5.2	5.6	5.2	5.0	5.1
<i>For reference</i>										
Consumer Price Index (relative to December of previous year)	105.4	102.1	103.3	104.1	105.1	102.5	101.0	102.3	101.7	102.5
Price index on investment goods	103.2	99.8	102.3	103.7	103.2	103.0	99.1	101.2	103.0	103.1
Key rate (as of period's end) percent		11.00	11.0	10.5	10.0	7.75	9.75	9.0	8.5	7.75
Labor productivity	99.7	99.0	99.4	99.4	98.9	102.8	100.8	103.4	102.6	101.2

Source: Rosstat.

The factors behind the negligible slide in GDP in 2016 were the reduction in the rate of decrease of domestic demand and the retention of net exports (calculated by the SNA methodology) in the positive territory and provided added momentum for the GDP growth in 2017.

The distinctive features of the macroeconomic situation in 2017 were determined by the unidirectional positive dynamics of external and home demand. 2014–2015 saw around 10 percent decrease of domestic demand against 2013 that was a turning point in the three-year trend of domestic market performance. Unprecedented shrinkage in domestic demand seen in 2015–2016, which was not offset by the exports dynamic, remained the principal factor behind the decrease in the rate of development of the Russian economy in this period. Adaptation of the Russian economy to new realities was accompanied by a gradual renewal of the positive dynamic of domestic demand thus markedly determining the prospects for the Russian economy in 2017. To note, in Q1 2017, GDP positive dynamic was maintained by external demand dynamic growth and in Q2 2017 domestic demand growth was outstripping external demand growth. However, H2 2017 reported gradual decrease of domestic demand growth, which was accompanied by slowdown of domestic output and imports (*Fig. 1*).

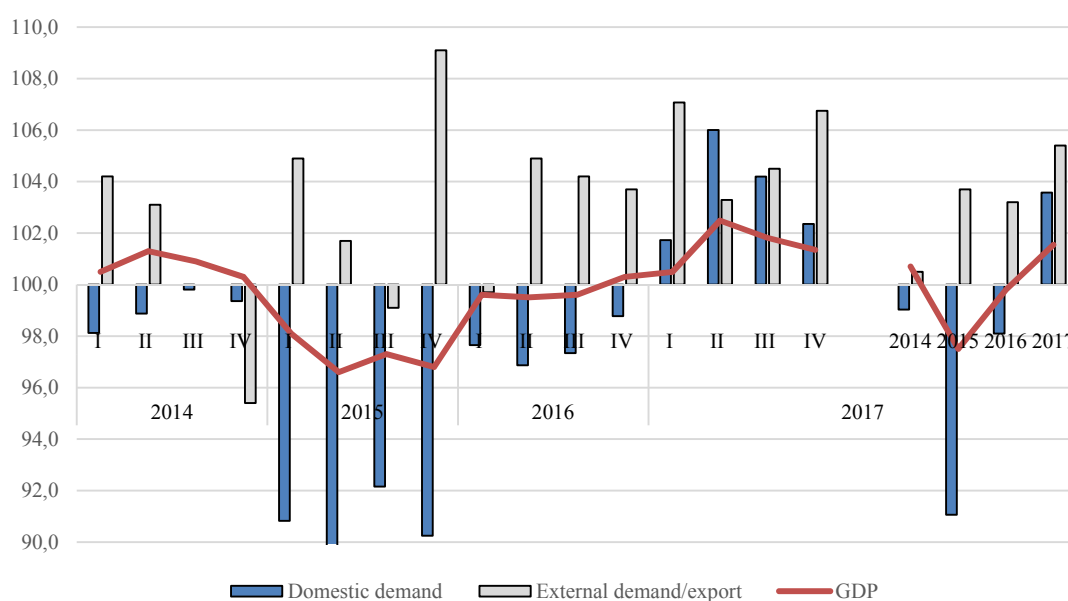


Fig. 1. GDP dynamics by component of domestic and external demand in 2012–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

Simultaneous growth in the investment and consumer markets was another significant feature of 2017. Investment bust in fixed capital at its lowest point was passed in Q2–Q3 2015 and during entire 2016, improved situation on the capital market was observed. Growth in investments in fixed capital by 4.4 percent against that a year earlier was reported in 2017 for the first time after twelve quarters of contraction. Investment activity peaked in Q2 2017. It was hard to expect significant changes in the GDP structure by components amid retention of investment share in fixed capital practically at the previous year level.

The consumer market had been very slowly recovering from the consequences of the acute crisis of 2015–2016. In 2017, personal real disposable income dropped by 1.7 percent versus 5.8 percent in 2016 and dynamic of the household final consumption expenditure went into positive territory after the two-year fall (*Fig. 2*).

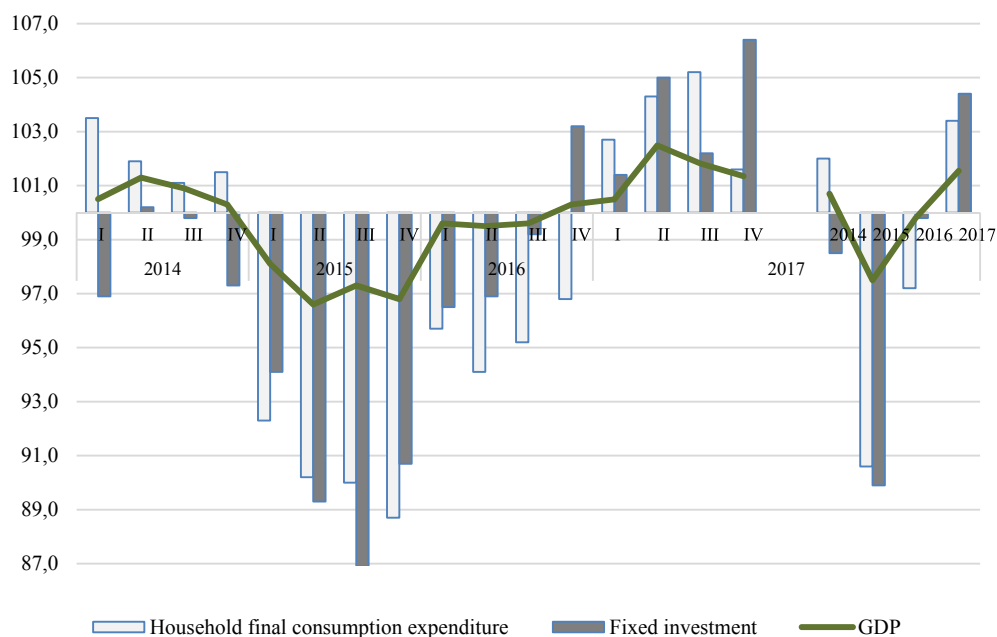


Fig. 2. The dynamics of investment and consumer demand 2014–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

The dynamics of domestic market was determined both by competitiveness of domestic goods and services compared to their imported analogues by price parameters and by a fall of production efficiency in non-tradable goods and services sectors compared to export oriented tradable sector of the economy. As a result, in 2016, domestic production of goods and services for the Russian domestic market dropped by 4.3 percent on the previous year. As a result, the pace of production of goods and services for the domestic market decreased by 4.3 percent compared to 2014. Simultaneous contraction of demand on domestic and imported capital goods seen in 2014–2016 contributed to negative trends on the domestic market. The proportion of imports of goods for intermediate consumption reflected insufficient local content of main production. Growth of investment goods imports reflected increased need for renewal of upgrade and modernization of export oriented and import substitution productions. A number of additional difficulties emerged due to tightening on the global credit market, the anti-Russian sanctions and the restrictions on imports of some types of technological equipment necessary for implementing the investment plans of mineral extracting and processing enterprises, as well as infrastructure projects. Easing of imports contraction in comparison with exports contraction (according to balance of payments methodology) observed in 2016 positive affected GDP dynamics.

In Q2 2017, there was for the first time since 2014 domestic production growth of goods and services for the home market in comparison with the corresponding period of the previous year. However, on the whole for 2017-year end results, it remained in although small but negative territory.

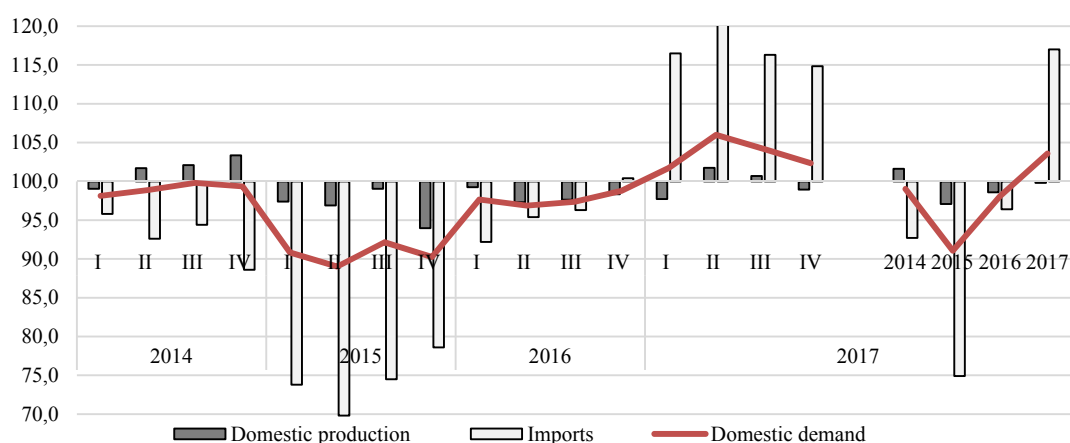


Fig. 3. Dynamics of domestic demand by components in 2014–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

To note, change in the structure of imports due to a reduction of deliveries of consumer and intermediary goods and growth of capital goods imports markedly affected positive dynamics of domestic demand in 2017 (*Table 2*). This fact gave the domestic investment market a boost and provided an additional momentum to overcome the recession of domestic production.

Table 2

Structure of imports by function type (calculated by the balance of payments methodology, percent)

	Goods		
	consumer	investment	intermediate
2012	38.1	24.9	37.0
2013	37.6	24.3	38.0
2014	36.1	24.5	39.4
2015	36.4	23.2	40.4
2016	35.6	26.5	37.9
2017	33.6	27.5	38.9
Q1	36.8	22.8	40.4
Q2	32.0	27.8	40.2
Q3	32.6	29.0	37.4
Q4	33.6	27.5	38.9

Source: Rosstat.

One can not assess growth of capital goods imports conclusively. Amid unquestionably positive impact of imports on investment demand dynamic and on production incentives oriented towards foreign capital goods and components, renewal of the outstripping growth of imports versus exports and home demand reflected gradual depletion of the ruble's devaluation properties and the effect of import substitution. Essentially, the economy was facing the situation characteristic of 1999–2012 when insufficient production of domestic capital goods were supplemented by imports of capital goods.

By underscoring the importance of domestic demand dynamics as a major factor of the Russian economy development, one should note features of capital formation for the home consumer market. A large scale drop in imports observed in 2015–2017 determined structural changes in the domestic market: amid the contraction of consumer demand owing to a reduction of household income and ruble's depreciation, the proportion of domestically produced goods

in retail trade commodity resources increased to 65 percent in 2017, and to 77 percent in the commodity resources of retail trade in food products. This trend was sustained by the resumption of the positive dynamics of production in the consumer sector of the economy. (Table 3).

Table 3

**Structure of retail trade commodity resources in actual prices
(in actual prices), percent**

	Retail trade commodity resources	Including commodities		Share of food imports in commodity resources of retail trade in food products
		produced domestically	imported	
2012	100	56	44	34
2013	100	56	44	36
2014	100	58	42	34
2015	100	62	38	28
2016	100	62	38	23
2017	100	65	35	23
Q1	100	64	36	24
Q2	100	67	33	22
Q3	100	65	35	22
Q4	100	63	33	22

Source: Rosstat.

On the whole in 2017, the dynamics and structure of domestic production of goods and services was determined by a shift towards increasing the output of goods and services for the external market (Fig. 4). In 2017, the share of goods and services for the domestic market constituted 72.9 percent of the total domestic production against 74.0 percent in 2016 and 76.1 percent in 2014. Increased share of goods for export was accompanied by a reduction of proportion of high-order goods, which strengthened resource dependence of the Russian economy.

The simultaneous growth of output in the tradable (100.9 percent against 2016) and non-tradable (101.9 percent) sectors of the economy was a positive factor for the renewal of the domestic market positive development in 2017 (Fig. 5). However, contribution of the socially oriented types of economic activity in 2017 contracted compared to the previous year amid increased importance of the commerce-transport and financial infrastructures.

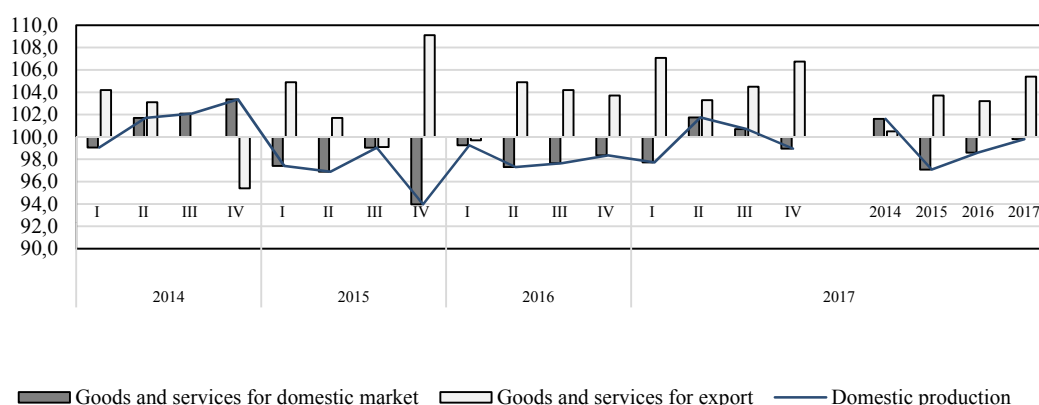


Fig. 4. The dynamics of domestic production of goods and services, by component in 2014–2017, as percent to the corresponding period of the previous year

Source: based on data released by Rosstat.

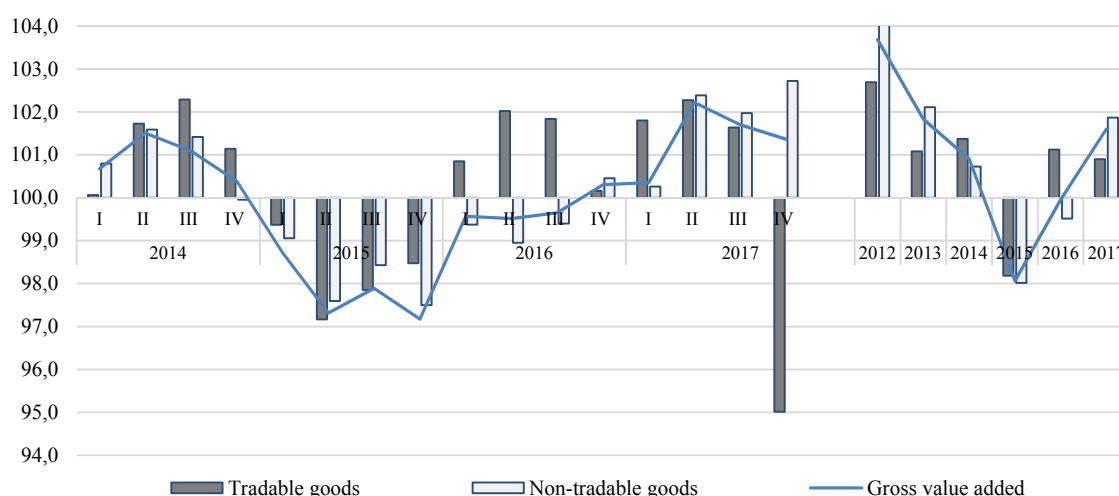


Fig. 5. Dynamics of gross value added in tradable and non-tradable sectors of the economy in 2012–2017, as percent to the corresponding period of the previous year

Source: Rosstat.

4.1.2. The expenditure components of GDP in 2014–2017: consumer and investment demand

The structure of expenditure-based GDP is determined by the ratio between final consumption and gross capital formation. In 2016–2017, there was a decline in the share and pace of final consumption, which was caused in the main by a notable drop in household final consumption expenditure. In 2017, the dynamics of the expenditure components of GDP are indicative of an increase in the share of gross capital formation due to the growth of stocks and the reduction in the share of net exports (*Table 4*).

Table 4

The structure of expenditure-based GDP in actual prices in 2012–2017, percent

	2012	2013	2014	2015	2016	2017
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0
including:						
Final consumption expenditure	68.8	71.5	71.4	70.1	71.6	70.4
household	50.6	52.6	53.1	52.0	52.8	52.2
state government	17.8	18.5	17.9	17.7	18.5	17.8
non-profit organizations rendering services to households	0.4	0.4	0.4	0.4	0.3	0.4
Gross capital formation	24.5	23.1	22.2	21.9	23.1	24.1
gross accumulation of fixed assets	21.5	21.8	21.2	20.3	21.6	21.8
changes in circulating tangible assets resources	3.0	1.4	1.0	1.6	1.5	2.3
Net exports	6.7	5.4	6.4	8.0	5.3	5.5

Source: Rosstat.

One of the distinctive features of the Russian economy in 2015–2017 was a more pronounced drop in household final consumption expenditure than that demonstrated by Russia's GDP and investments in fixed capital. While in the period 2010–2014 the main factor sustaining the positive trend in the development of the Russian economy was growth in per-capita consumption, in 2015–2017 the drop in the real personal income resulted in an almost 8.9 percent shrinkage in household final consumption expenditure relative to 2014.

Both household final consumption expenditure and the retail market were at their lowest points in Q4 2015. As the rate of inflation decreased from 12.9 percent to 5.4 percent over the course of 2016 and 2.5 percent in 2017, the rate of decline in consumer demand gradually diminished. In 2016, household final consumption contracted by 5.0% on 2015, while the turnover of retail trade and the market of paid services rendered to the population declined by 5.2% and 0.3% respectively relative to the previous year. In 2017, growth rates of household final consumption expenditure stepped in the positive territory (3.4 percent against the previous year) (*Fig. 6*).

An analysis of the dynamics of consumer prices and consumer demand indicates that the population responded to high inflation and changes in the magnitude and structure of prices in 2014-2016 by drastically curbing the consumer demand for non-food products and paid services, and by gradually reducing the consumer demand for food products. As the population became to be better adapted to the new market situation, and the pressure of deferred consumer demand became stronger, the quarterly indices of 2017 gradually began to demonstrate less prominent downward trends in the turnover of retail trade. The accumulated growth potential of consumer prices amid the drop in the real income of the population became a factor restraining the dynamics of the consumer market (*Fig. 7*).

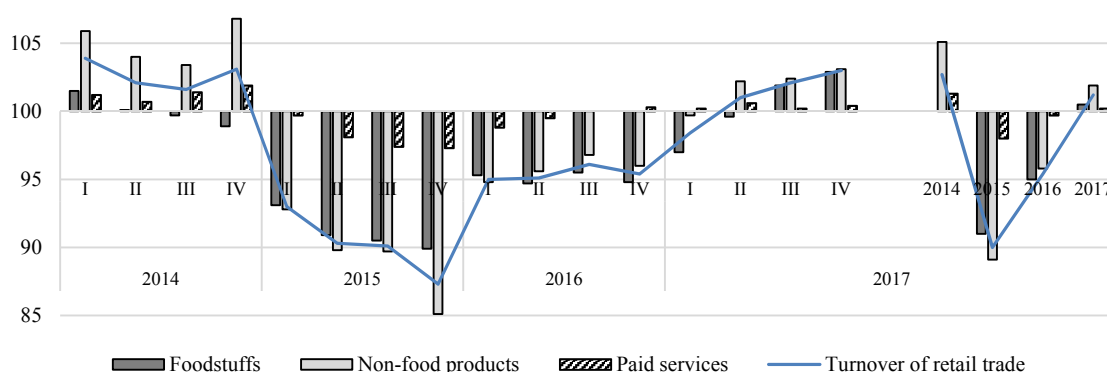


Fig. 6. The dynamics of household final consumption in 2014–2017, as percent to the corresponding period of the previous year

Source: Rosstat.

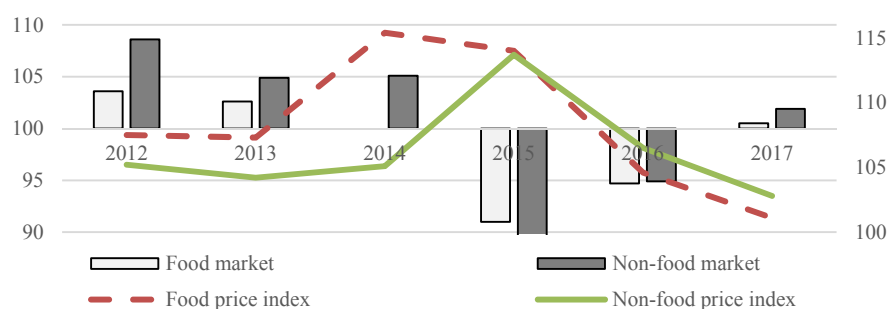


Fig. 7. The dynamics of the turnover of retail trade and consumer prices in 2012–2017, as percent of the previous year

Source: Rosstat.

The change in the level and structure of prices made a considerable impact on the dynamics and composition of household consumption expenditure. As the growth in nominal income of the population was weak, purchases of food and articles of prime necessity accounted for the major part of household consumption expenditure. In 2016–2017, there was an increase in the proportion of food products including beverages and tobacco products in the structure of retail trade turnover. The crisis had a number of consequences, including the narrowing range of available goods, the decline in delivery orders for many expensive commodities, and the withdrawal from the market of quite a few suppliers and manufacturers. The drop in demand affected not only the relatively hi-tech consumer market segments (computers; consumer electronic products; communications equipment), but also the food market segments oriented to the high-income strata of the population.

In 2017, cash personal income constituted RUB 55,447.8 billion up 2.5 percent in comparison with the corresponding period of the previous year. Personal consumption of goods and services in 2017 up 5.1 percent in comparison with the previous year and constituted RUB 41,569.5 billion and personal savings down 12.8 percent. Personal income spending is differentiated by years. In 2015-2016, against the background of high deposit interest rates, continuing interest in purchasing property personal savings behavior dominated. However, two-year trend of falling living standard indicators was telling on the change in household consumer behavior. In 2016-2017, amid a weak growth of nominal personal cash income, there was a further change in proportion of personal income spending. Amid simultaneous decline in inflation, bank interest rates and personal income reported in 2017, there was a trend change – personal spending registered increased share of expenses on purchases of goods amid contraction of savings proportion in personal income to 8.1 percent against 11.2 percent in 2016.

In 2015-2016, while savings displayed an overall downward trend, there were some structural shifts resulting from an increased share of property acquisition expenditure at the level of 2.9 percent of total personal spending when they peaked 4.5 percent in 2014. In 2017, further growth of spending on current consumption amid simultaneous demand growth on consumer loans was observed in the structure of personal spending despite significant decline of inflation rates. Reduction of bank interest rates on mortgages against the backdrop of extended supply on the housing market in a wide price bracket affected personal savings behavior from H2 2017. This fact triggered growth of spending on housing and created preconditions for the development of this trend in the coming year.

Renewed trend towards growing share in gross capital formation as a percentage of GDP hitting 28.9 percent positively affected macroeconomic outlook of the last year (*Table 5*). The share of gross capital formation amid changes in its structure due to increased savings in stockbuilding hit 24.0 percent of GDP in 2017. However, proportion of capital formation in fixed capital remained at average levels of 2013-2014. A distinctive feature of Russia's investment model is the substantial share of savings, where a notable portion is not transformed into investments in fixed capital. In 2017, the index of investments in fixed capital as a percentage of GDP constituted 17.3% up 0.1 percentage point against indicator of the previous year.

An analysis of Russia's capital account shows that the Russian economy has been in a net creditor position for quite a long time. In 2014, capital outflow from Russia hit its 20-year high of USD 153.0 billion. In 2016 and in 2017, net capital outflow from Russia dipped to USD 19.8 billion and USD 31.1 billion, respectively manly due to banking sector transactions.

Table 5

**The main indicators of the investment potential of the Russian economy
in the period 2014–2017, as percent of GDP**

	2014	2015	2016	2017
Gross savings	28.6	29.9	29.0	29.8
Gross accumulation of fixed assets	21.2	20.3	21.4	21.7
Deposits made by individuals, as of year-end	23.4	27.9	28.3	28.3
Size of Reserve Fund, as of year-end	5.9	4.2	1.1	0
Size of National Wealth Fund, as of end of year	5.3	6.1	4.7	3.9
Investment in fixed assets	17.6	17.5	17.2	17.3

Source: Rosstat.

4.1.3. Changes in the GDP structure
by income source

In the wake of falling rates of economic growth seen in 2014–2017, producer price policy was adjusted, which determined features of financial results from economic activity and profitability indicators. In January–September 2017, production profitability down 0,1 percentage point in comparison with 2016 (Table 6).

Table 6

**Profitability from sold goods, products, works, and services by types
of economic activity in 2012–2017, percent**

	2012	2013	2014	2015	2016	2017
Total in the economy	8.6	7.0	7.3	9.3	7.6	7.5
Agriculture, hunting and forestry	10.7	5.2	17.4	21.3	15.7	17.3
Fishery and fish-breeding	16.2	16.5	28.6	49.4	54.5	49.9
Mineral extraction	28.0	22.1	19.2	26.8	26.2	25.9
Processing industries	10.7	8.8	9.9	12.4	10.1	11.5
Production and distribution of electric energy, gas and water	3.9	4.4	3.7	5.5	7.1	н/д
Building construction	5.0	8.3	3.4	5.4	5.5	7.2
Wholesale and retail trade	6.7	6.5	6.1	7.1	4.8	4.6
Hotels and restaurants	5.9	6.0	4.4	5.8	4.9	7.0
Transport and communications	11.1	9.7	8.4	10.6	10.1	9.7
of these: communications	0.8	0.5	1.5	0.5	1.6	н/д
Financial activity	10.6	10.4	10.7	9.7	15.6	15.5
Real estate transactions, property lease and services	8.3	7.8	10.3	11.7	0.2	1.6
Government administration and military defense; social insurance	2.5	11.8	2.3	6.2	3.1	5.0
Education	6.6	4.8	6.2	7.0	7.0	10.4

Source: Rosstat.

Over the period 2014–2017, the movement of profitability indices and the financial result achieved by enterprises and organizations (balance of profits and losses) was strongly influenced by changes in producer pricing policies.

In 2016, producers responded to the persistent domestic demand shrinkage trend by restraining the growth of prices for their products. However, the year 2017 saw a somewhat increase of industrial producers' price rates due to the growing price index for mining and quarrying by 23.9 percent compared to December 2016. Outstripping price growth observed in the mining sector, in raw materials processing and electricity production can result in price adjustment in processing sector in the coming year.

Table 7

Price and tariff indexes in 2010–2017, December-on-December

	2014	2015	2016	2017
The consumer price index	111.4	112.9	105.4	102.5
The producer price index for industrial goods, including	105.9	110.7	107.4	108.4
<i>The price index for mining</i>	98.4	109.8	108.5	123.9
The price index for manufacturing	108.5	111.2	107.6	104.2
The price index for producers of agricultural products	114.1	108.5	101.8	92.2
The composite index for construction material prices	107.2	110.3	103.2	103.1
The index of motor freight tariffs	100.9	111.5	105.6	109.0

Source: Rosstat.

The years 2016–2017 saw a shift in the income structure from its corporate towards personal component. In 2017, the share of wages in GDP amounted to 47.8%, rising 1.60 percentage points above the corresponding index for 2015. The proportion of total income in GDP shrank in 2016–2017 in comparison with the previous year although remained above its 2013–2014 indicators. Growth of enterprises' costs led to a reduction of profitability in economy as a whole in 2016 by 1.2 percentage points relative to 2015. In 2017, decelerated trend towards growth of prices and labor costs resulted in growing share of gross income and gross mixed incomes in GDP to 41.5 percent of GDP (*Table 8*).

Table 8

GDP structure by income sources in 2011–2017, as percent to total in current prices

	2011	2012	2013	2014	2015	2016	2017
Gross domestic product	100	100	100	100	100	100	100
Including:							
Wages of hired labor, including hidden remuneration and mixed incomes	43.8	44.3	46.2	47.2	46.2	47.9	47.8
Net taxes on production and imports	14.4	14.3	13.8	13.9	11.2	11.0	10.7
Gross profit in the economy and gross mixed incomes	41.8	41.4	40.0	38.9	41.9	41.1	41.5

Source: Rosstat.

The accelerated wage growth trend relative to that of labor productivity renewed from 2016. In the context of accumulated capital and increased level of capital-labor ratio the efficiency of labor service and fixed capital went on the rise. Miniscule dynamics of labor productivity remains one of major constraints for transition to sustainable growth (*Table 9*).

Table 9

**Indices of the use of main production factors in 2011–2017,
as percent relative to previous year**

	2011	2012	2013	2014	2015	2016	2017
Labor productivity	103.8	103.3	102.2	100.7	97.8	99.8	101.8
Capital-labor ratio	103.0	103.6	105.2	104.0	103.8	104.0	105.0
Fixed-asset turnover ratio	100.7	99.9	96.7	97.0	93.3	95.1	97.0

Source: Rosstat.

The Russian economy's recent development patterns reflect its shrinking development potential, which has become manifest in the high intensity of the use of production capacities, absence of large-scale investment projects, and low unemployment rate. Besides, the situation has been further complicated by the long-term upward trend displayed by the growth rate of production costs, which has been pushed up by the tariff policies of infrastructure provider monopolies and the accelerated wage growth relative to labor productivity. Low production efficiency remains one of the main factors that push down industry productivity and the low

competitive capacity of Russia's domestic products in the domestic and foreign markets. Over the period 2010–2013, productivity decline was demonstrated by practically all major types of economic activity. Amid projected contraction of the labor force, labor productivity becomes the main factor for production growth of goods and services. According to short-term forecast, the shortage of skilled labor and rather slow rate of technical and technological upgrade of production will affect the labor productivity dynamics.

The changes in the structure of costs and the balance of profits and losses were strongly influenced by the highly differentiated wage indices by type of economic activity. In the medium-term implementation of social commitments and the ratio of targeted groups' wages, in particular, employed in the budgetary sphere will affect wage dynamics. The highest wages, for fifteen years in a row, have been observed in mining industries, the production of oil and petroleum products, and the financial sector. Manufacturing industries have demonstrated a continuing trend towards employment restructuring through cutting non-productive jobs. As a result, labor productivity in manufacturing industries has been growing at a rate that is higher than Russia's average, but wages, as before, have also been rising at an accelerated rate. In the wake of wage growth rates being close to labor productivity growth there will be no pressure on inflation.

As wage is the major personal income component, the employment issue is one of the priority factors shaping consumer behavior. In face of the plummeting economic growth rate, the distinctive feature of 2017 was an exceptionally low unemployment rate (calculated by the ILO methodology) of 5.2 percent. The total number of officially registered unemployed persons declined to 85.3 percent relative to 2016, and amounted to 0.9 million persons.

The employer demand for workforce registered by state employment agencies has remained above its last year's level; the tension coefficient (the number of registered unemployed individuals per 100 job vacancies) at the close of 2016 constituted 64.3 persons vs. 86.8 a year earlier. While the labor turnover index (the number of hired vs. dismissed employees) is high, the turnover of jobs (liquidation of old jobs and creation of new ones) as a measure of job renewal has remained rather low. The turnover level is sustained predominantly by the liquidation of jobs by actively operating companies, and not by the creation of new jobs.

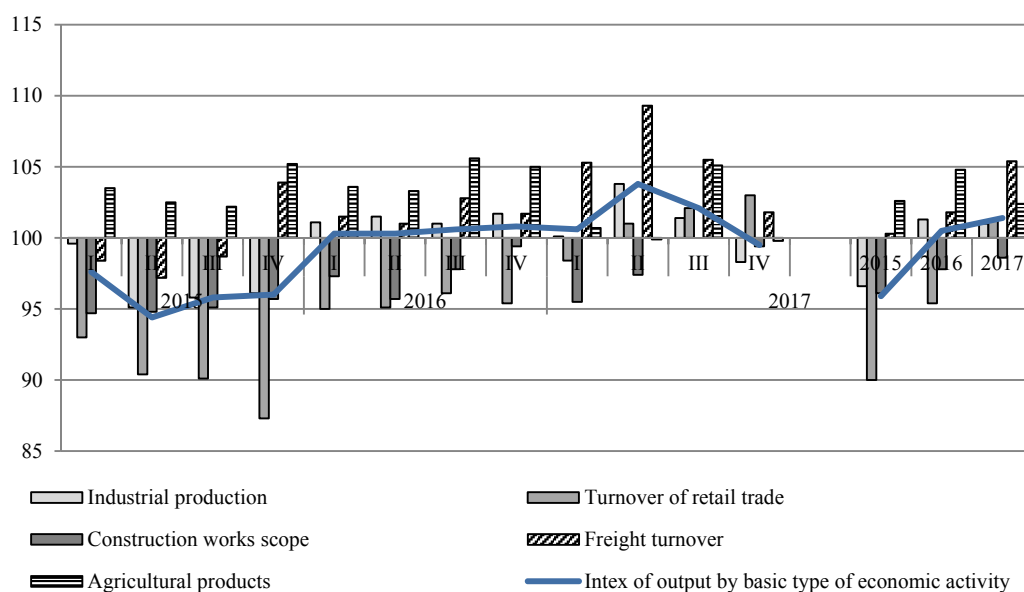
Besides, the Russian labor market adapts to crisis conditions not through increasing the unemployment rate, but by relying on flexible remuneration schemes. Due to the underdeveloped contractual recruitment system in the sphere of labor relations and the low unemployment benefits, people prefer to stay employed during a crisis and work for a lower wage, or to work fewer hours.

In the current situation, the weak response of the labor market, including unemployment index, to unfavorable economic developments can likewise be explained by the employer policy aimed at keeping their qualified workforce, which is becoming cheaper in real terms, in expectation of future revival of economic activity. Besides, the factor that exerted downward pressure on unemployment rate growth was the supply deficit in the labor market determined by demographic factors and the outflow of migrants, whose earnings significantly plummeted due to the ruble's weakening.

The less than efficient use of production factors has remained one of the main reasons behind the dramatic slowdown in the pace of economic growth and the generally declining competitive capacity of the Russian economy as a whole. In the short run, the behavior of incomes and inflation will depend solely on the growth rate of labor productivity and return on investment - that is, total factor productivity.

4.1.4. The dynamics and structure of production by type of economic activity

The year-on-year decline in the volume of industrial output, by major type of economic activity, has been observed since 2015. Decrease of the physical quantity of output by basic types of economic activity compared to the previous year was observed in 2015. The already unstable economic development pattern has been further destabilized by the declining investment activity, turnover of retail trade, and industrial production indices. In Q2 2016, after a five-quarter-long plunge, the index of industrial production demonstrated slight growth. The economic situation in 2017 as a year earlier was positively influenced by industrial production (101.0 percent relative to 2016), agricultural produce (102.4 percent), and transport services (105.8 percent). From Q2 2017, growth of retail trade commenced (*Fig. 8*).



Source: Rosstat.

Fig. 8. The dynamics of basic types of economic activity in 2015–2017, as percent to corresponding period of the previous year

Structural changes across the economy in 2016–2017 were determined by the increasing role of the raw materials sector and related infrastructure. In 2017, growth of mineral extraction in annual terms amounted to 2.0 percent. The hydrocarbons output cut agreement with OPEC member states notably affected in H2 2017 the dynamics of the extracting sector quarter-on-quarter 2017. Manufacturing industry indicators were highly unstable in 2017. Contraction in manufacturing sector by 0.8 percent seen in Q1 2017 changed for dynamic growth by 3.2 percent observed in Q2 2017 against corresponding period of 2016. However, it did not represent a turning point in the manufacturing sector. When taken in annual terms, the 2017 output index in manufacturing industries constituted merely 0.2 percent versus 0.5 percent a year earlier (*Fig. 9*).

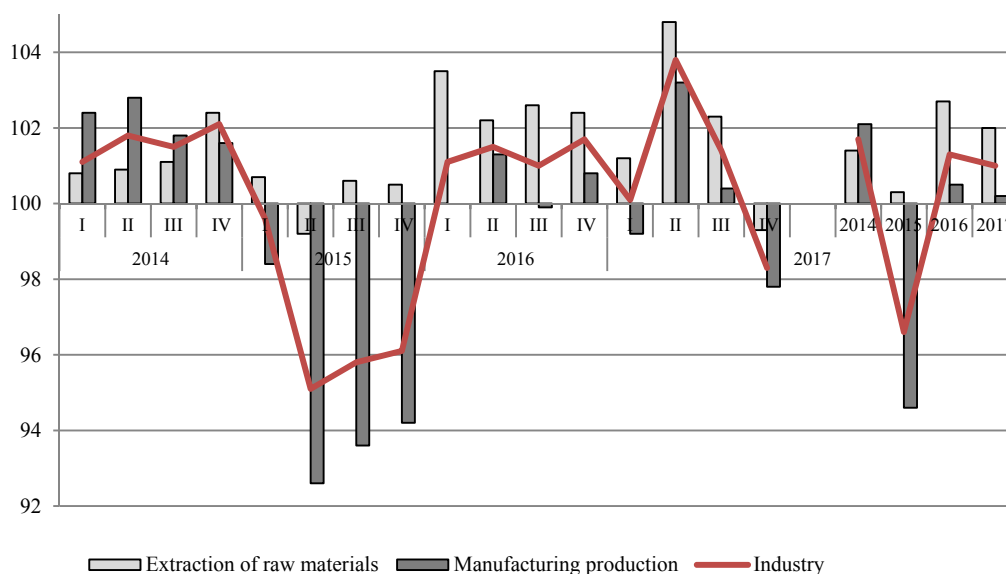


Fig. 9. The pace of industrial production by type of economic activity in 2014–2017, as percent of the corresponding period of the previous year

Source: Rosstat.

The output volume indices in the manufacturing industry are rather significantly diversified by type of economic activity. Manifestation of crisis developments by types of economic activity speak about weakness of proper restructuring processes in the domestic business sector and low motivation to move domestic products to new competitive markets. As before, one of the problems faced by the Russian economy has been the targeted support of certain industries instead of a well-coordinated system of comprehensive measures designed to generally improve the overall conditions for doing business. For example, the potential of the machine building complex was determined by national producers possessing own platforms with high localization level, engineering jurisdictions and intellectual property rights. However, in the current technical level of products and weak international cooperation this fact restricted competitiveness of domestic products both on the home and foreign markets. Development of export oriented productions, foreign distribution and service systems, integration of Russian producers into global lines of production should become one of the ways of supporting machine building complex. This will be a stimulating factor for upgrading main and associated productions.

The dynamics of manufacturing sector in 2017 was determined by the growth in the chemical complex with increased output volume of competitive on external and domestic markets products, which to a large extent was a result of state and private investment growth in creation of new capacities and upgrade of existing ones. Growth in the machine building complex was determined by an increase of state orders and direct subsidies as well as renewal of demand on means of transport. Accelerated dynamics of the consumer market was determined by expanding niches for domestic goods on home market amid reduction of imports. Growth in metallurgical complex was linked with increased demand in the investment/construction complex and positive shifts seen in external environment on metals market.

Along with this production renewal recorded in high and medium-tech components of machine building complex was observed. The index for production of high-tech manufacturing types of activity in 2016 constituted 96.8 percent against the previous year and in 2017 stepped into the positive territory. The share of high-tech and knowledge-based industries in GDP in 2017 constituted 22.1 percent against 20.3 percent in 2012. Production of medicine was growing by exceptionally high rate in 2017. Market of machine building products is traditionally geared towards receptive domestic market (*Table 10*).

Table 10

**The indexes of production by major types of manufacturing industry
in 2016–2017, as percent to the previous year**

	2016	2017
Manufacturing industries	100.5	100.2
Production of foodstuffs	103.1	105.6
Production of beverages	101.3	99.0
Manufacture of textiles	104.6	107.1
Manufacture of clothes	107.1	103.8
Production of leather and leather products	104.4	104.3
Timber and wood products processing	102.8	102.2
Cellulose and paper production	105.1	104.7
Production of coke and petroleum products	98.3	100.6
Chemicals production	106.3	104.3
Production of medicine and materials for medical purposes	107.0	112.3
Manufacture of rubber and plastic products	106.3	104.2
Manufacture of other non-metal mineral products	94.0	102.5
Metallurgical production and	99.0	96.4
Manufacture of finished metal products	101.3	97.3
Manufacture of computers, electronic and optical equipment	100.6	92.7
Manufacture of electrical equipment	100.9	102.8
Manufacture of machinery and equipment	99.3	100.3
Manufacture of means of transport, trailers and semitrailers	100.5	112.9
Manufacture of other means of transport and equipment	104.2	100.6
Manufacture of furniture	97.3	108.7
Manufacture of other finished products	82.4	110.2

Source: Rosstat.

Significant changes are not expected in the industrial production structure in the short-term perspective. The future of economic development is linked with the renewal of the capital goods production, in particular, at the expense of state orders, which will positively tell on the development of machine building and the investment/construction complexes. Stability will remain in export oriented sectors – fuel and energy complex, metallurgy, and chemical production. Implementation of state infrastructure projects will secure demand on construction sector services.

In the medium term, industrial policy is aimed at the change of business environment and creation of conditions for innovation activity including demand incentives for innovations.

4.2. Russian industrial sector in 2017 (based on surveys findings)¹

This Chapter has been prepared on the results of business surveys of industrial enterprises which have been conducted by the Gaidar Institute using a European harmonized method in monthly cycles since September 1992, covering the entire territory of the Russian Federation. The panel size is around 1,000 enterprises employing over 13 percent of industrial employees.

¹ This section is written by Sergey Tsukhlo, the Gaidar Institute.

The panel is shifted towards large enterprises for each of the segregated sub-industries. The ratio of returned questionnaires is in the range of 70-75 percent.

Business survey questionnaire contains a limited number of questions (not more than 15–20). The questions are of a qualitative and not quantitative nature. Simple questions structure allows the respondents to fill out the questionnaire quickly and without using any documents. It is paramount that respondent at each enterprise is a manager of the highest level who has a full understanding of state of business and is directly linked to the business management.

We use specific derived index, which we call balance, for the analysis of business surveys results. Balances are calculated as difference between the percent of those who answered “go up” (or “above normal”) and percent of those who answered “go down” (or “below normal”). The obtained difference allows us to present responses to each question by one number with “+” or “-”.

Balance is interpreted as first derivative or process speed. When the balance of responses to a question of expected price shift is marked “+” this means that the average prices in the near future will be growing (for example, prevail those enterprises with responses about projected increase of their prices). For instance, increase of a monthly balance from +10 percent to +17 percent speaks about the fact that prices on average across industry will be growing faster because the number of enterprises projecting their growth have increased. Negative balance means a decline of average prices (more enterprises intend to cut their prices). Change of balance from -5percent to -12 percent is interpreted as an increase of price fall intensity.

4.2.1. Russian industrial sector in 2015–2017 – business assessment

Recent years have been complicated for the Russian economy as a whole and for industry, in particular. The crisis, which was launched by the ruble devaluation in 2014 lasted for two year. Already now, it is evident that the Russian industrial sector managed to encounter and walk in a relatively smooth manner through the crisis of 2015–2016 and to start recovering in the same manner from the crisis in 2017. This description of the recent years’ events in the Russian industry has been backed up by the findings of IEP’s (Gaidar Institute for Economic Policy) monthly business surveys of 1992–2017. We now consider the findings on a yearly rather than monthly basis (the latter is most common) to be able to view the crisis of 2015–2016 and the recovery in 2017 within the context of our long enough history of business industrial surveys.

The following features are characteristic of the crisis years. First, the crisis have not provoked a decline of demand for industrial products and its output. Second, insignificant deterioration of these indicators resonated with a significant time span of the recession. Third, businesses were ready for the recession, and, it seems, for a more adverse recession, which was mostly owing to the authorities and experts who constantly in 2011–2014 discussed the chances for the “second wave of recession”. Fourth, this unordinary (compared to the crisis of 2008–2009) combination allowed Russian industry to smoothly face and pass through the crisis of 2016–2017 and in the same way to exit from the recession in 2017.

Composite indicators that derive from some of the business survey questions provide the first impression and a general view of the Russian economy. One of traditional indicators is *The IEP Industrial Confidence Indicator*¹ Similar surveys of other institutions most commonly rely

¹ The Indicator is computed as a simple arithmetic average (difference in responses) to four questions from the IEP’s monthly business survey questionnaire:

1) Actual change of demand, balance = percent growth – percent decline;

on similar indicators that are reviewed on a monthly basis, which is more useful for online monitoring than for making a generalized analysis of the industry. Therefore, this indicator and the indicators described in this paper are estimated on a yearly basis for the entire period of IEP's surveys with a view to evaluating the crisis of 2015–2016 and the post-crisis period of 2017.

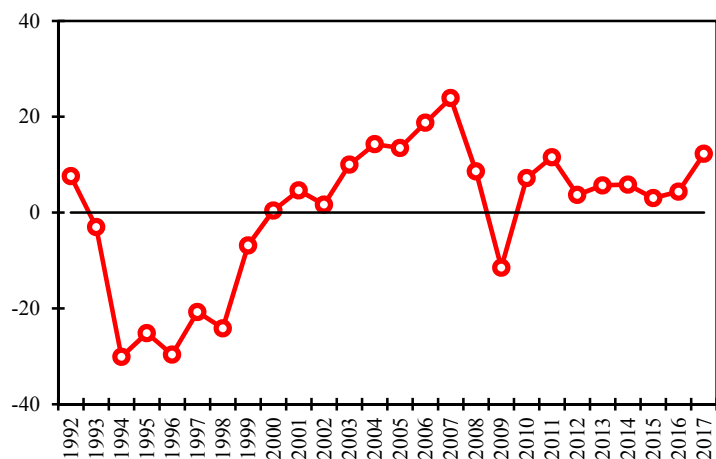


Fig. 10. IEP Industrial Confidence Indicator, 1992–2017, percentage points

The dynamics for the Industrial Confidence Indicator clearly demonstrates the Russian industry's salient features in recent years (*Fig. 10*).

The industrial sector exhibited a minor recovery in confidence in 2010–2011 following the crisis of 2008–2009. The Indicator climbed to positive, albeit not pre-crisis, values in 2010 and then slid again in 2012, reaching modestly positive, and most importantly, stable values in 2012–2016, including in the crisis of 2015–2016. For the accuracy's sake, there is a point to note that in 2015 the Index averaged annually 3 percentage points below the pre-crisis value of 2014. In particular, the Index lost 15 points during the crisis of 2008 and another 20 points during the crisis of 2009, making a total loss of 35 points during the crisis of 2008–2009. The dynamics for the Industrial Confidence Indicator for 1992–2014 was in line with the commonly held view of the Russian industrial sector. In 2015–2016, however, variations in the indicator started to disagree with the commonly-held views of analysts and government officials that the industrial sector was faced with a crisis. In other words, industrial enterprises did not view the events of 2015 as crisis-induced events.

As to the signs of crisis developments over the past few years in the Russian industrial sector, they started to emerge, according to industrial enterprises, in 2012, when the Industrial Confidence Indicator lost 8 points, varying steadily within a range of +3...+6 points throughout the period of 2012–2016. Thus, even such a broad treatment of the crisis facing the Russian industry is an indication of unusual nature of the crisis: a minor fall (posing no threat of crisis

2) Estimate of demand, difference of assessments = percent above normal + percent normal – percent below normal;

3) Estimate of stocks of finished products, balance = percent above normal – percent below normal, opposite sign;

4) Plans for output change, balance = percent growth – percent decline.

Balances of questions 1 and 4 are seasonally and calendar adjusted. The Index can range from –100 to +100 points. Positive index values imply the prevalence of positive assessments. Negative index values mean that adverse assessments prevail. Decline of index's values is the sign of deteriorating situation. Growth of index's values – the sign of ameliorating situation.

whatsoever) of key indicators and a long enough duration of these developments; at least, if one relies on the opinion of industrial enterprises. Our most recent data as of 2017 on the Russian industrial sector show a recovery following the period of 2012–2016. The Industrial Confidence Indicator rose to the level of 2011, marking 2011 as the best year for the industry since the crisis of 2008–2009.

The Russian industrial sector has managed to adapt easily to the recent years’ economic environment because of the sluggish nature of the crisis. These processes are well depicted by another composite indicator – *The Russian Industry Adaptability (‘Normality’) Index* – that is based on a list of questions as part of another IEP’s business survey (*Fig. 11*). The index is computed using only evaluative questions – enterprises are offered to self-assess their key performance indicators using grades such as “above normal”, “normal”, “below normal”. Therefore, the average proportion of “normal” answers indicates that enterprises self-assess their performance, i.e., adaptability to the ongoing economic environment, as “normal”.

The dynamics for the Industry Adaptability Index in 1994–2014 was also in line with the commonly held views of the Russian industry. The industry was faced with an extreme hardship prior to the Russian default of 1998, with an average annual level of adaptability ranging within 29–33 percent. After the 1998 default, the Russian industry saw things start turning for the better, with “normal” self-assessments reaching 71 percent by 2007. “Normal” self-assessments dropped to 54 percent because of the crisis of 2008–2009, but they recovered since 2011 to the pre-crisis level of 71 percent. The sluggish economic dynamics in 2012–2014 halted the growth in the Adaptability Index, even cutting it back to 69 percent in 2013. In 2014, the industrial sector was 70 percent adapted to the prevailing economic environment.

However, the 2015–2016 and even the 2017 values of the indicator was not in line with the commonly held beliefs based on official statistical data. During the initial and the second years of crisis, 71 percent and 73 percent of enterprises, respectively, said their key indicators (product demand, inventories, labour supply, production capacity, financial standing) were “normal”. Thus, not only did industrial enterprises see no crisis-induced threat during the crisis of 2015–2016, but they also said their adaptability to the ongoing economic environment was better than to the pre-crisis periods. Moreover, 77 percent of Russian industrial enterprises were adapted to difficult conditions of recovery from the crisis in 2017, with the indicator hitting an all-time high in the entire 24-year period of monitoring.

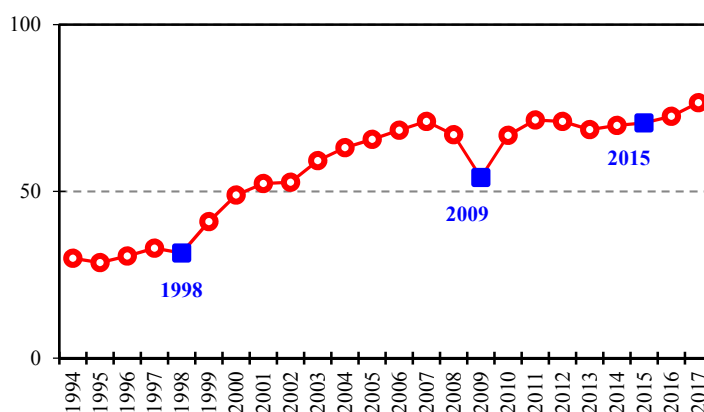


Fig. 11. Russia Industry Adaptability (‘Normality’) Index, 1994–2017, percent

We now consider business self-assessments of some key indicators.

The dynamics for product demand (*Fig 12*) self-assessments was relatively stable in 2010–2017, when “normal” product demand answers varied within a range of 50-60 percent, with the industry experiencing neither crisis-induced downturn nor any decline in satisfaction with demand in 2015–2016. In 2012–2015, 50–53 percent of industrial enterprises said they were satisfied with their product demand. For comparison, during the crisis of 2008–2009 this indicator plummeted to a historical low of 28 percent from the all-time high of 69 percent. The lowest level on record was reached in 1996, when only 8 percent of Russian industrial enterprises said their product demand was “normal”. However, satisfaction with product demand stood near all-time high throughout the four years preceding the default, increasing to a local high of 60 percent after the crisis, in 2017.

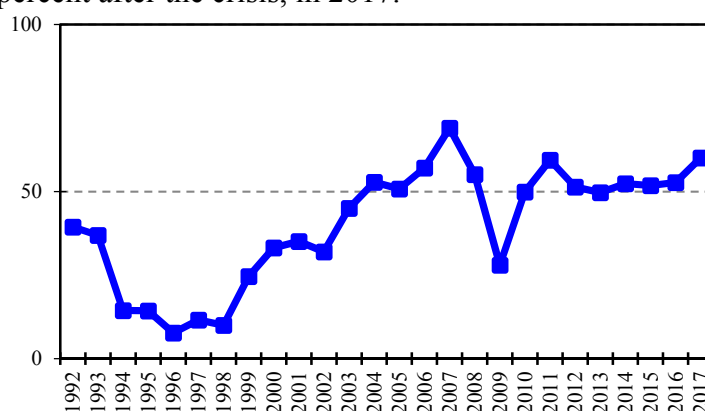
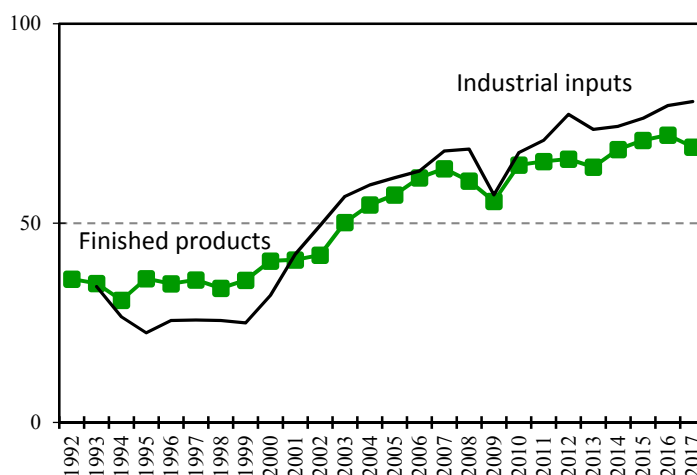


Fig. 12. “Normal” self-assessment of product demand, 1992–2017, percent

Enterprise inventory self-assessments (finished goods inventory, raw materials and supplies inventory) give a better non-crisis picture of the Russian industrial sector in 2015–2016.

None of the enterprise inventory types exhibited typical crisis-induced dynamics during that period (see *Fig. 13*). The balance of finished products inventory self-assessments (the difference between the proportion of “above normal” and “below normal” answers) during the initial year of the latest crisis turned out to be hit less (with less overstock) than before the crisis (in 2014). Furthermore, the balance turned out to be negative in the first month of the crisis, that is, enterprises were in need of big finished product stockpiles to be able to meet the expected new demand during the coming crisis. Such an onset is highly exceptional for crisis. Producers are supposed to experience a shock in the first month of crisis, leading to a rapid increase in the overstock of finished products. In 2015, however, the Russian industrial sector swiftly coped with such a non-standard shock, making another record during the initial year of crisis – “normal” finished goods inventory self-assessments hit an all-time high of 71 percent (at that point). “Normal” answers increased to 72 percent during the second year of crisis, according to an inventory monitoring and the balance remained at near zero level. Hence, during that crisis enterprises managed (for the first time since 1992) to control their supply-demand balance and pursued a careful policy of managing their finished products inventory. In 2017 – during the recovery stage – “normal” finished goods inventory self-assessments saw a small decline as a result of scheduled accumulation of finished products overstock to be able to meet the expected increase in demand, with the highest expectations recorded in the second quarter of the year. However, slow recovery from the crisis forced the industrial sector to return to minimizing their overstock inventory, and therefore “normal” answers climbed back to a high level.



Puc. 13. “Normal” self-assessments of finished products inventory and of available industrial inputs, 1992-2017, percent

Against a backdrop of slow rolling 2015–2016 recession and sluggish recovery recorded in 2017, the Russian industrial sector has reached the best level of availability of industrial inputs in the period of 1993–2017. During the initial year of crisis, “normal” raw materials availability answers increased by 2 points from the preceding non-crisis year, getting close to the highest value recorded in 2012. During the second year of crisis, this indicator gained another 3 points, hitting an all-time high. During the recovery stage in 2017, the industrial sector has managed to achieve even a better level of availability of raw materials and supplies, with 81 percent of enterprises saying they have “normal” level of availability of raw materials and supplies, according to average annual self-assessments. Thus, the industrial sector during the ongoing crisis has experienced minimum difficulties with raw materials and supplies and managed to reduce their shortage to a historical low. This is what also makes the fading crisis different from previous crises.

Enterprise self-assessments of production capacity and labour supply add more details to the non-crisis picture of Russian industrial sector in 2015-2016 and demonstrate excellent readiness to get out of the crisis (*Fig. 14*).

According to our surveys, during the crisis of 2015–2016 the Russian industrial sector was able to solve their HR issues through staff recruitment rather than layoffs (as is commonly practiced amid crisis). It was not until the onset of the crisis of 2015–2016 that the former option became available. Enterprises therefore managed to achieve the best possible labour supply in 2017 as the Russian government achieved an unexpectedly low unemployment rate. The HR policy of the Russian industrial sector amid the recent crisis seems to be reasonable enough considering that the industry experienced shortage of qualified employees, primarily blue-collar workers, during years preceding the crisis. Moreover, a new influx of workers from vocational schools cannot be counted on due to a degrading secondary vocational education. In 2017, the Russian industry has managed to cope with the shortage of labour force owing solely to the crisis of 2015–2016.

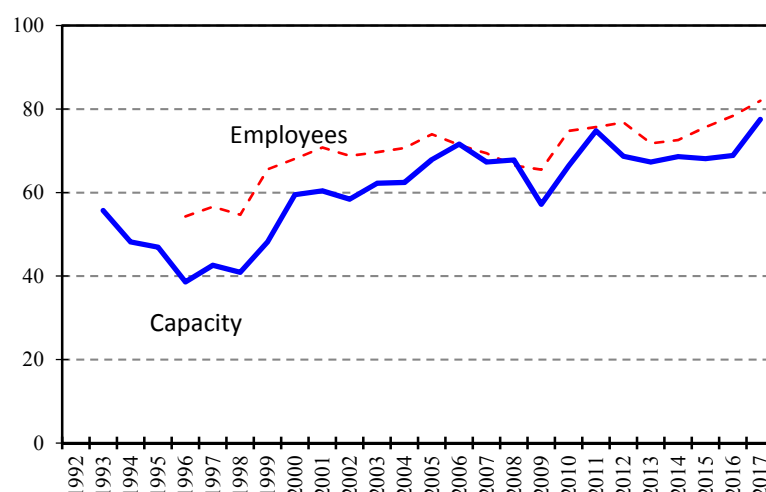


Fig. 14. Enterprises with adequate capacity and labour supply, 1992–2017, percent

The Russian industrial sector is in need of more qualified workers than production capacity. Enterprises have had excessive production capacity (with a potential to manufacture competitive products) since 2009. The balance of capacity self-assessments in the industry has been positive, which is unusual amid crisis, over the recent 9-year period of our monitoring. In 2017, “adequate production capacity led by the expected changes in demand” has hit a historical high of 78 percent.

Thus 2017 as a whole, was the year when the Russian industry was recovering from the protracted but slow rolling official crisis of 2015–2016. However, this post crisis year is distinctly divided into two periods, which coincide with the calendar half-year periods. In H1 Russian industry remained strong in overcoming the crisis of 2015–2016 and made some progress at the year-end. However, from July onwards positive trends recorded at the onset of the year have slowed down and in October fell to the lowest (worst) point of the first post-crisis year.

4.2.2. Russian industrial sector in H1 2017

The Russian industrial sector started recovering in early 2017 from the protracted unrepresentative crisis of 2015–2016. Actual and forecast changes in demand, assessments of finished products, innovation plans of enterprises—all these indicators have been demonstrating long awaited positive development.

The demand for industrial products in H1 2017 was almost , attended by occasional and hence divergent movements leading toward a positive trend, the first of which was recorded during business surveys in February, the second one was reported in June. In general, however, the sales dynamics was found to be better than that in 2012–2016, even though enterprises tend to underestimate the demand for their products.

A similar positive context was observed through demand surveys. The seasonal and calendar adjusted demand continued to grow in early 2017, reaching a multi-year high in February, whereupon upbeat demand forecasts stopped growing, and the balance was secured at a level of +10 points. As a result, enterprises’ expectations in H1 2017 were found to be the highest since 2011.

However, our business surveys regarding gains in (current) volumes of demand show that the Russian industrial sector in early 2017 had inflated expectations and hence forecasts for the pace of recovery from the crisis of 2015–2016. In February, when both actual and predicted demand growth rates reached multi-year highs, enterprises' satisfaction with gains in sales fell to 51 percent because they expected higher volumes of demand. Nevertheless, they were quick in rethinking the inflated expectations, and therefore the satisfaction with demand reached 65 percent as early as May 2017, the highest value on record since 2007.

The dynamics of enterprises' responses about the stock (finished products) adds to the picture of the Russian economy recovering from the "lukewarm" crisis of 2015–2016. In the first few months of 2017, the Russian industrial sector continued officiating the crisis-related ritual of maintaining the indicator around zero, whereas the stock was revised in March, and therefore the balance was up to +11, until June. The 25-year observations show that the specified level of stock glut cannot be attributed to the crisis. The reverse seems to be the case: similar values of the indicator were observed during the periods when enterprises were sure that the demand for their products would soon increase. It is difficult to tell on what volumes of stock their responses rely on, because no official statistics of stock volumes are available in the country. In addition, there is a scenario that cannot be ruled out: there was no growth in volumes of stock (finished products) in March-June 2017; instead, enterprises just "revised" the previous, unchanged volumes of stock after rethinking their expectations for the pace of recovery from the crisis of 2015–2016. This scenario is supported by the fact that demand change forecasts stabilized in February-June 2017.

The dynamics of output plans in H1 2017 also reflects that industrial enterprises varied in their expectations for the pace of recovery from the ongoing crisis. Indeed, this indicator saw a sharp increase in upbeat expectations in early 2017 after hitting in H2 2016 nearly the lowest values in the ongoing crisis (less optimistic responses were recorded only in early 2016, when industrial enterprises realized that promises of quick "rebounding from the bottom" are slippery). However, upbeat output plans were down almost by half in April-May 2017, which seems to be logical amid declining upbeat demand forecasts and spiking stock (finished products) glut. In June, however, the number of enterprises with upbeat output plans increased, reaching the highest level in 2012–2017, which, by the way, was recorded in late 2015, when enterprises' hopes for quick recovery from the crisis were unmet.

Enterprises' pricing policies in H1 2017 reflect both the monetary authorities advance in struggling with inflation and enterprises' efforts to rekindle demand for their products. Although industrial enterprises in January 2017 raised prices more intensively than a year earlier, they failed to reach the price target set in December 2016. It seems that industrial enterprises raised factory-gate prices in response to positive demand dynamics early in the year. However, industrial enterprises had to slow drastically the intensity of growth in actual prices in response to Bank of Russia' consistent struggle with inflation. Enterprises reported in April-May that they had zero growth of factory-gate prices of their products, with price change forecasts in March showing hopes for a more intensive growth of factory-gate prices. Further, the industrial sector in June embarked on absolute price cut (-6 points) while forecasting a change at an average of +9 points for April-June.

In 2017, Russian industrial enterprises' HR policies continued to rip the benefits offered by the "crisis" of 2015–2016. Enterprises made new recruit plans early in 2017 (similar to what they did during the crisis of 2015–2016), which was not the case in the pre-crisis years of 2013 and 2014, and, most importantly, they did manage to hire more employees following the

traditional peak of redundancies in January. Eventually this even resulted in a small oversupply of labour force – the balance of enterprises’ responses about labour supply in Q2 2017 reached a positive value, which is quite uncommon for the entire period of 2010–2017 and for the crisis of 2015–2016. Furthermore, no spike in labour force oversupply was recorded at the very beginning of the recession period. Neither were there redundancies – a logical HR policy amid crisis – at industrial enterprises.

In Q1 2017, the Russian industrial sector exhibited a strong growth in upbeat expectations for investment. Twenty-four points were added to the balance of investment plans, eventually hitting a five-year high. Therefore, the 26-month period of upbeat expectations for investment – which began shortly after Russia joined the war of sanctions in August 2014 – is over. The industrial sector was prepared for a new cycle of investment growth. However, the plans stopped clambering higher on upbeat expectations and stabilized in the second quarter following the rethinking of expectations for the pace of recovery from the ongoing crisis. Indeed, there are not many incentives available for Russian enterprises to implement investment plans. Only 14 percent of enterprises considered a lack of investment as a headwind for output, which comprises nearly the smallest share of enterprises considering this factor as a constraint in 2014–2017. Only 9 percent of enterprises faced with a lack of machinery and equipment said investment in output expansion is relevant. Only 7 percent of enterprises said they were facing the issue of low labour productivity. Accordingly, it is also unlikely that the existing production facilities will be upgraded.

Crediting terms and conditions for the Russian industrial sector in H1 2017 continued recovering after the crisis-related credit crunch that fell, according to surveys, on February 2015, when 45 percent of enterprises reported they were facing the issue of credit availability, which, however, was 20 percentage points below the peak value recorded during the crisis of 2008–2009. Only 12 percent of enterprises faced the issue of credit availability in Q1 2017, 10 percent in Q2 2017, and 11 percent in June. Thus, the lack of credit availability for the Russian industrial sector in H1 2017 was finally secured at the pre-crisis level.

The average minimum interest rate on bank rouble-denominated loans to industrial enterprises dropped by January 2017 to 14.6 percent per annum. The indicator stood at 14.1 percent in March–April, 13.9 percent in May–June. Thus the interest rate dropped by 7 percentage points after hitting a post-crisis high. The inter-crisis lowest value of the indicator was recorded at 11.8 percent in 2011.

In Q2 2017, the ability of industrial enterprises to service their outstanding loans reached an absolute record in the entire period (2009–2017) of monitoring. Today, 90 percent (!) of enterprises have either adequate or more than adequate resources to repay their bank loans. The obtained result fits well with the estimates of financial and economic environment, which was considered good or acceptable by 91 percent of respondents. It should be noted that in this case we talk about the actual state of enterprises and not about reporting.

4.2.3. Russian industrial sector in H2 2017

The second half of 2017 was a tough period for Russian enterprises. In the middle of the year industrial enterprises saw the demand for their products expand at slower pace, which forced businesses to get rid of stocks of finished products, downgrade output, which is ordinary for that period and review for the worse the investment plans. Meanwhile, businesses kept hopes alive (plans) for the output growth and recruited employees. The first few months of H2 2017 saw a slow reversal of feeble positive trends that were seen earlier in the year. The pace

(balance) of actual changes in demand saw a reversal to a negative trend in July. The latter looked rather flat and unlikely was a sign of a new wave of recession, if so a softer one like in 2015 and not a repetition of the across-the-board deterioration of November 2008. Demand forecasts also continued to lose the business confidence gained by February 2017. The industrial sector was still, albeit less intensively, hoping for an increase in sales. In that context, the industry continued to reduce the surplus in finished goods inventory, which was reasonable enough amid uncertainty about the time of switching to a statistically indisputable increase in output. Another logical result from that was the decelerating increase in output. Another logical result from that was the decelerating increase in output—even so symbolic that was observed previously in 2017.

Despite certain signs of slowing demand and output, the industrial sector continued to hire employees, having positive recruitment plans because the Russian industry was still running short of workforce on the back of “anticipated demand change”. Although the shortage was relatively small, the very fact of its existence shows which resource-related issue is most critical for the Russian industry.

Russian industry’s investment plans underwent sharp negative changes in July 2017, with this indicator balance losing 9 points during the month. Russian industry’s investment plans underwent sharp negative changes in July 2017, with this indicator balance losing 9 points during the month. While retaining this indicator at a five-year high level for four months, the industrial sector was not prepared to invest in its own production amid protracted stagnation with unpredictable timeline for recovery.

In August 2017, industrial sector’s recovery from the protracted crisis of 2015–2016 continued to lose momentum. The month (August) happened to be a time of hardship for sales. Enterprises’ self-assessments of current demand dropped to a 13-month low. The same was true for demand projections. In August 2017, enterprises lost the confidence they accumulated during the previous 15 months. However, Russian industry output dynamics did not change in August. Survey data also show that the industrial production continued to experience near-to-zero growth of the output rates. This fact again put at the top of the list competition between experts regarding adjustment of the Rosstat data with respect to industrial output and seasonality in search for an answer to the most popular and crucial question of 2017: “Is there a growth in Russian industry?” Industrial enterprises, however, revised their output plans upward rather than downward, adding 3 points to this indicator balance in August. There were still hopes for regaining growth.

The continuing recruitment of staff by Russian industry corroborates this thesis. In August, the balance of changes remained positive although minimal in absolute terms. The continuing recruitment was registered over six months of 2017 (excluding in January and May). The balance of projected changes in enterprises’ staff headcount also remained positive, albeit moderate.

The data for September showed that enterprises were no longer hoping for being able to achieve the demand they needed for rapid recovery from the crisis. Actual changes in sales remained “below zero”, the forecast balance also went negative for the first time since early in 2017. Nevertheless, the proportion of enterprises that said their demand was “normal” still remained above 50 percent, thus indicating that the majority of enterprises were still satisfied with their sales volumes.

Revised plans of rapid recovery from the crisis prompted enterprises not to maintain their inventory at levels that can ensure the recovery. In September, the balance of inventories self-

assessments indicated a decline in their surplus down to +6 points, хотя ранее промышленность удерживала показатель в интервале +9..+11 пунктов. Finished goods inventory were updated in September on the back of current output – the industrial sector started making minor cuts in output while adhering to output boost plans for late in 2017. In August-September, the balance of output plans added 6 points, reaching values that were decent enough in times of crisis. That helped industrial enterprises continue to hire workers even amid slowing recovery from the crisis. Staff recruitment plans remained at a positive level. However, the investment plans balance approached again a zero line late in the third quarter – the industry had completely lost the confidence accumulated in Q1 2017 and maintained at the five-year highest level in Q2 2017.

In October, the dynamics of demand for industrial products continued to be driven by a downward trend. Nevertheless, the majority of businesses said the demand for their products was “normal” in H2 2017. In October, there were 64 percent of “normal” responses, not less than 60 percent since April 2017. However, demand forecasts reflected dimming hopes of successful year-end outturns. The balance of those hopes neared a zero, i.e. businesses hoped for no demand contraction. The latter told on the stocks of finished products. In Q2 2017, enterprises brought the stocks of finished products to a high amount of redundancy, which is characteristic for a steady recovery. However, in late Q3–early Q4 they began to get rid of the unwanted stocks due to the loss of confidence in a prompt recovery. The output dynamics added to the negative outlook in Russian industry. The survey statistics demonstrated continuing output contraction. However, the output plans remained confidence for at least a symbolic growth, which was observed before.

In November 2017, according to Gaidar Institute’s survey statistics Russian industry attempted to recover from the prolonged crisis of 2015-2016. Changes in demand and depleted stock of finished products have contributed to it.

Demand for industrial products exhibited positive dynamics in November 2017 Both baseline and seasonally adjusted data showed positive changes of both actual sales and sales projections. Most impressive was a sharp upsurge in the expected demand change shortly before public holidays in January. For that matter, this sharp upsurge of projections confidence continued moderate October improvement of the indicator, which was successfully implemented in November. The latter, most likely, pushed businesses to further growth of demand projects confidence. The Russian industrial sector’s finished goods inventory were totally “depleted” due to positive sales dynamics in November and upbeat projections for growing demand. The balance of this indicator self-assessments lost another 6 points down to zero – the proportion of “above normal” answers was offset by the proportion of “below normal” answers, with “normal” answers showing an absolute and strong prevalence, 71 percent in November. The combination of finished goods inventory self-assessments amid increasing demand was supposed to further encourage enterprises to increase volumes of finished goods inventory due to the increase in output.

Indeed, surveys in November registered a positive change in enterprises’ actual output dynamics and production plans. November saw output reverse from negative to positive values. Output plans underwent drastic changes in November as well. The seasonally adjusted balance rose during the month to +26 from +15 points, also hitting a multi-year high (like demand projections). Positive dynamics of demand and output coupled with the confidence growth of their forecasts and depletion of stocks of finished products forced businesses to recruit personnel. In November, the balance of change in the actual number of workers again was

positive. Enterprises resumed recruiting workers even against a backdrop of sufficient number (better than ever) of qualified personnel.

In December, enterprises continued to provide positive self-assessments. For instance, the demand growth rate remained above zero and even gained a few percentage points, thus enabling enterprises to be highly satisfied with their current demand, with 66 percent of “normal”, as before, answers. Demand projections were also at a steadily positive level, as was registered in H1 2017. The industry’s response to the demand dynamics seemed logical enough – enterprises continued to increase output in December. The latter was used to meet the demand and to increase finished goods inventory. As a result, finished goods inventory self-assessments bounced back from a zero to above-zero balance, evidencing that the Russian industrial sector was prepared to recover from the crisis of 2015–2016. Enterprises’ investment plans also bolstered this scenario in late 2017/early 2018. While the balance of the plans stabilized, albeit still somewhat below zero, in November-December 2017. In 2018 investment confidence may once again prevail over investment pessimism as long as there will be stronger confidence in success of another attempt to recover from the crisis.

4.2.4. Import substitution in Russian industry

From mid-2014, the issue of import substitution became an important component not only of the economic but also of the political agenda. In the wake of December (2014) ruble’s devaluation all buyers of imported goods who through carelessness had become dependent on imports found themselves in the sphere of import substitution. The task was clear for Russian engineers, producers and consumers, but the Russian statistics found itself in a hot seat—it turned out that to measure import substitution in a large open economy was very hard. The Federal service of state statistics provides a rather moderate set of indicators in that sphere. And it was more complicated to comprehend what issues during the implementation of the import substitution policy face Russian consumers (be it the state, companies or households). Just they decide what imports to replace with the Russian analogues.

Traditional approach to import substitution based on the foreign trade statistics provides only limited analysis of those processes in this context. Understanding the difficulty of measuring import substitution and related issues in the context of high demand of the actual data forces us to turn to more flexible tool—surveys. Surveys’ findings provide a more comprehensive and extended picture of the current problems of Russian import substitution than general trade statistics.

This chapter discusses the main results of our import substitution surveys, conducted by the Gaidar Institute business surveys laboratory in 2014–2017 on the basis of surveys of directors of industrial enterprises. In this connection, the enterprises were treated not as producers of Russian domestic products capable of ousting their competing counterparts from the Russian market in the framework of import substitution policy, but as buyers of imported machinery and equipment and imported supplies and raw materials forced to switch over to the domestic analogues of these items in conditions of an administrative ban on certain imports and/or their rising prices resulting from the ruble's depreciation.

The first measurements of the potential changes in planned purchases across industry in response to growth of ruble-denominated import prices were done as early as April 2014, when it was still unlikely that the exchange rate movement was significantly influencing buyer behavior. That survey demonstrated Russian industry’s high dependence on imports. The critical dependence index – the impossibility not to rely on imports notwithstanding any scale

of price growth – was then hovering at around 40 percent (the share of enterprises reporting that dependence) with regard to both equipment and raw materials. At the other side of the spectrum of possible reactions to price growth were those enterprises which during that period reported that they were not importing anything. The estimated independence from imports reported by enterprises amounted to 22 percent with regard to machinery & equipment, and 33 percent with regard to raw materials and other supplies. Thus, the remaining group of enterprises continued to purchase imported products, but were prepared to do without those products in the event of further growth of their ruble-denominated prices. In April 2014, this group of enterprises across Russian industry amounted to 25 percent for raw materials, and to 39 percent for machinery and equipment.

Our second opinion survey of the preparedness of enterprises to discontinue import purchases took place specifically in December 2014, when the ruble's plunge trajectory hit its bottom, and the calls of authorities for import substitution were loudest. However, the plans of import purchases across industry remained the same as before. Nearly 40 percent of enterprises were not ready to operate without buying imported machinery and equipment, even in view of the ruble's obvious depreciation inevitably followed by a rise in ruble-denominated prices for these technologies in the forthcoming year 2015. In other words, the scale of Russian industry's critical dependence on imports remained unchanged.

An almost identical situation could be observed with regard to Russian industry's dependence on imports of raw materials – the reported intentions of enterprises concerning purchases of such items. A maximum percentage share of all enterprises (37 percent), as before, were prepared to rely on these imports regardless any surge in their ruble-denominated prices. By late 2014, as before, only a third of all enterprises had not been relying on imports in order to secure their output.

The obvious reluctance (or unpreparedness) of Russian industrial enterprises to do without purchases of imported equipment and raw materials even in face of the inevitable growth (clearly made obvious in December 2014) of their prices urged us to begin monitoring, from 2015 onwards, the existing obstacles to successful import substitution across industry. Over the past three years, the survey participants were asked 5 times to answer the following question: “What prevents your enterprise from switching over from purchases of imported equipment and raw materials to purchases of their domestic analogues?” Their answers have yielded a rather comprehensive picture of the real issues that prevent successful import substitution in enterprises' purchases.

The main issue arising in the event of discontinuation of imports has always been and still remains the absence, in Russia, of any analogues of some imported items, no matter what their quality. The January (2015) assessments of the barriers in the way of import substitution were more than just an emotional reaction to the shock-like depreciation of the ruble in December. And our three-year monitoring failed to yield any positive observations that could confirm the creation, in Russia, of production of new equipment and raw materials (i.e., something that had never been produced before) – rather, the observable trend was the opposite (*Fig. 15*).

The low quality of domestic equipment and raw materials as compared with that of their imported analogues has been ranked stably second among the obstacles to import substitution. A sizable group of enterprises (on the average, a third of them in all five surveys) constantly pointed to that issue. Other constraints on import substitution were mentioned far more rarely.

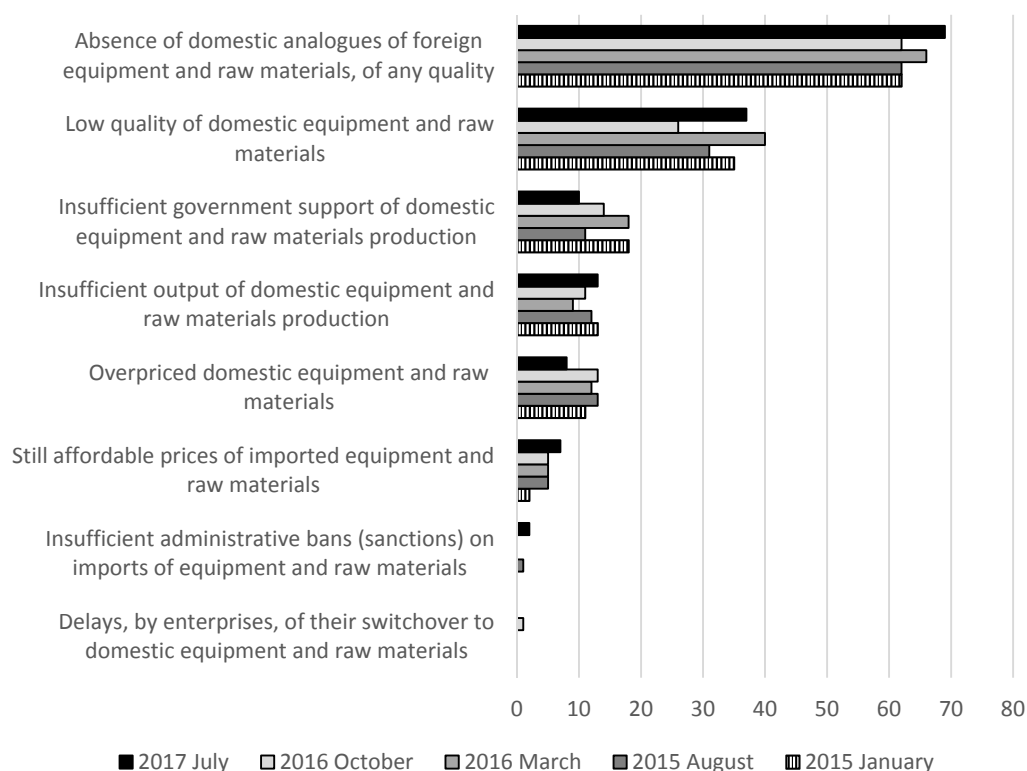


Fig. 15. Hindrances for import substitution faced by Russian industrial enterprises in 2015–2017, %

For example, among the other obstacles, industrialists noted insufficient government support of domestic equipment and raw materials production, but this kind of estimation of the government policy in the sphere of import substitution was voiced by only 18 percent of respondents in January 2015, and by 10 percent in July 2017.

Overall, on the basis of the available set of estimations, it can be concluded that enterprises relied mostly on their own devices, including their ability to adapt to the ruble's new exchange rate. In this respect, by the end of 2017, domestic industry had achieved some very obvious successes: the negative effects on output by 'the weakening ruble and the rising prices of imported equipment and raw materials' (as worded in the questionnaire offered by the Gaidar Institute) in late 2017 were as low as 6 percent.

The estimations of those analogues of imported equipment and raw materials that were already being produced in Russia were also quite stable and well-defined. Complaints about the prices of Russian products that were unreasonably high compared with their quality were reported on the average by 11 percent of those Russian enterprises that were buying them, and these complaints remained unchanged over the three-year period.

Special attention should be focused on the estimates of the ability of Russian industry to increase output in the framework of import substitution. Issues associated with the demand for those products that were already being manufactured in RF territory were mentioned on the average by 12 percent of enterprises. Therefore, Russian industry possesses sufficient reserves (idle capacities) for increasing output in an event of an increased demand for its products in the framework of the import substitution policy.

As demonstrated by the monitoring results obtained in 2015–2017, Russian industry during that period managed to achieve a relatively high success in terms of import substitution when buying new machinery and equipment (*Fig. 16*). This process was most notable in Q2 2015, when 30 percent of industrial enterprises reported a shrinkage, in terms of physical volume, of the share of imports of machinery and equipment in their total purchases (relative to Q2 2014), or their total disappearance. Perhaps, the corresponding period-end index for Q1 2015 was even more impressive in terms of import substitution scale, but it can be considered to be the upshot of the initial and excessively emotional response to the shock produced by the ruble’s December devaluation.

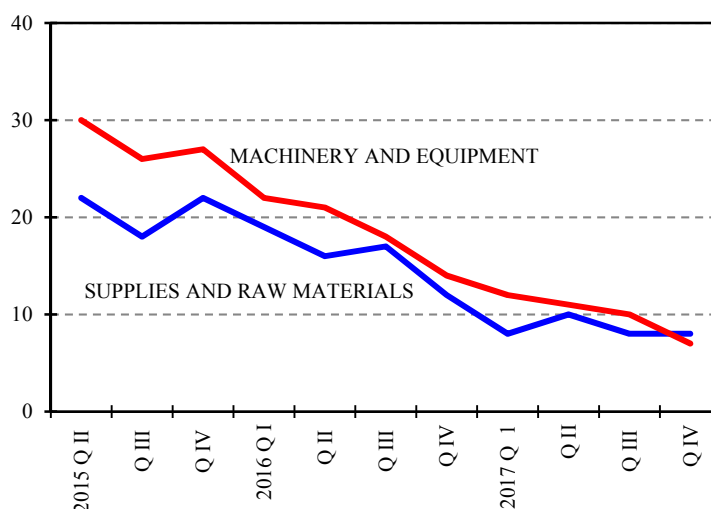


Fig. 16. The actual scale of import substitution in the purchases of equipment and raw materials by enterprises, percent

However, over the next ten quarters, Russian industry began to play down the intensity of actual import substitution. Therefore, in Q4 2017, only 7 percent of enterprises reported a shrinkage, in terms of physical volume, or a zero percentage of imports in their purchases of machinery and equipment. The shrinkage of imports of raw materials across Russian industry was less intensive due to the lower import substitution potential in that sector. The highest scale of substitution of imports of raw materials was 22 percent, and by Q4 2017, it had declined to 8 percent. The reason for this very modest success was, most probably, the dependence of Russian industry on imports that had emerged over the previous years. Having purchased imported equipment, Russian enterprises are forced to use industrial inputs that are compatible with that equipment. Such materials are not produced domestically, but can be supplied by foreign producers who usually offer comprehensive sets of supplies and take full advantage of any opportunity to make their customers dependent on their products for all the phases of their production cycle.

Another reason for the slow pace of import substitution in the sector of industrial inputs was the mildness of the 2015–2016 crisis, which did not trigger any dramatic output reduction across Russian industry. Such a situation did not require a large-scale substitution for the more expensive imports of raw materials and other supplies, and so the demand of enterprises for raw materials, including imported ones, did not dwindle markedly.

Let us now review the import substitution plans across industry (*Fig. 17*) over the period from Q3 2015 (survey in July 2015) through Q1 2018 (survey in January 2018).

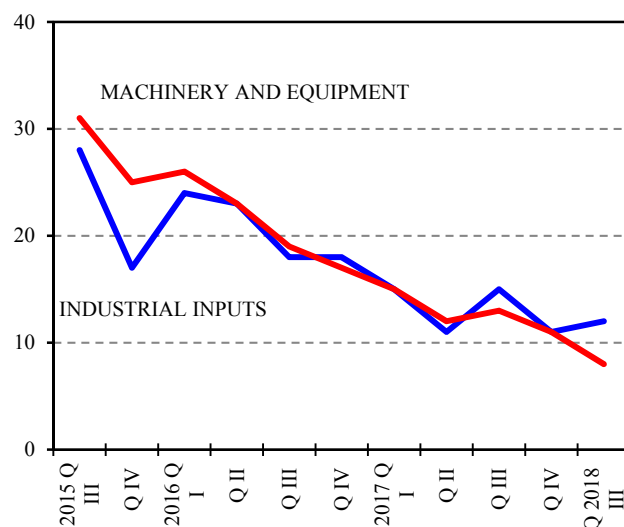


Fig. 17. The planned scale of import substitution in the purchases of industrial inputs by enterprises, percent

The quarterly import substitution plans demonstrate that the expectations of a reduced scale of import substitution with regard to raw materials relative to that of machinery and equipment were true only for the year 2015. The plans for 2016–2017 have already confirmed the similarity of intentions of Russian producers in that sphere. The obvious collapse of investment plans and the obviously less than disastrous (non-crisis) scale of output decline predetermined that variance of plans across Russian industry in 2015. The situation became different in 2016, when industry was already capable of assessing the specificities of the protracted crisis of 2015–2016 and adapting to the new production conditions and the monetary policy implemented by the Bank of Russia. This was also true for the investment sector: there appeared certain signs of possible growth of investment in domestic production. Moreover, the strengthening ruble and relatively good financial result enabled enterprises to once again begin to purchase imported machinery and equipment.

The scale of import substitution planned by producers with regard to all categories of purchases (equipment and raw materials alike) was always below that of their own “import conservation” plans. In other words, industry preferred (or was compelled) to maintain the same share of imports in the purchases of new equipment and the use of raw materials.

Thus, the policy of import substitution definitely faces tough challenges, which are hard to overcome. Business surveys conducted before the December 2016 ruble devaluation demonstrated dramatic dependency of Russian industry from imports. The lack local production of necessary equipment, components and raw materials remains the main hindrance for the import substitution policy. The low quality of the local products poses a second problem. Russian industry is able to satisfy growth of import substitution demand for goods, which are already locally produced. In other words, Russian industry boasts of sufficient standby capacity. The ruble’s strengthening and successful adaptation of Russian industry to slow rolling crisis of 2015–2016 allowed the industry to cut in 2017 the scale of import substitution in their procurements to the 3-year minimum recorded by monitoring.

4.3. The public sector of the Russian economy: it's size and dynamics¹

Two main channels can be pointed out whereby the state participates in value added chains: through the operation of companies with state stakes, and through the services (in a broader sense of the work) produced by enterprises with state stakes and budget-funded organizations. Consequently, the assessment of the state sector scope inside the national economy consists, as a rule, of two components: an analysis of the relative share of biggest companies with state stakes – state-owned enterprises (SOE) in a country's aggregate economic statistics (the scope of state ownership); and an estimation of the input of the general government sector (GGS)² in GDP.

The relative parameters of the SOE sectors operating in different countries have become one of the most well-studied issues in the framework of research projects and statistics, thanks to the efforts of the Organization for Economic Co-operation and Development (OECD). However, there also exist some serious limitations, like the irregularity of available data concerning the input of SOEs in GDP, or lack of a single methodology for calculating that index. The relevant data on SOEs in Russia, with regard to that index and several other indices (capitalization, number of employed persons, proceeds, etc.) are only fragmentary or based on approximate expert estimations.

There is no single approach, either, to understanding and measuring the general government sector's input in GDP. On the one hand, for a long time already this index has been applied in the systems of national accounts in many countries, in the production account for institutional sectors of the national economy. On the other, its input is frequently measured from the point of view of redistribution of financial flows by the state, i.e., the relative amounts of aggregate state revenues generated by taxes, property ownership, operations with assets, proceeds generated by production of services, etc., or the corresponding items on the expenditure side. In our opinion, such a broad approach to calculating the input of the public sector results in an overestimation of the general government sector's input in GDP, because the beneficiaries of the expenditures of the centralized funds are largely households and private businesses.

The presence of some unresolved issues in the estimation of the inputs of both SOEs and government bodies in GDP makes it difficult to correctly calculate the aggregate input of the public sector in GDP. It can be said that this issue remains unresolved both with regard to the public sector in Russia and to its comparative estimation relative to other countries. Here we will attempt to elaborate a more precise methodology for estimating the inputs in GDP of different sectors of the national economy where SOEs are present, and then, on the basis of available empirical data, to compare the public sector's input in GDP in Russia and other

¹ This section was written by Alexander Abramov, IAES-RANEPA; Ivan Aksenov, IAES-RANEPA; Alexander Radygin, the Gaidar Institute, IAES-RANEPA; Maria Chernova, RANEPA.

² According to the Russian Classification of Institutional Sectors (KIES) introduced by the Federal State Statistics Service (Rosstat), the general government sector (GGS) consists of two types of institutional units:

- 1) government units of all levels – ministries, government departments, services, agencies, government extrabudgetary funds, etc.;
- 2) non-market non-profit institutions financed and controlled by the state (schools, hospitals, recreational institutions, etc.).

countries, and to analyze the movement of the corresponding indices over the period 2006-2016.¹

4.3.1. The estimated inputs in the national economy of state-owned enterprises

The official statistics in the majority of countries, Russia including, lacks a unified definition of companies with state stakes. In recent years, useful results in that area have been achieved by the OECD, which has acted as a methodological center, pooling the statistical data of the public sectors of many economies. As an upshot of that activity, a uniform term *state-owned enterprise* (SOE) has emerged. According to the OECD Guidelines on Corporate Governance of State-owned Enterprises, as amended in 2005 and 2015,² a legal entity is recognized to be a SOE if the state exercises its right of ownership thereto understood as 'exercise of control'. Based on this approach, a SOE is an organization controlled by the state as the sole owner, which holds a majority or a significant minority block of shares (a stake in the charter capital) amounting to not less than 10 percent. This definition is not a 'canonical' one, it gives rise to many technical questions, i.e., the specific forms of control or their quantitative confirmation, but the term itself is, nevertheless, quite appropriate and is now becoming increasingly widespread in the studies on this subject conducted in different countries.

The notion of control as a criterion to be applied in defining a SOE may imply a variety of forms of state participation in an enterprise, some of these forms being non-transparent. If one relies on the information disclosure rules for issuers of securities introduced in Russia, the best way to describe control-based relations would be through the institutions of direct and indirect state ownership. *Direct ownership* means that the shares (or stakes) held in state ownership are disposed of by the empowered government bodies, including the RF Federal Agency for State Property Management (*Rosimushchestvo*). *Indirect ownership* means that the control of a stake in a company is exercised through the Bank of Russia, state corporations, holding companies, banks, and state enterprises.

In an indirect state ownership model, the state may own a company through a chain of organizations. In this case, when estimating the size of a state stake, a more complex methodology will be needed. The size of a block of shares (or a stake) in a company studied as part of an indirect state ownership model is calculated as the sum of state stake in the core company, the stake held by the core company in its first generation subsidiary, the stake held by the latter in a second generation subsidiary, and so on, all the way down to the company under consideration. In this connection, an additional rule is applied: any majority (above 50 percent) blocks of shares (or stakes in the charter capital) of the core company owned directly by the state are assumed to be 100 percent stakes. In every case, the length of ownership chains for the purpose of indirect ownership calculation is determined on the basis of an expert

¹ See also Abramov A., Radygin A., Chernova M. Companies with State Stakes in the Russian Market: Their Ownership Structure and Role in the Economy // *Voprosy ekonomiki*. 2016. No 12. P. 61-87; Abramov A., Radygin A., Chernova M., Entov R. State Ownership and Efficiency Characteristics // *Voprosy ekonomiki*. 2017. No 4. P. 5-37; Abramov A.E., Aksenov I.V., Radygin A.D, Chernova M.I. Modern Approaches to Measuring the State Sector: Methodology and Empirics // *Economic Policy*, 2018, No 1, February, No 2, April.

² Guidelines on Corporate Governance of State-owned Enterprises. Paris: OECD Publishing, 2005; OECD Guidelines on Corporate Governance of State-Owned Enterprises. Paris: OECD Publishing, 2015.

estimation, with due regard for the possibility to trace the relevant stakes in the official reporting documentation of the companies¹.

As Rosstat does not apply the category of *state-owned enterprise* (SOE) in its official statistics, we assessed the economic parameters of SOEs based on a sample of 208 biggest private and state-owned Russian companies, for which financial reports are publicly available. In 2016, these companies accounted for 94.5 percent of total equity capitalization, and 20.1 percent of the aggregate proceeds in the Russian economy.² Our data analysis encompasses the period from 2006 through 2016.

In 2016, out of the 208 legal entities included in the sample, only 106 had the status of a SOE;³ of these, 86 were companies with majority state stakes, where the state directly or indirectly held more than 50 percent of voting shares; the remaining 20 were companies with minority state stakes, namely blocks of shares amounting to 10-50 percent. In the group of 106 SOEs, 'non-public' companies prevailed, i.e. issuers of ordinary shares not listed on the MICEX. Among the 106 SOEs, only 34 companies (32.1 percent) were public joint-stock companies (PAOs), the remaining 72 (67.9 percent) were non-public. In addition to PAOs and JSCs, this sample included state unitary enterprises (SUE),⁴ limited liability companies (LLC),⁵ three state corporations – *RUSNANO* Corporation, State Corporation *Rostec*, and *Rosatom* Corporation.

Our approach to analyzing the scale of state ownership in Russia based on a sample of SOEs and the national economic indices released by *Rosstat* in its official reports is compatible with the methodologies applied in a similar study of the role of SOEs in the world's 40 biggest economies conducted by the OECD.⁶ That study, participated by the government economic departments of many states, on the basis of samples of biggest SOEs analyzed their relative shares in the total capitalization indexes and their personnel numbers. That study lacks the

¹ The methodology for a detailed calculation of the size of blocks of shares (or stakes) in indirect ownership was suggested in [Abramov A., Radygin A., Chernova M. Companies with State Stakes in the Russian Market: Ownership Structure and Role in the Economy // *Voprosy ekonomiki*. 2016. No 12. P. 61-87.]. In their study, the authors reviewed a sample of 114 biggest Russian companies, including 61 SOEs, over the period from 2006 through 2014. This study, which uses a larger sample observed over a longer period, makes it possible to compare the indices of Russian SOEs with those of SOEs across 40 countries, on the basis of data as of 2015, recently published in [The Size and Sectoral Distribution of State-Owned Enterprises, Paris: OECD Publishing, 2017.].

² Rosstat data contain two different estimates of aggregate proceeds in the Russian economy. One of them is cited in the statistics entered in the national accounts, and the other is entered in the aggregate proceeds data for different sectors of the national economy. Thus, for example, in 2016 the total sales volume in the system of national accounts amounted to RUB 178.5 trillion, while in accordance with Rosstat's Central Statistics Database, the total proceeds of organizations with all forms of ownership amounted to RUB 230.7 trillion. In our calculations for the corresponding years, we applied the proceeds index taken from the Central Statistics Database, because it provides data relative to each form of ownership, and so these data can be compared with our estimations based on our study sample of SOEs.

³ Because of the changes in the ownership structure of Russian companies, their reorganization and absence of publicly available reporting data for several companies for some years, the number of SOEs in the sample varies from year to year, amounting to 70 in 2006, to 82 in 2007, to 85 in 2008, to 96 in 2009, to 98 in 2010, to 103 in 2011, to 109 in 2012, to 107 in 2013, to 110 in 2014, to 105 in 2015, and to 106 in 2016.

⁴ FSUE Russian Post, SUE Mostransavto, FSUE Rosmorport, Federal State Enterprise *Specialized Railroad Security Service of Russia*, FSUE Main Military Engineering Administration No 6, FSUE Main Administration for Construction of Roads and Airfields of the RF Ministry of Defense, SUE Vodokanal of St. Petersburg, SUE Fuel and Energy Complex of St. Petersburg, SUE Mosoblgaz, FSUE Center for Operation of Space Ground Base Infrastructure, etc.

⁵ UAZ, Farmpreparat, METRO Cash and Carry, Volkswagen Group Rus, Japan Tobacco International Russia, MERLION, Avtotor Group, NISSAN Manufacturing Rus, and O'KEY Group.

⁶ The Size and Sectoral Distribution of State-Owned Enterprises, Paris: OECD Publishing, 2017

corresponding data for Russia. All the calculations were made as of year-end 2015. In our sample for that year, Russia had 105 SOEs.

The aggregate by-country data describing the number of SOEs, their estimated value and personnel number, are shown in *Table 11*. The indices are calculated separately, with and without the SOE indices for China, because the latter differ significantly from the parameters observed in the other countries. Besides, the pooled OECD estimates do not include data for Saudi Arabia, because these are incomplete.

In 2015, in 39 countries there were a total of 2,443 SOEs, with estimated value of approximately USD 2 trillion, or 4.0 percent of total capitalization of public JSCs in these countries. In the same year, China reported 51,300 SOEs with estimated value of USD 29.2 trillion, which is 3.6 times more than the total capitalization index of public companies in China's economy (which ranks 2nd in the world relative to that index). In Russia, 105 SOEs were identified with estimated market value of USD 175 billion, or 36.9 percent of the total capitalization index of all shares listed on the MICEX.¹

The OECD's by-country SOE sample, less China, in 2015 employed 9.2 million personnel, which on the average amounts to 1.1 percent of the total number of employed persons in the national economies; and the same index, China including, is 24.5 million, or 1.9 percent of the total number of employed persons. In Russia, SOEs employed 3.8 million persons, or 5.4 percent of the total number of employed persons in the national economy.

Table 11

Selective indices of SOEs in 41 countries, as of year-end 2015

	Number of SOEs	Company value, billions of US dollars			Personnel number		
		SOE	Public stock market capitalization – total	Input of SOEs, percent	SOE	Country's total	Input of SOEs, percent
1	2	3	4	5	6	7	8
Argentina	59	28	56	49.2	130,776	13,282,300	1.0
Australia	8	14	1,187	1.1	42,607	9,746,800	0.4
Austria	10	5	96	5.1	72,491	3,602,100	2.0
Brazil	134	145	491	29.6	597,505	68,150,900	0.9
Canada	44	30	1,593	1.9	83,462	15,185,600	0.5
Chile	25	21	190	10.9	50,361	5,868,200	0.9
Columbia	39	23	86	26.8	33,033	10,808,900	0.3
Costa Rica	32	13	n.d.	n.d.	43,013	1,556,200	2.8
Czech Republic	133	29	n.d.	n.d.	133,826	4,162,100	3.2
Denmark	21	**	**	**	18,728	2,520,000	0.7
Estonia	66	**	**	**	26,026	581,900	4.5
Finland	47	**	**	**	72,391	2,088,200	3.5
France	51	77	2,088	3.7	826,967	23,324,400	3.5
Germany	71	72	1,716	4.2	370,440	35,821,900	1.0
Greece	42	83	42	198.2	42,927	2,341,300	1.8
Hungary	370	9	18	51.5	148,193	3,748,400	4.0
Iceland	35	**	**	**	3,636	160,000	2.3
India	270	339	1,516	22.3	3,284,845	288,808,600	1.1
Ireland	25	10	128	8.0	39,079	1,615,000	2.4
Israel	28	n.d.	244	0.0	57,114	3,205,700	1.8
Italy	20	208	587	35.3	499,765	16,988,400	2.9
Japan	8	82	4,895	1.7	256,265	56,899,500	0.5
South Korea	56	218	1,231	17.7	147,833	14,248,900	1.0
Latvia	71	**	**	**	49,962	782,300	6.4

¹ The estimated aggregate value of Russian SOEs, in contrast to that of some other countries, e.g. China, is somewhat understated because it is based only on data on capitalization of public companies listed on the MICEX. Out of 105 SOEs in our sample, only 33 companies were registered as public in 2015.

Cont'd

1	2	3	4	5	6	7	8
Lithuania	128	**	**	**	40,711	1,169,800	3.5
Mexico	78	21	402	5.3	73,686	34,327,500	0.2
The Netherlands	29	83	728	11.4	110,400	6,896,500	1.6
New Zealand	37	29	74	39.1	36,214	2,008,700	1.8
Norway	55	108	194	55.6	230,601	2,460,500	9.4
Poland	126	16	138	11.4	128,016	12,632,500	1.0
Slovakia	113	n.d.	n.d.	n.d.	60,471	2,054,400	2.9
Slovenia	37	13	6	207.1	47,052	762,100	6.2
Spain	51	37	787	4.7	94,635	14,761,900	0.6
Sweden	49	37			124,133	4,343,300	2.9
Switzerland	4	45	1,519	2.9	106,883	3,946,100	2.7
Turkey	39	63	189	33.1	438,990	17,879,100	2.5
UK	16	115	3,879	3.0	153,604	26,395,800	0.6
USA	16	-22	25,068	-0.1	535,981	139,208,000	0.4
China	51,341	29,201	8,188	356.6	20,248,999	657,253,800	3.1
NASDAQ OMX Nordic Exchange*	n.d.	113	1,268	8.9	n.d.	n.d.	
<i>total (less China)</i>	<i>2,443</i>	<i>2,023</i>	<i>50,418</i>	<i>4.0</i>	<i>9,212,622</i>	<i>854,343,800</i>	<i>1.1</i>
<i>total (including China)</i>	<i>53,784</i>	<i>31,224</i>	<i>58,606</i>	<i>53.3</i>	<i>29,461,621</i>	<i>1,511,597,600</i>	<i>1.9</i>
Russia	105	175	473.7***	36.9	3,671,564	68,495,000	5.4
Saudi Arabia	24	139	421	33.1	25,906	10,925,900	0.2

* Pooled stock exchange data for Denmark, Iceland, Latvia, Lithuania, Finland, Sweden, Estonia.

** To avoid duplicated results, in the 'total' rows, the SOE value and stock market capitalization data for Denmark, Iceland, Latvia, Lithuania, Finland, Sweden, and Estonia are entered as aggregate value in the row *NASDAQ OMX Nordic Exchange*.

*** Capitalization index based on MICEX data for 2015 divided by the annual average USD exchange rate, in rubles.

Source: data on SOEs in 40 countries, less Russia [The Size and Sectoral Distribution of State-Owned Enterprises, Paris: OECD Publishing, 2017]; SOE sample data for Russia, collected by the RANEPА Institute of Applied Economic Research; public share market capitalization – World Development Indicators (WDI). URL: <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>; by-country personnel data – Passport (Euromonitor International) URL: http://go.euromonitor.com/passport_.html.

The countries shown in *Fig. 18* (less China) are ranked by the number of their SOEs operating as of 2015. By the number of companies in its sample (105), Russia was 8th among a total of 40 countries. The number of SOEs in the other major developing economies was as follows: 270 in India, 134 in Brazil, 126 in Poland, 78 in Mexico, 56 in South Korea, 39 in Turkey. The number of SOEs in the developed countries was markedly lower than in Russia, in particular 51 each in France and Spain, 49 in Sweden, 47 in Finland, 44 in Canada, and 16 each in the USA and the UK. On the basis of this data it can be assumed that the size of Russia's sample of SOEs is representative, given the available statistics on SOEs in the 40 countries included in the OECD study.

Among these samples data, China stands somewhat apart, because in 2015 it numbered a total of 53,784 SOEs. The distinctive feature of the Chinese model, as noted by Ronald Coase and Nina Wang,¹ is that it envisaged a one-time specification and transfer of rights to the relevant economic subjects without an accompanying privatization of the state stake. This is the reason why in the ownership structure of the innumerable commercial enterprises scattered across rural and urban areas, there still remain stakes held by the state and local-self-government bodies, which is manifest in the very sizable sample of SOEs representing that country.

¹ Coase R., Wang N. How China Became Capitalist. [In Russian]. Moscow: Novoye Izdatel'stvo. 2016. P. 261–264.

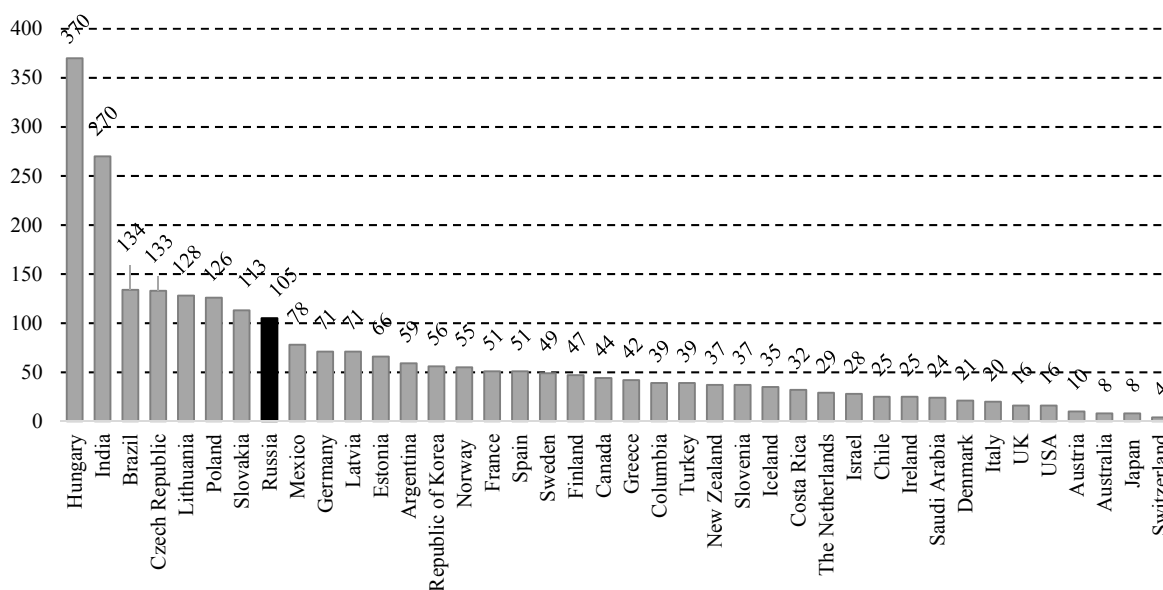


Fig. 18. The number of SOEs in samples studied in different countries in 2015, units

Source: calculations based on OECD data [The Size and Sectoral Distribution of State-Owned Enterprises, Paris: OECD Publishing, 2017]; for Russia, the sample data collected by the RANEP Institute of Applied Economic Research are applied.

Fig. 19 demonstrates the SOE value indices, in US dollar terms, for different countries, less China. The market capitalization index of Russian SOEs in 2015 amounted to USD 175 billion. By this criterion, if we disregard China, with its staggering total estimated value of SOEs amounting to USD 29.2 trillion, Russia falls behind only the following three countries included in this sample: India (USD 339 billion), South Korea (USD 218 billion), and Italy (USD 208 billion). At the same time, by the capitalization index of its SOEs, Russia was ahead of several major economies where the share of government ownership was traditionally high: Brazil (USD 145 billion), Saudi Arabia (USD 139 billion), Norway (USD 115 billion), Japan (USD 82 billion), France (USD 77 billion), Germany (USD 72 billion), and Mexico (USD 21 billion). It must be remembered, however, that in the group of Russia's 105 SOE, the resulting index of USD 175 billion was in the main contributed to by only 33 public JSCs whose shares had market value based on their high quotes.

Fig. 20 shows the value indices of SOEs in terms of their share in the market capitalization index of each country. In 2015 in Russia, this index amounted to 36.9 percent, the average for 39 countries (less China) being only 4.0 percent. In China, the ratio of the value index of SOEs to the total capitalization index of that country's market (second in the world in terms of its size) was as high as 356.6 percent, which can be explained by the already mentioned characteristic feature of the Chinese economy. If we disregard China, Russia's share of the value index of SOEs in the total capitalization index will be one of the highest among the countries with liquid stock markets. In 2015, Russia's index was significantly above the corresponding indices for Italy (35.3 percent), Turkey (33.1 percent), Brazil (29.6 percent), India (22.8 percent), Poland (11.4 percent), and Mexico (5.3 percent).

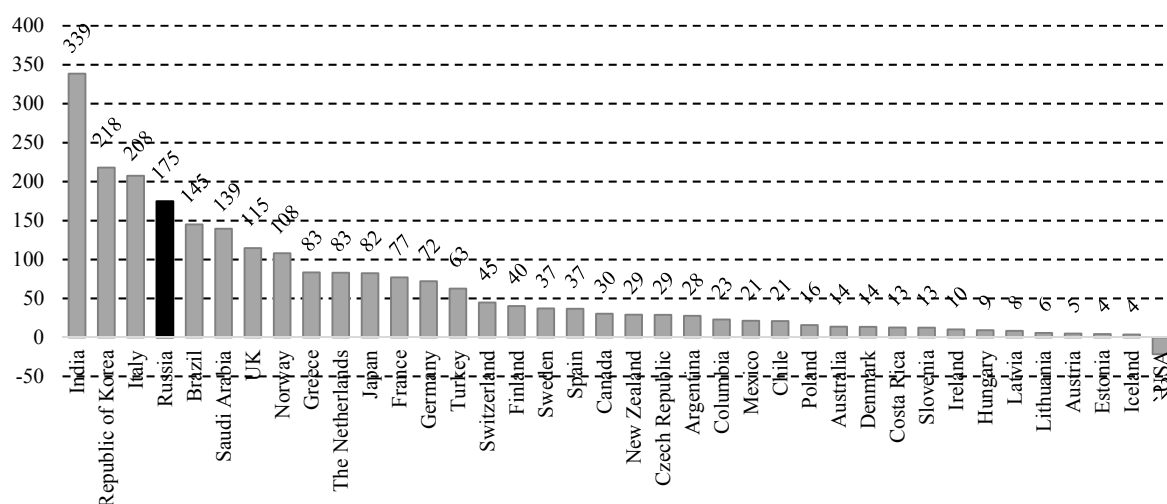
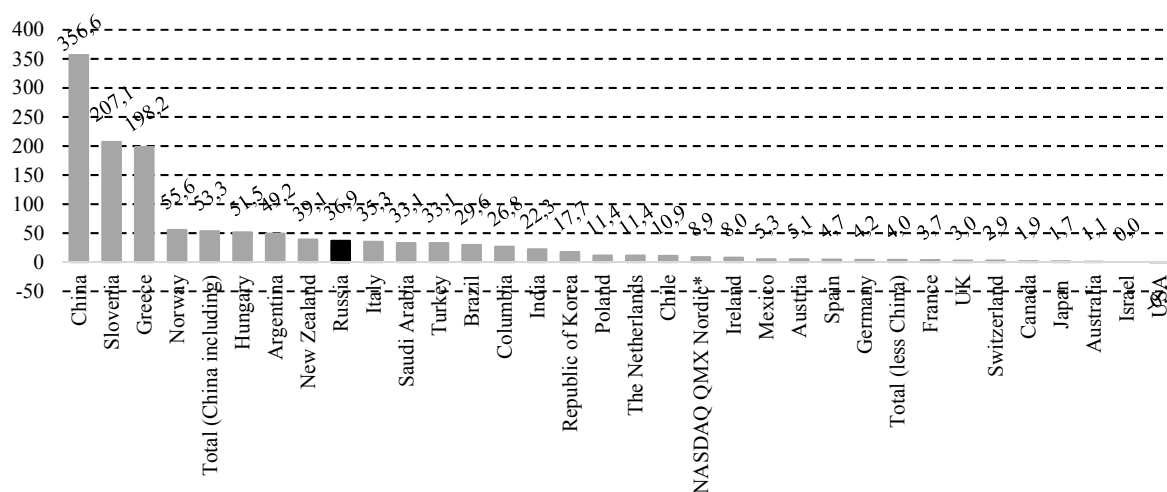


Fig. 19. Value of SOEs in different countries in 2015, billions of US dollars

Source: calculations based on OECD data [The Size and Sectoral Distribution of State-Owned Enterprises, Paris: OECD Publishing, 2017]; for Russia, the sample data collected by the RANEP Institute of Applied Economic Research are applied.



* Finland, Denmark, Sweden, Estonia, Latvia, Lithuania, Iceland.

Fig. 20. The value index of SOEs in different countries in 2015, as a percentage of the total market capitalization index of public companies

Source: calculations based on OECD data [The Size and Sectoral Distribution of State-Owned Enterprises, Paris: OECD Publishing, 2017]; for Russia, the sample data collected by the RANEP Institute of Applied Economic Research are applied.

Fig. 21 presents the inputs of SOEs operating in the total number of persons employed in each economy in 2015. Russia's index of 5.4 percent was found to be one of the highest among the 40 countries included in the OECD sample. The corresponding average index for all these countries, including China, was only 1.9 percent. By the input of SOE personnel in the total number of employed persons, Russia was behind only three countries – Norway (9.4 percent), Latvia (6.4 percent), and Slovenia (6.2 percent). At the same

time, by the same index, Russia was ahead of some other countries with a high input of the public sector in their national economies: Hungary (4.0 percent), France (3.5 percent), Finland (3.5 percent), China (3.1 percent), Sweden (2.9 percent), Turkey (2.5 percent), Germany (1.0 percent), Brazil (0.9 percent), and Mexico (0.2 percent).

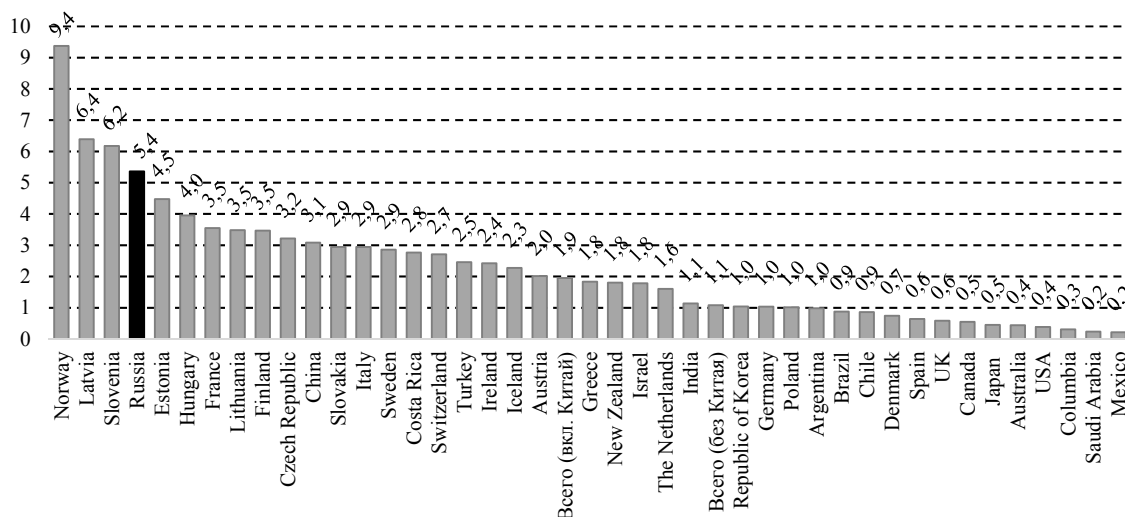


Fig. 21. The inputs of SOE personnel in the total number of employed persons in different countries in 2015, percent

Source: calculations based on OECD data [The Size and Sectoral Distribution of State-Owned Enterprises, Paris: OECD Publishing, 2017]; for Russia, the sample data collected by the RANEPА Institute of Applied Economic Research are applied.

At present, on the basis of the available OECD statistics on SOEs operating in different countries, it is not possible to correctly assess the year-on-year movement patterns of the public sector in the entrepreneurial sphere. The relevant estimates can be presented only for Russia, derived on the basis of the time series in our SOE sample over the 11-year period from 2006 through 2016.

Fig. 22 shows the movement patterns, in Russia, of the indices describing the inputs of SOEs in the total market capitalization index, the number of employed persons in the total economy, and proceeds in the total economy. Over 11 years, the input of the capitalization index of SOEs in the total capitalization index of the Russian stock market shrank only slightly, from 50.0 percent in 2006 to 48.7 percent in 2016. At the same time, the changes displayed by that index were cyclical: it was notably on the decline during the period of the Russian stock market's growth, but in the post-crisis year 2009, and then in 2016 during the stock market's rebound, it displayed dramatic surges. Evidently, this 'rebound phenomenon' had to do with the more substantial support provided by the government to biggest SOEs, by comparison with other companies, during the acute phase of the crisis.

The input of SOE employees in the total number of employed persons in Russia's total economy, which was shown (see *Fig. 23*) to be among the highest in the world, also displayed an obvious trend towards long-term growth. Over the 11-year period, this index for SOEs increased from 2.3 percent in 2006 to 5.8 percent in 2016, or 2.5 times.

The input of SOEs in the total economy's proceeds also increased, although at a more moderate rate compared with the growth rate of the SOE personnel. That index increased from

9.2 percent in 2006 to 11.5 percent in 2016, i.e., approximately by 1/4. It should be noted that the input of proceeds generated by SOEs began to decline specifically from 2012 onwards, when the Russian economy was entering the period of recession – from 13.7 percent in 2011 to 12.4 percent in 2015. In addition to all the other factors, this could be caused by the declining performance level of these companies compared with the private sector of the economy.

The year-on-year data on capitalization, the number of employed persons and proceeds for the SOEs included in our sample over the period from 2006 through 2016 are presented in *Fig. 22* and *Annex I*.

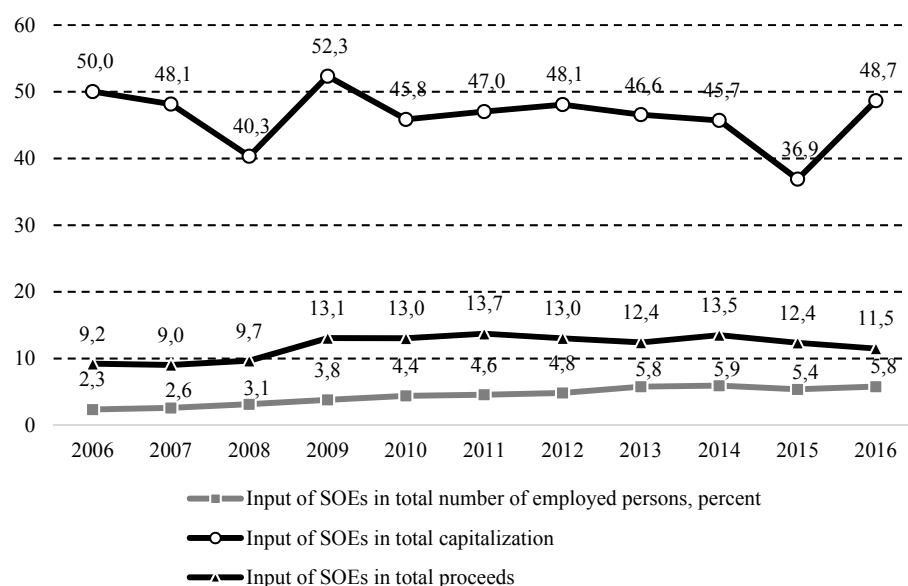


Fig. 22. The inputs of SOEs in the capitalization index, total number of employed persons and total proceeds in Russia in 2006–2016, percent

Source: calculations based on the sample data collected by the RANEPА Institute of Applied Economic Research.

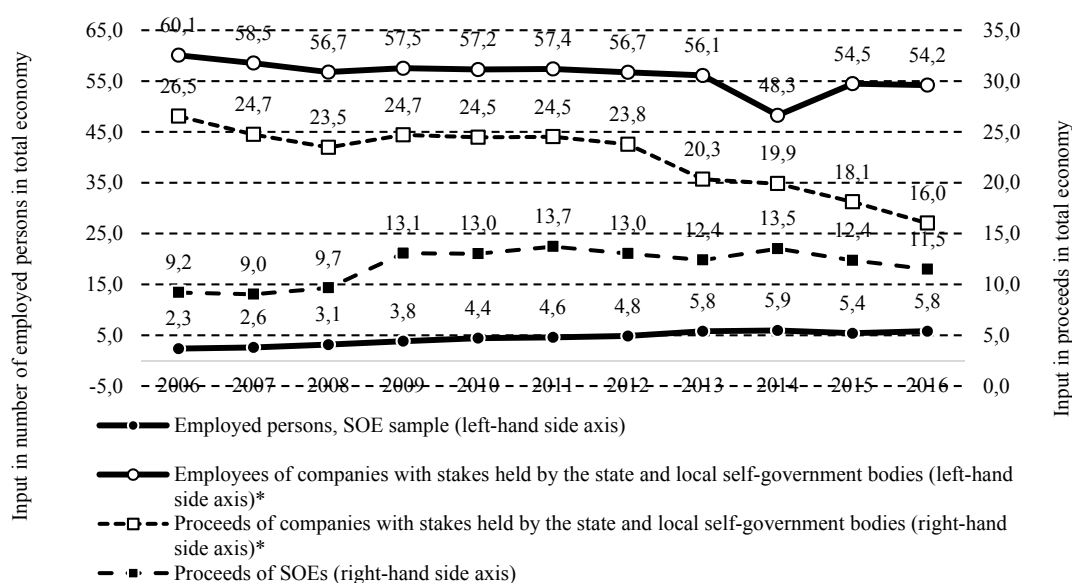
The data on the number of personnel and the amount of proceeds generated by SOEs across our sample can be set against the corresponding data for a broader group of organizations with state stakes released by Rosstat. In this dataset, there are organizations in federal ownership; in ownership by subjects of the Russian Federation; in municipal ownership; in mixed ownership by Russian residents; and in joint Russian/foreign ownership. The latter may include joint ventures with foreign capital and either state-owned or private stakes on the Russian side, as such entities do not always require the participation of government units. According to Rosstat data,¹ the number of organizations² in federal ownership plunged from 6,823 in 2006 to 2116 in 2016, or by 69.0 percent. Over the same period, the number of organizations owned by RF subjects shrank by 7,518 to 3,303, or by 56.1 percent; that of organizations in municipal ownership – from 17,116 to 13,067, or by 23.6 percent; that of companies in mixed ownership

¹ URL: <http://cbbsd.gks.ru/>

² In accordance with the classification of legal entities by type of ownership, Rosstat recognized the following categories: legal entities registered as commercial organizations; state unitary enterprises (SUEs); joint-stock companies; production co-operatives; non-profit organizations; and consumer co-operatives.

by Russian residents – from 14,227 to 11,336, or by 20.3 percent; and that of organizations in joint Russian/ foreign ownership, on the contrary, increased from 12,030 to 24,590, or 2.1 times.

In *Fig. 23*, the relative data on the number of employed persons and amount of proceeds for our SOE sample are set against the aggregate data on all organizations in federal ownership, ownership of RF subjects, municipal ownership, mixed Russian ownership, and joint Russian/foreign ownership. On the basis of these data, it becomes evident that in terms of personnel number and proceeds, the gap between the SOEs included in our sample and all the other organizations entered in the Rosstat records is very significant. Thus, for example, in 2016, the input of SOE employees in the number of employed persons in the total economy amounted to 5.8 percent, while the same index for the entire group of organizations in Rosstat’s dataset was 54.2 percent; the relative inputs in total proceeds amounted to 11.5 and 16.0 percent respectively. However, this soaring index demonstrated by Rosstat data could largely be explained by the inclusion therein of the group of companies in foreign/Russian ownership where, strictly speaking, the presence of government units among the owners is not mandatory.



* Companies in federal, subfederal and local self-government ownership; companies in mixed ownership and joint ownership by Russian and foreign entities.

Fig. 23. The input in Russia's national economy of SOEs and organizations owned by federal, subfederal, local self-government bodies, together with companies in mixed ownership and joint ownership by Russian and foreign units, by their number of employed persons and proceeds, percent

Source: calculations based on the sample data collected by the RANEPА Institute of Applied Economic Research.

If the data on the number of employed persons and proceeds are recalculated for the more narrow sample of organizations entered in Rosstat's statistical records, without the companies in joint ownership by Russian and foreign entities, the parameters of SOEs included in our sample will display significantly closer similarities, especially with regards to proceeds (*Fig. 24*). In 2016, about 20.5 percent of the reported average staffing number in Russia was accounted for by the enterprises in federal, subfederal and local self-government ownership,

and by enterprises in mixed ownership. The comparable index for SOEs was 5.8 percent. At the same time, both SOEs and the enterprises included in Rosstat's sample generated approximately comparable amounts of proceeds. Moreover, in 2016, the relative index of proceeds generated by SOEs – 11.5 percent of the total proceeds index in the national economy – was above the corresponding index for Rosstat's sample, which amounted to only 10.1 percent of the same base.¹

These results prove that our SOE sample is sufficiently representative to provide a reliable estimate of the input in total proceeds, and consequently in GDP, of all Russian state-owned enterprises. As for the number of employed persons, our SOE sample does not include those companies where the output per worker is low, or those that generate no proceeds. In the latter case, the system of national accounts places such state-owned enterprises in the institutional sector as government units, where their input in GDP is calculated on the basis of their wage costs. In this study, their input in GDP will be entered not in the SOE sector, but in the general government sector.

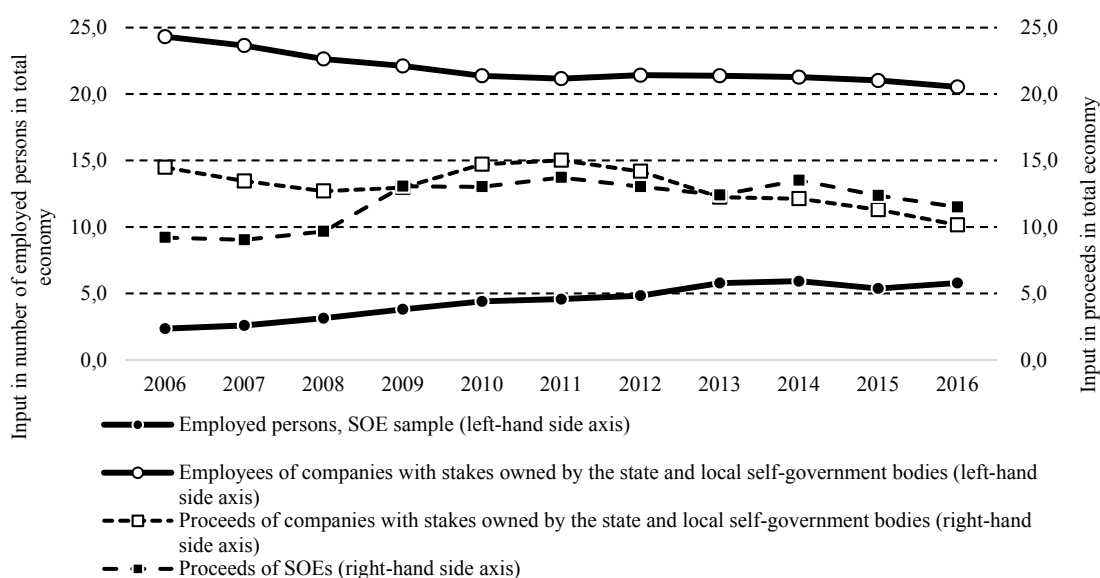


Fig. 24. The input in Russia's national economy of SOEs and organizations in federal, subfederal, and municipal ownership, together with companies in mixed ownership, by their number of employed persons and proceeds, percent

Source: calculations based on data released by Rosstat and the sample data collected by the RANEPА Institute of Applied Economic Research.

4.3.2. Estimation of the input in GDP of state-owned enterprises

There exist different methods of estimating the relative share of SOEs in Russia's GDP. Usually, such calculations are either based on a narrow sample, or made without disclosing the calculation methods. Eurostat published a specialized methodology for deriving such estimates on a company level.² The calculations of a company's input are largely based on its reported

¹ This difference can probably be explained by the presence, in our SOE sample, of companies with stakes indirectly owned by the state, which are not taken into account in Rosstat's sample.

² Eurostat. Essential SNA: Building the basics. Luxembourg: Publications Office of the European Union. 2014.

profits and losses. Output is calculated as the sum of proceeds, growth of stocks reserves, growth of produced fixed assets, net result of asset resale, growth of unfinished production, growth of goods for resale, and other operating profits. Intermediate consumption consists of purchases of raw materials and other materials less their stocks, other purchases and other transaction costs. The amount of value added generated by a company is calculated as the difference between output volume and intermediate consumption. With due regard for the specificities of national accounting systems, certain technical adjustments to this methodology can be made.

Nevertheless, this methodology is rather complex, it requires that the reports submitted by companies be compatible with the International Financial Reporting Standards (IFRS). Methodologically, it is more difficult to estimate the input of SOEs in GDP, because the reports of such companies must provide data compatible with the IFRS. Regrettably, by far not all the SOEs, even among those that have been selected for our samples, actually publish such data. A generalized estimate of the input of SOEs in GDP based on our sample was derived as follows. At the first stage, we applied the Eurostat methodology to calculate, for the period 2006–2016, the inputs of the two biggest non-financial SOEs – Gazprom and Rosneft – in total proceeds and in GDP. After that, by dividing their input in GDP by their input in total proceeds, we derived a multiplier factor, its average value for the 11-year period being 2.2. By multiplying this value by the input in total proceeds of all the SOEs included in our sample, the input of the latter in GDP can be calculated.¹

Additionally, we calculated the input in GDP of the value added created by SUEs. To achieve this, on the basis of data taken from the SPARK information system² we calculated the amount of proceeds received by SUEs, and then, by applying the same factor of 2.2 (input in GDP/input in total proceeds) to the amount of proceeds received by state-owned enterprises of this type, we derived their value added index.³ To avoid duplicated results, we did not include data for some of the organizations contained in our SOE sample in our calculations of the aggregate indices of SOEs.

The results of our calculations are shown in *Fig. 25*. Over the entire 11-year period, the input in GDP of the value added index of SOEs increased from 20.2 percent in 2006 to 25.3 percent in 2016. After the financial crisis it jumped from 21.3 percent in 2008 to 30.2 percent in 2011, but later on slid to 25.3 percent in 2016. Over the same period, the input of SUEs in GDP shrank from 2.5 percent in 2006 to 1.5 percent in 2016. That drop was caused primarily by the ongoing privatization processes and various reorganization procedures in that sector, especially in 2011–2016.

According to other expert estimations, in 2015 in Russia, the input in GDP of companies with state stakes amounted to approximately 29–30 percent.⁴ Somewhat similar data, although

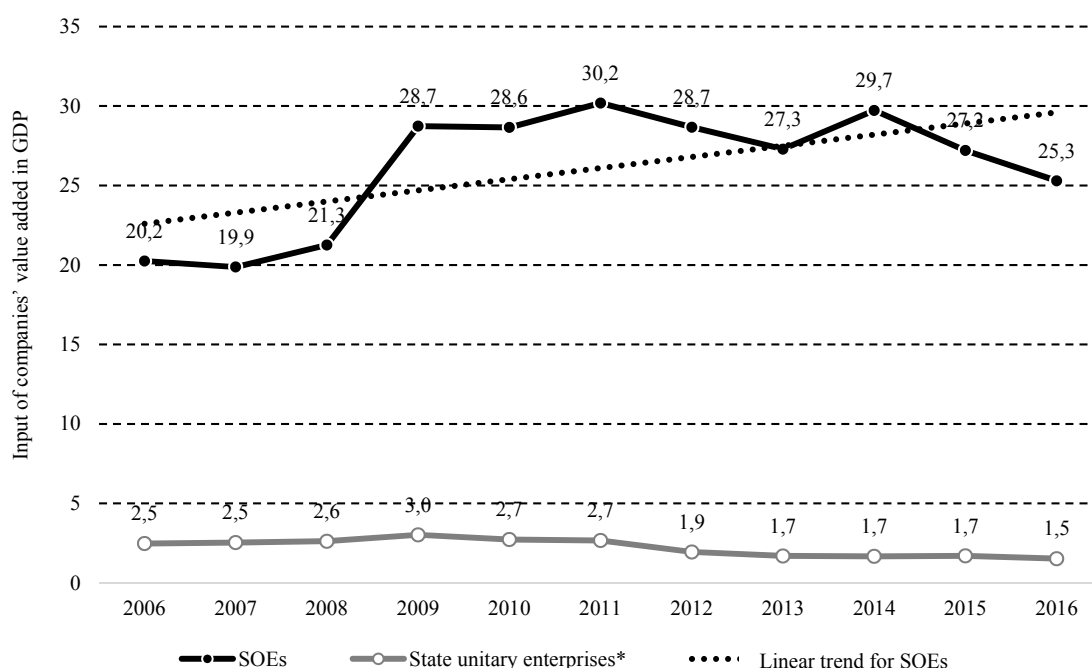
¹ In terms of economics, this factor is applied in order to eliminate, by comparing the input of biggest SOEs in the total economy's proceeds and GDP, the effect of the proceeds index calculated by Rosstat on the basis of the broadest possible database.

² Hereinafter, we apply data taken from the SPARK information system, available at <http://www.spark-interfax.ru/ru/about>.

³ In this case, these are SUEs owned by the Russian Federation, subjects of the Russian Federation, and local self-government bodies. Data for both commercial and non-profit organizations are included; data for the SUEs transferred to state corporations are not included.

⁴ Estimates presented at *The Gaidar Forum 2016: Russia and the World. Looking to the Future* on 14 January 2016 (the panel discussion 'Publicly-owned Companies – Economic Powerhouse or Deterrent?'. www.gaidarforum.ru).

derived on the basis of a different methodology, were published by the IMF.¹ According to these estimations based on data for 26 biggest SOEs, that index in 2012 amounted to 28 percent.



* Less data for FSUE Russian Post, SUE Mostransavto, the FSUE Rosmorport, Federal State Enterprise *Specialized Railroad Security Service of Russia*, FSUE Main Military Building Construction Administration No 6, FSUE Main Administration for Construction of Roads and Airfields of the RF Ministry of Defense, SUE Vodokanal of St. Petersburg, SUE Fuel and Energy Complex of St. Petersburg, SUE Mosoblgaz, FSUE Center for Operation of Space Ground Based Infrastructure, and some other SUEs included in our SOE sample.

Fig. 25. The estimated inputs in GDP of the value added indices of SOEs and SUEs, percent

Source: calculations based on the financial reports submitted by SOEs and data distributed by SPARK.

Our data on the input of Russian SOEs in GDP can be compared with available international estimations. According to data released by the OECD,² in 2009 in 25 of its member states, a total of 2,050 SOEs produced approximately 15 percent of GDP, including 20–30 percent of GDP in transition economies. Russia's corresponding index for the same year was 28.7 percent, which is near the established ceiling for the developing economies.

According to the estimates released by the World Bank,³ in 2006 across the group of developing countries, SOEs generated 15 percent of GDP in Africa, 8 percent in Asia, and 16 percent in Latin America, which was significantly below the input of SOEs in the Russian economy over the same year. In China, the input of SOEs in GDP shrank from 37.6 percent in 1998 to 30 percent in 2010, which roughly corresponds to the input in GDP of Russian SOEs

¹ Hughes R., Josephs T., Karolova V., Krivenkov V., Ljungman G. Russian Federation: Fiscal transparency evaluation. // IMF Country Report. No 14/134. 2014. P. 16.

² The Size and Composition of the SOE Sector in OECD Countries. OECD Corporate Governance Working Paper 5, 2011. OECD, Paris.

³ Corporate Governance of State-owned Enterprises: A Toolkit. The World Bank, 2014.

over the same year (28.6 percent). As demonstrated by the IMF estimates for the 20-year period¹ that ended in 2015, the input of SOEs in Chinese total industry's value added index declined from 40 to 16 percent. In India, the input of SOEs in GDP shrank from 17.5 percent in 1993–1994 to 13.1 percent in 2006–2007. In contrast to China and India, in Russia the input of SOEs in GDP displays an upward trend.

Thus, in terms of the number of big SOEs, Russia ranks 8th among the 40 countries included in the OECD sample (less China). The number of SOEs in Russia is 105, the average index per country in the OECD sample (less China) being 64. By the number of SOEs in absolute terms, Russia was behind only four countries, China including. In 2015, the capitalization index of Russian SOEs was USD 175 billion, while the sample's average (less China) was USD 62 billion. In terms of the relative value of its SOEs in the capitalization index of public companies, Russia was behind only seven countries, China including. In 2015, this index of Russian SOEs amounted to 36.9 percent, its average for the entire sample (less China) being only 4.0 percent. In terms of the input of the personnel employed by SOEs in the total number of employed persons, Russia was behind only three countries, China including. In 2015, that index for Russia amounted to 5.4 percent, the sample's average, China including, being 1.9 percent.

All these facts confirm the assumption that in Russia, in terms of their size, business value, and personnel number, SOEs *as a group weight more than the similar companies operating in most of the other major economies in the world.*

An analysis of the movement patterns displayed by the indices describing the scale of activity of SOEs in Russia over the period 2006–2016 revealed the following regularities. The input of SOEs in the market capitalization index of Russian issuers of shares during that period was fluctuating between 36.9 and 52.3 percent, depending on the cyclical behavior of Russia's economy. On the whole, that index demonstrated a slightly downward trend; in 2016, it amounted to 48.7 percent.

The total proceeds of the Russian economy and the total number of employed persons therein over the period 2006–2016, on the contrary, showed a trend towards increasing the role of the public sector. The input of SOE personnel in the total number of employed persons jumped from 2.3 percent in 2006 to 5.8 percent in 2016. A more moderate growth rate over the same period was demonstrated by the per-unit SOE proceeds – that index increased from 9.2 percent in 2006 to 11.5 percent in 2016. The input of SOEs in the total capitalization index of Russia's stock market declined from 50.0 percent in 2006 to 48.7 percent in 2016. Growth in the number of personnel employed by SOEs was not accompanied by a similar growth in sales volume, while the input of SOEs in the aggregate capitalization index over the same period even declined.

The multiplier method described above, where the relevant factor is derived as the ratio of the input of two biggest non-financial SOEs in GDP to their input in total proceeds, makes it possible to estimate the input of SOE sector in GDP. This index points to growth of the input of SOEs in the creation of new value, from 20.2 percent of GDP in 2006 to 25.3 percent of GDP in 2016. In this connection, it becomes obvious that our sample, which consists of only 105 biggest SOEs, represents just a fraction of all the companies with state stakes operating in the Russian economy. However, we believe that our estimates describing the inputs of the companies included in the sample both in GDP and in the total economy's proceeds are sufficiently representative, because the amount of proceeds generated by the SOEs included in

¹ Lam R., Rodlauer M., Schipke A. *Modernizing China. Investing in Soft Infrastructure.* International Monetary Fund, 2017.

our sample is practically the same as the total proceeds of all the companies in federal, subfederal and municipal ownership, as well as those in mixed ownership, entered in Rosstat's dataset.

It is rather difficult to make a comparative analysis of the input of SOEs in GDP, as there are no systematically arranged fresh data for many countries. However, a comparison with available random data for some other countries demonstrates that the input of Russian SOEs in GDP is among the highest, relative to all the other datasets included in our analysis. Besides, as far as Russian companies are concerned, this index was characterized by an upward trend in 2006–2016.

Our estimates of the inputs of SOEs in total proceeds and GDP should, most likely, be regarded as a conservative variant, i.e., as the estimated floors for these indexes' values. It has some value, however, because it relies on an analysis of financial reports of 105 SOEs, including the consolidated financial reporting data of public corporations included in our sample.

Meanwhile, the question as to the size of the inputs in total proceeds and GDP of other SOEs, which were not included in our sample, remains open. The selection of companies entered in the SPARK information system makes it possible to approximately estimate the inputs in total proceeds and GDP of the state-owned companies on Russia's Top 100 list, relative to their proceeds volume. Besides, the SPARK database offers a more accurate by-sector distribution of SOEs.

In each sector of the national economy, we analyzed the indices of 100 biggest companies (relative to their annual volume of proceeds) and estimated the input of aggregate proceeds generated by companies controlled by the state. *Companies controlled by the state* were understood as the companies operating either under direct or indirect control of the state (taking into account all ownership levels, if those levels secured state control of a subsidiary). The companies with a state stake less than 50 percent+1 share were not included in the sample.

Compared with our relatively small sample of SOEs, the methods employed in processing the statistics in the SPARK sample have several distinctive features. The amount of proceeds for the latter is estimated on the basis of non-consolidated reporting data. This approach results in overestimating the actual indices stored in the system relative to the indices disclosed by big corporations in their reports prepared in accordance with the IFRS.¹ Due to the somewhat erroneous nature of the by-sector classifier, the selection of companies controlled by the state across various industries may result in errors, which have to do with duplication of the available information of one and the same company. The actual use of SPARK data is very complicated and time-consuming, and so it is relatively difficult to calculate the proceeds of companies controlled by the state for the entire period from 2006 through 2016. In this case, the estimated amounts of proceeds for different groups of companies were obtained for 2015, and these are presented in *Annex 2*.

According to our calculations, the highest input of the public sector in the economy, estimated on the basis of proceeds indices obtained for a broader sample of biggest companies, less the sector of budget-funded institutions, amounted to 39.8 percent (*Table 12, Annex 2*). *Table 12*, based on data for 2015, also demonstrates the relationship between the inputs of SOEs in total proceeds and GDP, calculated for the sample of 105 companies (a conservative

¹ Thus, for example, according to the consolidated reported data, the amount of proceeds generated by PJSC Gazprom in 2016 was RUB 6.1 trillion, while the added-up proceeds reported separately by the holding company and its subsidiaries (according to SPARK data) yield the sum of RUB 9.3 trillion.

estimation of the input of SOE), and the maximum values of these inputs determined on the basis of a broader sample taken from the SPARK information system.

The differences in the estimated proceeds indices are caused not only by the differences in the sample size, but also by the differences in the estimated amounts of the total economy's proceeds in the denominator. If the same proceeds base is used as denominator, the gap between the two estimated indices describing the input of SOEs in total proceeds becomes notably shorter – 12.4 percent in the conservative estimation, and 17.9 percent in the maximum variant based on SPARK data. If we multiply the inputs of SOEs in total proceeds in the conservative and maximum variants by the factor of 2.2, thus converting these indices into those describing inputs in GDP, the resulting input of SOEs in GDP based on data for 2015 will be 27.2 percent in the conservative variant, and 39.4 percent in the maximum variant based on SPARK data.

The use of non-consolidated corporate data taken from the SPARK information system made it possible to correctly distribute between sectors the subsidiaries of holding companies (e.g., the subsidiaries of PJSC Sberbank, PJSC Russian Railways, and other holding companies that produce IT services were placed in the IT sector; the subsidiaries offering education services were likewise placed in the corresponding sector, and so on).

Due to the obvious imbalance, in Russia's national economy, in favor of mineral resources extraction sectors, a general (averaged) estimation of the public sector's size, without a proper by-industry (sectoral) analysis, may produce a seriously distorted picture. In order to obtain more correct estimations of the role of the public sector, we performed a by-industry analysis of Russian companies based on their annual proceeds volume.

Table 12

The conservative and maximum inputs of SOEs in GDP, based on the sample of 105 SOEs and the sample of companies controlled by the state (SPARK data), estimated for 2015

	Calculations for SOE-105 sample (conservative estimations)	Calculations for SPARK (maximum level)	
		data incomparable with SOE-105	data comparable with sample SOE-105
1. Proceeds of SOEs, trillions of rubles	25.6	37.1	37.1
2. Proceeds for each sample, trillions of rubles	207	93.3	207
3. Input of SOEs in proceeds (country 1 / country 2 * 100), percent	12.4	39.8	17.9
4. Factor, relative to GDP	2.2		2.2
5. Input of SOEs in GDP (country 3 * country 4), percent	27.2		39.4

Source: calculations based on sample data collected by the RANEPА Institute of Applied Economic Research and SPARK data.

The index of maximum input of the public sector in the economy based on the proceeds of biggest companies varies significantly between sectors. In fact, in each of the following four sectors (energy, transport, mineral resources extraction, and finance), the input of the proceeds of state corporations in the total proceeds of 100 biggest companies is near or above 50 percent. Meanwhile, these 400 biggest companies operating in four sectors (100 in each sector), taken together, generate more than 30 percent of the total proceeds of all Russian companies (*Table 13*). This proportional distribution pattern largely determines the prominent role of the state in the national economy.

Table 13

**The by-sector distribution of companies depending on their proceeds
and the input of the public sector**

Sector	Public sector input (input of state corporations in total proceeds of top 100 companies in each sector), percent
Transport	83.0
Energy	70.9
Mineral resources extraction	70.0
Finance and insurance	46.8
Amenities	31.9
Machine-building, automobile building	30.9
IT, communications, mass media	22.7
Building construction and construction materials	18.4
Real estate activities	15.9
Education*	11.8
Healthcare*	11.5
Chemical production	9.3
Consulting, legal and other services, security services	8.5
Accommodation and food service activities	6.7
Other**	4.9
Metallurgy, metal product manufacturing, metal ore mining	4.4
Culture, arts, sports, lotteries*	3.5
Pharmaceutics	2.6
Forestry, logging, wood processing	1.3
Trade	1.1
AIC and food industry	1.0
Light industry	0.7

* Less the sector of budget-funded institutions.

** Including the incorrectly placed OKVED codes that actually belong to other groups.

Source: calculations based on sample data collected by the RANEPА Institute of Applied Economic Research.

The conclusion concerning the prevalence of the state in four sectors of the Russian economy is largely compatible with the trends observable in other major economies. As demonstrated by the OECD sample of 40 countries, in terms of personnel number and value, the highest relative shares of SOEs were noted in the infrastructure sectors (electricity, natural gas production and supply, transport, and telecommunications), as well as in the financial sector. In 2015, the input of personnel employed by infrastructure SOEs in the total number of personnel employed by SOEs across all countries, less China, on the average amounted to 70 percent; the input of infrastructure SOE in the total market value of companies with state stakes was 51 percent. The SOEs operating in the financial sector accounted for 26 percent of the total market value and 8 percent of the total number of personnel employed by all SOEs. Over the same year in China, infrastructure SOEs accounted for 56 percent of the total number of personnel and 25 percent of total market value in the SOE sector. The inputs of financial SOEs in China amounted to 11 percent of the total number of personnel and 58 percent of the total market value of all state-owned companies.

In view of the dramatic variance in the index describing the input of SOEs in total proceeds across different sectors of the Russian economy, it is necessary that this specificity be taken into account when planning further steps in the sphere of privatization and government property management. In those sectors where SOEs generate less than a third of total proceeds, the state may completely withdraw from their ownership structure, thus creating appropriate conditions for competition. As for the sectors like transport, energy, mineral resources extraction, finance, amenities, where SOEs generate the bulk of proceeds, the withdrawal of the state may be more gradual.

4.3.3. The public sector estimation

The estimation of the public sector's share in GDP, in addition to the input of SOEs, also includes the input of the general government sector (GGS). Overall, this sector can be defined as the input equivalent to the value of public services, paid or unpaid, produced for the benefit of society. If these are paid services, the amount of value added can be derived by adjusting the amount of proceeds by material costs (revenue method) or by incurring the value added components of expenditures (wages and salaries, and some other expenses). If services are free, they are valued on the basis of compensation of employees.

However, the questions as to how the input of the GGS in GDP can be estimated, and how the corresponding indices can be compared across different countries, have remained open. By way of example, we can point to the estimation methodology employed by the IMF in its overview of the Russian economy.¹ Its results are shown in *Table 14*. The methodology is actually simple: in one variant, the revenue, and in the other – the expenditure of the consolidated budget is added to the corresponding indices of extrabudgetary welfare funds. In both variants, the relevant data are augmented by data on a few extrabudgetary units/entities and the value added indices estimated for 26 biggest state-owned companies. Revenues in the budgetary sector consist of taxes and social contributions, property incomes, revenues generated by the provision of paid services (or work), confiscation mandated by the law, gratis transfers to the budget, incomes generated by operations with assets, and some other types of revenues. Expenditures in the budgetary sector are made up of compensation of employees and the associated social contributions and benefits, purchase of work, services, debt servicing, gratis transfers to organizations and other budgets, welfare expenditures, and some other expenditure types. The records of revenues and expenditures in the budgetary sector are kept by the Federal Treasury and are reflected in public reports in the form of consolidated financial reporting data of public-legal entities of the Russian Federation, budget-funded and autonomous institutions.

IMF experts have come to the conclusion that, taken together with the SOE sector, the input of the GGS in Russia's GDP amounts to 68 percent, which is significantly above the corresponding estimates for other countries. Thus, for example, in one of the IMF publications² it is stated that in the majority of developing countries, the input of the private sector in GDP is 60 percent, i.e., the share of the public sector is no more than 40 percent. According to another publication,³ the input of the private sector in China's GDP is likewise 60 percent, while that of the public sector is only 40 percent.

In our opinion, the input of the GGS in Russia's GDP as shown here is grossly overestimated. Some components of the aggregate revenue and expenditure indices reflected in the Federal Treasury's reports are not directly linked to the value added actually created by the general government sector in the national economy. Thus, for example, the expenditure index here includes the social benefits paid to households, the cost of work and services bought from other sector of the economy, debt servicing, and operations with assets, those being the items that it would have been more logical to enter in the report as part of revenues received by other sectors

¹ Hughes R., Josephs T., Karolova V., Krivenkov V., Ljungman G. Russian Federation: Fiscal transparency evaluation. // IMF Country Report. No 14/134. 2014.

² IMF Survey: IMF Facilitates Debate on Private Sector, Growth, Jobs in Mideast. IMF Survey. November 27, 2013. URL: <https://www.imf.org/en/News/Articles/2015/09/28/04/53/socar112713a>.

³ Ding H., He H. A Tale of Transition: An Empirical Analysis of Economic Inequality in Urban China, 1986–2009. // IMF Working Paper. WP/16/239. 2016.

of the economy. The revenue side also includes tax receipts, social security contributions, property incomes and other payments, which are then redistributed in favor of households and businesses, and so they can hardly be treated as the value added created by the GGS. In this case, the GGS acts as an intermediary in the distribution of these resources. Consequently, its value added consists only of the expenses incurred in the course of its upkeep (the upkeep of government units and budget-funded institutions), and of the even smaller amount of the value added created as a result of production of paid services by government units or budget-funded institutions.

Table 14

**Russia: IMF estimates of public sector institutions and finance in 2012,
percent of GDP**

	Number of units	Revenue ¹	Expenditure ¹	Difference ²	Net transfer input	Net difference
		1	2	3 = 1 – 2	4	5 = 3 – 4
I. General government (consolidated data)	40,063	44.4	41.4	3.0	-0.8	3.8
Central government (consolidated data)	16,878	30.4	27.7	2.7	-4.0	6.6
Consolidated budget of central government	12,402	22.4	20.2	2.2	-11.5	13.7
Budget-funded and autonomous institutions	4,389	2.5	2.7	-0.3	0.3	-0.6
Welfare funds	87	13.5	12.7	0.7	7.3	-6.5
Governments of RF subjects (consolidated data)	23,185	25.0	24.6	0.4	3.2	-2.8
Governments of RF subjects	83	16.3	16.1	0.3	-1.1	1.3
Local self-government	23,102	8.6	8.5	0.1	4.2	-4.1
II. State-owned companies (consolidated data)	41,891	28.6³	28.6³	-0.1	0.8	-0.9
Unitary enterprises	22,440					
State corporations	308					
Joint-stock companies	8,344					
Other state-controlled units	10,799					
III. Public sector (consolidated data)	81954	71.3	68.3	3.0	0.0	3.0

¹ Consolidated revenue/expenditure at subsector and sector level, including internal flows between subsector/sector.

² Net borrowing / lending.

³ Estimations by IMF experts are based on the annual reports of 26 biggest state-owned companies.

Source: Hughes R., Josephs T., Karolova V., Krivenkov V., Ljungman G. Russian Federation: Fiscal transparency evaluation. // IMF Country Report. No 14/134. 2014. P.15.

Thus, the IMF estimations based on consolidated financial data reported by the Federal Treasury need, at least, to be seriously adjusted. These adjustments will be discussed below, together with the possible variants of calculating the input of the GGS in GDP.

It seems that in order to obtain more correct results, we should compare the quantitative parameters of *three different variants of measuring the input of the GGS in GDP*.

Variant 1 relies on GGS estimations based on the production account in the system of national accounts (SNA). This approach is simpler than that applied by IMF experts. In the production account, Rosstat reflects the value of the input of the GGS in GDP, calculated by the revenue method. Of course, it can be argued, as a separate issue, if indeed all the units financed by the government are actually included in the general government sector in the system of national accounts. Nevertheless, it should be admitted that the value added created by the GGS is being entered in records, and moreover, these records are kept in accordance with the international accounting standards. In other words, the GGS indices derived on the basis of the

SNA for Russia may indeed be applied in international comparative studies of the scope of the public sector in different countries.

Variant 2 relies on the method applied by [Hughes R. et al., 2014]¹. However, in contrast to the estimations by the IMF, where the index is shown only as of 2012, we calculated its movement pattern, by applying the same methodology, over the period from 2011 through 2016, i.e., the entire period for which the initial reporting data are available on the Federal Treasury's official website. The slight deviation of our results for 2012 from the corresponding estimations obtained by the IMF can probably be explained by the subsequent corrections entered by the Federal Treasury in its reports.

Variant 3 implies the use of the same method as applied by the IMF, with certain adjustments. Thus, the input of the GGS is estimated not on the basis of the total sum of the budgetary system's revenue and expenditure, but only the items 'compensation of employees', 'employers' social contributions', 'other expenses' and 'before tax operational result'. These indices, in our opinion, more accurately describe the amount of value added created by the GGS.

The calculated results based on all the three variants are shown in *Fig. 26* and in *Annex 3*. As can be seen in *Fig. 26*, the estimated input of the GGS in GDP in Variant 2 is significantly higher than the corresponding values obtained in Variants 1 and 3. At the same time, these values (Variants 1 and 3) are relatively close. Thus, in 2015, the input of GGS in GDP was 41.6 percent in Variant 2, 19.2 percent in Variant 1, and 14.0 percent in Variant 3.

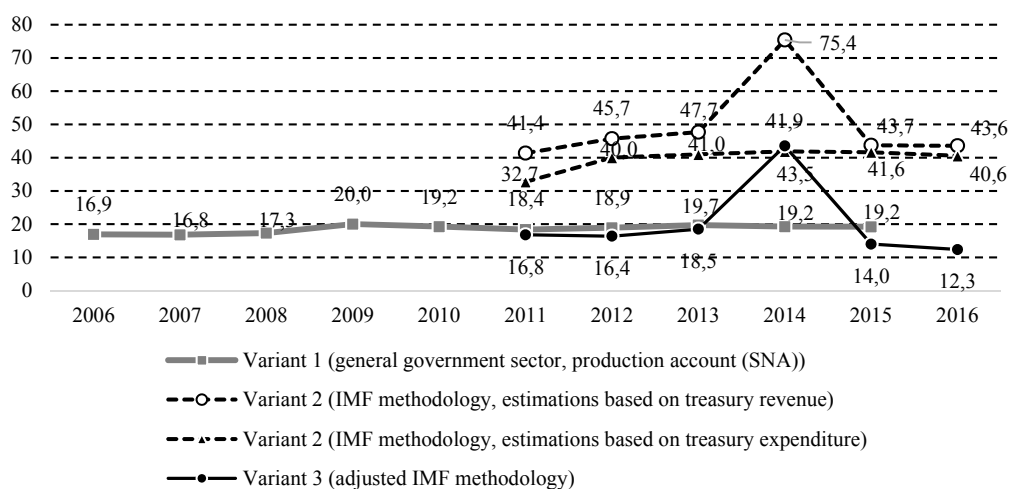
The different variants of calculating the input of the GGS demonstrate notably different movement patterns of that index. While in accordance with the estimations based on the IMF methodology (Variant 2) the budget-funded sector's input in GDP increased from 32.7 percent in 2011 to 40.6 percent in 2016, or by 7.9 percentage points, the estimations for the same period based on the adjusted methodology demonstrate a plunge from 16.5 to 12.3 percent. This can be explained by the accelerated growth, after 2008, of the government expenditure component – the transfers earmarked for the payment of social benefits to households – that in accordance with the adjusted methodology is not included in total government expenditure.

In our opinion, out of the three variants, the most reliable one is the estimation of the input of the GGS in GDP in Variant 1, which is based on Rosstat's official statistics reflecting the value of services produced by the public sector of the economy and entered in the production account. These data are obtained directly from the reports submitted by organizations operating in the budget-funded sector of the economy, in accordance with the established international standards of the System of National Accounts. They are comparable with similar estimations recognized in other countries, available for a longer period, and on the average are close to data derived from indirect estimations of the input of the GGS in Variant 3.

In *Fig. 27*, the input of the GGS in Russia's GDP, as estimated in Variant 1 for 2015, is compared with the corresponding indices for 39 countries. Russia's index amounts to 19.2 percent of GDP, which roughly corresponds to the average index for this group of countries. Thus, the average for the OECD sample is 19.7 percent, and that for the 28 member states of the European Union – 18.6 percent. The highest input of the GGS is noted in the Scandinavian countries (Finland, Denmark, Iceland, Sweden and Norway), where it amounts to 28.4, 27.8, 26.6, 26.1 and 24.8 percent of GDP respectively. The lowest input of the GGS is observed in

¹ Hughes R., Josephs T., Karolova V., Krivenkov V., Ljungman G. Russian Federation: Fiscal transparency evaluation. // IMF Country Report. No 14/134. 2014.

India, Ireland, Mexico, Germany and South Korea, where it amounts to 12.2, 12.2, 12.6, 14.3 and 14.3 percent of GDP respectively.



Note. In Variants 2 and 3, due to the limitations of the published reports of the Federal Treasury, data are available only for the period 2011-2016 [URL: <http://datamarts.roskazna.ru/razdely/konsolidirovannye-dannye-po-ppo-i-uchr/konsolidirovannyj-finansovyj-rezultat-publichno-pravovyh-obrazovaniy-rf-budjetnyh-i-avtonomnyh-uchrezhdenij/?paramPeriod=2016>]. Variant 2, in accordance with the IMF methodology, is based on the total revenue and expenditure index. In Variant 1, data for the period 2006-2015 were taken from the reports for each institutional sector based on the SNA [URL: http://www.gks.ru/bgd/regl/b17_15/Main.htm]. The revenue surge in Variants 2 and 3 can probably be explained by the entry of proceeds of sales, by the RF Government, of foreign currency from the RF Reserve Fund.

Fig. 26. The inputs of GGS in GDP estimated in accordance with different methodologies, percent

Source: calculations based on sample data collected by the RANEPА Institute of Applied Economic Research.

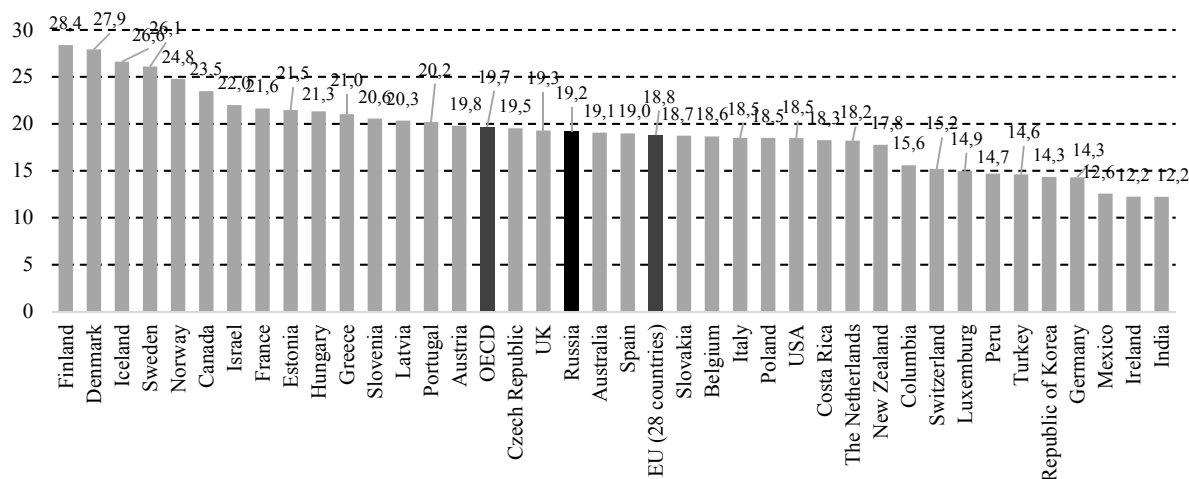


Fig. 27. The input of the GGS in GDP in 2015 across different countries, percent

Source: calculations based on data released by OECD.Stat [<https://stats.oecd.org/>], for Russia – based on data released by SNA Rosstat [http://www.gks.ru/bgd/regl/b17_15/Main.htm].

Table 15 and *Fig. 28* demonstrate the movement patterns of the input of the GGS in GDP across the same 39 countries and Russia over the period from 2006 through 2015. In Russia, the input of the GGS in GDP increased from 16.9 percent in 2006 to 19.2 percent in 2016, or by 2.3 percentage points. The arithmetic mean for the OECD member states over the entire 11-year period remained stable, at a level close to 19.2 percent in 2006, or 19.7 percent in 2015. The average input of the GGS in GDP across the 28 member states of the European Union over the same period changed from 18.4 to 18.8 percent. Thus, in accordance with this criterion, Russia's index in 2015 was at the same level as in the high-income countries. The movement patterns of the inputs of the GGS in GDP in the major developing economies over the period 2006–2016 were multi-vectored. In India, this index plunged from 19.5 percent in 2006 to 12.2 percent in 2016; in Poland – from 19.5 to 18.5 percent respectively. It moved in the opposite direction in Mexico, rising from 10.6 percent in 2006 to 12.6 percent in 2016, and in South Korea, rising from 13.7 to 14.3 percent respectively. Thus, in Russia, the growth rate of the input of the GGS in GDP over the period under consideration (by 2.3 percentage points) was one of the fastest in this group of countries. By meeting this criterion, the Russian economy reached the level of developed economies (OECD member states).

Table 15

The input of GGS in GDP in different countries over the period 2006–2015, percent

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	2	3	4	5	6	7	8	9	10	11
Australia	17.7	17.6	17.9	18.4	18.1	18.3	18.4	18.2	18.4	19.1
Austria	20.1	19.4	19.9	21.3	21.1	20.5	20.4	20.4	20.2	20.2
Belgium	17.6	17.3	17.9	18.9	18.5	18.6	19.0	19.3	19.1	18.6
Canada	21.6	21.7	22.1	24.5	23.9	23.5	23.4	23.3	22.8	23.5
Czech Republic	20.8	20.0	20.1	21.5	21.3	20.7	20.3	20.6	20.0	19.5
Denmark	26.2	26.2	27.0	30.1	29.6	28.8	28.8	28.4	28.2	27.9
Estonia	17.2	17.1	19.8	22.3	21.4	19.8	19.6	20.1	20.7	21.5
Finland	25.2	24.6	25.6	28.7	28.7	28.4	29.2	29.6	29.5	28.4
France	20.8	20.5	20.6	22.0	21.9	21.7	21.8	22.0	21.9	21.6
Germany	13.4	13.1	13.4	14.6	14.5	14.3	14.4	14.5	14.4	14.3
Greece	20.2	20.7	20.9	23.1	22.1	21.2	21.7	20.8	20.9	21.0
Hungary	21.7	21.0	21.7	22.5	22.1	21.1	20.9	20.9	21.3	21.3
Iceland	26.6	25.9	26.5	27.7	27.7	27.6	27.7	27.3	27.2	26.6
Ireland	16.3	16.8	18.6	20.1	19.0	18.3	17.5	16.8	15.9	12.2
Israel	23.8	23.0	22.9	22.5	22.3	22.1	22.4	22.2	22.2	22.0
Italy	18.5	18.1	18.6	19.7	19.5	18.9	19.0	19.2	18.9	18.5
South Korea	13.7	13.8	14.4	14.7	13.9	13.9	14.1	14.3	14.4	14.3
Latvia	19.8	19.5	21.7	21.8	21.1	20.6	19.7	19.9	20.0	20.3
Luxembourg	14.0	13.4	13.9	15.5	15.0	14.7	15.3	15.2	14.7	14.9
Mexico	10.6	10.6	10.9	12.1	11.7	11.6	11.9	12.3	12.3	12.6
The Netherlands	18.0	17.8	18.2	19.9	19.8	19.3	19.3	19.1	19.0	18.2
New Zealand	17.8	17.6	18.8	18.9	18.7	18.6	18.4	17.9	17.8	17.8
Norway	19.6	20.1	19.7	22.9	22.7	22.2	22.1	22.5	23.3	24.8
Poland	19.5	19.1	19.5	19.4	19.8	18.7	18.5	18.6	18.8	18.5
Portugal	21.4	21.0	21.3	22.8	22.2	21.6	20.4	21.0	20.4	19.8
Slovakia	17.3	15.8	15.5	18.2	17.7	17.6	17.4	17.8	18.2	18.7
Slovenia	19.5	18.3	19.1	21.1	22.0	22.5	22.4	21.7	20.8	20.6
Spain	16.5	17.1	18.1	19.6	19.7	19.8	19.3	19.3	19.1	19.0
Sweden	26.2	25.6	26.2	27.5	26.3	26.1	26.8	27.0	26.7	26.1
Switzerland	13.9	13.5	13.8	14.7	14.5	14.6	14.9	15.1	15.1	15.2
Turkey				15.3	15.3	14.4	15.1	14.8	14.8	14.6
UK	19.7	19.6	20.4	22.0	21.7	20.8	20.5	19.9	19.5	19.3

Cont'd

	1	2	3	4	5	6	7	8	9	10	11
USA		19.1	19.3	20.2	21.3	21.2	20.7	20.0	19.3	18.8	18.5
OECD – arithmetic mean		19.2	18.9	19.5	20.8	20.5	20.0	20.0	20.0	19.9	19.7
European Union (28 countries)		18.4	18.2	18.7	20.1	19.8	19.4	19.4	19.4	19.1	18.8
Brazil						19.2	19.0	18.9	19.3	19.5	
Peru			11.6	11.6	13.4	12.6	12.1	12.8	13.4	14.2	14.7
Columbia		14.0	13.9	14.0	14.9	15.0	13.8	14.3	15.1	15.2	15.6
Costa Rica		13.7	13.4	14.2	16.4	17.4	17.7	17.8	18.4	18.2	18.3
India		19.5	18.2	16.6	16.2	15.9	14.4	12.2	11.8	11.4	12.2
SAR				22.5	24.1	24.5	24.4	24.7	24.8	24.9	
Russia		16.9	16.8	17.3	20.0	19.2	18.4	18.9	19.7	19.2	19.2

Source: calculations based on sample data collected by the RANEP Institute of Applied Economic Research.

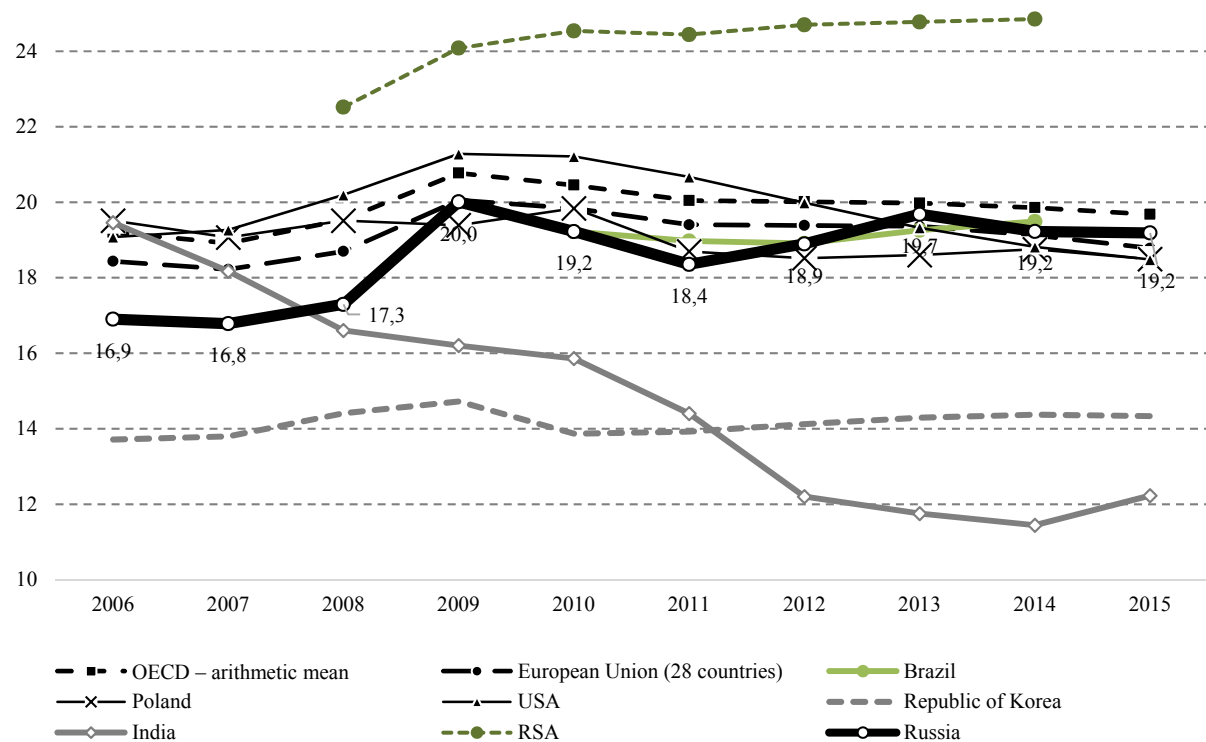


Fig. 28. The input of the GGS in GDP in 2006–2015, percent

Source: calculations based on data released by OECD.Stat

Thus, the index that most closely reflects the input of the GGS in GDP is the one calculated on the basis of the production account in the SNA.

4.3.4. The aggregate estimation of the public sector in Russia's economy

The aggregate estimation of the input of the public sector in GDP consists of three components: the input of SOEs; the input of the GGS; and the input of value produced by state unitary enterprises (SUEs). These three components are shown in Fig. 29. The bulk of the total

input, relative to the size of the public sector, belonged to SOEs, their input in GDP (conservative estimation) increased from 20.2 percent in 2006 to 25.3 percent in 2016. The input of the GGS over the same period also increased, from 16.9 to 19.2 percent. The input of SUEs, on the contrary, shrank from 2.5 to 1.5 percent, which was the upshot of the government policy aimed at gradual elimination of this organizational legal form, because it usually performs inefficiently.

More detailed statistics describing the input of the public sector (and its various components) in GDP are presented in *Annex 3*.

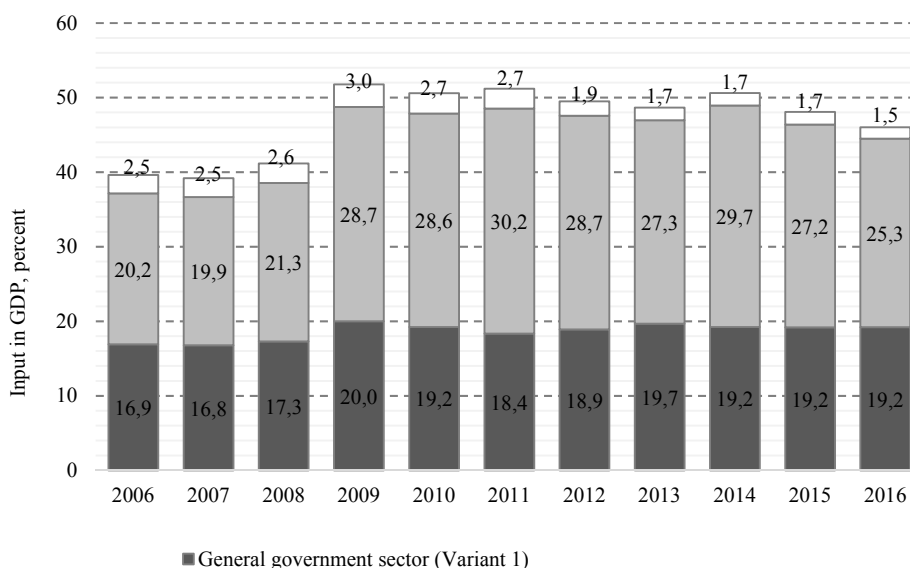


Fig. 29. The components of the input of the public sector in Russia's GDP in 2006–2016, percent

Source: calculations based on sample data collected by the RANEPА Institute of Applied Economic Research.

The total input of the public sector in GDP, including the inputs of SOEs, SUEs and the GGS, increased from 39.6 percent in 2006 to 46.0 percent in 2016 (*Fig. 30*). In this connection, the movement pattern displayed by this index reveals several regularities. The most robust growth rate was observed after the financial crisis of 2008 – from 41.2 percent in 2008 to 51.8 percent in 2009, in part in response to the government measures designed to support those SOEs that were important for the smooth functioning of the entire system, and primarily the big ones; the other growth-triggering factor was the rapid recovery of prices for raw materials in the international markets. The shrinking input of the public sector from 50.6 percent of GDP in 2014 to 46.0 percent in 2016 was caused by the reduced input of SOEs in GDP resulting from the plunging prices of mineral resources and the ruble's weakening. All these changes demonstrate that the most volatile component of the public sector's input in GDP is that of SOEs, which are very susceptible to the shocks in foreign raw materials markets, and this pass-through effect is reflected in the GDP index.

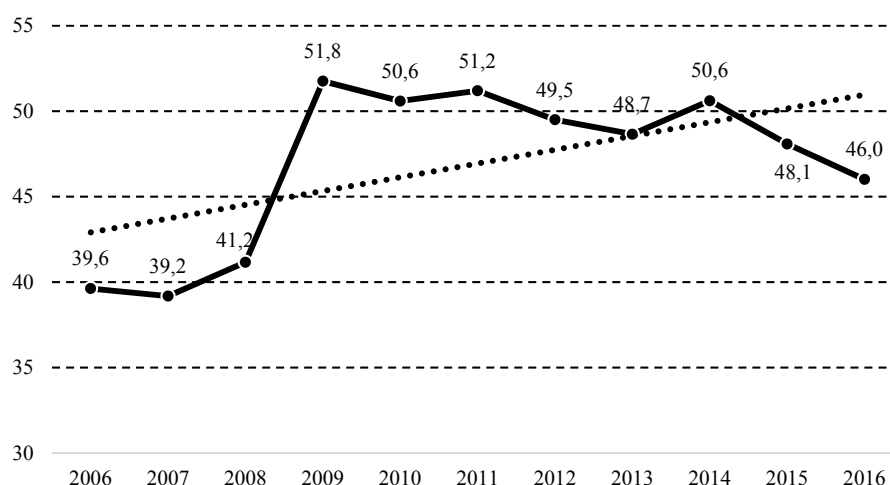


Fig. 30. The total input of the public sector in Russia's GDP in 2006–2016, percent

Source: calculations based on sample data collected by the RANEPА Institute of Applied Economic Research.

In a number of studies, the input of the public sector in GDP is estimated to be higher than that it follows from the calculations presented here. According to the estimates¹ released by the RF Federal Antimonopoly Service (FAS), the aggregate input of government units and state-owned companies in Russia's GDP in 2015 amounted to approximately 70 percent, whereas in 2005 this index had been not higher than 35 percent. At the same time, the FAS, regrettably, does not disclose the methodology applied in its calculations. According to the calculations published by the IMF,² the size of the public sector in Russia, including budget-funded organizations, as of 2012 was estimated to be 68 percent (the share of SOEs being about 28 percent and that of the GGS -40 percent of GDP).

Besides, our estimations of the input of the public sector in GDP turned out to be somewhat higher than the corresponding index (35 percent in 2010) derived by the EBRD³.

In China, according to the IMF, this index IMF is about 40 percent. In the IMF publication it is stated⁴ that in the majority of developing countries the input of the private sector in GDP is 60 percent, i.e., that of the public sector is not more than 40 percent. If we look at the corresponding index for Russia after the 2008 crisis, when it was at 51.8 percent in 2009 and 46.0 percent in 2016, it can be noticed that its value is 6–12 percentage points above the level considered to be typical of the countries with developing markets. This gap could be even wider, given the lack of transparency in the defense-industrial complex and some other non-public segments of the Russian economy.

¹ Report on the State of Competition in the Russian Federation for the Year 2015. Moscow. Federal Antimonopoly Service. 2016.

² Hughes R., Josephs T., Karolova V., Krivenkov V., Ljungman G. Russian Federation: Fiscal transparency evaluation. // IMF Country Report. No 14/134. 2014.

³ According to EBRD data, the input of the public sector of Russia's economy in GDP increased from 30 percent in 2005 to 35 percent in 2010. These data are very instructive from the point of view of tracing the input's dynamics, it should be said, however, that as far as the scope of the Russian public sector is concerned, they appear to be understated [Crisis and Transition: The People's Perspective. Transition Report 2011. EBRD, 2011.).

⁴ IMF Survey: IMF Facilitates Debate on Private Sector, Growth, Jobs in Mideast. IMF Survey. November 27, 2013. URL: <https://www.imf.org/en/News/Articles/2015/09/28/04/53/socar112713a>.

The upward trend displayed in 2006–2016 by the input of the public sector in Russia’s GDP is an alarming phenomenon. It should be noted that this upward movement happened due to the increasing number of both SOEs and the expansion of the GGS. Unfortunately, due to absence of systematic data on the public sector in other economies, we cannot say just how typical this trend has been on an international level. However, as was mentioned earlier, India in recent years has been demonstrating shrinking inputs not only of the public sector (from 17.5 percent in 1993–1994 to 13.1 percent in 2006–2007), but also of the GGS (from 19.5 percent in 2006 to 12.2 percent in 2016). In China, over a 20-year period that ended in 2015, the input of SOEs in total industry’s value added shrank from 40 to 16 percent.

At the same time, the methodology for estimating the input of the public sector in GDP presented here cannot be regarded as a sufficient tool to be employed in assessing the overall role of the state in a national economy. Rather, it assesses the role of the state as a direct participant in the new value creation process. However, in addition to that role, the state can also actively participate, e.g., in redistributing primary incomes across the institutional sectors of the economy, or financial resources across society, and these functions should be borne in mind when attempting a comprehensive study of the direct and indirect influence of the state in the economic sphere.

Annex I

**The capitalization, employee numbers and proceeds of Russian SOEs
over the period 2006–2016**

	Measur. units	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1.1. Russian stock market capitalization	billion s of rubles	25,482	32,740	11,017	23,091	28,975	24,551	24,657	25,256	22,838	28,733	37,748
1.2. Capitalization of SOEs	billion s of rubles	12,747	15,759	4,444	12,082	13,283	11,544	11,851	11,759	10,435	10,596	18,366
1.3. Input of SOEs in total capitalization index	percent	50.0	48.1	40.3	52.3	45.8	47.0	48.1	46.6	45.7	36.9	48.7
2.1. Number of employed persons in total economy	thousands of persons	67,174	68,019	68,474	67,343	67,493	67,644	67,968	67,901	67,813	68,495	68,400
2.2. Number of persons employed by SOEs	thousands of persons	1,573	1,755	2,142	2,557	2,964	3,085	3,279	3,920	4,010	3,672	3,951
2.3. Input of SOEs in total number of employed persons, percent	percent	2.3	2.6	3.1	3.8	4.4	4.6	4.8	5.8	5.9	5.4	5.8
3.1. Proceeds, total economy	billion s of rubles	60,460	75,281	87,605	83,450	102,597	120,183	140,774	174,224	185,319	207,014	234,302
3.2. Proceeds of SOEs	billion s of rubles	5,564	6,798	8,463	10,898	13,360	16,488	18,342	21,607	25,035	25,586	26,933
3.3. Input of SOEs in total proceeds	percent	9.2	9.0	9.7	13.1	13.0	13.7	13.0	12.4	13.5	12.4	11.5

Source: calculations based on sample data collected by the RANEP Institute of Applied Economic Research.

**The input of the state in the economy
(less the sector of budget-funded institutions)**

Industry	Total proceeds of 10,000 biggest companies (billions of rubles)	Total proceeds of 100 biggest companies (billions of rubles)	Concentration (input of proceeds of top 100 companies in total proceeds of top 10,000 companies), percent	Total proceeds of top 100 state-controlled companies, by sector				Input of total proceeds of state-controlled companies (out of top 100) in total proceeds of top 100 companies in each sector, percent
				companies controlled by RF (billions of rubles)	companies controlled by RF subjects (billions of rubles)	companies controlled by municipalities (billions of rubles)	SOEs, TOTAL (billions of rubles)	
1	2	3	4	5	6	7	8	9
Fishing	332	239	72	-	-	-	-	0.0
Forestry and logging	224	107	48	0.4	2.5	-	2.9	2.7
Crop and animal production	2 527	763	30	16.3	14.2	-	30.5	4.0
Coal mining	870	830	95	5.2	-	-	5.2	0.6
Crude oil and natural gas production	26,760	22,819	85	16,978.3	-	-	16,978.3	74.4
Metal ore mining	1,109	999	90	1.5	-	-	1.5	0.2
Other mineral resources extraction	546	442	81	195.3	0.5	0.7	196.6	44.4
Mineral resources extraction - servicing	1,292	1,031	80	410.4	-	-	410.4	39.8
Foodstuff manufacturing	4,931	2,036	41	-	-	-	-	0.0
Beverage manufacturing	787	637	81	8.5	13.8	-	22.4	3.5
Tobacco product manufacturing and sales	1,363	1,362	100	-	-	-	-	0.0
Textiles	197	120	61	1.4	-	-	1.4	1.2
Clothing	220	126	57	0.5	-	-	0.5	0.4
Leather products	74	60	81	0.3	-	-	0.3	0.5
Paper	517	394	76	-	-	-	-	0.0
Wood processing	513	282	55	4.7	1.5	-	6.2	2.2
Printing	291	159	55	4.5	0.6	-	5.1	3.2
Furniture	269	125	46	-	-	-	-	0.0
Petroleum products	2,941	2,913	99	389.7	-	-	389.7	13.4
Chemical production	2,410	1,857	77	98.4	-	-	98.4	5.3
Rubber & plastic products	1,015	455	45	-	-	-	-	0.0
Pharmaceuticals (manufacturing and sales)	2,339	1,683	72	5.8	37.4	-	43.2	2.6
Cement, glass and other building construction material manufacturing	1,467	503	34	20.9	-	-	20.9	4.2

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1	2	3	4	5	6	7	8	9
Metallurgy	4,655	4,271	92	168.5	66.2	-	234.6	5.5
Metal product manufacturing	1,316	459	35	17.1	-	-	17.1	3.7
Machine-building, electronic, optical, electrical equipment manufacturing	4,006	1,803	45	1,002.8	-	-	1,002.8	55.6
Transportation equipment manufacturing and sales	2,552	2,328	91	334.0	-	-	334.0	14.3
Other finished products	257	166	65	14.5	-	-	14.5	8.7
Machinery and equipment repair and assembly	732	313	43	65.5	5.7	-	71.1	22.7
Electricity, gas, steam supply	7,651	5,044	66	3,394.6	183.0	-	3,577.6	70.9
Water supply	402	246	61	-	106.6	71.9	178.5	72.6
Waste management and remediation activities	753	385	51	20.5	2.5	-	22.9	6.0
Construction	10,118	2,881	28	495.3	106.4	-	601.7	20.9
Trade	31,122	8,805	28	97.7	-	-	97.7	1.1
Transportation and storage	10,718	6,731	63	5,405.7	180.2	-	5,585.9	83.0
Accommodation and food service activities	1,087	473	43	16.8	12.0	2.9	31.7	6.7
IT and communications, mass media	3,954	2,447	62	547.9	7.9	-	555.8	22.7
Finance and insurance	15,593	13,574	87	6,348.8	-	-	6,348.8	46.8
Real estate activities	2,593	550	21	53.5	21.6	12.6	87.8	15.9
Consulting, legal and other services, security services	2,708	447	17	34.1	3.9	-	38.0	8.5
Education*	139	40	29	4.5	-	0.3	4.8	11.8
Healthcare*	591	191	32	8.3	13.6	-	22.0	11.5
Culture, arts, sports, lotteries*	286	148	52	3.3	1.8	-	5.1	3.5
Other**	5,640	2,034	36	100.4	-	-	100.4	4.9
TOTAL	159,866	93,279	58	36,276	782	88	37,146	39.8

* Less the sector of budget-funded institutions.

** Including incorrectly placed OKVED codes that actually belong to other groups.

Source: calculations based on data released by SPARK.

The estimated public sector's input in Russia's GDP in 2006–2016

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1. Gross domestic product, billions of rubles	6,917	33,248	41,277	38,807	46,309	60,283	68,164	73,134	79,200	83,233	86,044
2. General government sector											
2.1 Variant 1 – calculations based on production account (SNA) ^a											
billions of rubles	4,549	5,580	7,138	7,765	8,901	11,063	12,880	14,392	15,225	15,969	16,520 ^b
percent of GDP	16.9	16.8	17.3	20.0	19.2	18.4	18.9	19.7	19.2	19.2	19.2 ^b
2.2 Variant 2 – calculations based on IMF methodology ^c											
2.2.a Revenue side											
billions of rubles						24,937	31,152	34,867	59,718	36,400	37,479
percent of GDP						41.4	45.7	47.7	75.4	43.7	43.6
2.2.b Expenditure side											
billions of rubles						19,730	27,286	29,984	33,174	34,661	34,909
percent of GDP						32.7	40.0	41.0	41.9	41.6	40.6
2.3 Variant 3 – adjusted IMF methodology ^d											
billions of rubles						10,109	11,151	13,529	34,477	11,635	10,622
percent of GDP						16.8	16.4	18.5	43.5	14.0	12.3
4. value added of SOE, based on conservative estimations											
billions of rubles	5,450	6,605	8,773	11,149	13,266	18,194	19,539	19,954	23,538	22,632	21,760
percent of GDP	20.2	19.9	21.3	28.7	28.6	30.2	28.7	27.3	29.7	27.2	25.3
5. value added of state unitary enterprises (SUEs) ^e											
billions of rubles	665	841	1,079	1,172	1,260	1,604	1,322	1,235	1,319	1,409	1,307
percent of GDP	2.5	2.5	2.6	3.0	2.7	2.7	1.9	1.7	1.7	1.7	1.5
6. public sector value added – total ^f											
billions of rubles	10,664	13,026	16,989	20,085	23,428	30,861	33,741	35,581	40,082	40,018	39,587
percent of GDP	39.6	39.2	41.2	51.8	50.6	51.2	49.5	48.7	50.6	48.1	46.0

^a SNA – System of National Accounts.

^b Estimations for 2016.

^c [Hughes R., Josephs T., Karolova V., Krivenkov V., Ljungman G. Russian Federation: Fiscal transparency evaluation. // IMF Country Report. No 14/134. 2014. P.15]. The input of government units was estimated as the total revenue and expenditure of the Consolidated Financial Result of Public-Legal Entities of the Russian Federation, Budget and Autonomous Institutions for 2012, published by the Federal Treasury.

^d Calculations based on the Consolidated Financial Result of Public-Legal Entities of the Russian Federation, Budget and Autonomous Institutions, published online by the Federal Treasury since 2011. It contains data on compensation of employees and employers' social contributions, other expenses, and operational result before taxes.

^e Calculations for those SUEs whose proceeds are recorded in the SPARK information system, with due regard to the total economy's average proceeds to value added ratio. These do not include several big SUEs (i.e., post office Russia, etc.); data for the latter are included in the SOE sample.

^f The input of the general government sector in GDP is calculated in this table in accordance with Methodology 1. *Source:* calculations based on sample data collected by the RANEPА Institute of Applied Economic Studies.

4.4. Small and medium-sized enterprises in 2016–2017¹

Over the period 2016–2017, a number of specialized normative legal acts were introduced with the aim of developing the small and medium-sized business sector (SMB), including the

¹ This section is written by Vera Barinova, the Gaidar Institute, IAES-RANEPА; Stepan Zemtsov, the Gaidar Institute, IAES-RANEPА; Yulia Tsareva, IAES-RANEPА.

SMB Development Strategy until 2030;¹ the SMB Corporation was set up;² and the creation of a basic support infrastructure was completed in many regions. The Single Register of SMB Subjects was introduced in order to follow the monthly movement of their basic indices.

In 2017, 77.9 percent of all organizations and individual entrepreneurs (IEs) belonged to the category of SMB subjects, while at year-end 2016, the share of SMB subjects in the national average employment rate (calculated on the basis of their average staffing number index) amounted to 37.9 percent, and in the total turnover of enterprises and organizations – to 37.1 percent. The input of SMBs, IEs including, in GDP over the period from 2011 through 2016 jumped by 0.5 percentage points, and now amounts to approximately 20 percent.³

Small and medium-sized businesses represent a very significant sector in the Russian economy; nevertheless, in spite of the current positive trends that point towards an expanding entrepreneurial activity and an increasing role, overall, of the SMB sector in the national economy, it still remains relatively underdeveloped in Russia, by comparison with other countries.

4.4.1. The movement of the main development indicators in the SMB sector

The main indicators applied in the analysis of the current status and development trends in Russia's SMB sector are the number of SMB subjects, employment, and turnover relative to company size, by-industry and across Russia's regions. Additional parameters make it possible to more precisely analyze the specific features of small and medium-sized companies in Russia.

When working on a general assessment of the SMB sector, it should be noted that for Russian small and medium-sized companies, it is typical to use new technologies on a low scale; Russia's Innovation Index⁴ is 5.4 percent, which is 4 times below the corresponding indexes in the BRICS countries, and 7 times lower than in the USA. Besides, the majority of entrepreneurs in Russia lack business development plans, the percentage of unregistered entrepreneurs is high and cannot be estimated accurately, and the share of involuntary entrepreneurs is likewise huge, amounting to 31 percent⁵.

Besides, Russia is characterized by strong structural and regional disproportions across its SMB sector.

¹ Strategy of Small and Medium-sized Business Development in the Russian Federation for the Period until 2030, 2016. See <http://economy.gov.ru/minec/main>

² In 2015, in accordance with the Executive Order of the President of the Russian Federation 'On Measures Designed to Further Develop Small and Medium-sized Businesses' and Federal Law 'On the Introduction of Alterations in Some Legislative Acts of the Russian Federation Concerning Issues of Small and Medium-sized Business Development in the Russian Federation'.

³ Report on the results achieved in improving conditions for entrepreneurship and development of small and medium-sized businesses, and in increasing support for individual entrepreneurial initiatives, 2017.

⁴ Product Newness Index / Competition Intensity of Budding and Well-established Entrepreneurs. Source: *Verkhovskaya et al.*, 2016/2017 National Report *Global Entrepreneurship Monitor (GEM)*, St. Petersburg: St. Petersburg University Graduate School of Management, p. 46. URL: http://gsom.spbu.ru/files/docs/gem_russia_2016-2017.pdf

⁵ Ibid.

The movement of indices describing the creation and liquidation of SMB subjects

The data entered in the Single Register of Registered Companies (including IEs) are available beginning from 1 August 2016. As of autumn 2017, the total number of SMB subjects operating in Russia was 5.86 million (*Fig. 31* and *Table 16*), and of these, approximately 3.1 million were IEs (≈ 53 percent). In Russia, 95.1 percent of all SMB subjects are micro companies (almost 5.5 million), with only one or two employees on average. The number of small companies in Russia is 265,900 (4.5 percent), and that of medium-sized ones is 19,900 (0.3 percent).

Table 16

The Structure of the SMB Sector, by Company Size and Organizational Form, As of 10 November 2017

Index	Total	Micro companies	Small companies	Medium-sized companies
Legal entities				
Number of companies, units	2,756,724	2,498,152	238,893	19,679
Share in total number of SMB subjects, percent	47.024	42.613	4.075	0.336
Share in total number of legal entities, percent	100	90.620	8.666	0.714
Individual entrepreneurs				
Number of companies, units	3,105,636	3,079,056	26,446	134
Share in total number of SMB subjects, percent	52.976	52.522	0.451	0.002
Share in total number of IEs, percent	100	99.144	0.852	0.004
All SMB subjects				
Number of companies, units	5,862,360	5,577,208	265,339	19,813
Share in total number of SMB subjects, percent	100	95.136	4.526	0.338

Source: Single Register of Small and Medium-sized Business Subjects.

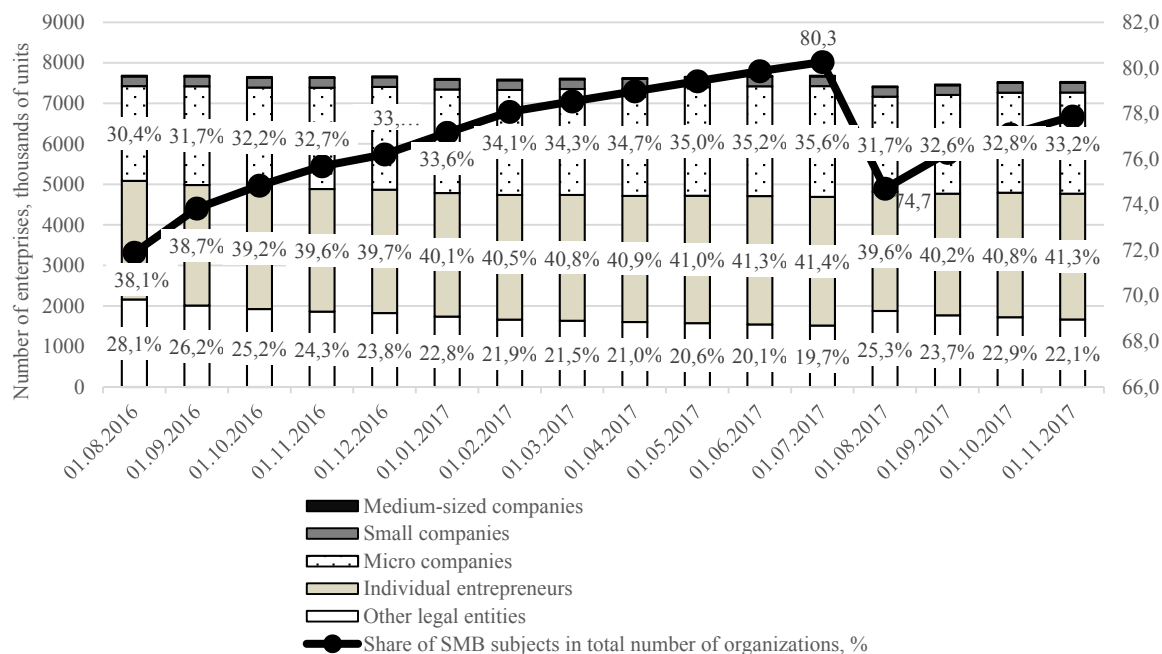
Over the period from August 2016 through July 2017 the number of SMB subjects was displaying a positive movement trend (*Fig. 31*). During that time, their number jumped by 11.6 percent, from 5.52 million to 6.16 million, or approximately by 641,000 units. Meanwhile, the total number of registered legal entities and IEs over the same period remained practically unchanged (decline by 0.02 percent). However, in August 2017, the number of SMB subjects shrank from 6.165 million to 5.543, or by more than 622,000, which nearly offset its previous growth. By November 2017, the number of SMB subjects increased relative to November 2016 by only 74,000, or by less than 1.3 percent. Of course, this movement pattern seems to be questionable. The Single Register of Small and Medium-sized Business Subjects is being augmented by new entities (which do exist, but have not been entered in records), while those companies that effectively do not function and fail to submit their reports are struck off the register only once a year. Therefore data from the Single Register pertaining to current changes in the number of SMB subjects, as well as their employment data, should be treated with caution.

The relative share of SMB subjects in the total number of registered legal entities and IEs in Russia, according to data released by the RF Federal Tax Service,¹ as of early November 2017 was 77.9 percent (*Fig. 31*).² This index hit its record high in July 2017, when 80.3 percent of

¹Statistical Information on State Registration, RF Federal Tax Service. See https://www.nalog.ru/rn77/related_activities/statistics_and_analytics/regstats/

²It is noteworthy that the number of IEs differs significantly depending on the data source. Rosstat calculates the number of IEs by imputation, extrapolating its collected sample data.

all enterprises and organization were SMB subjects, followed by its already mentioned decline in August 2017. No reduction in the number of other organizations was observed, which indirectly confirms the assumption that the plunge of the number of SMB subjects was caused by certain alterations inside the Single Register, and did not reflect the actually existing situation with regard to registration of economic subjects in the national economy as a whole.



Note. The category of other legal entities includes those entities that are entered in the Single State Register of Legal Entities (with the exception of those legal entities that have terminated their operations), but not entered in the Single Register of Small and Medium-sized Business Subjects.

Fig. 31. The Movement Pattern and Structure of the SMB Sector and Other Legal Entities, by Number of Subjects, from August 1, 2016 through November 10, 2017, Units, %

Source: Single Register of Small and Medium-sized Business Subjects. URL: <https://rmsp.nalog.ru/>; Statistical Information on State Registration, RF Federal Tax Service. URL: https://www.nalog.ru/rn77/related_activities/statistics_and_analytics/regstats/

With due regard for the alterations introduced in the classification criteria applied to SMB subjects, on the basis of sample studies conducted by the federal State Statistics Service (*Rosstat*), we can follow, with some reservations, the multi-year movement pattern of structural changes inside the SMB sector based on the number of companies, from 2008 through 2016 (the years 2010 and 2015 are excluded because *Rosstat* was then collecting non-selective data for SMBs). The total number of SMB subjects increased by 30 percent, from 4.1 million in 2008 to 5.3 million in 2016, while a sharp surge by 17 percent occurred over the period 2014–2016.

The Single Register of Small and Medium-sized Business Subjects contains records of those IEs who have simultaneously submitted their complete reporting form set – the statement concerning their staff number and the filled-in reporting forms established for their taxation regime.

The RF Federal Tax Service, in the framework of the Single Register of Individual Entrepreneurs, collects data on the IEs who owe irrecoverable debts, and on those of them who effectively do not operate and do not submit their reports.

From 2008 through 2016, there was stable growth of both the number and relative share of micro companies in the total number of SMB subjects (from 26 percent in 2008 to 49 percent in 2016), alongside a shrinkage of the relative share of IEs, from 67 to 48 percent. At the same time, the aggregate share of micro companies and IEs in the total number of SMB subjects was staying above 90 percent, and in 2016 it amounted to 96.7 percent, as shown in *Fig. 32*. The number of micro companies increased from 1.87 million in 2014 to 2.6 million in 2016.

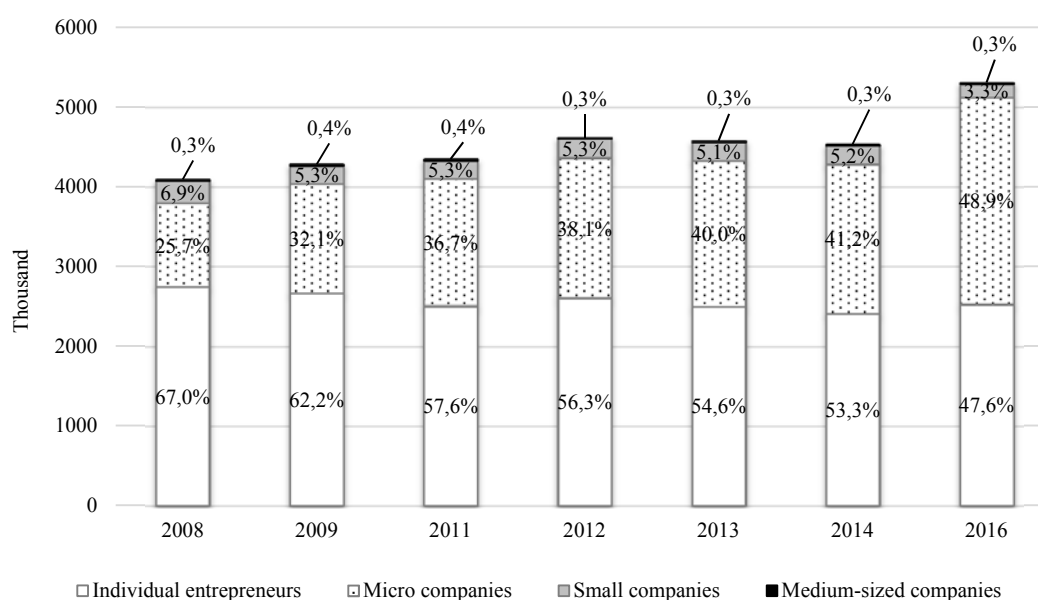


Fig. 32. The Movement Pattern and Structure of the SMB Sector in 2008–2016, by Number and Relative Share of Enterprises of Different Sizes

Sources: Small and Medium-sized Enterprises in Russia. Statistics Collections. *Rosstat*. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1139841601359; for 2016, see Institutional Changes in the Economy and the Number of Big and Medium-sized Enterprises and Organizations. *Rosstat*. http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1139841601359

In the by-sector structure of SMBs, the biggest share is taken up by trading enterprises; according to *Rosstat* latest available data (year-end 2016), these amounted to 2.3 million, or 42.7 percent of the total number of small and medium-sized companies. Other types of economic activity most commonly practiced by small and medium-sized businesses are real estate transactions (18.3 percent of the total number of enterprises), transport and communications (9.9 percent), building construction (8.1 percent), and manufacturing industries (7.1 percent).

It should be noted that in the SMB sector, the prevailing type of economic activity varies depending on company size. Thus, among small (including micro) companies, 37 percent operate in trade, 22 percent – in real estate business, 12 percent – in building construction, and 9 percent – in manufacturing industries. Among medium-sized ones, there are more companies involved in manufacturing (26 percent) and agriculture (14.5 percent). These activities require more skills and higher competence, and so a company, in order to maintain its competitive capacity on the market, must be bigger in size. Trading was engaged in by approximately

25 percent of medium-sized companies, and about 11 percent were involved in building construction.

The distribution of IEs by type of economic activity also notable differs from that of small and medium-sized companies. Thus, nearly half of all IEs (48.8 percent) are engaged in trading; 14.7 percent – in real estate transactions; and 12.2 percent – in transport and communications, that is, in a sector where capital turnover ratio is high, and low capital/labor ratio. Another noteworthy fact is the high number of IEs providing amenities and household services: 161,500, or 6.4 of the total number of IEs. The bigger the company, the higher its capacity for carrying out technologically complex (manufacturing industry), expensive (extractive industry), and risky (agriculture) activities.

The distribution of small and medium-sized companies across subjects of the Russian Federation corresponds to the population distribution structure. The highest number of small and medium-sized companies, according to the Single Register of Small and Medium-sized Business Subjects, can be found in the Central (30.6 percent of the total number of SMBs), Volga (18 percent), Southern (12 percent), Siberian (11.7 percent), and Northwestern (11.5 percent) Federal Districts.

The leaders among Russia's regions, by their total number of legal entities and IEs entered in the Single Register of Small and Medium-sized Business Subjects, are as follows: the city of Moscow (768,618 SMB subjects, or 13.1 percent of Russia's total); the city of St. Petersburg (347,355, or 5.93 percent); Moscow Oblast (308,378, or 5.26 percent), these three regions accounting for nearly a quarter of all the small and medium-sized companies operating in Russia. The other regions with high numbers of small and medium-sized companies are Krasnodar Krai (276,966); Sverdlovsk Oblast (199,103); Rostov Oblast (173,380); the Republic of Tatarstan (152,658); Novosibirsk Oblast (143,366); Chelyabinsk Oblast (142,267); and Nizhny Novgorod Oblast (130,187). These are predominantly the regions housing biggest agglomerations with highly developed services sectors, where the bulk of their SMB subjects are operating.

In terms of their relative share of SMB subjects in the total number of registered organization, the leaders are the regions with a well-developed agricultural sector, where the registered subjects are IEs, including individual farmer households. The relative share of IEs in the structure of SMBs is also above 75 percent in the least developed regions, where many individual farmer households are registered, while the existing institutional conditions impose constraints on their growth into some bigger entities.

The relative share of legal entities above 50 percent is higher in the regions housing biggest agglomerations: in the city of Moscow; the city of St. Petersburg; Novosibirsk Oblast; Samara Oblast; Sverdlovsk Oblast; Nizhny Novgorod Oblast; Tomsk Oblast; and the Republic of Tatarstan. These regions display a greater density of the services sector and industry and a higher purchasing power of their population; thanks to their more favorable economic and geographic situation (as, for example, Yaroslavl Oblast or Tyumen Oblast), they have access to major foreign or domestic markets. The institutional conditions in those regions promote business growth. The highest relative share of medium-sized companies (above 0.4 percent) is registered in the cities of Moscow and St. Petersburg, and in Moscow and Leningrad Oblasts – that is, in the best-developed and most technologically advanced regions of Russia.

Employment in the SMB sector

The companies operating in the SMB sector provide jobs to more than 19.1 million people (see *Table 17* and *Fig. 33* below), which amounts to approximately 25 percent of the total number of persons employed in this country. According to data in the Single Register of Small and Medium-sized Business Subjects as of November 10, 2017, nearly 10 million are employed by micro companies, 7 million - by small ones, and 2 million – by medium-sized ones. The structure of the SMB sector, by the number of persons employed, has remained relatively stable, although over last year the relative share of micro companies increased.

Table 17

The Structure of the SMB Sector, by Number of Persons Employed and by Organizational Legal Form

Data as of November 10, 2017, persons	Micro	Small	Medium-sized	Total
Legal entities	5,452,380	6,290,701	1,904,746	13,647,827
Employed by IEs ¹	1,557,769	744,531	10,860	2,313,160
IEs ²	3,079,056	26,446	134	3,105,636
Total	10,089,205	7,061,678	1,915,740	19,066,623
As percentage of total number of persons employed by SMB subjects				
Legal entities	28.6	32.99	9.99	71.58
Employed by IEs	8.17	3.9	0.06	12.13
IEs	16.15	0.14	0	16.29
Total	52.92	37.04	10.05	100
Data as of December 10, 2016, persons	Micro	Small	Medium-sized	Total
Legal entities	4986416	6565522	1936627	13488565
Employed by IEs	1533320	861540	39013	2433873
IEs	3017192	28682	378	3046252
Total	9536928	7455744	1976018	18968690
As percentage of total number of persons employed by SMB subjects				
Legal entities	26.29	34.61	10.21	71.11
Employed by IEs	8.08	4.54	0.21	12.83
IEs	15.91	0.15	0	16.06
Total	50.28	39.31	10.42	100

Source: Single Register of Small and Medium-sized Business Subjects. See <https://ofd.nalog.ru/index.html>

Monthly employment data in the Register are available from December 10, 2016 onwards. During all the periods for which data are available, the general distribution of the employment index between micro, macro and medium-sized companies, as well as the total number of persons employed, remained approximately the same (although August 2017 saw a plunge in the number of persons employed (which, as noted earlier, we explain by measurement errors). The total number of persons employed in the SMB sector as of November 10, 2017 relative to December 10, 2016, according to data in the Register, increased by 97,900.

It should be noted that Rosstat annual sample studies have revealed an employment decline in the SMB sector, as confirmed by both the reported average staffing number indices and its relative share (see *Fig. 34* below).

¹ The index ‘Employed by IEs’ does not include the number of individual entrepreneurs-employers, it reflects only their hired staff.

² In fact, this is the number of IEs that we apply in order to reflect, in our employment statistics, the number of those entrepreneurs who set up their IE entities.

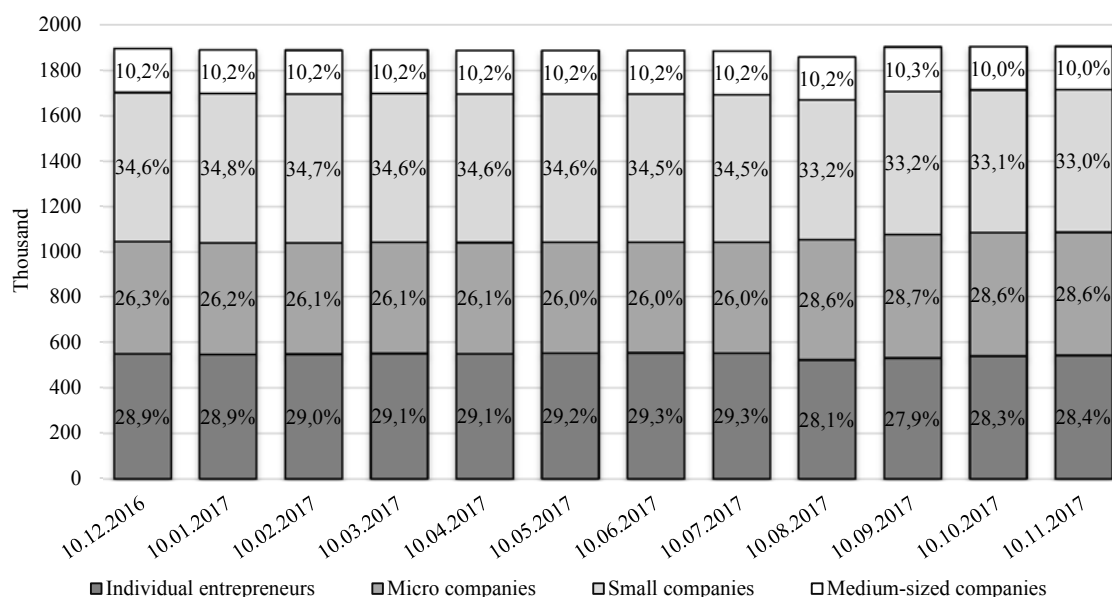


Fig. 33. The Employment Movement Pattern and the Structure of the SMB Sector, by Company Size and Organizational Legal Form

Source: Single Register of Small and Medium-sized Business Subjects. URL: <https://ofd.nalog.ru/index.html>

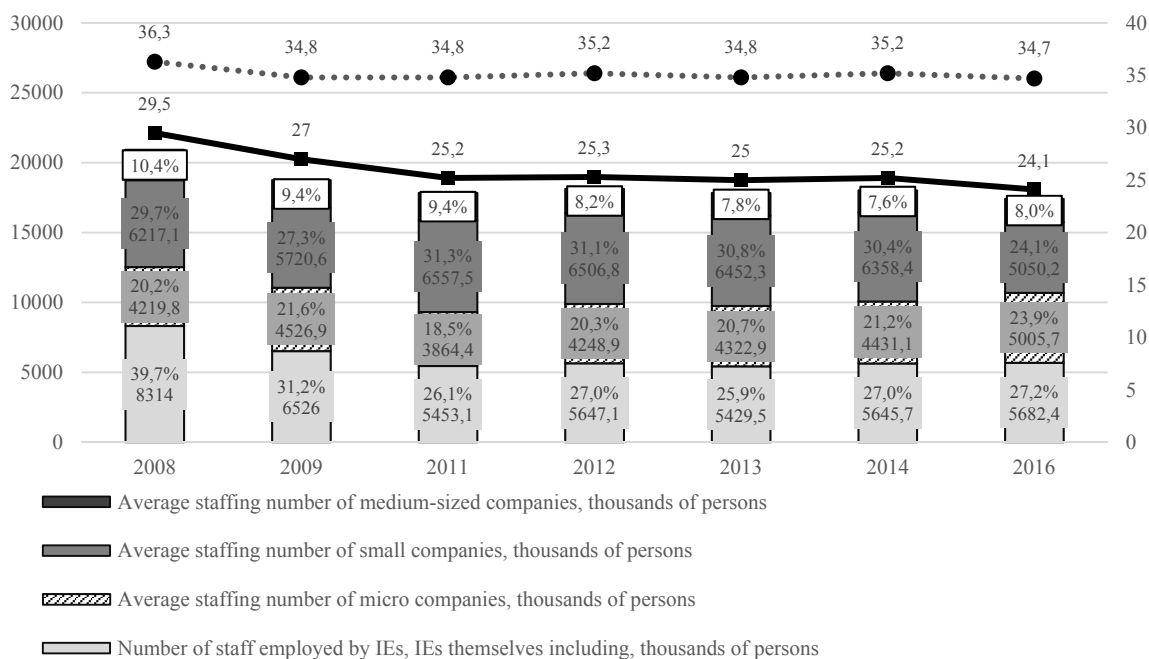


Fig. 34. The Average Staffing Number Movement Pattern in the SMB sector

Source: Small and Medium-sized Enterprises in Russia. Statistics Collections. Rosstat. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1139841601359; Institutional Changes in the Economy and the Number of Big and Medium-sized Enterprises and Organizations. Rosstat. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1139841601359

The topmost regions in terms of the number of persons employed by SMB subjects: the city of Moscow (12.5 percent of the average staffing number data reported by Russian SMB subjects; 47.4 percent the average staffing number data reported by organizations and IEs in the region), the city of St. Petersburg (6.3 percent and 54.3 percent respectively), Moscow Oblast (5.2 percent and 42.1 percent), Krasnodar Krai (4 percent and 43.8 percent), and Sverdlovsk Oblast (3.3 percent and 38.5 percent).

The relative share of those employed by individual entrepreneurs in the overall structure of SMB subjects is above 50 percent in the underdeveloped regions (the Republic of Tyva, Chechen Republic, the Republic of Kalmykia, and the Republic of Crimea), and it is lowest (below 20 percent) in the highly developed regions – Samara Oblast, the city of St. Petersburg, and the city of Moscow.

The turnover and labor productivity of SMB subjects

The turnover of small and medium-sized companies (less IEs) in 2016 was RUB 46.4 trillion, and the total proceeds of IEs was RUB 12.4 trillion, which adds up to produce the total index for the SMB sector amounting to RUB 58.8 trillion. The total turnover of all organizations¹ over 12 months of 2016 was RUB 146 trillion. Thus, the SMB sector (less IEs) accounts for approximately 31.8 percent of the total business turnover. The turnover in the SMB sector increased by 15.5 percent (adjusted for inflation) over the period 2014-2016.²

The input of trading companies in the total turnover of SMB subjects in 2016 amounted to 59.3 percent see *Fig. 35*).

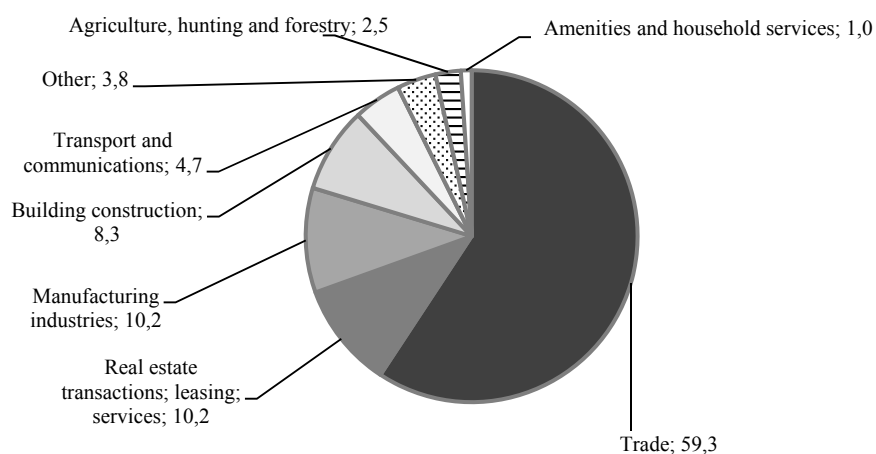


Fig. 35. The Relative Shares of Different Types of Economic Activity in the Turnover of SMB Subjects (Including IEs) in 2016, Percent

Source: Institutional Changes in the Economy and the Number of Big and Medium-sized Enterprises and Organizations. *Rosstat*. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/reform/#

¹ Institutional Changes in the Economy and the Number of Big and Medium-sized Enterprises and Organizations. *Rosstat*. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/reform/#

² Small and Medium-sized Enterprises in Russia. 2017 Statistics Collection. *Rosstat*. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1139841601359

The decisive share in the aggregate proceeds of all IEs belongs to trading companies – 75.8 percent of the total index. Second come real estate transactions, leasing, and services (8.4 percent), followed by transport and communications (4 percent).¹

At the same time, the relative share of medium-sized companies in the total turnover does not exceed 13 percent, although elsewhere around the globe it is significantly higher. The highest share of medium-sized companies operate in manufacturing industries and agriculture.

According to the data based on 2017 OKVED (All-Russia Classifier of Economic Activities) Codes (OKVED2), trade and services account for more than 54 percent of the total output of SMB subjects, manufacturing industries – for about 28.5 percent.

More than 50 percent of the turnover of companies operating in the SMB sector occurs in the following 10 regions: the city of Moscow (RUB 11.2 trillion; 19.5 percent of Russia’s total index); the city of St. Petersburg (RUB 4 trillion; 6.9 percent); Moscow Oblast (RUB 2.3 trillion; 4 percent); Sverdlovsk Oblast (RUB 2 trillion; 3.5 percent); Krasnodar Krai (RUB 2 trillion; 3.4 percent); Rostov Oblast (RUB 1.7 trillion; 3 percent); the Republic of Tatarstan (RUB 1.7 trillion; 2.9 percent); Chelyabinsk Oblast (RUB 1.3 trillion; 2.2 percent); the Republic of Bashkortostan (RUB 1.2 trillion; 2.1 percent); and Nizhny Novgorod Oblast (RUB 1.2 trillion; 2.1 percent).

Over the period from 2008 through 2016, labor productivity, understood as the ratio of turnover to staffing number, increased across the entire SMB sector by 18 percent (adjusted for inflation),² and the highest indices were typically reported by medium-sized companies (RUB 4.5 million per person), which is significantly above both the labor productivity index typically reported by IEs (RUB 1.5 million per person) and the corresponding average index for the SMB sector (RUB 2.95 million per person).³

Table 18

The Main Characteristics of the SMB Sector in 2016–2017

Rosstat data for 2016					
	Individual entrepreneurs	Micro companies	Small companies	Medium-sized companies	Total, SMB subjects
1	2	3	4	5	6
Number of companies, units	2,523,575	2,597,646	172,916	13,315	5,307,452
Employment, thousands of persons	8,206.0	5005.7	5,050.2	1,676.6	19,938.44
Average staffing number per company	3.3	1.9	29.2	125.9	3.8
Turnover, billion RUB	12,369.2	20,138.8	18,738.2	7,586.2	58,832.33
Productivity, million RUB per person	1.5	4.0	3.7	4.5	3.0
Index’s relative share depending on company size, percent					
By number of companies	47.55	48.94	3.26	0.25	100.00
By staffing number	41.16	25.11	25.33	8.41	100.00
By turnover index	21.02	34.23	31.85	12.89	100.00
Share of SMB sector in GDP					19.9
Data from Single Register of SMB Subjects as of 10.November.2017					
Number of companies	3,105,636	2,498,152	238,893	19,679	5,862,360
Employment index, based on average staffing number, thousands of persons	5,418.8	5,452.4	6,290.7	1,904.7	19,066.6

¹ Proceeds of IEs, by Type of Economic Activity, in 2016. Institutional Changes in the Economy. *Rosstat*. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/reform/#

² Own calculations based on data released by Rosstat.

³ Own calculations based on data released by Rosstat. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/reform/#

Cont'd

1	2	3	4	5	6
Average staffing number per company	1.7	2.2	26.3	96.8	3.3
Number of SMB subjects (including IE) per thousand residents					39.9
Number of SMBs created over reporting period per 1,000 SMBs operating as of its end date					102.0
Output of goods and services, billion RUB	761	1,665	909	262	3,597
Productivity, million RUB per person	0.1	0.3	0.1	0.1	0.2
Index's relative share depending on company size, percent					
By number of companies	52.98	42.61	4.08	0.34	100.00
By average staffing number	28.42	28.60	32.99	9.99	100.00
By output of goods and services	21.16	46.29	25.27	7.28	100.00

Source: Single Register of Small and Medium-sized Business Subjects. See <https://ofd.nalog.ru/index.html>; Institutional Changes in the Economy and the Number of Big and Medium-sized Enterprises and Organizations. *Rosstat*. See http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1139841601359

4.4.2. Improvement of the measures designed to support small and medium-sized businesses in Russia

The systemic policy oriented to SMBs must ensure that the latter are constantly supported during all phases of their evolution, and helped to survive and grow from a micro company to a small one, and then from a small one to a medium-sized one. A very general outline of the system of measures introduced in Russia is shown in *Fig. 36*.

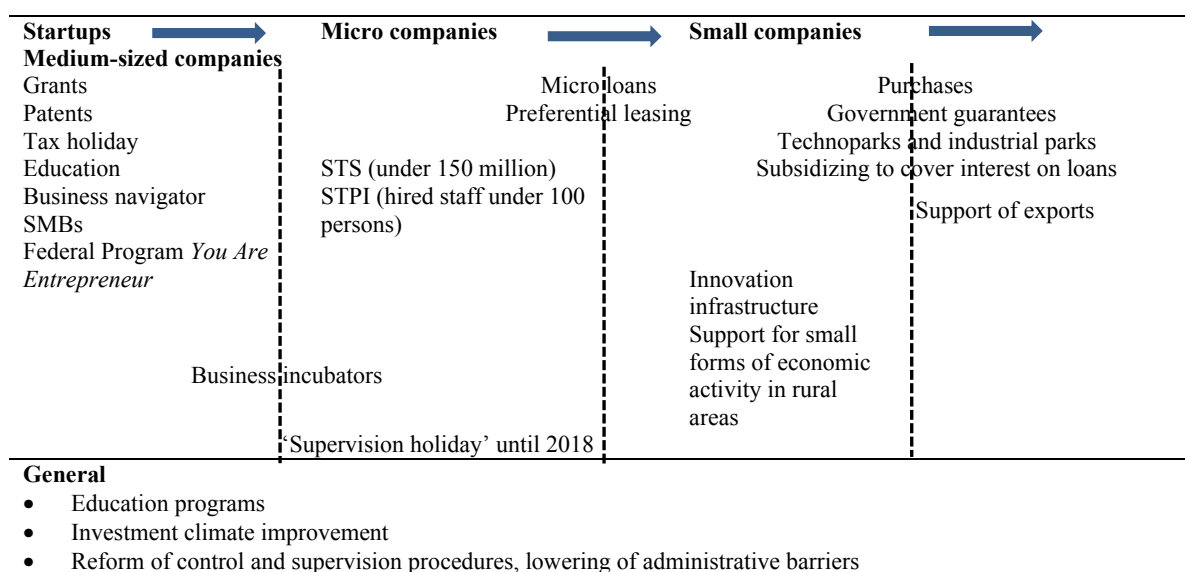


Fig. 36. System of Support for Small and Medium-sized Companies in Russia, 2017

Source: own calculations.

In 2016, JSC Federal Corporation for Small and Medium-sized Business Development (SMB Corporation), SMB Bank, and regional guarantee institutions issued more than 10,000

guarantees to SMB subjects, thus enabling the latter to attract a total of more than RUB 172 billion. Over the first 8 months of 2017, the amount of attracted funds rose to RUB 129 billion.

In 2016, the volume of government purchases from SMB subjects amounted to RUB 1.511 trillion. The target index for 2017 is RUB 1.6 trillion (or RUB 2 trillion, with due regard for the extended list of customers); in this connection, over the first 8 months of 2017, the volume of government purchases from SMB subjects amounted to 1.192 trillion. The number of items on the corresponding purchase lists was increased to 150,000.

SMB Corporation, in the course of its operation, created a MSP Business Navigator portal,¹ freely available to entrepreneurs and enabling them to make a choice of a business activity type and map a tentative business plan, to learn about the existing loan and guarantee options, the support measures available for small and medium-sized companies, to find appropriate premises for renting, to learn about the forthcoming government purchase tenders, to post advertisements concerning their businesses, and gain access to information and analytical materials. The content offered by the MSP Business Navigator had been found relevant for 171 cities all over Russia with 100,000+ population, and more than 220,000 companies have already registered themselves as that portal's users. From 2016, two educational programs were launched by SMB Corporation *Entrepreneurial Basics* (on how to create a business) and *Entrepreneurial School* (on business development).

In Russia's regions, a target model designed to Support small and Medium-sized Businesses has been launched². According to data released by the RF Ministry of Economic Development in July 2017, the average implementation rate across all the 46 indices of the target model was 60 percent³.

The RF Ministry of Economic Development Russia in cooperation with Doing Business Russia have been elaborating Russia's first nationwide platform designed to provide knowledge and service to businesses.

In 2016, 541 multi-function centers for businesses were set up in many RF subjects.⁴ The Priority Project *Small Businesses and Support for Individual Entrepreneurial Initiatives*⁵ is underway, its key goal being to create about 1.2 million jobs with individual entrepreneurs and small businesses, and to provide support to 336,000 business subjects belonging to that category. The other channels of support are JSC SMB Bank, the Foundation for the Support of Small Businesses in the Science and Technology Sector, and the RF Ministry of Agriculture.

From 2005, Russia has been implementing a government program of support for small and medium-sized enterprises, launched by the RF Ministry of Economic Development⁶, which relies on direct support mechanisms (for example, *nonrefundable* cash *subsidies* to startup entrepreneurs in amounts up to RUB 500,000; subsidies covering lease payments designed to

¹ MSP Business Navigator website. See <https://smbn.ru/msp/main.htm>

² RF Government Order No 147-r of January 31, 2017 'On the Target Models Designed to Simplify the Procedures of Doing Business and Increase the Investment Attractiveness of Subjects of the Russian Federation'. See <http://government.ru/docs/all/105437/>

³ RF Ministry of Economic Development. Regions Increase their Support for MSB. See <http://economy.gov.ru/minec/about/structure/depmb/2017110802>

⁴ See <http://economy.gov.ru/minec/about/structure/depmb/2016191205>

⁵ Project Certificate Small Businesses and Support of Individual Entrepreneurial Initiative. See <http://smb.gov.ru/mediacenter/businessnews/?action=show&id=17791>

⁶ Decree of the Government of the Russian Federation No 1605 of January 30, 2014 'On the Issuance and Distribution of Subsidies from the Federal Budget to the Budgets of Subjects of the Russian Federation Earmarked for the Government Support of Small and Medium-sized Enterprises, Including Peasant (Farmer) Households'.

fund production modernization; subsidies to entrepreneurs who are welfare recipients, or to young entrepreneurs, etc.), and also on some indirect support measures that imply the creation of special infrastructure components oriented to small and medium-sized companies and providing them with consulting, financial, in-kind, innovation-related, and expert support. The volume of funding allocated to the program and the number of companies receiving such support has been on the decline: in 2017, the allocation amounted to RUB 7.5 billion RUB, and the planned target for 2018 is RUB 5 billion.

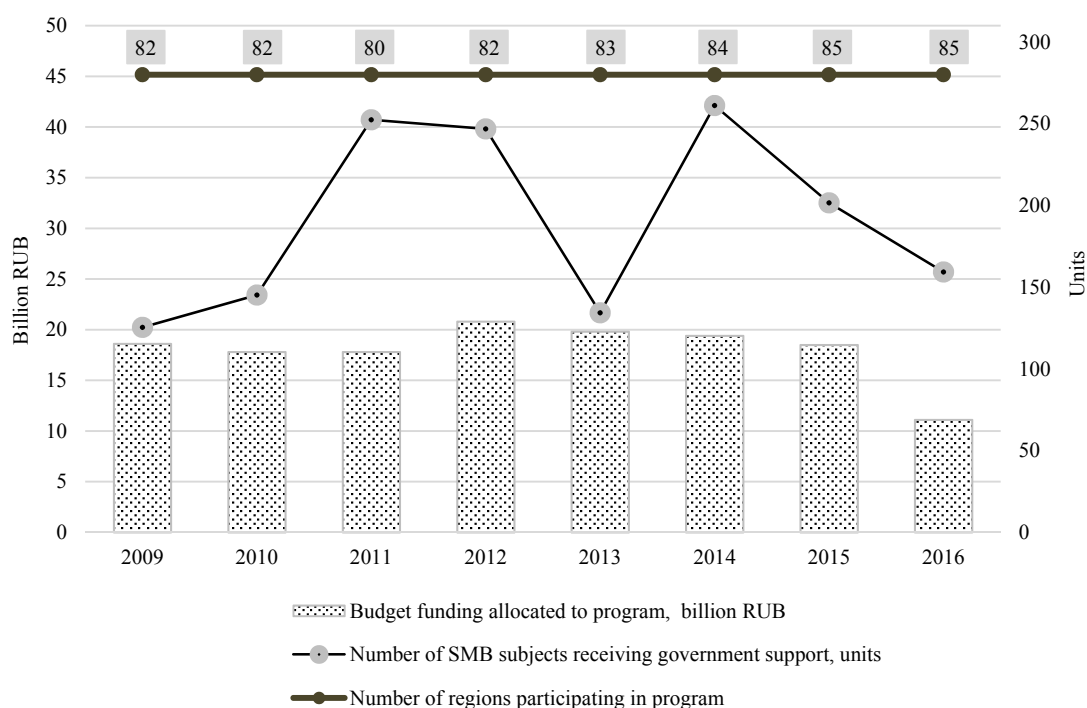


Fig. 37. Parameters of the Federal Program of SMB Support in Russia, 2009–2016

Source: RF Ministry of Economic Development.

From 2017, the program has been implemented as a ‘service model’ – that is, by way of rendering services to small and medium-sized companies through specialized infrastructure complexes created for the support of enterprises. As seen by the year-end results of 2016, a total of 330 infrastructure entities oriented to the support of businesses operated in RF subjects. Fig. 38 demonstrates the SMB support infrastructure distribution across Russia’s regions in 2017.

In 2016, according to data released by the RF Ministry of Economic Development,¹ government support was received by more than 167,000 companies in the SMB sector; a total of 39,509 new jobs were created; and 303,800 existing jobs were maintained. The creation of regional export centers was followed by growth in the number of companies – from 10,600 in 2014 to 30,100 in 2017 – that is, 2.8 times.²

¹ Report on the results achieved in improving conditions for entrepreneurship and development of small and medium-sized businesses, and in increasing support for individual entrepreneurial initiatives, RF Ministry of Economic Development, 2017.

² Ibid.

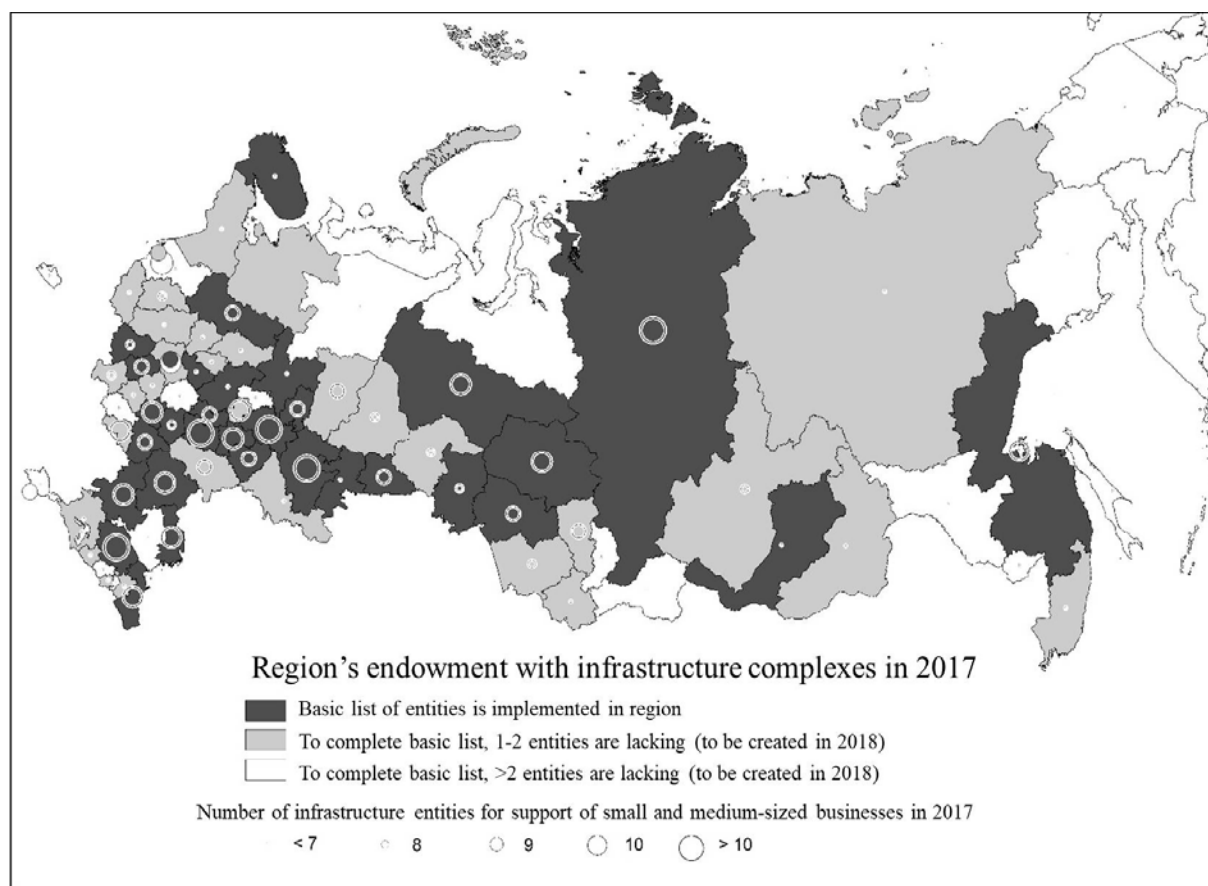


Fig. 38. The distribution of the SMB support infrastructure across Russia's regions in 2017

Source: Own calculations based on data released by the RF Ministry of Economic Development.

The volume of loans received by SMB subject, including IEs, over the first 9 months of 2017 increased by 12.7 percent relative to the same period of 2016. The introduction of the mechanisms that envisaged the issuance of guarantees and sureties to SMB subjects made it possible, in 2016, to double the amount of loans received by them, relative to 2015.¹ It also became possible to lower the average weighted interest rate on the ruble-denominated loans issued for a period under 1 year to small and medium-sized companies: in July 2017, it amounted to 13.3 percent, which is above the market average (10.44 percent), but below the corresponding average weighted interest rate for March 2015 (19.12 percent). This had to do, among other things, with the implementation of Program 674 that envisaged subsidizing the interest rate on bank loans (by agreements with Sberbank, VTB Bank, Russian Agricultural Bank), thus bringing down the interest rates for medium-sized companies to 9.6 percent per annum, and for small companies to 10.6 percent.

In addition to the government program and other forms of support, an important component of the policy designed to boost the activity of SMB is the creation of favorable conditions for doing business, including the reduction of the administrative load on businesses. Over recent years, the Russian Federation has significantly improved its ranking with the World Bank,

¹ JSC Federal Corporation for Small and Medium-sized Business Development, 2017.

having moved in its Doing Business ranking from 124th place in 2010 to 62th in 2015, and to 40th in 2017. The number of days required to complete the registration for a new company was reduced from 29 in 2008 to 9.8 in 2016, or nearly 3 times; the number of procedures that need to be completed in order to register a company, was reduced from 8 to 4, or by half.¹ Meanwhile, the investment climate in Russia's regions has been improving: in 2016-2017, the average index of the National investment climate ranking² rose by 5.3 points. The ranking index reflected the increased relative share of government purchases from small and medium-sized business, and the shorter period and fewer procedures needed for the registration of a title to an immovable property entity and for the issuance of a building construction permit.

From 1 January 2016 through 31 December 2018, a moratorium has been established on the planned audits, by supervisory bodies, of small companies operating in sectors other than household services, healthcare, education, heating, and electric energy supply.³ The government priority program *Control and Supervision Reform* has been launched, which aims, among other things, to reducing the burden on businesses. So far, it has resulted in a fewer number of planned checks and audits in the framework of a pilot departmental program (a decrease by 22 percent).

According to data released by the RF Ministry of Economic Development Russia, over the period from 2015 through 2016, the number of off-schedule checks and audits was reduced by 15 percent.⁴ However, business surveys (RANEPА)⁵ revealed that about 50 percent of respondents believed that the intensity of government control-and-supervision activity had remained unchanged over the last 5 years; 55.6 percent of respondents admitted that control and supervision was creating administrative barriers for their business activity.

From July 4, 2016, the issuance of a warning as a preventive measure applied to SMBs began to be used more broadly: by Federal Law No 316-FZ of July 3, 2016, an administrative fine imposed for an offence committed for the first time was replaced by a warning, on condition that there had been no damage to valuables protected by the law. As a result, over H1 2017, the number of cases where SMB subjects were brought to administrative responsibility was reduced by 17 percent, while the number of warnings issued over the same period increased to by 52.8 percent. Meanwhile, the number of imposed administrative fines dropped by 23.3 percent.⁶

Besides, some tax incentives for small and medium-sized companies were introduced.

(1) The criteria for applying a simplified taxation system became more lax:

¹ Bazanova E., Papchenkova M. In the New Doing Business Ranking, Russia Simultaneously Rose and Dropped to 40th Place // *Vedomosti*, 2016.

² National investment climate ranking of subjects of the Russian Federation, 2017.

³ Report on the results achieved in improving conditions for entrepreneurship and development of small and medium-sized businesses, and increasing support for individual entrepreneurial initiatives, 2017.

⁴ Ibid.

⁵ Assessment of the effects of government control (or supervision) of the activity of economic subjects. Preliminary results of a comprehensive assessment of the efficiency and effectiveness of the most commonly applied forms of government supervision, 2017. See <http://www.ranepa.ru/images/News/2017-09/12-09-2017-ipei-seminar-pres2.pdf>, <http://ipei.ranepa.ru/konferencii-ctgu/920-anons-seminara-otsenka-rezultativnosti-i-effektivnosti-kontrolno-nadzornoj-deyatelnosti-na-primere-naibolee-massovykh-vidov-gosudarstvennogo-kontrolya-nadzora>

⁶ Report on the results achieved in improving conditions for entrepreneurship and development of small and medium-sized businesses, and increasing support for individual entrepreneurial initiatives, 2017.

- from January 1, 2017, the income cap that entitles a taxpayer to continue operating under a simplified taxation system has been raised from RUB 60 million¹ to RUB 150 million² (a deflator will not be applied to the income cap until January 1, 2020³);
- from January 1, 2017, the cap on corporate income received over a year's first 9 months that entitles a company to switch over to a simplified taxation system has been raised from RUB 45 million⁴ to RUB 112.5 million⁵ (a deflator will not be applied to the income cap until January 1, 2020⁶);
- from January 1, 2017, the cap on fixed asset value entitling a company to switch over to STS (simplified taxation system) has been raised from RUB 100 to RUB 150 million.⁷

(2) the possibility to apply the regime of single tax on presumptive income (STPI) has been extended to January 1, 2021.⁸

At the same time, it is expected that in 2018, STPI⁹ will be raised by 3.9 percent relative to the inflation forecast, and this will have a negative effect primarily on the micro companies operating in the trading and services sector.

(3) The tax holiday, introduced for the period from January 1, 2015 through January 1, 2021 continue; for the first time, a registered IE operating under a STS or PTS (patent-based taxation system) has been made exempt from tax over the first two years of his or her operation.¹⁰

¹ This value was to be calculated annually with a deflator. Thus, in 2016, the income cap that allowed a taxpayer to continue the use of a simplified taxation system amounted to RUB 79.74 million.

² By Federal Law No 401-FZ of 30 November 2016 'On the Introduction of Alterations to Parts One and Two of the Tax Code of the Russian Federation and Some Legislative Acts of the Russian Federation', the Tax Code of the Russian Federation (Part Two) (as approved by Federal Law No 117-FZ of August 5, 2000, Article 346.13. The Procedure of and Conditions for the Start and Termination of the Use of Simplified Taxation System', Item 4) was amended.

³ Federal Law No 243-FZ of July 3, 2016 (as amended on November 14, 2017) 'On the Introduction of Alterations to Parts One and Two of the Tax Code of the Russian Federation in Connection with the Delegation, to Tax Agencies, of the Powers to Administer the Insurance Contributions to Compulsory Pension, Social, and Medical Insurance.'

⁴ This value was to be calculated annually with a deflator. Thus, in 2016, the income cap for a year's first 9 months that allowed a taxpayer to continue the use of a simplified taxation system amounted to RUB 51.615 million.

⁵ By Federal Law No 401-FZ of November 30, 2016 'On the Introduction of Alterations to Parts One and Two of the Tax Code of the Russian Federation and Some Legislative Acts of the Russian Federation', the Tax Code of the Russian Federation (Part Two) (as approved by Federal Law No 117-FZ of August 5, 2000) was amended (Article 346.12 'Taxpayers', Item 2).

⁶ Federal Law No 243-FZ of July 3, 2016 (as amended on November 14, 2017) 'On the Introduction of Alterations to Parts One and Two of the Tax Code of the Russian Federation in Connection with the Delegation, to Tax Agencies, of the Powers to Administer the Insurance Contributions to Compulsory Pension, Social, and Medical Insurance.'

⁷ By Federal Law No 243-FZ of July 3, 2016 (as amended on November 14, 2017) 'On the Introduction of Alterations to Parts One and Two of the Tax Code of the Russian Federation in Connection with the Delegation, to Tax Agencies, of the Powers to Administer the Insurance Contributions to Compulsory Pension, Social, and Medical Insurance', the Tax Code of the Russian Federation (Part Two), as approved by Federal Law No 117-FZ of August 5, 2000, was amended (Article 346.12 'Taxpayers', Item 16).

⁸ Federal Law No 178-FZ of June 2, 2016 'On the Introduction of Alterations to Article 346.32 of Part Two of the Tax Code of the Russian Federation and Article 5 of the Federal Law 'On the Introduction of Alterations to Parts One and Two of the Tax Code of the Russian Federation and Article 26 of the Federal Law 'On Banks and Banking Activity', Article 2.

⁹ RBC, 2017. URL: <https://www.rbc.ru/economics/12/10/2017/59df6db49a7947d4d4c745d1>

¹⁰ By Federal Law No 477-FZ of December 29, 2014 'On the Introduction of Alterations to Part Two of the Tax Code of the Russian Federation', a tax holiday is not to be introduced throughout the entire territory of the Russian Federation; instead, RF subjects are granted the right to introduce a tax holiday on their own within their respective

(4) Self-employed citizens that operate without hired staff and render private tutoring services, house cleaning and other household services, care for children and persons with disabilities, who have notified a tax agency of their services rendered to individuals, are to be exempt from PIT in 2017 and 2018.¹

4.5. Fixed investment²

4.5.1. Investment resources

The macroeconomic aspect of the investment model is determined by dynamics and structure of major indexes of the real sector and by monetary and financial markets as well as by characteristics of reproduction and usage of principal factors of production economy wide by types of economic activity. This allows not only to assess the investment potential of the economy from the point of view of mobilization of internal development reserves but also to reveal constraints and possibilities for raising the investment attractiveness for the Russian and foreign capital. Institutional environment, norms and rules of regulation the investment activity, development of financial and credit system, risks of changes in social and political, economic, infrastructure and organization and managerial factors represent another feature of the investment model. The investment model being a complex system includes a third aspect – mechanism of interaction of different subjects of the investment process (state sector, corporate sector, households, foreign investors) and investment decision making by economic entities. One should also take into consideration specific features of the investment model depending on time-frame. In short-term perspective, economic growth can be determined by a system of non-capital intensive development factors, in particular, decline in inflation, reduction of costs, and shutdown of inefficient products. In medium- and long-term perspective, the role of investments notably increases due to the need to resolve deep structural issues of modernization of production and raising competitiveness of the economy.

Instability of macroeconomic situation over a prolonged period of time (2013–2016) has determine the development of the investment/construction complex in 2017. The former was due to impact of both accumulated over that period issues linked to the renewal of fixed capital stock and market factors. Renewal of investment flows into the fixed assets seen in 2010 to the pre-crisis level and the outstripping growth of investment demand against the GDP dynamics growth seen in 2011–2012 was not accompanied both by an increase in return on investment and labor and by significant changes in the investment structure and by type of business activity, which has resulted in conservation of structural disproportions and dynamics slowdown. The investment crisis of 2013–2016 has taken a protracted nature whose evolvement was aggravated by the changes in availability of resources on the global capital market, structure of capital formation for the gross national savings, movement of capital goods and investments in the wake of sanctions, and downbeat investment plans of Russian and foreign investors on the domestic market. It should be noted that in the acute phase of the investment crisis (Q4 2014–Q4 2015) downbeat of business plans was determined both by a surge of the key rate and by price hike on the investment goods. Dynamics of the investment plans seen in 2016 was mixed

territories. Nevertheless, many regions introduced, within their respective territories, zero taxation of startup entrepreneurs. The list of such regions, as of March 1, 2017, is posted to the RF Ministry of Finances' official website. See https://www.minfin.ru/ru/document/?id_4=117728

¹ Item 70 of Article 217 of the Tax Code of the Russian Federation, as amended by Federal Law No 401-FZ of November 30, 2016.

² This section is written by Olga Izryadnova, the Gaidar Institute, IAES-RANEPА.

amid adaptation of the economy to changed macroeconomic conditions and access to the world capital market. From Q4 2016 onwards, upward trend of investment demand was observed on the back of the adaptation of the investment\construction complex to perform amid sanctions.

Moreover, in 2016, the decline in interests rates to 10.5 percent (July 14) and then to 10.0 percent (September 19) enabled the investment-construction complex to slow the fall rate and to recover some, albeit meager, growth in fixed investment in Q4 2016.

In 2017, the last four-year trend changed—fixed investment were growing at the rates outstripping the GDP growth dynamics and the households’ final consumption expenditure. Amid stable positive quarter dynamics increment of fixed investments in 2017 constituted 4.4 percent, meanwhile GDP grew at 1.5 percent against the previous year (*Fig. 39*).

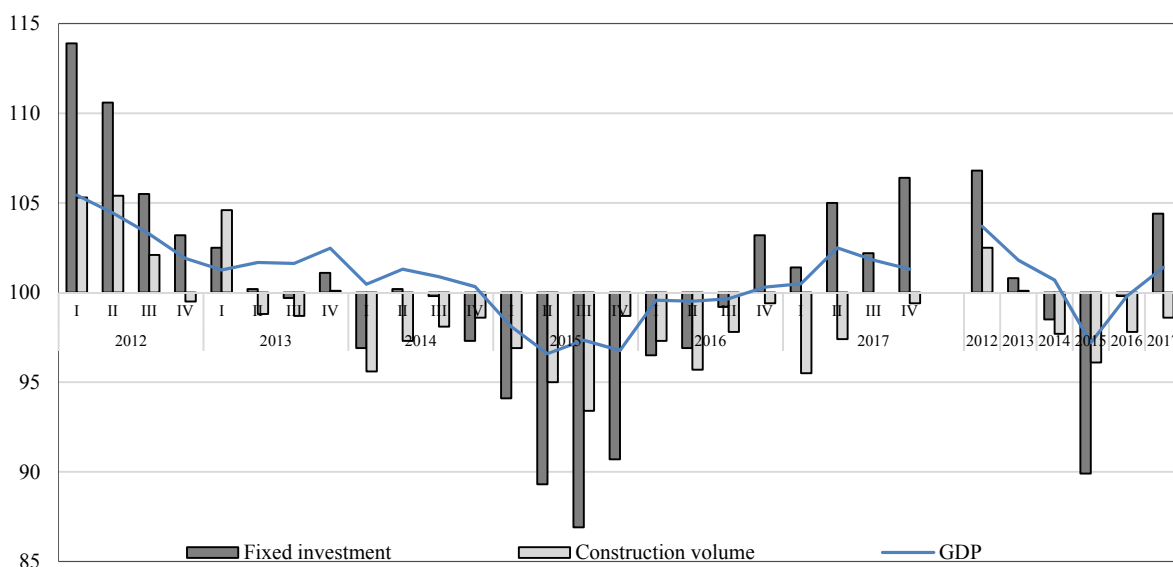


Fig. 39. Dynamics of GDP, fixed investment and construction volume in 2012–2017, in percent to the corresponding period of the previous year

Source: Rosstat.

Reduction of capital outflows, renewal of direct foreign investments growth in the Russian economy, as well as changes in the terms of borrowing on the domestic market amid reduction of the key rate positively affected financial conditions of investment plans in 2016–2017. In Q2 2017, in the wake of the interest rates decrease the investment\construction complex (amid total deferred demand) renewed an upward trend of the investments in fixed assets and stabilization of construction volumes and commissioning new housing against the same indexes of the previous year. As year-end results as a whole demonstrate that in the context of absence of necessary construction backlogs and current use of investment the dynamics of construction volumes including housing construction remained in the red and would determined the performance of the construction complex in early 2018 (*Table 19*).

Over a prolonged period, the investment model had such specific feature as significant volumes and high gross savings rate amid low level of their transformation into fixed investments. Unpredictable development of economic situation in 2014-2015 enhanced net private capital outflow, mounting risks, and downgraded sovereign ratings affected foreign investors’ plans. With the imposition of sanctions and restricted access to the global capital

markets, there was a simultaneous contraction of direct investments into the Russian economy and fall of revenues proceeding from the foreign investment activity. On the back of changes in the macroeconomic situation seen in 2016-2017, there was an inflow of direct investments in the Russian economy, which for the first time since 2012 exceeded Russian foreign investments (*Fig. 40*).

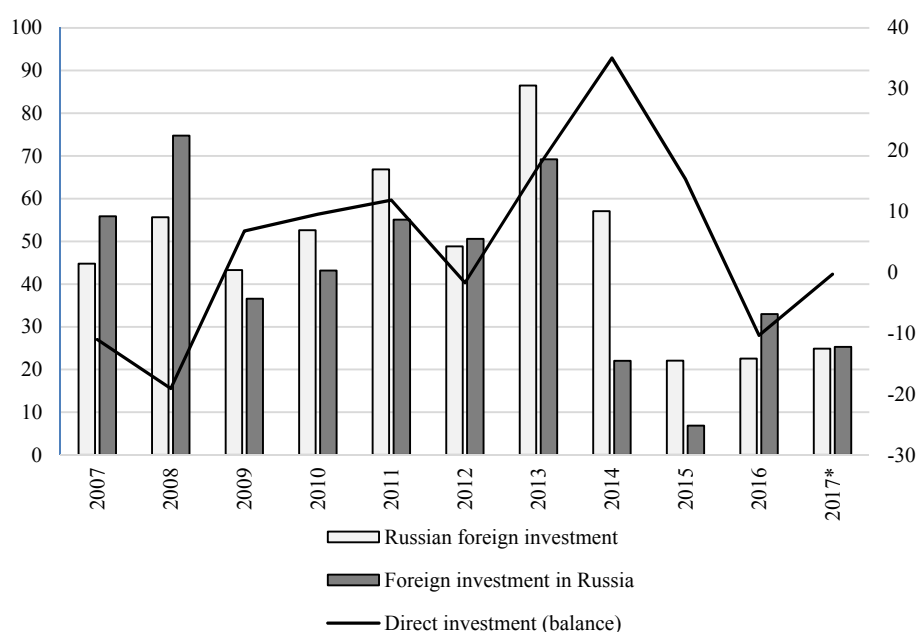
Table 19

Financial environment for investment in 2010–2017

	2012	2013	2014	2015	2016	2017
Refinancing rate (year-end), percent	8,25	8,25				
Key interest rate (year-end), percent	-	5,50	17,00	11,0	10,0	7,75
Bank of Russia international reserves (year-end), USD bn.	537,6	509,6	385,5	368,0	376,3	432,1
Net capital inflows (-) / outflows (+) in private sector, USD bn	53,9	60,3	152,1	58,1	19,8	31,3
Price indices, percent change, Dec to Dec	50,6	69,2	22,0	6,9	32,5	25,3*
Consumer prices for goods and services						
Industrial producer prices	106,6	106,5	111,4	112,9	105,4	102,5
Composite price index for imported investment goods	105,1	103,7	105,9	112,4	107,5	108,4
Including	106,9	104,9	107,2	110,3	103,2	103,1
producer prices for construction products						
machinery and equipment	108,3	104,3	104,6	104,1	106,6	104,9
USD/RUB official exchange rate (year-end), RUB/USD.	103,9	103,1	112,3	120,1	97,8	101,1
Net capital inflows (-) / outflows (+) in private sector, USD bn	30,37	32,73	56,26	72,88	60,66	57,60

* Data for January-September 2017

Source: Rosstat.



* January-September 2017

Fig. 40. Direct foreign investment into the Russian Federation in 2007–2017, balance of payments, USD billion.

Sources: Rosstat, Bank of Russia.

The formation of the savings model determined potential resources of the investment plans in 2013–2017. Amid high interest rates, the share of attracted by the credit institutions corporate

resources constituted 19.0 percent of GDP and households' deposits – to 28.2 percent of GDP in 2016 against 14.8 and 23.2 percent, respectively in 2013. In 2016–2017, in the context of declined inflationary pressure and changes in terms of lending, dynamics of corporate deposits somewhat slowed and their share in GDP fell to 19.2 percent which was dictated by the need to resolve issues related to the renewal of fixed assets. Upward trend of gross savings share resulting from changes in the ruble exchange rate was observed. Growth in the share of revenue and other mixed income in GDP amid current correlation between interest rates and inflation as a whole for the period had no significant effect on investment decisions. Tightening on budgetary constraints led to a reduction of financing share in state investments in 2017 to 2.1 percent of GDP including budget-funded investment – to 1.1 percent of GDP (*Table 20*).

Table 20

Key features of investment resources in 2012–2017, as percent of GDP

	2012	2013	2014	2015	2016	2017
Gross savings	31.2	28.5	28.6	29.9	29.0	29.8
Gross fixed capital formation	18.5	18.4	17.6	16.7	17.2	17.3
Fixed investment	41.3	40.0	38.9	42.0	41.2	41.5
Gross profit and other mixed income	35.8	33.4	33.8	32.3	32.8	33.3
Consolidated budget revenues	2.5	2.6	2.2	2.3	2.2	2.1
Budget-funded investment	1.4	1.4	1.2	1.4	1.2	1.1
Including federal budget-funded investment	20.9	23.2	23.4	27.8	28.2	28.2
Financial assets growth and real estate purchase	14.1	14.8	21.5	22.8	19.0	19.4

Source: Rosstat.

While analyzing the dynamics and the structure of capital formation available for investments, it is paramount to estimate the households' investment potential. In the context of current households' income dynamics seen in recent ten years, there was an increase in retail deposits kept in depository institutions as well as growing volume and increment rate of financial assets in the households' income. In 2014–2017, amid changing dynamics of the nominal and real households' income and decrease in thrift propensity, the households' role in capital formation for investment purposes declined. In 2010, the households accounted for 46.8 percent against 36.1 percent in 2013, and 27.8 percent in 2016 of the total volume of funds available for investment across institutional investors. Changes in the structure of capital formation across institutional investors was determined by the increasing role of non-financial corporations and state administration.

During number of years, high crude oil prices maintained relatively high level of foreign and domestic investment in Russia. Rapid growth of domestic income to a certain extent offset institutional weaknesses of the economy, in other words, the market expansion rates and profits growth dampened risks proceeding from underdevelopment of institutions.

4.5.2. Fixed investment financing by source and by type of ownership

In 2013–2017, own capital of enterprises and institutions remained the principal source for finding investments. In 2017, investments funded by own capital accounted for 52.1 percent of the total fixed investments. At the same time, the financial results obtained by enterprises and institutions as a whole in economy dropped by 6.8 percent compared to 2016 and bank interest rates decreased from 10 to 7.75 percent, which led to growing activity on the credit market.

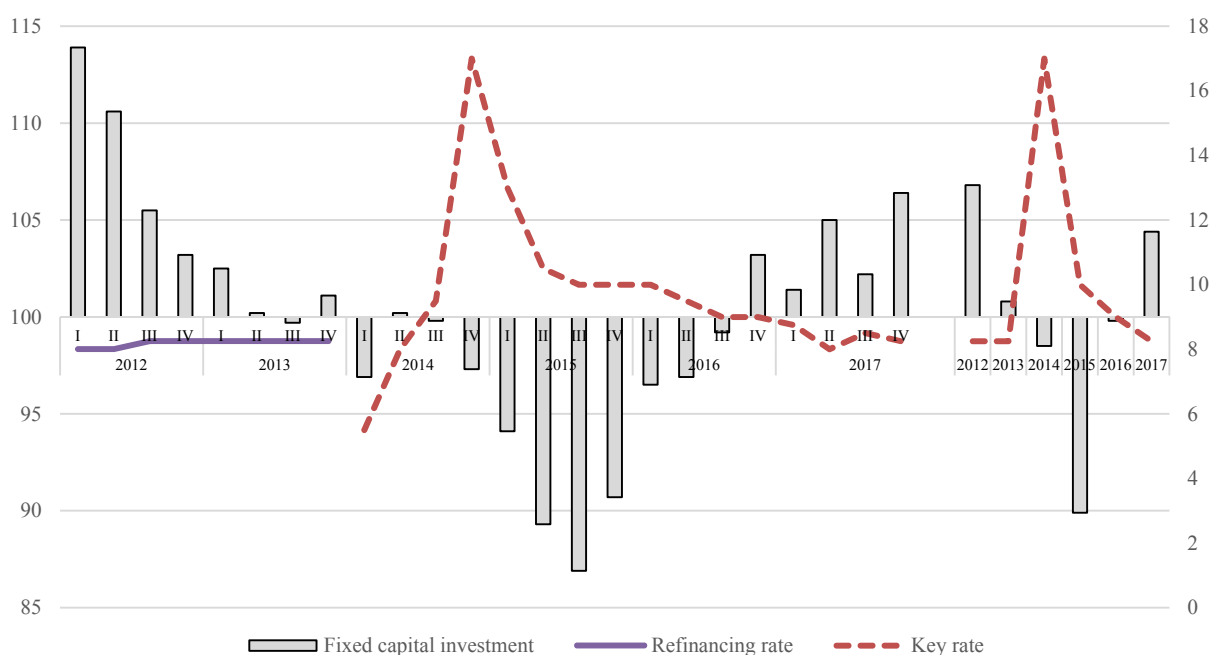


Fig. 41. Fixed investment dynamics and change of key rate in 2012–2017 гг., in percent

Source: Rosstat.

It is hard to assess straightforwardly the extent of bank participation in financing investment programs. 2017 by contrast with the previous year, saw an increment in foreign banks loans, which totally offset the net reduction of Russian banks' investment and loans issued by other institutions in the capital formation available for investment in Russian economy. The share of Russian bank loans in the structure of funding sources for fixed investments in 2017 constituted 5.5 percent and was at all-time low for last 15 years.

Budget funds as a source of fixed investment financing changed. In 2017, budget funds as a source of investment financing represented 16.3 percent of total fixed investment in the economy. The transformation of the 2016–2017 structure of budget-funded investment was driven by an increase in volumes and in the share of Russian subjects' budgets, thus compensating for the decline in the scale of federal budget-funded investment. The dynamics and the structure of state investment was formed according to the priorities in up-grading and development of strategically important facilities, realization of investment projects aimed at the implementation of the state of the art technologies for manufacturing competitive import substitution products as well as development of transportation and energy infrastructure. In 2017, the federal budget accounted for 2.1 percent of the total fixed investment including the federal budget accounted for 1.1 percent compared to 2.6 percent and 1.4 percent, respectively in 2013.

Institutional investors with state participation represented in 2017 other sources of capital formation for investment purposes and accounted for 12.0 percent in total investments following the four-year compression of their share and scale in investment plans.

The redistribution of investment funds by types of fixed assets was accompanied by a reduction of attracted funds from institutions and households for cost-sharing construction projects. Investment in real estate business in 2017 contracted by 4.1 percent compared to the

previous year. One should pay attention to the structural financing features stemming from a reduction of volumes and share of households' funds in the cost-sharing housing construction in the analysis of changes in absolute volumes of investment in housing construction in 2015–2017. At 2017-year end, the share of individual investors in cost-sharing housing construction projects constituted 2.0% of total fixed investment and shrank by 0.3 percentage point compared to the previous year (*Table 21*). Individual developers commissioned 32.7 million square meters in comparison with 31.6 million square meters of total floorage a year earlier. In the context of general downward trend in personal income and contraction of saving ratio the development of new programs designed by banking authorities aimed at a reduction of bank interest rates on housing mortgage shapes the investment plans and on the back of this one can expect positive shifts on the mortgage market in the coming year.

Table 21

Fixed investment structure by source of financing (excluding small businesses and investment volumes unobservable by statistical methods), as percent to total

	2012	2013	2014	2015	2016	2017
Fixed investment total	100	100	100	100	100	100
Including by source of financing:						
own capital	44.5	45.2	45.7	50.2	51.0	52.1
fundraising	55.5	54.8	54.3	49.8	49.0	47.9
of which:						
bank loans	8.4	10.0	10.6	8.1	10.4	10.9
Russian bank loans	7.2	8.9	8.0	6.4	7.5	5.5
including foreign bank loans	1.2	1.1	2.6	1.7	2.9	5.4
fundraising from other organizations	6.1	6.2	6.4	6.7	6.0	5.1
inward foreign investments		0.8	0.9	1.1	0.8	0.7
budget funds	17.9	19.0	17.0	18.3	16.4	16.3
including:						
federal budget funds	9.7	10.0	9.0	11.3	9.3	8.2
subjects of Russia budget funds	7.1	7.5	6.5	5.7	6.0	6.8
off-budget funds	1.1	1.5	1.5	1.3	1.1	1.3
money generated from investment in shared participation in construction projects (legal entities and individuals)	0.4	0.3	0.2	0.3	0.2	0.2
including individuals	2.7	2.9	3.5	3.2	3.0	2.7
other	2.1	2.3	2.7	2.4	2.3	2.0
Fixed investment total	20.0	15.6	15.7	12.8	12.0	12.2

Source: Rosstat.

The national investment strategy of 2009–2016 rested on the acknowledgment that large businesses are major contributors to the national modernization and global competitiveness. To trigger the investment process, the state, first, was actively involved in developing the Russian corporate sector, focusing on the establishment, optimization and structural evolution, as well as improving competitiveness, of large companies. The state over the last few years was actively involved in the establishment of state-owned holding companies in aerospace and shipbuilding industries, railway and oil sectors. The investment crisis which engulfed state-owned enterprises turned into a protracted one and reflected their low efficiency. The fall of state corporations' investment in 2015 by 16.0 percent as compared with the previous year determined their weak investment efforts in 2016–2017. Complexity of the investment process management system revealed the issues of the investment climate improvement and strengthening of effort aimed at optimization of the institutional structure, reduction of the state participation in the economy and implementation of privatization plans. Second, the state participated in the investment process as a proactive member and source of funding being a part of public private partnership.

In 2011-2017, privately owned enterprises, foreign-owned enterprises and joint ventures preserved positive nominal volumes of fixed investment which partly offset instability of investment activity of state and municipal enterprises.

Analysis of capital formation for fixed investment by type of ownership in 2017 shows that the private sector continued contributing positively to the investment process amid reduced contribution of public and mixed ownership and investment by state-owned corporations. (Table 22).

Table 22

Fixed investment indices in current prices by type of ownership, in current prices, as percent to the previous year

	2011	2012	2013	2014	2015	2016	2017*
Fixed investment – total	120.6	114.0	106.9	103.4	100.0	106.1	106.6
public	118.1	113.6	109.5	89.4	99.2	109.1	105.3
federal	119.1	106.7	103.1	94.9	105.0	99.3	101.7
Subjects of Federation	115.2	129.5	119.2	82.2	90.4	126.2	110.3
municipal	117.7	116.8	114.4	100.8	88.8	97.6	98.7
Russian mixed ownership	192.0	115.8	83.7	106.3	84.3	101.3	104.4
state-owned corporations	162.6	117.4	108.4	103.9	84.0	103.5	96.0
private	114.8	106.7	113.6	108.0	100.9	104.3	116.5
foreign and mixed Russian/foreign ownership	106.1	144.7	98.3	100.9	113.0	114.7	103.0

* less small businesses and investment volumes unobserved by direct statistical methods.

Source: Rosstat.

4.5.3. Use of investment by areas of activity: reproductive structure

Prolonged investment pause determined the increased effect of limiting factors of fixed assets on the economic growth dynamics.

In 2015–2016, amid sharp fixed investment contraction, fewer enterprises and institutions designed long-term plans for high-productivity job creation, implementation of new production technologies and raising environmental characteristics of production. The fixed investment downturn and reduction in commissioned fixed assets seen in 2013–2017 was attended by decline of renovation rates and growing share of used-up fixed assets. Lack of their timely renovation resulted in extended timeline for use of inefficient machinery and equipment. For example, according to sample survey of the investment activity of organizations, in 2016 (corresponding data for 2017 will appear solely in 2018) retirement of obsolete machinery, equipment, and means of transport due large scale of depreciation was reported by 58 percent of organizations meanwhile merely 9 percent reported the reason for their retirement – economic inefficiency of their use. Around 60 percent of organizations carried out reconstruction and upgrade of fixed assets in 2016. This investment strategy resulted in the total depreciation and increased level of wear of fixed assets. The low volume of fixed assets disposal resulted in a high level of wear and the age structure of fixed assets. To note, on the back of the implementation of projects aimed at upgrade, reconstruction and technical retooling of production there appeared an interest in complex renovation of fixed assets including procurement of technological lines, use of electronics and computer technologies and mechanical and automation equipment for engineers and managers and development of communications, which fully corresponded long-term targets to raise effectiveness and competitiveness of production.

Possibilities for stepping up processes of modernization, reconstruction and renewal of productive facilities remained dependent on the level of development and state the

investment/construction complex production facilities. Russia’s machine-building complex has long been developing at a slower pace than fixed investment dynamics (*Fig. 42*). The lack of domestically produced investment goods was offset by imports of machinery and equipment, Although its importance estimated in shares to the total fixed investment volume and to investment in machinery and equipment was gradually falling in the economy as a whole.

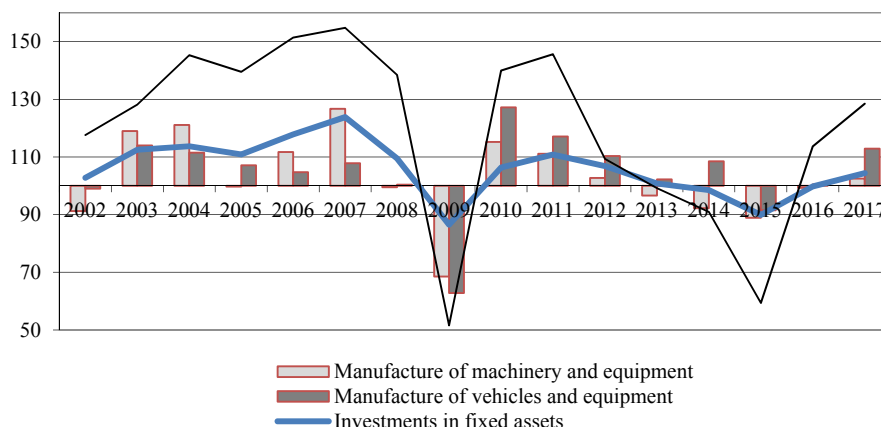


Fig. 42. Dynamics of domestic production of machine-building complex, imports of machinery and equipment and fixed investment in 2002–2017, as percent to the previous year

Source: Rosstat.

The investment/construction activity in 2016–2017 was characterized by a stronger fall of both construction scope of work and commissioning of housing floor space against fixed investment dynamics. Construction scope of work in 2017 constituted 98.6 percent and commissioning of housing floor space – 97.6 percent compared to the previous year (*Fig. 43*).

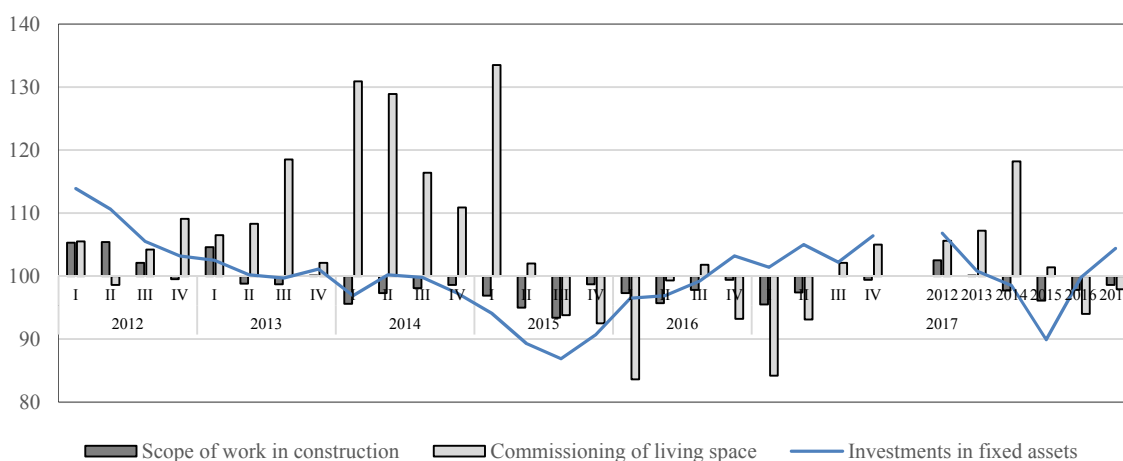


Fig. 43. Dynamics of construction scope of work and commissioning of housing floor space and fixed investment in 2012–2017, as percent to the corresponding period of the previous year

Source: Rosstat.

The fixed investment structure boasted of increased investment share in construction of industrial buildings amid contraction of investment on housing construction (*Table 23*).

Table 23

**Structure of fixed investment by types of fixed assets in 2013–2017,
as percent to total**

	Total enterprises				Less small businesses and informal sector	
	2013	2014	2015	2016	2016	2017
Investment in fixed assets	100	100	100	100	100	100
including:						
Housing	12.5	14.5	15.6	15.4	5.7	4.8
Buildings (less residential) and facilities	41.5	40.8	43.7	45.2	51.8	51.1
Machinery, equipment and means of transport	38.8	36.3	31.5	30.6	33.1	33.8
Of which information, computer and telecommunication equipment						
Intellectual property assets					2.9	3.9
Other	7.2	8.4	9.2	8.8	7.1	5.7

Source: Rosstat.

Growing share of investment in non-residential structures was determined by growing scope of work and commissioning of industrial and agricultural facilities amid contraction of scope of construction work in administrative, commercial and social spheres. Growing commissioned number of industrial buildings conditions change in the investment technological structure and determines growth of costs on machinery and equipment. However, comparison of domestic manufacture of equipment, imports of investment goods and fixed investment demonstrate that in the context of current dynamics of the machine-building complex and on-going sanctions on imports of certain types of equipment and machinery breakdown of technological structure balance and technological structure of investment becomes one of the major constraints.

At 2017-year end, simultaneous recovery of positive dynamics of investment goods imports and output of domestic machinery and equipment removed tensions in the investment/construction sphere.

Efficiency of capital flows for the renewal of fixed capital remains an issue for the investment activity. In the context of declared tasks aimed at increasing competitiveness a high degree of deterioration and obsolescence of fixed assets, an adverse age composition of the machinery fleet and equipment amid downward fixed investment trend as a whole and especially in active part represent a rather tough economic growth constraint.

4.5.4. Investment financing by types of economic activity

Recovery of the investment activity positive dynamics seen in 2017 was characterized by a simultaneous investment growth in tradable and non-tradable sectors of the economy. Not so deep decrees of fixed investment registered in tradable sector of the economy in 2015 together with a subsequent two-year upward trend resulted in an increase in expenses on the investment activity seen in 2017 by 3.4 percent against 2013, and ensured value added growth by 1.6 percent. Fixed investment in non-tradable sector of the economy in 2017 constituted 86.8 percent against 2013 (*Fig. 44*).

Change in fixed investment scale failed to offset structural imbalance in renewal of fixed assets. In 2017, the trend to fixed investment growth in raw materials production continued (108.6 percent to 2016) mainly by means of investment in fuel and energy complex

(114.1 percent). The share of total investment in extraction, refining and transportation in the total fixed investment volume in 2017 moved up to 26.8 percent and by 3.6 percentage points exceeded the previous year level owing to outstripping growth of investment in the pipeline industry development. Investment in surface and pipeline transport increased 1.3-fold including in the pipeline transport 1.17-fold compared to 2016. This is explained, in particular, by the implementation of large structural projects and orders for their implementation were placed at domestic enterprises.

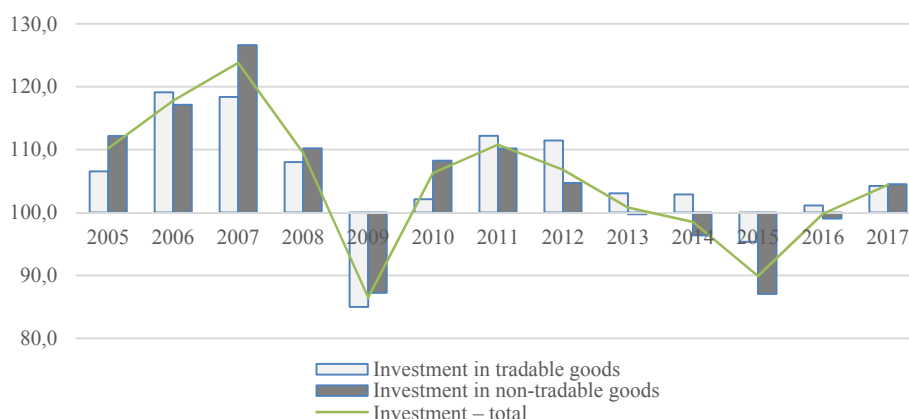


Fig. 44. Fixed investment dynamics of tradable and non-tradable goods in 2003–2017, as percent to previous year

Source: Rosstat.

Structure of fixed investment in industry was determined by an ongoing slump of investment volume in manufacturing. The share of investment in manufacturing in the total volume of fixed assets fell by 0.8 percentage point against 2016, which is due to a contraction of investment in metallurgical and chemical complexes.

Contraction of investment in capital products and construction materials raises risks for the construction/investment complex performance in the long term. Reduction of investment in fixed assets of production of construction materials (82.2 percent to 2016) and in proper construction (96.3 percent) determined low dynamics of construction scope of work and correspondingly assimilation of capital investments. In 2017, the decrease of construction scope of work came to 1.4 percent and commissioning of new housing – 2.1 percent against 2016.

Non-tradable sector of the economy reported an outstripping growth of fixed investment in transport and warehousing (108.8 percent to 2016), in IT development (114.5 percent), in financial and insurance (163.4 percent), sport, culture and recreation (134.0 percent), as well as in the development of health care (112.7 percent). Low investment level in education (93.7 percent), and in R&D (90.8 percent).

Prospects for structural changes and diversification of the economy are determined by resolution of modernization issue amid transition to new technologies and acceleration of development of high-tech manufacturing, which form export potential for goods and service with high value added.

Creation of conditions for transition to sustainable development was linked with the implementation of measures aimed at modernization of industrial potential, expansion of investment and innovation activity and upgrading human capital. Changes in the production

structure are possible solely in case of increasing competition, formation of powerful small and medium-size businesses, reduction of institutional barriers, improved mechanisms for attraction of investment, simplification of doing business procedures, and creation of adequate infrastructure.

4.6. The oil and gas sector¹

The oil and gas sector is playing an important role in the income generation for the state budget and Russia's trade balance. In 2017, the volumes of crude oil production somewhat fell owing to Russia's commitments to curb production as a result of the oil output cut agreement between some OPEC and non-OPEC countries. Under the so-called tax maneuver in force in the oil industry, refining depth went up, production and export of fuel oil moved down and export of crude oil, a highly lucrative source of state budget revenues, increased. In 2017, natural gas production and export hit an all-time peak. Despite the plunge of oil and gas world prices, the oil and gas sector continues to constitute over a half of Russian exports.

4.6.1. Dynamics of global oil and gas prices

Global crude oil prices in 2017 were under a spell of two major factor: steady oil supply glut and a drastic fall in crude oil prices and the implementation of the agreement between OPEC and other non-OPEC producers including Russia aimed at cutting production. The growth in supply was driven up basically by a rapid increase in the production of shale oil in the United States because of new shale technologies and high crude oil prices that were present over the past few years. Facing this context, OPEC countries refused to cut their oil production quota and in fact switched to a policy of retaining their market share in the global oil market. In this context, OPEC opted not to cut its oil production quota and de facto launched a policy of retaining its market share. Subsequently, the price of Russian crude oil dropped to an average of \$51.2 and \$41.9 per barrel in 2015 and 2016, respectively (*Table 24, Fig. 45*).

Table 24

World crude oil prices in 2010–2017, USD/bbl

	2010	2011	2012	2013	2014	2015	2016	2017
Brent crude price, UK	79.6	111.0	112.0	108.8	98.9	52.4	44.0	54.4
Urals crude price, Russia	78.3	109.1	110.3	107.7	97.7	51.2	41.9	53.1
Prices on Russian gas on European market, US\$/thousand cubic m.	296.0	381.5	431.3	402.0	376.0	267.9	156.7	194.1

Sources: IMF, OECD/IEA, Rosstat.

The production at cost-intensive oil fields, primarily shale oil fields in the United States, was cut driven by low crude oil prices in 2015–2016. In the meantime, the decline in oil production in cost-intensive regions was actually neutralized by the increase in oil production in OPEC countries seeking to expand their market share and to compensate, at least in part, for falling revenues by boosting oil supplies.

However, significant plunge of crude oil prices recorded in 2016 motivated the oil producing countries to act decisively regarding cutting the oil production. At the end of 2016, OPEC and a group of oil producing countries from outside OPEC, including Russia, concluded a production cut agreement in effect since 1 January 2017. In compliance with this agreement OPEC (13 countries) agrees to reduce its oil production by 1.2 m bpd and the other parties thereto, 11 non-OPEC countries, agree to cut output by 558,000 bpd, Russia by 300,000 bpd

¹ This section is written by Yuri Bobylev, the Gaidar Institute, IAES-RANEP.

against the production level of October 2016. As far as the crude oil production in Russia was growing and in October 2016 peaked its maximum, the implementation of undertaken commitments meant a refusal from further increase in crude oil production and curbing it in 2017 to the average level of 2016.

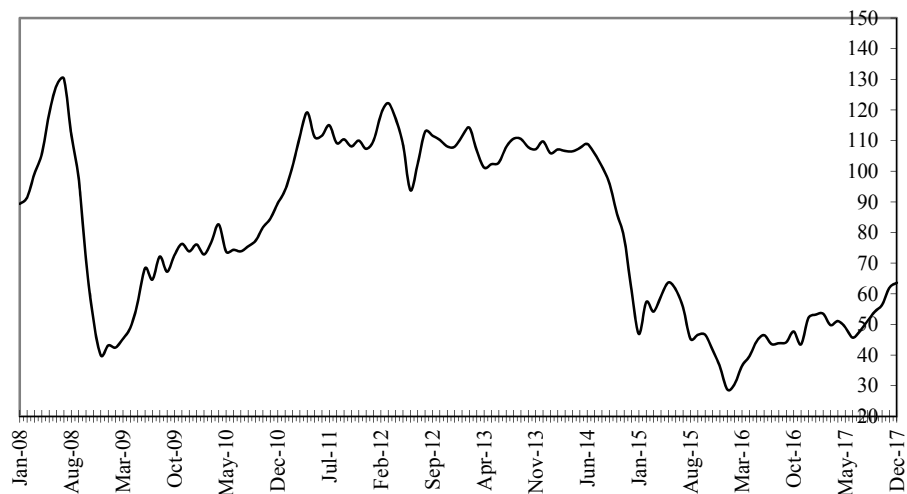


Fig. 45. Urals crude price in 2008–2017 гг., US\$/b

Source: Pocerar.

In an effort to decrease further the oil supply glut, the OPEC and non-OPEC parties to the agreement decided in May 2017 to extend the agreement for another nine months, that is, between July 2017 and March 2018. In late November 2017, parties to the agreement took a decision to extend the effective date of the agreement through the end of 2018.

As a result of the agreement, the excessive supply was cut and the world prices went up noticeably. For example, the Brent price rose from USD 44 a barrel in 2016 to USD 54.4 a barrel in 2017. The Urals price averaged USD 53.1 a barrel in 2017, up USD 11 a barrel against 2016. Meanwhile in December 2017, the Urals price hit USD 63.6 a barrel up USD 19.7 a barrel against November 2016 (the last month prior to signing of agreement on production cut) and up USD 11.5 a barrel compared to December 2016.

The surplus of commercial crude stockpiles (crude oil inventories) have decreased markedly (stocks in oil terminals), thus evidencing a gradual market rebalancing. According to the data released by the monitoring committee of the parties to the agreement, the excess of commercial crude oil stocks for the average five-year level constituted 340 million barrels, by the year-end – 118 million barrels down 65 percent.

A markedly buoyant demand also had a positive effect on the market balance and on oil prices. Global oil demand increased 1.5 mb/d in 2017 (or 1.6% year-on-year), according to the International Energy Agency estimates, OECD.

However, the recovering growth in the US shale oil production as well as increased crude oil production by some non-OPEC countries have recently become a challenge to the agreement. Advances in shale oil technologies and cost-effective methods allowed the US oil industry to adapt to a relatively low crude oil prices. As a result, the number of operating oil rigs has been increasing in 2017. According to the recent forecast of the U.S. Energy

Information Administration (EIA), the US crude oil production in 2017 constituted 9.33 million barrels per day, adding another 0.47 million barrels per day (up 5.3 percent) against the previous year.

Prices on Russian natural gas exported abroad on long-term contracts, as a rule, are linked to the prices of petroleum products and owing to this factor follow the world crude oil prices. Following a significant decrease in 2015-2016 the sale price on Russian gas on the European market in 2017 went up to USD 194.1 per thousand cubic meters (up 23.9 percent compared to the previous year). Meanwhile changes that took place on the European market over recent years—increased supply of gas by other natural gas producers and lower spot prices on natural gas compared to the prices of long-term contracts signed by Gazprom produce downward pressure on the Russian natural gas.

4.6.2. Dynamics and production structure in oil and gas sector

Volumes of crude oil production in 2017 were governed by Russia’s compliance with its commitment to curb oil production taken within the framework of the agreement between OPEC and a group of non-member countries.¹ In 2017, the Russian oil production reached 546.8 million tons or 99.9 percent in comparison with the previous year (*Table 25, Table 26*). In the meantime, natural gas production (including natural, associated and condensate) went up to 704.1 billion cubic meters, which was an all-time high. Russia boasts of significant capacity potential to maintain and increase oil and gas extraction. At the same time, the oil sector faces deteriorated production conditions. Considerable share of producing fields demonstrate a downward trend of extraction and the new deposits in the majority of cases have not as good mining-and-geological and geographic parameters. Their development requires higher investment, running and transportation costs. In order to offset falling production on the brown fields, it is necessary of develop both new oil deposits in regions with underdeveloped infrastructure or in those regions that lack infrastructure all together, and to develop low quality deposits in developed regions.²

Table 25

Production and refining of crude oil in Russia in 2010–2017

	2010	2011	2012	2013	2014	2015	2016	2017
Extraction of crude oil including gas condensate, million tons	505.1	511.4	518.0	523.3	526.7	534.0	547.6	546.8
Primary crude oil refining, million tons	249.3	258.0	270.0	278.0	294.4	287.2	284.5	284.0
Share of crude oil refining in crude production, percent	49.4	50.4	52.1	53.1	55.9	53.8	52.0	51.9
Crude oil refining depth, percent	71.1	70.8	71.5	71.7	72.4	74.4	79.1	81.0

Sources: Rosstat, Russian Energy Ministry.

Year 2017 demonstrates that the tax maneuver has delivered positive outputs: a structural tax reform in this sector envisages gradual reduction of export duties on both crude oil and petroleum products, as well as higher mineral extraction tax (MET).³ According to the adopted

¹ See Yu. Bobylev. Global Oil Market in 2017: constraints to production and prices. Russian Economic Developments. 2018. №1, pp. 12-14.

² See Yu. Bobylev, O. Rasenko. Russia Oil Sector: main trends. Moscow, Delo Publishers, RANEPa, 2016; Yu. Bobylev. Development of Oil Sector in Russia. Voprosy Ekonomiki. 2015. №6, pp. 45–62; Bobylev Yu. The Development of the Russian Oil Sector. Problems of Economic Transition. Vol. 58. 2016. Issue 11-12: The Real Sector Potential. pp. 965–987.

³ See Yu. Bobylev. Tax Maneuver in Oil Industry. Russian Economic Developments. 2015. №8, pp. 45-49.

parameters of tax maneuver effective marginal export duty rate was cut from 59 percent in 2015 to 30 percent in 2017. Meanwhile, export duty rate on heating oil went up from 66 percent to 100 percent from crude oil export duty rate. Such restructuring of the tax system has created incentives for upgrading of oil refining capacities and has resulted in trend changes.

New trends emerged in 2015–2016, and some of them deserve to be mentioned here: (1) oil refining depth increased notably as production and exports of fuel oil declined, (2) crude oil exports, more lucrative for state budget revenues than fuel oil exports, increased, (3) crude oil refining declined in volume terms due to the above two factors (*Table 26*). In 2017, oil-refining depth hit Russia’s all-time high of 81 percent. Note that in the period of 2000–2014, that is, during a long period until the “tax maneuver” took force, depth of oil refining in Russia constituted 71–72%, meanwhile, this indicator comes to 90–95% in leading industrial countries. Over last three years production of heating oil in Russia contracted by 33.7 percent.

Table 26

**Production of crude oil, petroleum products and natural gas in 2010–2017
in percent to previous year**

	2010	2011	2012	2013	2014	2015	2016	2017
Extraction of crude oil including gas condensate	102.1	100.8	101.3	100.9	100.7	101.4	102.5	99.9
Primary crude oil refining	105.5	103.3	104.9	102.7	104.9	97.3	98.7	99.8
Gasoline	100.5	102.0	104.3	101.3	98.8	102.3	101.9	98.4
Diesel fuel	104.2	100.3	98.7	103.1	107.4	98.9	100.2	101.4
Heating oil	108.5	104.6	101.6	103.3	102.0	91.1	80.2	90.7
Natural gas	111.4	102.9	97.7	102.1	95.7	98.7	101.0	107.9

Sources: Rosstat, Ministry of Energy of Russia.

The structure of the oil sector is characterized by a predominance of major vertically-integrated companies and high share of state property. In 2017, five major companies (Rosneft, LUKOIL, Surgutneftegaz, Gazprom, and Tatneft) accounted for 80 percent of crude oil extraction. Recently, the market share of Rosneft drew significantly. In 2013, Rosneft took over TNK-BP and in 2016 acquired controlling stake in Bashneft. The share of Rosneft in the overall crude oil production moved up from 22.3 percent in 2010 to 38.3 percent in 2017 (*Table 27*). Small and medium-size oil producing companies are few in Russia. Oil companies producing up to 2.5 million tons per year (up to 50 thousand barrels per day) account for merely 3 percent of the total production (in USA – 46 percent). Such companies are efficient in developing marginal oilfields and tight oil.

Table 27

Crude oil production structure in 2010–2017

	Oil production in 2010, million t	Share in total production, percent	Oil production in 2016, million t	Share in total production, percent	Oil production in 2017, million t	Share in total production, percent
1	2	3	4	5	6	7
Rosneft*	112.4	22.3	211.1	38.6	209.3	38.3
LUK	90.1	17.8	83.0	15.2	81.7	14.9
TNK-BP	71.7	14.2	–	–	–	–
Surgutneftegaz	59.5	11.8	61.8	11.3	60.5	11.1
Gazprom, including Gazprom neft	43.3	8.6	55.2	10.1	56.9	10.4
Of which: Gazprom	13.5	2.7	17.4	3.2	17.4	3.2
Gazprom neft	29.8	5.9	37.8	6.9	39.5	7.2
Tatneft	26.1	5.2	28.7	5.2	28.9	5.3

Cont'd

1	2	3	4	5	6	7
Bashneft	14.1	2.8	–	–	–	–
Slavneft	18.4	3.6	15.0	2.7	14.3	2.6
RussNefi	13.0	2.6	7.0	1.3	7.0	1.3
NOVATEK	3.8	0.8	8.0	1.5	7.7	1.4
PSA operators	14.4	2.9	16.0	2.9	16.5	3.0
Other producers	38.2	7.6	61.7	11.3	64.0	11.7

* From 2016 including Bashneft.

Sources: Ministry of Energy of RF, own calculations.

4.6.3. Dynamics and structure of oil and gas exports

Against a backdrop of falling crude oil production and growth of oil domestic consumption Russia's crude oil exports somewhat contracted in 2017. In 2017, Russia's exports of crude oil and petroleum products constituted 410.8 million tons, down 2.4 percent against the previous year. It should be noted that 2015-2017 saw a notable growth of 13.1 percent of crude oil exports spurred by the "tax maneuver" and a 10 percent decline in exports of petroleum products mainly owing to a fall of fuel oil exports (*Table 28, Table 29*). The share of net exports of crude oil and petroleum products in 2017 constituted 73.1 (*Table 28*). The share of crude oil in total oil exports constituted 63 percent, and that of petroleum products – 37 percent. At the same time, the share of exports in diesel fuel production accounted for 66.7 percent, and in gasoline production – 11.4 percent (to compare in 2010, the share of exports in gasoline production accounted for 8.2 percent, in 2015 – 12.1 percent, and in 2016 – 13 percent).

Table 28

Ratio of production, consumption and exports of crude oil and natural gas in 2010–2017

	2010	2011	2012	2013	2014	2015	2016	2017
Crude oil, m t								
Production	505.1	511.4	518.0	523.3	526.7	534.0	547.6	546.8
Exports, total	250.4	244.6	239.9	236.6	223.4	244.5	254.8	252.6
Exports to - non-CIS countries	223.9	214.4	211.6	208.0	199.3	221.6	236.2	234.5
Exports to CIS countries	26.5	30.2	28.4	28.7	24.1	22.9	18.6	18.1
Net exports	249.3	243.5	239.1	235.8	222.6	241.6	254.0	252.0
Domestic consumption	125.9	140.7	142.1	137.5	141.3	122.2	138.3	147.1
Net exports as percent of production	49.4	47.6	46.2	45.1	42.3	45.2	46.4	46.1
Petroleum products, m t								
Exports, total	132.2	130.6	138.1	151.4	164.8	171.5	156.0	148.4
Exports to non-CIS countries	126.6	120.0	121.2	141.1	155.2	163.3	148.1	137.4
Exports to CIS countries	5.6	10.6	16.9	10.3	9.6	8.3	8.0	11.0
Net exports	129.9	127.2	136.8	150.0	162.8	170.2	155.3	147.7
Crude oil and petroleum products, m t								
Net exports of crude oil and petroleum products, m t	379.2	370.7	375.9	385.8	385.4	411.8	409.3	399.7
Net exports of crude oil and petroleum products as % of crude oil production	75.1	72.5	72.6	73.7	73.2	77.1	74.7	73.1
Natural gas, billion cubic meters								
Production	665.5	687.5	671.5	684.0	654.2	645.9	652.6	704.1
Exports, total	177.8	184.9	178.7	196.4	172.6	185.5	198.7	210.2
Exports to - non-CIS countries	107.4	117.0	112.6	138.0	124.6	144.7	164.7	175.9
Exports to CIS countries	70.4	67.9	66.0	58.4	48.0	40.7	34.0	34.3
Net exports	173.5	179.2	171.6	189.3	165.5	178.4	189.8	201.4
Domestic consumption	492.0	508.3	499.9	494.7	488.7	467.5	462.8	502.7
Net exports in percent to production	26.1	26.1	25.6	27.7	25.3	27.6	29.1	28.6

Sources: Rosstat, Russian Ministry of Energy, Federal Customs Service, own calculations.

Analysis of Russia's crude oil exports over the course of a long period demonstrates a significant increase in the export-led component of oil industry. The share of net exports of crude oil and petroleum products in crude oil production went up from 47.7 percent in 1990 to 73.1 percent 2017. This, however, is due not only to the increase in absolute volumes of exports but to market transformation of the Russian economy, more efficient oil consumption and the replacement of petroleum products by natural gas.

Exports of natural gas in 2017 went up 5.8% in comparison with the previous year and hit 210.2 billion cubic meters, which is an all-time maximum. Exports growth was achieved due to deliveries to countries of far abroad, exports of natural gas to CIS countries was falling over recent years. Share of net exports in the natural gas production in 2017 constituted 28.6 percent.

Table 29

Dynamics of exports of crude oil, petroleum products and natural gas from Russia 2010-2017, in percent to previous year

	2010	2011	2012	2013	2014	2015	2016	2017
Crude oil	101.2	97.6	98.2	98.6	94.4	109.4	104.2	99.1
Petroleum products	106.2	98.5	104.4	109.6	108.7	104.1	91.0	95.1
Natural gas	105.6	104.0	96.6	109.9	87.9	107.5	107.1	105.8

Sources: Rosstat, FCS.

Owing to the plunge of global prices on crude oil and natural gas, the share of oil and gas sector products in Russian exports declined markedly. In 2014, with the world oil price at USD 97.7 a barrel it accounted for 65.2 percent including crude oil and petroleum products – 54.2 percent, and natural gas – 11 percent, and already in 2017 it accounted for 52.8 percent, of which crude oil and petroleum products – 42.2 percent and natural gas – 10.6 percent (*Table 30*). At the same time, in spite of the price plunge oil and gas sector products constitute above one-half of Russian exports.

Table 30

Value and share of exports of oil and gas sector products in Russia's exports in 2017

	Exports, billion US dollars.	In percent to total volume of Russian exports
Oil and gas sector, total	189.70	52.8
Crude oil and petroleum products	151.55	42.2
Crude oil	93.31	26.0
Petroleum products	58.24	16.2
Natural gas	38.15	10.6

Sources: FCS, own calculations.

4.6.4. Dynamics of domestic prices on energy products

The pricing mechanism for crude oil and petroleum products in the Russian domestic market is based on equal-netback pricing, that is, prices are equal to the world price less export duty and transportation costs. The domestic price in dollar terms declined in the second half of 2014-2016, due to a tumbling global prices on crude oil and petroleum products (*Table 31, Fig. 46*). In 2017, owing to a certain upward trend in world prices domestic prices on crude oil and petroleum products went up significantly. At the same time, there is still a wide gap between world and domestic oil prices due to the export duty. In the meantime, a convergence of international and domestic prices is observed owing to a lower rate of export duty envisaged as part of the tax maneuver. In 2014, the domestic oil price (producers' price) constituted 42% of the global price Urals crude price on the European market), while in 2017 – 66 percent.

Table 31

**Domestic prices on crude oil, petroleum products and natural gas in USD terms
in 2010–2017 (average producers' prices at year-end, USD/ton)**

	2010	2011	2012	2013	2014	2015	2016	2017
Crude oil	248.2	303.3	341.1	346.1	178.9	156.7	207.8	302.4
Gasoline	547.9	576.9	628.7	614.4	372.3	301.8	380.3	460.0
Diesel fuel	536.1	644.9	774.2	698.0	419.3	349.4	421.3	515.2
Heating oil	246.3	274.6	275.3	235.8	128.7	49.5	129.7	166.1
Gas, USD/thousand cubic m	20.5	21.3	40.3	39.8	29.1	24.5	23.6	34.2

Source: own calculations based on data released by Rosstat.

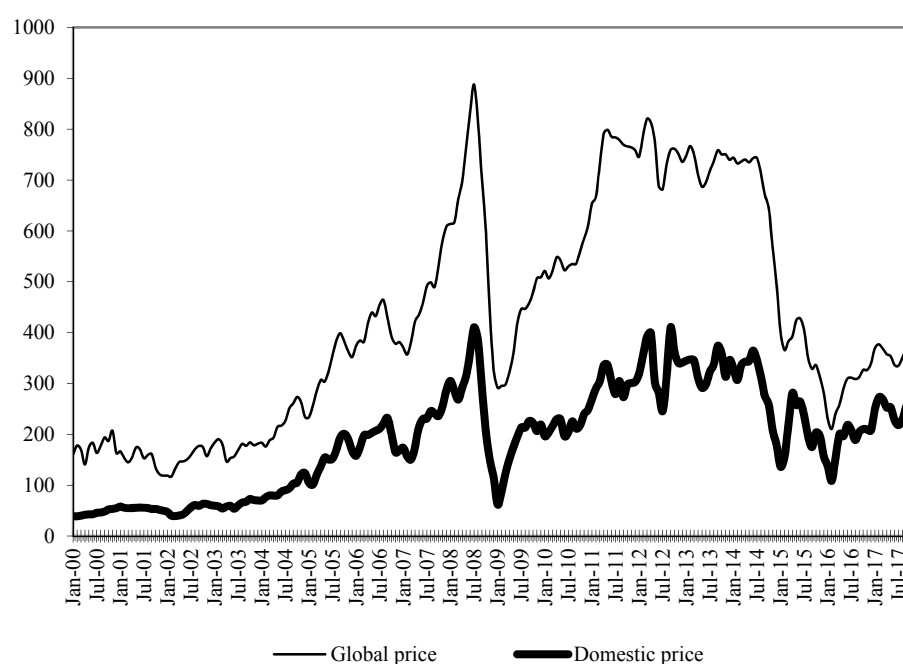


Fig. 46. Global and domestic oil prices in 2000–2017, USD/t

Sources: Rosstat, own calculations.

Upward movement of oil prices in 2017 determined growth of consumer prices on motor fuel which set the pricing policy on net-back prices taking into account indirect taxes (excises, VAT) and markup (Table 32, 33, Fig. 47). The share of indirect taxes in the consumer price of gasoline is 35–43% in Russia. Thus, regarding the tax burden on petroleum products, Russia ranks in the middle between EU5 (Germany, France, Great Britain, Italy, and Spain) where the share of the tax burden on gasoline reaches 65%, and 20 percent in the USA. With lower non-tax gasoline prices and such level of tax burden the consumer prices on gasoline in Russia are approaching the US prices, but remain significantly lower than in other developed countries. Effective system of export duties and the level of tax burden on petroleum products in Russia ensures lower prices level on motor fuel on domestic market in comparison with the developed countries.¹

¹ See Yu. Bobylev. Gasoline Prices in Russia and other countries: comparative analysis. Russian Economic Developments. 2016. №10 pp. 28–31.

Table 32

Consumer prices on gasoline in Russia 2014–2017, RUB/liter

	2014 January	2015 January	2016 January	2016 January	2017 January	2017 January
Regular unleaded gasoline	29.53	32.35	33.86	35.28	35.57	37.95
Premium 95 octane and plus	32.64	35.16	36.81	38.34	38.69	41.01

Source: Rosstat.

Table 33

Excise rates of gasoline in 2014–2017, RUB/t

	2014	2015	2016 January-March	2016 April-December	2017
Class 4	9916	7300	10500	13100	13100
Class 5	6450	5530	7530	10130	10130

Source: Tax Code of RF (2014–2017 edition).

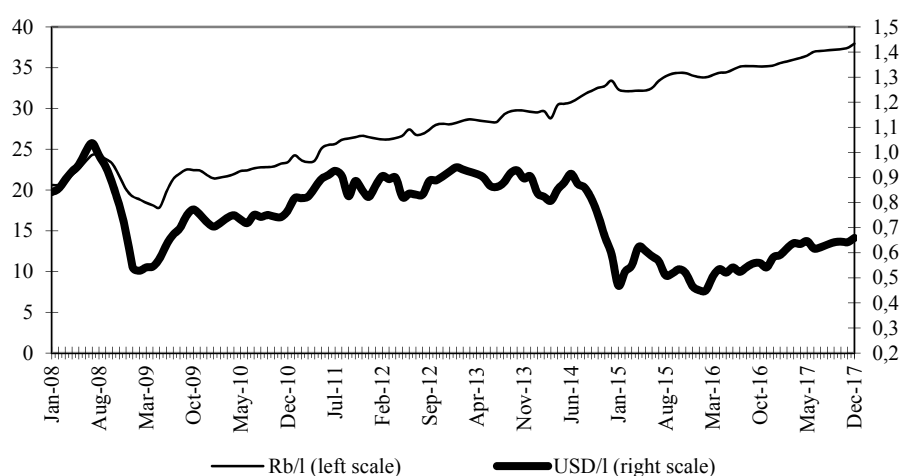


Fig. 47. Consumer price in ruble and dollar terms on regular unleaded gasoline in 2008–2017

Sources: Rosstat, own calculations.

Domestic prices on natural gas are under the state regulation. In order to ensure competitiveness of the national economy, the government maintains significantly lower level of domestic process on gas compared to the world gas prices. Meanwhile, owing to a regulated increase of the domestic gas prices and a significant decrease of the world prices on gas there is a gradual convergence of domestic and world gas prices. In 2015, domestic gas price (corporate consumers' price less indirect taxes) averaged 26 percent of the price of Russian gas in the European market, and in 2017, it constituted 38 percent.

4.6.5. Prospects for development of the Russian oil industry

Russia disposes of vast oil reserves, which are enough to maintain high levels of crude oil extraction and exports for many years to come. There is a high potential for crude oil extraction owing to both undeveloped deposits in undeveloped areas and oilfields in new producing areas. At the same time, there is a rather significant potential for additional extraction on already producing oilfields thanks to an in-depth development. Russia's oil refining rate constitutes merely 28 percent, which is markedly less than the average world level (to compare the US boasts of the oil refining rate standing at 35–43 percent, and Norway – 46 percent). Moreover,

Russia disposes of extensive currently undeveloped unconventional oil reserves including shale oil. Upgrade of the oil refining depth allows satisfying domestic demand in motor gasoline with relatively lower volumes of oil consumption. The leading industrial countries boast of oil refining depth at 90-95 percent, while in Russia it constitutes 81 percent.

In future, global demand for oil will grow, which will allow Russia to retain and even to increase current volumes of crude oil exports. This being said, shifts in the regional structure of global oil demand prompt diversification of crude oil exports, expansion of shipments to China and other countries of Asia. Meanwhile, potential of the Russian oil sector development to a significant degree will rely on the world oil prices. The oil market outlook is marked by factors, which will be contributing to the retention of relatively low oil prices. The most important factors are extensive shale oil reserves in the U.S., which will be rapidly put into production and create oil glut with global oil price above USD 60 per barrel, which will drag oil prices down.

In the context of low crude oil prices, options for the development of new oilfields and unconventional reserves will be significantly restricted in Russia because investment in the cost demanding projects will be unprofitable (first of all, it is true to the implementation of the Arctic shelf projects). In this context enforced technological sanctions against Russia, which ban exports to Russia of equipment and technologies for the development of deposits located on the Arctic shelf, deep-water oil fields and shale oil deposits will negatively affect the oil industry development.

In the circumstances, conventional oil reserves located onshore will be the basis for further development of the Russian oil sector. In-depth development of producing oilfields and increase of the oil recovery rate are of major importance. Options for additional oil production at such oil fields will largely depend on technological progress, development of import substitution aimed at increasing the oil recovery index.

Measures adopted within the state tax policy should contribute to the development of the oil sector. First of all, it is essential to complete a structural tax reform in the oil sector taxation system, which envisages stepwise reduction of export duties on both crude oil and petroleum products (right down to their cancellation), as well as a higher Mineral Extraction Tax (MET). This creates incentives for further upgrade of the oil refining sector, decreasing Russia's subsidizing of other EAEU countries and will strengthen incentives to lift energy efficiency.

For the greenfield projects it is expedient to apply a special windfall tax, which will ensure both higher resource rent extraction and will create favorable conditions for investment.¹ When in force, windfall tax will automatically make the tax burden compliant with oil production conditions in each specific oil field, thus creating environment suitable for investment, including investment in development projects involving higher-than-normal operating costs

In order to ensure sustainable development of the oil industry it is paramount to implement such measures as conduct coordinated efforts with OPEC countries and other oil producers aimed at maintaining acceptable level of world oil prices, promotion of import substitution capacities of oil exports to East, development of import substitution technologies aimed at upgrading oil extraction index and development of non-conventional oil reserves including shale oil, and development of small- and medium-size oil companies.

¹ See Yu. Bobylev, O. Rasenko. Windfall tax to introduce in oil industry. Russian Economic Developments. 2017. № 10, pp. 65-68.

4.7. The year-end results of 2017 and new developments in Russia's agrarian policy¹

4.7.1. The behavior of agricultural production

In 2017, the harvest of cereals, including wheat, Russia's top agricultural export commodity, hit its record high. This happened mostly due to a significant rise in wheat harvest against the three previous years (*Tables 34, 35*). At the same time, the record-high harvest caused problems with the transportation of grain from the regions of the Siberian Federal District. Agricultural producers also note a decline in the profitability of agricultural production (on the average, by 8.4 percent, to 12-14 percent²) due to the accelerated growth in the prices of inputs by comparison with that of the sales price of grain, which lagged behind because of the record-high harvest.

Among the year 2017's most important news events pertaining to the functioning of the grain market was the introduction of the Charter on Grain Turnover. This Charter was developed by the Federal Tax Service of Russia in order to discipline the procedures for reimbursement VAT on grain exports³. The traders that have signed the Charter thereby agree 'to resist VAT avoidance schemes and avoid cooperation with unscrupulous intermediaries that obtain a competitive advantage through the use of illegal VAT refunds'.⁴

Also, the year 2017 saw a continuation of the rise in barley, oat, buckwheat, and soya bean production. The gross yield of sugar beet was only slightly below its record-high harvest of 2016. Although slightly below last year's level, the gross yield of sunflower seeds was 4 percent above its average level of the past five years (2012-2016). These crops are traditionally produced by the commercial sector (agricultural organizations, peasant (farm) holdings (PFH), and individual entrepreneurs (IE)). Thus, in 2017, the share of agricultural organizations, PFHs, and IEs in the production of cereal grains, sunflower seed and sugar beet amounted to 99 percent. The volumes of production of these crop products exceeded their pre-reform levels of 1986–1990. The growth rates of soya bean, sunflower seed and corn production were especially high (*Table 34*).

It should be noted, though, that the achievements in the production of labor-intensive cheap crops, where the share of individual households is still high, are not that impressive. Thus, the gross yield of potatoes, where the share of individual households amounted, in 2017, to 77 percent, was almost 5 percent lower than in 2016 and 18 percent lower than in the last pre-reform years⁵.

A somewhat different trend is observed in the production of vegetables – in 2017, their gross yield at agricultural holdings and enterprises of all types amounted to 16.3 million tons, which represented a 1.5 times rise on the pre-reform level. Having hit its record low of 22 percent in

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² URL: <http://grainboard.ru/news/zernovie-interventsii-otkladivayutsya-na-2018-god-379413>

³ The Charter on Grain Turnover was signed by more than 500 companies. Agroiinvestor, URL: <http://www.agroiinvestor.ru/markets/news/28497-khartiyu-ob-oborote-zerna-podpisali-bolee-500-kompaniy/>

⁴ URL: <https://хартия-АИС.рф/о-hartii>

⁵ According to data of the All-Russia Agricultural Census 2016, the input of individual households in potato output may be subject to a significant downward adjustment.

2002, the commercial sector's input in their production (22 percent) has been on the gradual increase ever since, reaching 37 percent in 2017, mainly due to the rising share of PFHs and IEs.

Table 34

Gross Yields of Major Agricultural Crops, Millions of Tons

Indices	On average during 1986-1990	2015	2016	2017*	2017 relative to 2016, percent	2017 relative to average for period 1986-1990, percent
Grain	104.3	104.8	120.7	134.1	111.2	128.6
including wheat	43.5	61.8	73.3	85.8	117.1	197.3
Corn	3.3	13.2	15.3	12.1	78.7	365.2
Sugar beet	33.2	39.0	51.4	48.2	93.9	145.3
Sunflower seed	3.1	9.3	11.0	9.6	87.4	310.6
Soya beans	0.6	2.7	3.1	3.6	114.1	595.9
Potatoes	35.9	33.6	31.1	29.6	95.1	82.4
Vegetables, melons and gourds	11.2	16.1	16.28	16.3	100.3	145.8
Fruits and berries	3.3	2.9	3.3	2.9	89.0	89.3

* Preliminary data.

Source: Rosstat.

The most significant growth in yield in comparison to the period 1986-1990 was registered for sugar beet, cereals, grains, fruits, vegetables, and potatoes (*Table 35*).

Table 35

Yields of Major Agricultural Crops, Centners [Russia] per Hectare

Indices	On average during 1986-1990	2015	2016	2017*	2017 relative to 2016	2017 relative to average for period 1986-1990, percent
Wheat	17.6	23.9	26.8	31.2	116.4	177.3
Corn	28.7	49.3	55.1	48.7	88.4	169.7
Sugar beet	225	388	470	430	91.5	191.1
Sunflower seed	12.7	14.2	15.1	14.7	97.4	115.7
Soya beans	10.3	13	14.8	14.1	95.3	136.9
Potatoes	108	159	153	156	102.2	144.4
Vegetables, melons and gourds	154	225	227	236	104.3	153.2
Fruits and berries	39.5	75.7	85.6	76.6	89.5	193.9

* Preliminary data.

Source: Rosstat.

The growth in yield resulted in a sufficiently high profitability of crop production (*Table 36*).

Table 36

Profitability (unprofitability) of Sold Goods, Products, Work and Services¹

Indices	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total, national economy	14.0	14.3	14.0	11.5	11.4	11.5	9.7	7.7	8.6	9.3	8.1
Agriculture	10.1	15.7	12.4	9.8	11.1	11.2	12.9	6.8	19.5	22.3	17.6
Crop production	11.3	22.5	18.3	9.8	13.4	15.3	16.4	13.5	22.5	35.9	31.8
Animal husbandry	9.1	10.1	8.1	9.8	9.9	8.8	11.1	3.4	18.4	15.8	10.5

Source: Rosstat (The Unified Interdepartmental Statistical Information Service, UISIS).

The year 2017 also saw some success in the animal husbandry sector. There was growth in egg production (by 2.8 percent relative to 2016). The output of meat and poultry products increased, including that of poultry meat (6.9 percent on the previous year), pork (5 percent), and mutton (2 percent). The pig herd owned by agricultural holdings and enterprises of all types

¹ The profitability of the sold goods, products, work and services is calculated as a ratio between the balanced financial result (profit minus loss) of the sales of goods, products, work and services, and the cost of the aforesaid sold goods, products, work and services (including commercial and managerial costs).

increased to a total of 23.3 million head (a rise of 5.7 percent on the previous year); the total number of poultry flock – to 557 million head (0.7 percent on the previous year).

Growth in the production of poultry meat and pork was achieved, in 2017, only by agricultural organizations. Peasant (farm) holdings, IEs including, and individual households reduced their pig herd by nearly 6 percent, and their poultry flock by 3.6 percent. This decline – and particularly with regard to pig breeding – has had to do with the long-term policy of imposing constraints on individual household and small business production in order to reduce the threat of spreading animal diseases to the livestock of big agricultural organizations.

As before, no breakthrough could be achieved in cattle breeding, although thanks to the ongoing government support measures, the rate of cattle herd decline decreased, while milk production has been maintained at a level of 31 million tons for 4 straight years, and in 2017, it even demonstrated slight growth (*Table 37*). That growth was achieved through increased dairy cow productivity, and not through herd growth (the yield of agricultural organizations in 2017 increased by 5.3 percent to 5.8 tons per head¹). Dairy cattle breeding has remained one of the problem ridden sectors. Total national cattle herd decline has been contributed to not only by that at individual households, but by that at agricultural organizations. The only category of agricultural enterprises displaying cattle herd growth is peasant (farm) holdings. However, their share in national milk production is still small (slightly above 7 percent), whilst agricultural organizations account for 50.3 percent, and individual households – for 42 percent of total milk output (2017). In 17 RF subjects, this sector's yield took up more than 70 percent of a given region's milk production. Individual households receive no support from the federal budget for selling their milk, and they have some issues with milk sales. Given these conditions, they have no incentives for maintaining their current production level or increasing their milk output, as they lack a well-developed distribution infrastructure.

Table 37

The movement of gross output value of animal husbandry for agricultural holdings and enterprises of all types

Indices	1991	2014	2015	2016	2017	2017 relative to 2016, percent	2017 relative to 1991, percent
Total meat production, carcass weight, million tons	9,375	9,070.3	9,565.2	9,899.2	10,391.0	105	110.8
Including cattle	3,989	1,654.1	1,649.4	1,619.0	1,618.5	100.0	40.6
Pigs	3,190	2,973.9	3,098.7	3,368.2	3,536.7	105.0	110.9
Poultry	1,751	4,161.4	4,535.5	4,620.8	4,940.9	106.9	282.2
Sheep and goats	347	203.9	204.5	213.1	217.3	102.0	62.6
Milk, million tons	52	30.8	30.8	30.8	31.1	101.2	59.8
Eggs, billion	47	41.9	42.6	43.6	44.8	102.8	95.3

Source: Rosstat, 2017 – estimations based on data released by Rosstat.

Overall in 2017, milk, beef, and mutton production indices were significantly below the corresponding indices for the 1990, while pork and poultry meat production was higher. It is thanks to the development of the latter that the pre-reform meat livestock and poultry output index was exceeded (*Table 37*).

In recent years, agriculture's higher profitability relative to the national economy's average profitability index translated into a boost in its development: over the last three years, the average annual value added growth rate in agriculture has stayed above the growth rate of GDP (*Table 38*).

¹ In 1990, the average milk yield per cow in agricultural enterprises was 2.8 tonnes per annum.

Table 38

**Russia's GDP volume index and gross value added index
for agriculture**

	GDP growth index, as percent relative to previous year	value added growth index in agriculture*
2013	101.8	104.7
2014	100.7	101.3
2015	97.2	102.5
2016	99.8	102.9
2017	101.6**	102.1***

* Including hunting, forestry, fish farming and fishing (calculations based on Rosstat data).

** January–September 2017.

*** January–September 2017, including forestry, hunting, fish farming and fishing.

Source: Rosstat (Unified Interdepartmental Information and Statistics System (EMISS)); Information on the Socioeconomic Situation in Russia (January–November 2017).

Thus, in 2017, the sector displayed the same trends as had been typical of several recent years.

4.7.2. Government support of agriculture

The amount of federal budget allocations for 2017 in the framework of the Government Program of Agriculture Development and Regulation of Agricultural Products, Raw Materials and Foodstuffs for 2013–2020 (hereinafter – Government Program), in accordance with the most recently adjusted budget revenue and expenditure targets, was RUB 242.1 billion. This is RUB 26.3 billion more that was initially envisaged in Federal Law No 415–FZ dated December 19, 2016, and RUB 24 billion above the budget allocation level for 2016. However, the amount of federal government support represents only part of overall state support. In reality, its volume is significantly bigger due to allocations from regional budgets. Regional funding of the agricultural sector takes up between 30percent and 50percent of the aggregate budget allocated to federal and regional support programs targeting agricultural enterprises.¹

Over the course of 2016–2017, the Government Program was significantly amended several times.² While the previously introduced innovations resulted in program detailing and the creation of specifically targeted sub-programs and measures supported and protected by specific items added to their approved budget functions, including the funding of sectors that were vital for import substitution (2015), in the later version of the Government Program some of these directions were pooled. The Government Program, as amended on 1 December 2017, includes 9 subprograms. Their funding and structure are shown in *Table 39* and *Fig. 48*³.

¹ Data on regional funding for 2017 are not yet available.

² Decree No 396 dated March 31, 2017 ‘On Introducing Alterations in the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020’; Decrees of the RF Government No 902 dated July 29, 2017; and No 1347 dated November 10, 2017.

³ Hereinafter, the Government Program as amended by Decree of the Government No 1347 dated November 10, 2017, which was effective through December 31, 2017, is analyzed. From January 1, 2018, a new version of Government Program was introduced (by Decree of the RF Government No 1544 dated December 13, 2017).

Table 39

Federal Budget Allocations to the Government Program in 2017, billions of rubles

Item	2016	2017		2017 Adjusted budget targets relative to planned targets, %	2017 relative to 2016, %
	Cash execution as of January 1, 2017	Federal Law No 415-FZ dated December 19, 2016	Adjusted budget revenue and expenditure targets as of September 18, 2017		
Total	218.09	215.85	242.15	112.18	111.03
Development of AIC sectors	78.05	55.31	58.33	105.46	74.73
Maintaining ongoing operation of AIC sectors	10.33	11.12	11.29	101.57	109.29
Technical and technological modernization, innovative development	11.16	0.09	14.21	15,788.89	127.33
Promotion of investment activity in AIC	66.11	91.67	97.12	105.95	146.91
Development of AIC financial and lending system	8	5.00	5.00	100.00	62.50
Management of Government Program implementation	25.04	25.21	27.82	110.35	111.10
Sustainable development of rural territories in 2014–2017 and over period until 2020	12.07	15.45	16.1	104.23 133.39	
Agricultural land improvement in Russia in 2014–2020	7.34	11.28	11.43	101.36	155.72
Priority project <i>Export of AIC's products</i>	0	0.73	0.85	116.69	

Source: RF Ministry of Agriculture.

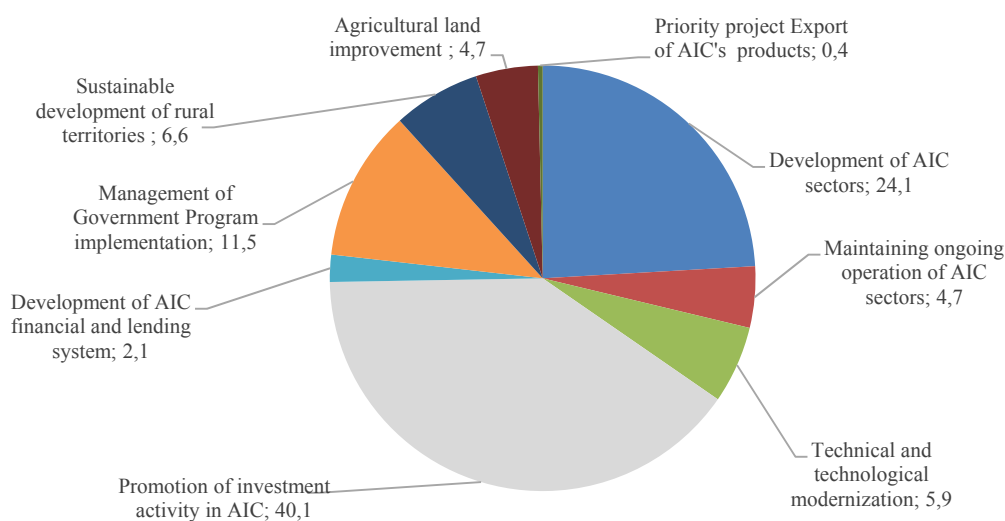


Fig. 48. The structure of federal funding allocated to the Government Program in 2017 (adjusted budget revenue and expenditure targets), percent

In Fig. 48, it can be seen that the lion's share in the allocation structure (a total of approximately 64 percent) was taken up by the subprograms oriented to the development of specific sectors: the Subprogram *Promotion of Investment Activity in AIC*, which envisaged support for low-rate investment loans in the AIC and reimbursement of the direct costs

associated with building construction and modernization of AIC property entities; and the Subprogram *Development of AIC Sectors*, through which all the subsidies allocated to specific sectors were paid. It is these types of support that were directly addressed to agricultural producers, and were most important for them. In 2017, the funding allocated to practically all the ongoing subprograms was increased relative to 2016 (*Table 39*), with the exception of the Subprogram *Development of AIC Sectors*. In the case of the latter, the amount of funding allocated to all the types of support listed in it was substantially reduced (*Table 40*).

Table 39

**Funding of the measures listed in Subprogram *Development of AIC Sectors*,
billions of rubles**

Subprogram measures	2016	2017		2018	2017 relative to 2016, percent
	Cash execution as of January 1, 2017	Federal Law No 415-FZ dated December 19, 2016	Adjusted budget revenue and expenditure targets as of September 18, 2017	Draft FZ 'On FB for 2018 and Planning Period 2019 and 2020'	
Allocations to Subprogram <i>Development of AIC Sectors</i>, Total	78.05	55.31	58.33	39.00	74.7
Subsidies to non-targeted support of crop production	23.34	11.34	11.34	0.00	48.6
Subsidies to increase productivity in dairy cattle breeding sector	12.67	7.96	7.96	0.00	62.9
Aid in achieving targets set by regional AIC development programs*	42.04	36.00	39.02	39.00	92.8

*In 2016, the subsidy titled *Aid in Achieving the Implementation Targets of Regional AIC Development Programs* was not yet introduced; for reference, the table lists the support measures that would later be integrated into this subsidy.

As follows from *Table 40*, the amount of federal funding allocated to the basic support of crop production, which had earlier already incorporated some important subsidies as reimbursement of cost of mineral fertilizers, crop protection, etc, was cut nearly by half. The subsidy to the dairy cattle breeding sector was cut by almost 40percent, although – as demonstrated earlier – this sector is still faced with some grave problems. Nevertheless, the Draft Federal Law 'On the Federal Budget for 2018 and the Planning Period of 2019 and 2020' suggests that all the funding allocated to these items should be discontinued.

This state of affairs can be explained by the necessity to redistribute the funds within the budget actually allocated to the ministry in favor of those investment loans that involve long-term government obligations. When trying to fit its loan agreements into the list of subsidized loans, the RF Ministry of Agriculture aims to stay within the amount of subsidies allocated for a given year. However, in a situation when an agreement is approved for subsidizing, say, in December, the payments are minimal, but they become substantial over the next year, while as a rule, the total amount of subsidies allocated under the Government Program is not increased (see, e.g., the Draft Federal Law 'On Federal Budget for 2018 and the Planning Period of 2019 and 2020'). As a result, in 2016, a total of RUB 55.3 billion was allocated to the reimbursement of part of interest paid on investment loans. In 2017, the amount allocated to that subsidy in accordance with the adjusted budget revenue and expenditure targets was RUB 58.8 billion, while another RUB 25.4 billion was allocated to the newly introduced subsidy received by Russian credit institutions by way of compensation of their loss of income on their loans issued to agricultural producers at a special reduced interest rate, which means a 1.5-times increase. These expenditures were partly covered by increasing the amount of allocations earmarked for

the Government Program, and partly by cutting the basic types of support. However, such a situation cannot be regarded as an optimal one.

In order to make subsidized loans more accessible to small agricultural businesses and small farms, by Decree of the RF Government No 1528 dated December 29, 2016, a mandatory quota was introduced, whereby they were guaranteed to receive subsidy 'in an amount not less than 20percent of the total amount of compensation for the loss of income, by banks, on the short-term loans with a reduced interest rate to be issued by them in the territory of a given RF subject'.¹ At the same time, the percent share of subsidy could be changed by the RF Ministry of Agriculture on the basis of proposals submitted by regional authorities. The quota floor in that case would be 'the share of small agricultural businesses and small farms in the total agriculture output of the corresponding RF subject over a reporting financial year'. For investment loans, the share of small agricultural businesses and small farms was set at not less than 10 percent of the amount of subsidy.

The Decree also set a cap on the amount of short-term loans that could be paid to one and the same borrower. The cap was to be determined on the basis of proposals submitted by regional authorities to the RF Ministry of Agriculture for each RF subject in accordance with the methodology introduced by Order No 415 dated August 21, 2017, of the RF Ministry of Agriculture. As a result, the cap on loan in many RF subjects was set at a level above RUB 1 billion, and in some of them it jumped tenfold, thus making it possible to distribute the bulk of an allocated subsidy among only 20-30 biggest recipients.²

Among the other new provisions introduced in 2017 we must note the 'pooling' of measures envisaged in the Government Program in the framework of a single subsidy earmarked for providing aid in the achievement of targets set by regional AIC development programs (hereinafter - single subsidy). It absorbed some important areas of subsidizing, such as support of small agricultural businesses and small farms (previously covered by a separate subprogram) and other areas that are important for the development of agricultural sectors. As a result, it became difficult to trace each declared measure and the funding allocated to it at the federal level. By way of dealing with that issue, and to avoid a loss of certain areas of support, the RF Ministry of Agriculture continues to exercise control and keep records concerning each of the 'pooled' measures through a system of mandatory targets, although the distribution of that subsidy is actually the prerogative of regional authorities. The measures had been pooled with the intention of reducing the associated administrative costs, but in the end these costs, in fact, increased.

At the same time, the structure of the Government Program in 2017 still contained subprograms like *Technical and Technological Modernization*, *Development of the Financial and lending System*, and the Priority Project *Export of AIC's Products*, each envisaging only one or two measures and relying on very modest funding, or with no funding being planned for the nearest future.³

The general services provided to the agricultural sector were funded, in 2017, through the federal target programs *Sustainable development of rural territories in 2014–2017 and over the*

¹ Decree of the RF Government No 1528 dated December 29, 2016 (as amended on July 24, 2017).

² Uzun V. Restriction of the Size of Subsidies Allocated to One Agricultural Producer: Its Necessity, Mechanisms, and Consequences // APK: Economics and Management, No 11, 2017, pp.12–31.

³ Decree of the RF Government No 717 dated July 14, 2012 (as amended on November 10, 2017) 'On the Government Program of Agriculture Development and Regulation of Markets for Agricultural Products, Raw Materials and Foodstuffs for 2013–2020'.

*period until 2020 (FTP SDRT)*¹ and *Agricultural land improvement in Russia in 2014–2020 (FTP Melioration)*,² as well as through R&D projects, agricultural education, land monitoring, and supervisory and veterinary agencies covered by the Government Program. Russia currently lacks well-developed agencies capable of providing information and consulting services, or a well-developed market information system, although the Government Program does envisage the relevant funding targets. However, every year the funding is reallocated to some other targets, which the RF Ministry of Agriculture believes to be more important. Thus, in 2016, RUB 0.26 billion was allocated to the measures defined as Formation of State Information Resources in the Sectors Responsible for Food Safety and Agro-industrial Complex Management; in 2017, in accordance with the adjusted budget revenue and expenditure targets, the same amount was allocated. However, its cash execution as of September 1, 2017 was only 16 percent of the planned level.

In 2017, in the framework of *FTP SDRT*, funding was allocated to measures designed to improve the housing conditions for citizens residing in rural areas, including young families and young specialists, develop the network of general education establishments, midwife obstetric units and general practitioners, sports venues, institutions for cultural and recreational activities, gas and water supply systems, comprehensive development of land plots for building residential communities, motor roads networks providing access to socially significant objects in rural areas and agricultural production and processing entities; grant support of local initiatives of citizens residing in rural areas; promotion and popularization of achievements in the development of rural territories and scientific and methodological backing of the implementation of *FTP SDRT*.

In 2017, the volume of funding allocated to *FTP SDRT* from the federal budget, in accordance with the adjusted budget revenue and expenditure targets, was RUB 16.1 billion, which is by RUB 4 billion above the 2016 level. However, its cash execution as of September 1, 2017 was only RUB 6.9 billion, or 43 percent of the planned target. The allocation of federal budget funding to *FTP SDRT* is handled by the RF Ministry of Agriculture. In 2017, the aforesaid ministry allocated to the Federal Road Agency a total of RUB 6.8 billion (in 2016 – RUB 7.3 billion). The total amount of co-financing from regional budgets in 2017, according to the existing agreements, was RUB 6.9 billion (in 2016 – RUB 7.9 billion)

The allocation of resources from the federal budget to the *FTP Melioration* in 2017 was significantly increased and amounted to RUB 11.4 billion (in 2016 – RUB 7.4 billion).

From January 1, 2018, the implementation of the *FTP SDRT* and the *FTP Melioration* was terminated early by Decree of the RF Government No 1243, dated October 12, 2017, 'On the Implementation of Measures Envisaged in Federal Target Programs and Being Integrated in Separate Government Programs of the Russian Federation'. The measures envisaged in these two programs will be implemented in the framework of specific subprograms incorporated in the Government Program of Agriculture Development and Regulation of Agricultural Products, Raw Materials and Foodstuffs for 2013–2020'.

¹ Approved by Decree of the RF Government No 598 dated 15 July 2013 (as amended on May 25, 2016) 'On the Federal Target Program *Sustainable development of rural territories in 2014–2017 and over the period until 2020*'; it is part of the Government Program.

² Approved by Decree of the RF Government No 922 dated October 12, 2013 (as amended on 17.05.2017) 'On the Federal Target Program *Agricultural Land Improvement in Russia in 2014 – 2020*'; it is part of the Government Program.

Over the course of 2017, the Government Program was amended 5 times.¹ One of the latest innovations was the switchover, from January 1, 2018, to a project-based management principle, followed by yet another revision of the Government Program's structure. As a result, the Government Program now includes 10 subprograms: *Development of Those Sectors of the Agro-industrial Complex That Ensure Accelerated Import Substitution of the Main Types of Agricultural Products*; *Raw Materials and Foodstuffs*; *Promotion of Investment Activity in AIC*; *Technical Modernization of the Agro-industrial Complex*; *Export of the AIC's Products*; *Development of Agricultural Land Improvement Measures in Russia*; *Sustainable Development of Rural Territories*; *Management of Government Program Implementation*; *Creation of General Conditions for the Functioning of Sectors in the Agro-industrial Complex*. Besides, two separate subprograms were formally established: *Scientific and Technological Backing for the Development of Sectors in the Agro-industrial Complex* and *Development of the Raw-materials Base for Providing Light Industry with Quality Agricultural Raw Materials*. The latter encompasses the measures designed to support the production of flax, wool, etc., which previously had existed in the main as part of other subprograms. The succession of relevant measures is also typical of other subprograms.

In order to control the volatility of prices in the domestic market, the RF Ministry of Agriculture, by its Order No 185 dated April 19, 2017, approved a special methodology for calculating price floors and ceilings for grains, dried milk and butter for the purpose of launching public goods and buying interventions. By Order of the RF Ministry of Agriculture No 158 dated March 31, 2017, the price floor was set at which, in 2017–2018, government buying interventions should be launched, targeting the grain harvested in 2017. The Order came in force from July 1, 2017, and is to stay in force until July 1, 2018.

According to the Grain Market Overview released by the RF Ministry of Agriculture on its official website, the price floor was indeed reached, but no interventions took place.

The mechanisms designed to support the incomes of agricultural producers in 2017 demonstrated their weaknesses. First, they are built in such a way that they fail to guarantee purchases at a minimum price to all producers. Second, they cannot promptly respond to changes in the current situation: in face of the large harvest in 2017 relative to 2016, RUB 4.3 billion was allocated to the measures involving government interventions (in 2016 – RUB 6.9 billion). Third, the volume of funding to be allocated to the intervention was determined without taking into account the fact that in October 2017, the RF Ministry of Agriculture had accumulated debt to United Grain Corporation and other holders of grain stocks in the amount of RUB 3.8 billion.² For all these reasons, the size of the intervention fund was not increased in response to the increased crop yield: as of November 1, 2017 it was the same as in December 2016 – 4 million tons.

The RF Government was urgently trying to find some other support mechanisms. A draft of the RF Government Decree 'Rules for the Allocation, in 2017 – 2018, of Subsidies from the Federal Budget to JSK *Russian Railways* by Way of Compensating It for the Losses of Income Arising As a Result of Railway Transportation of Grain Cargoes without Charging Carrier Fees'. The volume of subsidized deliveries is estimated to be 3.2 million tons, to the value of

¹ As amended by Decrees of the RF Government No 396 dated March 31, 2017; No 902 dated July 29, 2017; No 1347 dated November 10, 2017; No 1544 dated December 13, 2017.

² Grain Interventions Are To Be Postponed until 2018. URL: <http://grainboard.ru/news/zernovie-interventsii-otkladvayutsya-na-2018-god-379413>

nearly RUB 3 billion.¹ However, the Rules were approved only at the year's end, by Decree of the RF Government No 1595 dated December 20, 2017.

The pressure on the grain market could be lowered by measures designed to promote exports. However, little funding was allocated to the measures implemented in the Priority Project *Export of the AIC's Products* (support of the activity of the Federal Veterinary and Phytosanitary Supervision aimed at broadening the access, to foreign markets, of the products of Russia's AIC; creation and running of a center for conducting analysis of exports of the agro-industrial complex' products and research of potential foreign sales markets, etc.).

In late 2016, the Presidium of the Presidential Council for Strategic Development and Priority Projects gave high priority to the Development of International Cooperation and Exports Program, one part of which addressed the issue of expanding the national food exports support system. Support of exports is viewed by the RF Ministry of Agriculture as one of market regulation levers. This applies not only to grains, but also to other types of products with export potential. By Order No 524 dated October 19, 2017 of the RF Ministry of Agriculture, 7 programs aimed at promoting and increasing exports were approved, including the products of the sugar beet industry, the fats and oils industry, the poultry breeding sector, and grains. By way of supporting exports, one more priority project – *Export of the AIC's Products* – was incorporated in the Government Program's structure, to be funded from 2017 onwards. The project's goal is to boost the volume of agro-food exports to USD 21.4 billion by 2020. That project became an integral part of the Government Program of Agriculture Development and Regulation of Agricultural Products, Raw Materials and Foodstuffs for 2013–2020'. The project funding target for 2017 was RUB 745.9 million. The main measures envisaged in the project are as follows:

- consulting services, training of potential exporters;
- creation of a system for analyzing foreign markets for agricultural producers and exporters;
- development of regional sub-brands, their registration, and subsidizing of the cost of promoting the sub-brands on foreign markets;
- improvement of the quality control system for export products;
- support of business travels of importers;
- subsidizing, in part, of the costs of participation in fairs;
- setting up of 117 interdepartmental commissions for cooperation in trade, science and technology (between the RF and foreign countries).

To help promote the products of small agricultural businesses and small farms, it is intended to set up special export co-ops, authorized to represent the interests of their members before various organizations implementing export support programs (in order to help the co-op members to receive loans, insurance products; to participate in fairs and exhibitions, etc.) and ease their access to such products.

Besides, a Russian Export Center has been set up.² There, potential exporters can order market surveys of their products in those countries where they are planning to supply their products. Some of these services are provided free of charge. At present, the Russian Agency for Export Credit and Investment Insurance (EXIAR) is developing insurance instruments to support Russian export loans and investments in the agro-industrial sector, as well as financing

¹ Grain Interventions Are To Be Postponed until 2018. URL: <http://grainboard.ru/news/zernovie-interventsii-otkladivayutsya-na-2018-god-379413>

² URL: <https://www.exportcenter.ru>

instruments for agricultural exports in the framework of Eximbank of Russia, which is part of the Russian Export Center Group.¹

To ease the market entry of Russian goods (including all commodity groups, and not only foodstuffs and agricultural produce), the umbrella fund *Made in Russia* has been registered. The state subsidizes the activities aimed at increasing Russian brand recognizability and thus promoting exports of agro-food products from the Russian Federation.

The RF Ministry of Agriculture has not created a special department charged with the task of promoting exports. Instead, an interdepartmental group for the development and support of exports of agricultural products was set up (hereinafter – IDG).² A subordinated organization also exists. At present, sectoral programs of developing exports of the AIC's products are being elaborated.

The principal shortcoming of the existing government support system oriented to agricultural producers is the concentration of the bulk of subsidy within a limited group of enterprises.³ That the subsidy can benefit only selective big recipients is recognized as a negative practice by the lawmakers of all countries. In this connection, the developed countries have restricted the opportunities for receiving reimbursable government support.⁴

4.7.3. Food security

The official system of food security indices demonstrates an improvement of the situation in 2016–2017. Thus, the average consumption, disposable income, behavior of food prices, daily calorie intake, protein intake level, production volume, and dependence on imports, over the period 2016–2017, all improved relative to 2014–2015.⁵ The share of food imports in total retail turnover in 2017 was at its record low – see *Table 41*. The food security criteria for agricultural products envisaged in the Food Security Doctrine of the Russian Federation were all met, with the exception of dairy products.

Table 41

The share of food imports in RF retail food stocks, percent

	Q1	Q2	Q3	Q4	Year
2012	35	34	34	33	34
2013	36	35	35	36	36
2014	36	33	32	36	34
2015	29	26	27	30	28
2016	24	22	22	24	23
2017	23	21	22		

Source: Rosstat.

However, the index of economic access to food in 2017 was worse than in 2013, 2014, 2015, and in part in 2016. The consumption revival noted in 2016 (after its plunge in 2015) was estimated on the basis of budget surveys, and it is not confirmed by data on the physical volume of food purchases in 2017. Thus, a stable decline of food purchases was observed throughout

¹ URL: http://www.ved.gov.ru/rus_export/financial_measures/state_specialized_russian_export_import_bank

² URL: <http://mcx.ru/ministry/coordination-and-advisory/export-group/0>

³ Report of the Center for Strategic Research 'The Development Trends and Main Challenges of Russia's Agrarian Sector' (in Russian) URL: <https://www.csr.ru/wp-content/uploads/2017/12/Report-Agricultural-Sector-November-2017-Web.pdf>

⁴ Uzun V. Restriction of the Size of Subsidies Allocated to One Agricultural Producer: Its Necessity, Mechanisms, and Consequences // APK: Economics and Management, No 11, 2017, pp.12–31.

⁵ As the final data relative to some food security indices for 2017 will be published in mid-2018, our estimates in this section are partly based on relevant data for 2016.

the period from August 2014 to June 2017.¹ In June 2017, this index amounted to -13 percent relative to June 2012. In September, food purchases in comparable prices rose above the level of September 2016 to that of September 2015, while failing to reach the level of September 2014, let alone that of September 2013.

From 2014, the share of total household expenditure spent on food has been on the rise (Fig. 49).

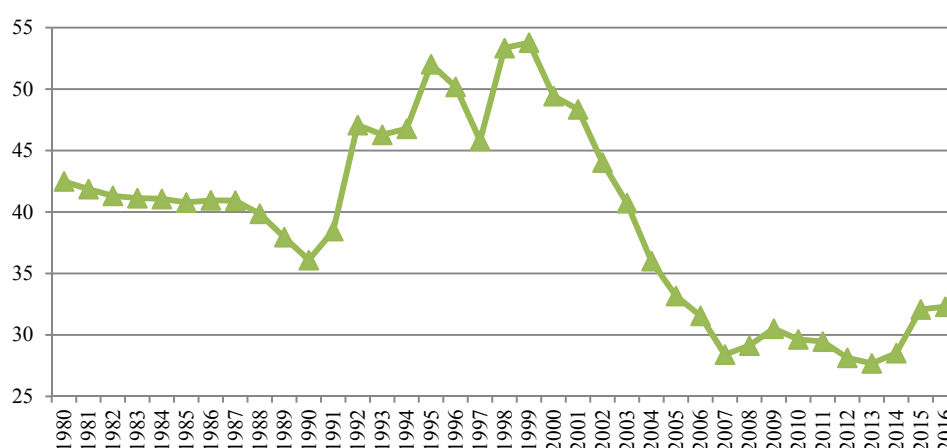


Fig. 49. Economic access to food – household food expenditure share (percent)

In rural families, the *share of total household final consumption expenditure spent on food increased from 41.8 percent in 2013 to 45.3 percent in 2016, and in urban families this index moved from 31.3 percent to 35.6 percent.* This growth was especially noticeable in the poorest families (first decile): from 48.2 percent in 2013 to 54.4 in 2016. Calorie intake in the first decile verged on starvation (2,045 kcal/day in 2016), while the Food and Agriculture Organization (FAO) defines hunger as consumption of 1,600–2,000 kcal/day, and the US Department of Agriculture – 2,100 kcal/day. This population group must be urgently protected by a government food assistance program. In order to raise the average annual food consumption level of the first decile (their current disposable income level preventing them from buying the recommended food basket) at least to that of the second decile, the government will need to spend RUB 144 billion. This represents a serious burden on the budget. Considering the limited potential of the federal and regional budgets, the high number of the needy, and the traditional non-transparency of income sources in many households, it becomes problematic to provide assistance to those who truly need it. It is obvious that the official household income data must be augmented/adjusted with due regard for the real household living standards of those who apply for government food assistance.

If the people cannot afford the recommended food basket, import substitution with Russian products can be justifiable only if the prices of Russian foodstuffs are not higher than those of their imported counterparts. Otherwise the orientation to Russian producers will reduce the economic access to food. According to the OECD estimates, over the period 2014–2016, Russia's population was buying food at prices that were on the average 10 percent higher than

¹ It could have been assumed that the shrinkage of household purchases was offset by an increased production of individual households. However, the budget surveys conducted in 2016 (Rosstat) failed to demonstrate production growth at individual households.

the prices in the world food market.¹ In this situation, in order to improve the economic access to food, it would be feasible to continue agriculture modernization, promote competition, lift the embargo on food products, and avoid linking government food assistance programs to Russian products alone. If this principle is not complied with, the artificial restrictions on the access to the Russian market of foreign food suppliers will reduce competition, create negative incentives for the reduction of domestic food prices, and thus undermine the country's food security.

The ruble's depreciation conduced to growth of food prices, as well as of the prices of other goods. However, the sharper growth trajectory displayed by food prices after the introduction of an embargo can be explained specifically as the upshot of artificial constraints on competition in the food market food. In *Fig. 50* it can be seen that, relative to August 2011, the growth patterns of prices across all groups of goods and services were practically the same as those of the prices of foodstuffs, and this situation lasted until June 2013. But from mid-2013 onwards, food prices began to grow at a faster rate, and this gap further increased after the introduction of the food embargo by Russia.

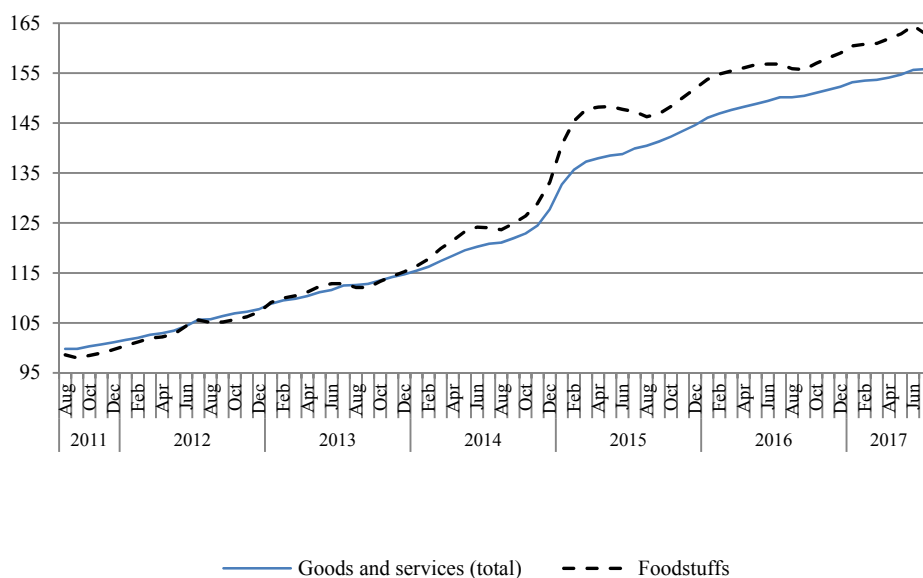


Fig. 50. The price index (January 2011=1)

4.7.4. Conclusions and recommendations

1. Growth in the agricultural sector. For the 5th year in a row, the agricultural sector has been demonstrating stable growth patterns of production, crop and livestock productivity, and labor productivity. The increasing output and productivity translated into Russia's lower dependence on imports, and rising exports of agricultural products and foodstuffs. However, in order to keep up the current growth rates, several issues will have to be properly dealt with:

- the need to increase the volume of both the traditional exports (grains, vegetable oils) and the exports of other products that are now in abundance in the domestic market (pork, poultry meat, sugar, potatoes, some types of vegetables, gourds, and melons);

¹ Agricultural Policy Monitoring and Evaluation 2017. OECD, 2017.

- the need to ensure successful development of the grain, fats and oils, and sugar beet industries. The current pig and poultry breeding growth occurs alongside the plunging production indices of beef, milk, potatoes, and sheep breeding. The land and labor resources formerly used to develop those sectors are now largely wasting away. The attempts to halt the decline and boost growth in these sectors by way of launching mega-reform have failed;

- the need to replace by the output of small and medium-sized businesses the shrinking output of potatoes, vegetables, gourds, and melons, fruits and berries by individual households. The agricultural census 2016 revealed vast areas of arable lands being held by individual households; according to Rosstat data, they employ more than 4 million workers. As a rule, big businesses cannot properly handle such resources, they are abandoned, and this situation translates into a patchy agriculture development pattern across the country's territory. The use of this potential can become possible through active development of hi-tech farms specializing in the production of milk, meat cattle and sheep breeding, potato and vegetable production, and management of fruit orchards. In order to promote this process and properly fit small agricultural businesses and small farms into food value added chains, it will be necessary to change the current approaches to government support of agricultural businesses.

2. Changing the approaches to government support. The government agricultural policy must gradually switch over from the support of owners of selective big agricultural firms and holdings to vigorous support, on a massive scale, of predominantly small and medium-sized agricultural businesses. The government's current policy has been focused on preferential treatment of selective big producers, resulting in their having obtained huge arable lands and multiple hired workers, while small and medium-sized businesses were being rapidly ousted from the agricultural market. This practice runs contrary to world historic experience and best practices of the developed countries, which have succeeded in creating a highly-performing agricultural sector. Legislative constraints on the size of subsidy allocated to one recipient represent a widespread international practice. The absence of such constraints in Russian legislation is the factor that prevents efficient development in the agricultural sector. This conclusion is in line with the general theory of government support of agriculture, which should be oriented not only to the existing purely economic issues, but also to sustainable social development of rural areas.

In the framework of measures designed to improve the mechanisms of government support it would be worthwhile to radically alter the principles employed in grain and dairy product pricing. The government public goods and buying interventions must be geared so as to maintain prices in the interval between their floor and ceiling, which will then translate in a similar behavior of the incomes of agricultural producers and household expenditure patterns. So far, this balance has not been achieved. Moreover, the currently applied pricing mechanism runs contrary to the principles established by the Federal Law 'On Agriculture Development'.

3. The launch of a government food assistance program addressing the most vulnerable population group. The main unresolved food security issue in this country is the low economic access to food for the low-income decile. The proper solution would be to introduce, as part of the food security doctrine, a threshold per capita income level ensuring economic access to food. Bringing personal income to the threshold level should be the principle index applied in estimating the country's food security. Food assistance should be provided to the poorest families, where the household monthly income per person is below the threshold level. It is necessary to adjust the methodology employed in identifying the needy, with due regard not only to the official income statements, but also to their actual living conditions. It is not feasible

to 'tie' food assistance only to Russian product, because some of them are more expensive than their foreign counterparts.

4. Adjustment of the indices applied in estimating Russia's food security. Given that the existing set of indices does not reflect the index of economic access to food, the estimation methodology should be revised. In addition to the currently applied consumption indices, the estimations must rely on some other indices, e.g. the share of total household final consumption expenditure spent on food; the share of households where food expenditure patterns correspond to less than 75 percent of the food basket recommended by the RF Ministry of Healthcare; the number of regions where the share of households spending on food more than 50 percent of their total expenditure is above 30 percent. It is likewise feasible to prepare annual reports of the food security situation in the Russian Federation, where the current trends should be analyzed not only on a nationwide level, but also across different income groups and territories.

4.8. Foreign trade¹

4.8.1. World trade outlook

In 2016, the growth rates of world economy hit the all-time low since the global financial crisis and constituted 3.2 percent. However, the global economy is experiencing a broad-based cyclical upturn started in mid-2016 is gaining momentum. In this context, international financial organizations have adjusted their short-and medium-term forecasts to the upside.

The World Bank report *Global Economic Prospects*², released in January 2018, estimated 2017 as more successful year than was previously forecast—estimates of global GDP growth in 2017 was upgrade from 2.7 percent to 3 percent. In the wake of benign global financing conditions, generally accommodative policies, rising confidence, and firming commodity prices global economy can edge up to 3.1 percent in 2018. Projections as of June 2017 said that in 2018 the world economy would grow by 2.9 percent, the forecast for 2019 was adjusted from 2.9 to 3 percent growth and forecast for 2020 gave 2.9 percent growth. At the same time, the World Bank experts warn that the lack of structural reforms aimed at the long-term potential for growth world economic growth will be temporary. In the context when the developed economies are close to full employment and their central banks raise interest rates in order to curtail inflation, economic growth in advanced economies is projects to slow in the coming years. According to the World Bank estimates, growth in advanced economies will slow from 2.3 percent in 2017 to 2.2 percent in the current year, and to 1.7 percent by 2020.

GDP growth estimates at 2017 year-end was upgraded by 0.7 percentage point up to 2.4 percent in Euro Area. The 2018 forecast is adjusted upwards by 0.6 percentage point to 2.1 percent. 2019 will see growth slowdown to 1.7 percent in Euro Area and in 2020 down to 1.5 percent.

The US GDP growth estimates at 2017 year-end were upgraded from 2.1 to 2.3 percent. Growth forecast for 2018 was reviewed upwards from 2.2 to 2.5 percent. According to the World bank estimates, economic growth in the US will slow down in 2019 to 2.2 percent and in 2020 down to 2.0 percent.

¹ This section is written by Nadezhda Volovik, the Gaidar Institute, IAES-RANEPA; Galina Balandina, IAES-RANEPA.

² <http://www.vsemirnyjbank.org/ru/publication/global-economic-prospects>

Economic growth in emerging market and developing economies (EMDEs) is expected to accelerate, hitting 4.5 percent in 2018 against a background of recovery of economic activity in oil exporting countries.

However, developing economies that grew last year by 4.3 percent can also face constraints for growth in the future. For example, GDP of India last year edged up by 6.7 percent instead of projected in June 7.2 percent. The 2018 forecast is revised downward by 0.2 percentage point to 7.3 percent, and for 2019 also down by 0.2 percentage point to 7.5 percent. In 2020, as expected, GDP growth will remain at 7.5 percent in India.

Growth in China is estimated to have reached 6.8 percent in 2017—an upward revision by 0.3 percentage point from June forecasts. Chinese growth is projected to edge up by 0.1 percentage point in 2018 to 6.4 percent.

The World Bank estimates growth in Russia at 1.7 percent, in 2017 and in 2018 the growth is forecast to edge up by 0.4 percentage point and by 0.3 percentage point, respectively.

Amid downside risks regarding long-term world economy growth, the World Bank indicated risks in the near-term perspective. Among these downside risks were tightening of global financing conditions due to a somewhat faster projected pace of U.S. Federal Reserve policy rate hikes in the United States and other development countries or growing sentiments regarding capital markets.

Protectionism and generated by it slack growth of the world economy also remain among the risks. According to the World Bank, the volume of global trading of goods and services edged up by 4.3 percent last year and became an important factor of world economy growth.

UNCTAD 2017 report “Beyond Austerity: Towards a Global New Deal”¹ indicates that 2017 observed somewhat recovery although nor sufficient. The forecast for the world economy in 2017 is 2.6 percent, not much higher than in 2016 (2.2 percent). The projections show that the majority of regions will expect slack growth. Markedly better improvement in economic situation is forecast in the Latin American countries that should come out of recession even so that growth rates in those countries will not exceed 1.2 percent. Countries of euro zone registered the highest rates of growth since 2010—1.8 percent, but lower than those recorded in the United States – 2.1 percent. Measures of tight budgetary policy, which still remain the main tool of macroeconomic policy hamper prompt economic recovery in the developed economies.

The IMF report “World Economic Outlook Update” released in January 2018 saw projections for global growth revised upward compared to fall. Global output is estimated to have grown by 3.7 percent in 2017, which is 0.1 percentage point faster than projected in October report, and by 3.9 percent in 2018, which is 0.1 percentage point faster, which reflects economic movement in euro zone, Japan, China and many other emerging market economies. The U.S. growth forecast remained unchanged compared to July estimates: 2.2 percent in 2017 and 2.3 percent in 2018. That was due to no expected reduction of taxes planned by Donald Trump administration. The euro zone forecast growth forecast was revised upward by 0.2 percentage point to 2.1 percent in 2017 and to 1.9 percent in 2018 compared to July estimates. The revision reflects higher exports, stronger domestic demand and reduced political risks. It should be noted that the forecast was computed before the events in Catalonia against a background of referendum for independence from Spain. The forecast for Chinese economy was revised upward by 0.1 percent point to 6.8 percent in 2017 and to 6.5 percent in 2018 (*Table 42*).

¹ UNCTAD web site. Trade and development report 2017. BEYOND AUSTERITY: TOWARDS A GLOBAL NEW DEAL// http://unctad.org/en/PublicationsLibrary/tdr2017_en.pdf

Table 42

Dynamics of global GDP and world trade (growth rates in percent to previous year)

	2010	2011	2012	2013	2014	2015	2016	Estimate	Projections	
								2017	2018	2019
<i>Global GDP</i>	5.1	3.9	3.4	3.3	3.4	3.2	3.2	3.7	3.9	3.9
Advanced economies	3.0	1.7	1.2	1.4	1.8	2.1	1.7	2.3	2.3	2.2
United States	2.4	1.8	2.3	2.2	2.4	2.6	1.5	2.3	2.7	2.5
Euro zone	2.0	1.5	-0.7	-0.4	0.9	2.0	1.8	2.4	2.2	2.0
Germany	4.0	3.4	0.9	0.5	1.6	1.5	1.9	2.5	2.3	2.0
France	1.7	2.0	0.3	0.3	0.2	1.3	1.2	1.8	1.9	1.9
Great Britain	1.8	1.1	0.3	1.7	3.0	2.2	1.9	1.7	1.5	1.5
Emerging market and developing economies	7.4	6.2	5.1	4.7	4.6	4.0	4.4	4.7	4.9	5.0
Commonwealth of Independent States	4.8	4.8	3.4	2.2	1.0	-2.8	0.4	2.2	2.2	2.1
Russia	4.3	4.3	3.4	1.3	0.6	-3.7	-0.2	1.8	1.7	1.5
Except Russia	6.0	6.1	3.6	4.2	1.9	-0.5	1.9	3.1	3.4	3.5
Developing countries, Asia	9.5	7.8	6.7	6.6	6.8	6.6	6.4	6.5	6.5	6.6
China	10.4	9.3	7.7	7.7	7.3	6.6	6.7	6.8	6.6	6.4
India	10.1	6.3	4.7	5.0	7.3	7.6	7.1	6.7	7.4	7.8
Latin America and Caribbean	6.2	4.6	2.9	2.7	1.3	0.0	-0.7	1.3	1.9	2.6
Brazil	7.5	2.7	1.0	2.5	0.1	-3.8	-3.5	1.1	1.9	2.1
Mexico	5.6	4.0	4.0	1.1	2.1	2.5	2.9	2.0	2.3	3.0
<i>Global trade in goods and services</i>	12.6	6.1	2.9	3.0	3.3	2.6	2.5	4.7	4.6	4.4
Imports										
Advanced economies	11.4	4.7	1.2	1.4	3.4	4.2	2.7	4.0	3.8	
Emerging market and developing economies	14.9	8.8	6.0	5.3	3.6	-0.6	2.0	4.4	4.9	
Exports										
Advanced economies	12.0	5.7	2.0	2.4	3.4	3.6	2.2	3.8	3.6	
Emerging market and developing economies	13.7	6.8	4.6	4.4	2.9	1.3	2.5	4.8	4.5	

Source: data released by IMF (<http://www.imf.org/ru/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018>)

Against the backdrop of released positive statistics regarding certain advanced and emerging market economies (including European countries as well as China), the Bank of Russia revised upward compared to September Monetary Policy Report its estimate of aggregate GDP growth in trade partners of Russia in 2017 from 2.3–2.4 percent to 2.7 – 2.8 percent.¹

In the context of slack global demand, the world trade registers sluggish growth. Meanwhile, the World Trade Organization (WTO) experts have revised upward estimates of world trade growth in 2017 from 2.4 percent to 3.6 percent.² Forecast revision was due to increased trade flows in Asia in the context of interregional supplies and recovery of demand for imports in North America after its marked contraction in 2016. Risks that can hamper world trade recovery are tight monetary policy, geopolitical tension and financial losses from natural catastrophes. Revision of North American Free Trade Agreement (NAFTA) and negotiations on trade agreements following Brexit between the United Kingdom and the European Union also can result in decline of world trade indicators.

The World Trade Outlook Indicator (WTOI) is designed to provide "real time" information on the trajectory of world trade by three to four months prior to release of trade volume statistics. The latest value of 102.3³ is little changed from the previous reading of 102.2 in

¹ Bank of Russia web site. Monetary Policy Report №4// http://www.cbr.ru/publ/ddcp/2017_04_ddcp.pdf

² WTO web site. WTO upgrades forecast for 2017 as trade rebounds strongly// https://www.wto.org/english/news_e/pr800_e.htm

³ WTO web site https://www.wto.org/english/news_e/news18_e/wtoi_12feb18_e.pdf

November last year, indicating continued solid trade volume growth in the first quarter of 2018 following robust expansion in 2017. The WTOI line in the chart below (blue) is slightly below the merchandise trade line (red), which suggests that quarterly merchandise trade volume growth may moderate going forward while still remaining above trend. The WTOI unites several indicators linked to world trade in a single indicator in order to determine near-term trends. Readings of 100 indicate growth in line with medium-term trends; readings greater than 100 suggest above trend growth, while those below 100 indicate the opposite.

Component indices for container port throughput and air freight (104.1) and international air traffic (104.4) in Q1 2018 are firmly above trend, indicating strong current trade growth. Meanwhile, the forward-looking export orders index (104.2) has reached its highest level since 2011, pointing to sustained recovery in trade flows in the first half of 2018. On the other hand, weaker results for automotive products (99.7), electronic components (97.9) and agricultural raw materials (98.6) could indicate weakening consumer confidence, which can lead to a slowdown of recovery growth of the world trade. According to the data released by the World Trade Organization (WTO), in 2017, world merchandise exports in value terms went up by 10¹ percent compared to the same period of the previous year. Exports from the Russian Federation demonstrated the highest growth (25.3 percent), Belorussia (24.2 percent), and Viet Nam (21.4 percent). The Russian Federation returned to the rating list of major exporters where it is ranked 15 (2.17 percent of world exports), which it kept since 2015 (with 2.29 percent), following a drop to rank 18 in 2016 (1.83 percent).

In terms of merchandise trade turnover, the Peoples Republic of China ranked first on the list with USD 4,110.6 billion in 2017. Trade balance of China remains positive since 1994 and in 2017, it hit USD 429.7 billion.

In terms of merchandise trade turnover, the United States of America ranked second with USD 3,956.2 billion. This said merchandise trade deficit remains: in 2017, it constituted USD 862.7 billion.

Germany ranked third on the list; its merchandise trade turnover in 2017 came to USD 2,615.5bn. Positive trade balance amounts to USD 281.6bn.

4.8.2. Terms of Russia's foreign trade: market conditions for major products of Russian export and import

The recovery of global demand has reflected on the dynamics of world commodity merchandise markets. For example, by the year-end the composite index of commodity assets Bloomberg Commodity Index (BCOM), which has 22 commodity futures in seven sectors, edged up from the second half of June (when it hit the lowest annual level of 79.6382 points) in the wake of contraction of deliveries amid growing demand for raw materials by 5.8 percent – to the level of 82.2183 points (December 12, 2017). Most critical price growth was observed on the markets of crude oil, coal, basic metals, cotton, and Robusta coffee. Price growth of those markets was driven by contraction of supply on the pretext of curtailment of production, reduction of capacities, environmental projects and simply crop failure.

Global crude oil market in 2017 was markedly under a spell of the crude oil production cut, which resulted in the oil market balancing. Attempts taken by OPEC and other non-OPEC oil producers aimed at cutting crude oil production bore fruit – oil supply glut began edging down,

¹ Calculated on data released by WTO «Monthly merchandise trade values»: https://www.wto.org/english/res_e/statis_e/short_term_stats_e.htm

and prices have stabilized. The oil market has positively reacted to the extension of crude oil production cut agreement between OPEC and non-OPEC oil producers signed in November 2017.

The World Bank energy price index edged up in December 2017 by 2 percent compared to the previous month, which was due to surge of coal price by 16.7 percent owing to the implementation of environmental projects aimed at reduction of excessive coal production capacities. In 2017 compared to 2016, the energy price index increased by 23.6 percent (Fig. 51).

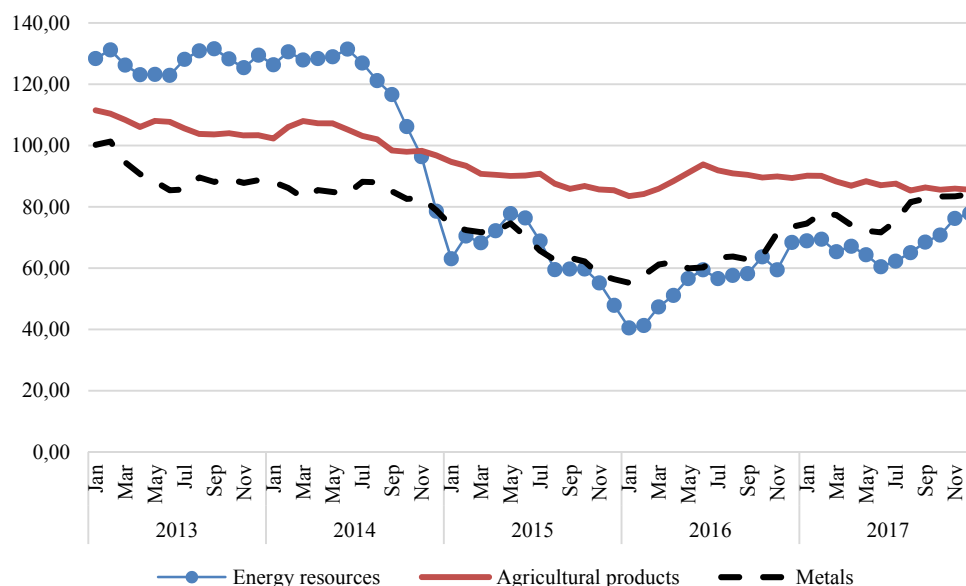


Fig. 51. World Bank commodity price index (2010 =100 percent)

Источник: <http://www.worldbank.org/en/research/commodity-markets#1>

Despite the fact that 22 oil-exporting countries of OPEC and non-OPEC oil producers have raised the level of the crude oil production cut agreement compliance, oil prices were falling in H1 first of all due to accumulated large stocks, shale oil production recovery in the United States as well as increased activity of such OPEC members as Libya and Nigeria, which were not covered by the OPEC+ production cut agreement as their oil industry suffered markedly from the combat activities.

In Q3 2017, crude oil prices were recovering moderately against the backdrop of the oil stock reduction amid growing global demand, improved compliance with oil production cut between OPEC and non-OPEC oil producers as well as shale oil production stabilization in the United States. Crude oil prices edged up by 1.6 percent to USD 50.2 per barrel on average compared with the previous quarter.

On November 30, 2017, members of OPEC agreed on extending the oil production cut agreement through the end of 2018. Other non-OPEC producers agreed to join the oil production cut agreement. Libya and Nigeria have undertaken obligations before OPEC to freeze their oil production at the 2017 level – 2.8 million barrels per day. According to data released by the OPEC report, at the November-end the agreement was executed by 121 percent; according to the data released by the International Energy Agency execution constituted

115 percent (assessment takes into consideration solely OPEC member states). As a result, in November 2017 Brent price exceeded USD 60 per barrel for the first time since December 2014, and on December 11, 2017, it hit USD 65.62 per barrel.

In 2017, Brent price averaged around USD 54.39 per barrel up by 23.5 percent against 2016 (USD 44.05 per barrel).

Oil production cut by OPEC and other oil producers led to the price growth on gas. For example, in the United States in 2017 compared to 2016, natural gas price went up by 18.8 percent, in Europe – by 23.9 percent, liquefied natural gas in Japan – up by 16.8 percent.

However, in Q3 2017 compared to the previous quarter, natural gas prices fell in the US by 4.0 percent to USD 2.93 per 1 million Btu owing to mild weather, corporate demand contraction, which suffered from hurricanes, and sufficient inventories of underground gas storage accumulated during winter. In Q4 price downward trend continued: compared to the previous quarter the price of natural gas in the US decreased by another 2.1 percent. It is projected that the demand for natural gas will go up due to commissioning of new capacities on the chemical industry as well as increased exports via pipelines to Mexico.

Natural gas price delivered to Japan down from USD 8.33 per 1 million Btu in Q2 to USD 8.23 per 1 million Btu in Q3 and to USD 7.92 per 1 million Btu in Q4 2017. Nevertheless, the year-average price on liquefied natural gas edged up from USD 6.89 per 1 million Btu in 2016 to USD 8.05 per 1 million Btu recorded in 2017.

European natural gas prices in Q2 and Q3 remained flat at USD 5.3 per 1 million Btu. In Q4 they rose to USD 6.22 per 1 million Btu. The year-average prices moved up by 23.9 percent to USD 5.65 per 1 million Btu reflecting contraction of nuclear capacities in France, high prices of coal and limited supply of liquefied gas.

Prices of non-energy commodities in 2017 in comparison with the previous year rose by more than 5.6 percent with higher variations among major groups. For instance, metal prices rose by 24.2 percent demonstrating best results among commodity groups due to heightened demand especially in the sphere of real estate, infrastructure and industrial sector in China as well as in the context of limited supplies due to contraction of excessive capacities. In December 2017, average basic metals prices fell by 0.5 percent due to somewhat slowdown of industrial activity and real estate market slump in China recorded in early Q4. In H2, prices recovered reflecting the weaker dollar. Over year as a whole, according to the London Metals Exchange data, price of nickel rose by 8.5 percent, led – by 24 percent, aluminum – 22.7 percent, copper – 26.7 percent, and zinc – by 38.3 percent.

Prices of precious metals rose by 0.4 percent in the face of strengthening investment demand and weaker dollar. Prices of agricultural products fell by 0.5 percent continuing downward trend from the onset of the year. Prices of food products edged up by 0.7 percent despite price cut of cereals, oil and protein meal. Prices of beverages declined by 9.0 percent (*Table 43*).

Table 43

Average annual world prices

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	2	3	4	5	6	7	8	9	10	11	12
Brent, \$/bbl.	72.32	97.64	61.86	79.64	110.9	111.97	108.86	98.94	52.37	44.05	54.39
Natural gas (USA), USD/1 m Btu	6.98	8.86	3.95	4.39	4.00	2.75	3.73	4.37	2.61	2.49	2.96
Natural gas, European market, USD /1 m Btu	8.56	13.41	8.71	8.29	10.52	11.47	11.79	10.05	7.26	4.56	5.65

	1	2	3	4	5	6	7	8	9	10	11	12
Natural gas (Japan), USD/1 m Btu		7.68	12.55	8.94	10.85	14.66	16.55	15.96	16.04	10.22	6.89	8.05
Copper, USD/t		7118	6956	5149	7534	8828	7962	7332.1	6863.4	5510.5	4867.9	6169.9
Aluminum, USD/t		2638	2573	1665	2173	2401	2023.3	1846.7	1867.4	1664.7	1604.2	1967.6
Nickel, USD/t		37230	21111	14655	21809	22910	17557	15032	16893	11863	9595.2	10409

Source: calculated on data released by the World Bank.

4.8.3. Main indices of Russian foreign trade

Throughout 2017, Russian foreign trade turnover demonstrated the ongoing since late 2016 upward trend. In 2017, it rose compared to 2016 by 24.8 percent to USD 590.9 billion. However, it should be noted that there was a quarterly slowdown of the Russian foreign trade turnover growth rates. In Q1 2017 compared to the same period of 2016, it rose by 36.5 percent, in Q2 – by 23.4 percent, and in Q3 – by 18.8 percent. In Q4, the foreign trade turnover grew by 24.2 percent.

Foreign trade turnover with countries of far abroad rose by 24.9 percent to USD 515.8 billion during the year, and with CIS countries – by 24.1 percent to USD 75.1 billion.

Russian exports in 2017 rose compared to the same period of 2016 by 25.3 percent to USD 353.1 billion, and Russian imports – by 24.1 percent to USD 237.8 billion. Long-established dynamics of exports and imports triggered growth of positive trade balance by 27.8 percent – to USD 115.3 billion (*Fig. 52*).

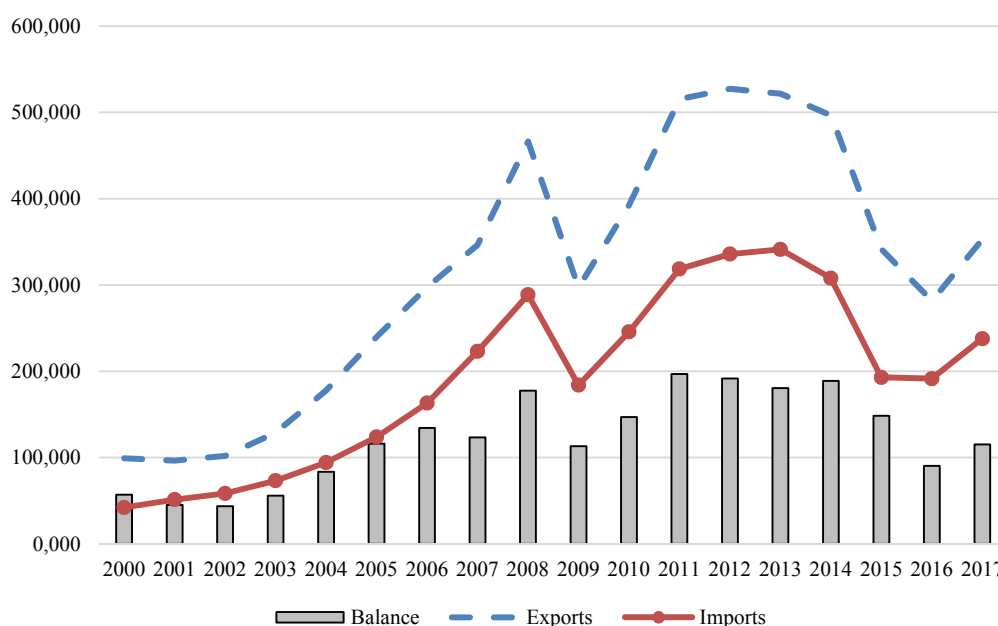


Fig. 52. Main indexes of Russian foreign trade (USD bn)

Source: Bank of Russia.

Price factor above all has determined positive dynamic of Russian exports amid insignificant growth of export volumes of goods. Growth of value of imports was determined essentially by growth of volumes of delivered goods to Russia (*Table 44*).

Table 44

Indexes of average prices and volumes of export and import pattern of Russian Federation in 2017 (in percent to corresponding quarter of 2016)

Customs Tariff Number EAEU	Name of commodity group	Average price index						Volume index					
		Exports			Imports			Exports			Imports		
		Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3
01–24	Food products and agricultural raw materials (minus textile)	108.9	102.6	103.3	103.8	103.5	105.7	109.8	140.5	99.0	100.8	111	119.1
25–27	Mineral commodities	125.6	122.7	122.5	111.6	127.6	117.6	102.9	99.3	100.4	117.5	109.8	112.8
27	Fuel and energy products	125.6	122.4	122.5	110.1	115.5	115.1	102.8	99.3	100.1	103.2	108.6	122.2
28–40	Chemical industry products, rubber	109.2	114.6	107.8	105.8	107.3	110.7	99.1	104.3	106.8	114	103.1	108.2
41–43	Rawhide, furs and articles made of furs	122.3	114.2	99.9	91.5	100.9	91.8	98.5	121.6	93.1	99.5	123.5	180.6
44–49	Timber and pulp and paper products	102.3	107.5	111.5	99.6	98.1	101.9	114.7	106	106.6	105.9	113	105.7
50–67	Textiles, textiles and footwear	90.5	101.4	98.7	92	96.2	96.2	136.6	100.8	110.5	134.9	129.6	136.0
72–83	Metals and metal products	119.4	120.9	123.2	105.1	104.7	105.5	113.8	96.2	105.2	129.3	152	115.6
84–90	Machinery, equipment and transport vehicles	89.1	106.4	122.1	100.1	105.2	108.9	104.6	93.4	109.7	116.4	132	115.2
68–70, 91–97	Other products	89.3	102.4	105.9	99.4	100.7	103.3	71.6	80.6	104.9	130.9	118.5	108.3

Source: data released by FCS.

Russia's terms of trade improved in 2017. According to the data released by the Federal Customs Service (FCS), in November 2017 against November 2016, Russia's terms of trade index hit 116.8 points (in July 2016 – 86.6 points), of which with the countries of far abroad – 119.1 points, and with CIS countries – 102.9 points.

Ratio of disequilibrium in trade (balance and trade turnover ratio) rose from 19.1 percent in 2016 to 19.5 percent in 2017.

Structure and dynamics of exports

After four consecutive years of downward trend and hitting the 11-year minimum in 2016, the volume of Russian exports began recovering. The value volume of exported goods in 2017 compared to 2016 rose by 25.3 percent to USD 353.1 billion. Deliveries to distant foreign countries increased by 25.4 percent, and to CIS countries – by 24.7 percent. The share of distant foreign countries in the total volume of exports remained at the level of the previous year – 85.9 percent.

Table 45

Russia's exports dynamics

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Exports, bn USD	354.4	471.6	303.4	400.6	515.4	529.1	523.3	497.8	341.5	281.9	353.1
Including:											
Distant foreign countries	300.6	400.5	255.3	338.0	436.7	443.8	445.2	428.9	292.3	241.9	303.3
Growth rates, in percent to previous year											
Quantum index	105.8	105.0	96.8	97.0	110.0	97.8	99.9	104.9	109.0	103.5	105.4
Average price index	119.7	110.9	137.4	76.4	119.8	132.9	101.6	95.7	58.1	76.9	129.9

Sources: Bank of Russia, Ministry of Economic Development of Russia.

Hydrocarbons price growth was the main contribution for high growth of value volumes of Russian exports. Average contract price of crude oil rose in 2017 compared to 2016 by 27.7 percent, oil products – by 33.2 percent, and natural gas – by 15.3 percent.

Moreover, volumes of natural gas deliveries abroad rose by 5.8 percent. In 2016, Gazprom increased natural gas deliveries to distant foreign countries by 12.5 percent – to 179.3 billion cubic meters, which was the all-time high. In 2017, shipments hit 194.4 billion cubic meters, which was the record of gas shipments to distant foreign countries. Practically constant growth of gas exports by Gazprom has been observed since 2012. Over five years, the share of Gazprom in the European market rose by 34.0 percent.

Despite the fact that export volumes of crude oil and petroleum products decreased compared to the previous year by 0.8 percent and 4.9 percent, respectively, value volume of exports of fuel and energy complex rose by 27.4 percent and constituted USD 211.4 billion in 2017 compared to 2016.

In 2017 compared to 2016, export pattern saw the share of fuel and energy products to rise by 1.1 percentage point. Share of other commodity groups of extended nomenclature remained at the last year's level or declines. For example, the share of food products declined from 6.0 percent to 5.8 percent, the share of chemical products—from 7.3 percent to 6.7 percent, timber, pulp and paper products – from 3.4 to 3.3 percent, machinery, equipment and means of transport – from 8.5 to 7.9 percent (Fig. 53).

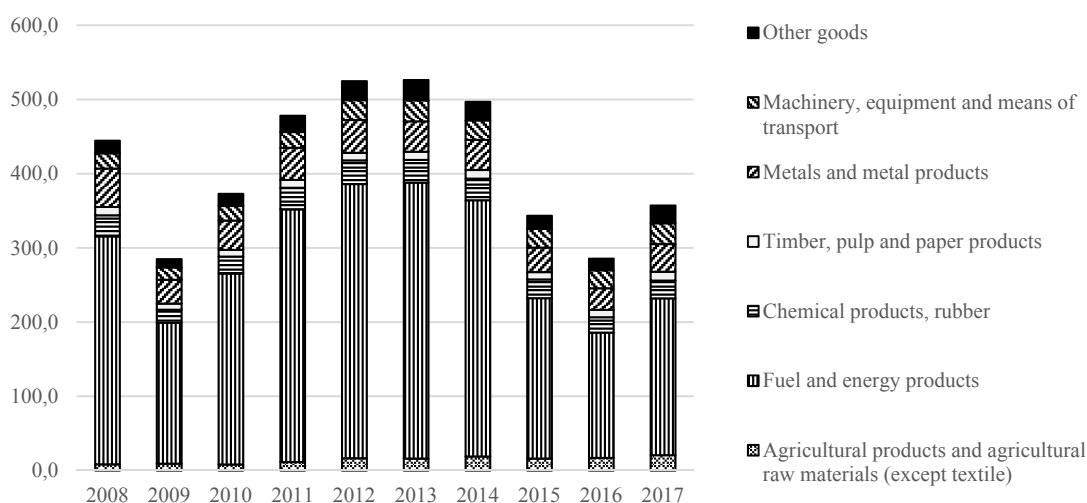


Fig. 53. Dynamics of Russian exports (USD bn)

Source: FCS.

According to the data released by the Federal Customs Service of Russia, non-resource non-energy Russian exports in 2017 hit USD 133.7 billion or 37.5 percent of the total exports volume (in 2016–38.3 percent).¹ Compared to 2016, value volume of non-resource non-energy exports rose by 22.5 percent. Upward trend of the global prices and extension of deliveries volume by 9.8 percent as well as strengthened ruble have contributed to exports.

Maximum contribution to the increase of non-resource non-energy exports was made by metal products (32.7 percent of total increase), food products (14.7 percent), engineering products (15.1 percent), chemical products (12.6 percent), precious metals and gems (8.6 percent), and pulp and paper products (8.1 percent).

In 2017, exports of food products and agricultural raw materials continued to demonstrate an upward trend, which volume hit USD 20.7 billion. This indicator surpassed the same indicator for 2016 by 21.5 percent and was a record high for the entire period of observation. Exports volume of that category of products rose by 21.7 percent. Export growth of food products was triggered by increased domestic production, favorable ruble exchange rate against the US dollar, as well as decline of the purchasing power of the population, which led to the contraction of domestic market of the majority of food products.

Cereals traditionally ranked first in the structure of Russian exports of food products. According to the data released by the FCS of Russia, in the current 2017–2018 agricultural year exports of cereals hit 31,427,000 tons up 36.1 percent against the same period of the last season (23,088,000 tons). Wheat exports constituted 24,514,000 tons (up 36.7 percent against the same indicator of last season). Barley exports came to 3,869,000 tons (up 1.9fold). Corn exports hit 2,823,000 tons (down by 5.7 percent). In value terms, exports of wheat and meslin over the calendar year rose by 37.4 percent to USD 5.8 billion. Egypt has accounted to one fourth of that volume up 45 percent, Turkey has accounted for 10 percent (up 29.9 percent), and Bangladesh has accounted for 6 percent (up 14.6 percent).

Fish and seafood ranked second in the structure of food exports: their exports hit 1.6 million tons up 8.4 percent against 2016. Their value volume constituted USD 3.43 billion in 2017 up by 14.3 percent against the same indicator seen in 2016. Frozen fish (59.5 percent) and shellfish (26.9 percent) account for the major part of the turnover. South Korea, China, the Netherlands, and Japan import the major share of these products.

Animal and vegetable fats and oils ranked third on the list. Their exports rose in 2017 by 22.0 percent to USD 2.66 billion. Turkey, Egypt, China, Algeria and many other countries import products of that group.

Over the last two years, Russia began exporting sugar, increased exports volume of pork and poultry meat. For example, exports of meat and edible meat offal rose by 57.6 percent, fruit and nuts – by 29.3 percent, and sugar – twice.

Exports of machinery, equipment and means of transport increased by 15.5 percent to USD 28.1 billion. Its share in the total exports hit 7.9 percent (in 2016 – 8.5 percent).

Exports of foreign-branded cars made in Russia kept rising markedly. At year-end 2017, it increased by 20.3 percent in value terms. Skoda and Lada top the list of Russian automotive industry exports. Skoda top the list with around 40 percent of the total exports of automobiles. Skoda Yeti tops sales. Over 15,000 of these vehicles were exported. Exports of Lada vehicles reached 10,000 unites. Renault ranks third on the list with exports of 3,700 vehicles. Belorussia,

¹ FCS web site http://www.customs.ru/index.php?option=com_content&view=article&id=26274:2018-02-12-11-28-37&catid=40:2011-01-24-15-02-45&Itemid=2094&Itemid=1835

Kazakhstan, Check Republic, China, and Germany account for the majority of imports of Russian made cars.

Structure and dynamics of imports

Against a background of domestic demand upward trend and relatively stable dynamics of ruble exchange rate imports in 2017 demonstrated a sustainable growth—imports reached USD 237.8 billion up 24.1 percent against the same indicator seen in 2016 (*Table 46*). Imports from distant foreign countries amounted to USD 212.5 billion, up 23.0 percent against 2016. The share of distant foreign countries in the total imports volume remained unchanged at 89.4 percent.

Table 46

Russian imports dynamics (USD bn)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Imports, USD bn	223.5	291.9	191.8	248.6	318.6	335.8	341.3	307.9	192.9	191.6	237.8
Including:											
Distant foreign countries	191.2	253.1	167.7	213.3	275.5	288.5	295.0	271.9	170.6	171.0	212.5
Growth rates, in percent to previous year											
Quantum index	122.4	130.1	127.1	113.5	63.3	135.4	122.2	105.1	97.8	96.6	115.0
Average Price Index	106.5	105.5	107.6	117.8	99.1	101.6	109.1	97.3	102.5	99.8	111.2

Sources: Bank of Russia, Ministry of Economic Development of Russia.

H2 2016 saw a recovery of imports volumes and in mid-2017, this indicator surpassed the average monthly level of 2010. That growth was due to purchases of machinery and equipment, which accounted for 53.6 percent of Russian imports increment. The Russian Federation imported machinery and equipment to the tune of USD 110.28 billion up 27.8 percent against 2016. Russia has imported machinery and equipment to the tune of USD 104.89 billion from the distant foreign countries. Imports of machinery and equipment include energy and special equipment, automotive special machinery, means of transport, vessels and airplanes, instruments and optics. Machinery and equipment as before account for around one-half of the total volume of Russian imports – 48.6 percent.

Imports of chemical products ranked second on the list of Russian imports (17.7 percent) rose in 2017 by 19.2 percent. Pharmaceuticals, plastics and products of plastics account for the major value of imports of chemicals with 27.0 and 22.0 percent, respectively. Rose by 23.7 percent.

Textiles imports reflecting increase of footwear imports by 40.0 percent and knitwear up by 25.0 percent.

In 2017, for the first time since the onset of the “sanctions wars” Russia increased imports of food products and agricultural raw materials.

To note, in August 2014, Russia banned imports of food products from countries, which had imposed sanctions against Russia: the US, the EU countries, Canada, Australia, and Norway. Beef, pork, poultry, sausage, fish, vegetables, fruits, dairy products, among other products were banned. From January 1, 2016, Russia banned imports of certain agricultural products from Turkey.

In 2014, Russia imported 25 million tons of food products and agricultural raw materials to the tune of USD 39.96 billion. In the following years, imports of food products were falling in

the wake of the imposed sanctions. In 2015, imports fell by 15.0 percent in volume terms to 21.4 million tons and by 33.0 percent in value terms down to USD 26.65 billion. In 2016, the downward trend went on to 20.3 million tons and USD 25.0 billion, respectively.

In 2017, imports of food products and agricultural raw materials increased in comparison with 2016 by 15.7 percent to USD 28.8 billion reflecting the rubles strengthening and amid lifting of embargo on imports of food products from Turkey. Fruits with 16 percent, meat and meat bypass with 9 percent, dairy product with 9 percent, alcoholic and non-alcoholic beverages with 9 percent, and vegetables with 6 percent account for major share of food products imports value.

Belorussia remains Russia's most important food and agricultural products exporter to despite a reduction in shipments in volume terms by 6 percent in 2017 down to 3 million tons. In value terms, imports from Belorussia rose by 15 percent to USD 3.9 billion. Belorussia exports dairy products, sugar, cheeses and cottage cheese, as well as meat and meat bypass to Russia.

Brazil ranks second on the list with USD 2.28 billion (in January-November 2017) of foodstuffs and agricultural products exports to Russia. Brazil exports to Russia soybeans, refrigerated and frozen pork, cattle meat and poultry, and peanuts. Ecuador ranks third with USD 1.18 billion of food products exports to Russia. First of all, Ecuador exports bananas to Russia. China ranks fourth with USD 1.55 billion of food products exports. China mostly exports apples and pears, citrus, onions and garlic, as well as tomatoes. Turkey resumed food products exports and agricultural products to Russia in 2017. Shipments of foodstuffs from Turkey in 2017 compared to 2016 rose in volume terms by 81 percent to 1.1 million tons, and in value terms by 66 percent to USD1 billion.

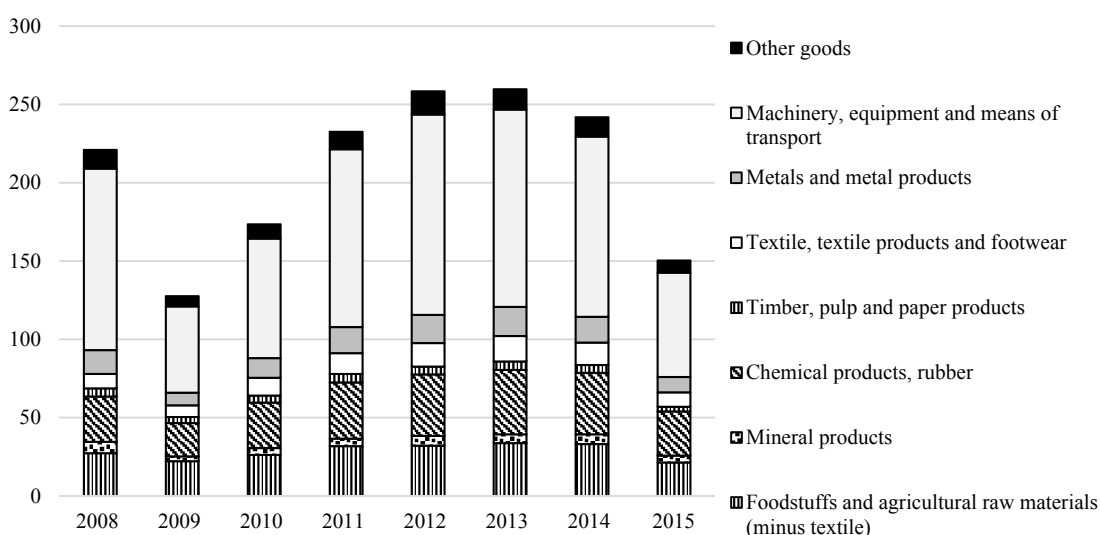


Fig. 54. Dynamics of Russian imports (USD bn)

Source: FCS.

2017 saw changes in the pattern of Russian imports in favor of investment goods. According to the Ministry of Economic Development, increment of investment goods deliveries came to 28.1 percent. Growth of consumer imports (by 21.6 percent in annual terms) reflected increased consumer unsecured lending.

The share of investment goods in Q3 2017 rose compared to Q2 by 1.6 percentage points to 29.2 percent, consumer goods up 0.7 percentage point to 32.6 percent. The share of intermediate goods contracted by 2.3 percentage points to 38.2 percent.

4.8.4. Regional pattern of Russian foreign trade

The share of the EU countries is decreasing in the regional pattern of Russian foreign trade, meanwhile the share of the APEC countries is rising in Russian foreign trade turnover. In 2017 compared to 2016, the share of the EU countries fell from 42.8 percent to 42.2 percent. Meanwhile, the share of the APEC countries rose in 2017 to 30.5 percent against 29.9 percent seen in 2016 (*Fig. 55*).

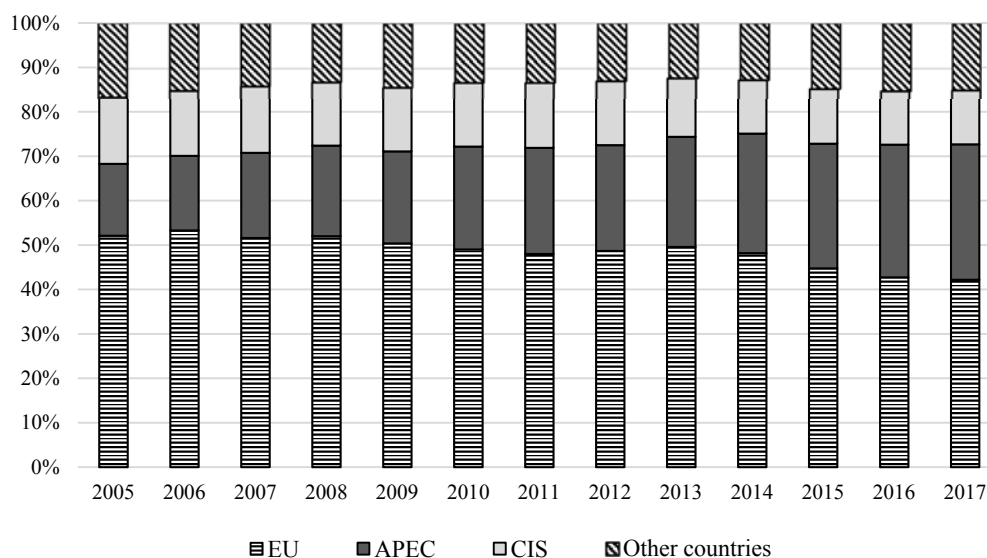


Fig. 55. Regional pattern of Russia's foreign trade (percent)

Source: FCS.

The European Union remains by far Russia's most important trade partner. In 2017, Russian foreign trade turnover with the EU countries rose by 22.9 percent notably both of Russian exports (by 22.1 percent) and Russian imports (by 24.4 percent). It should be noted that the growth of Russian foreign trade turnover was observed with all EU countries except Latvia and Estonia.

Russia's foreign trade with the APEC countries has moved up by 27.1 percent, with China by 31.5 percent, with Viet Nam by 36.2 percent, with Indonesia by 25.2 percent, and with Singapore by 94 percent. High growth rates of foreign trade turnover have been observed with countries that imposed sanctions against Russia. For example, foreign trade turnover with Australia in 2017 rose by 18.5 percent, with Canada by 43.2 percent, and with the United States by 16.2 percent.

Russian foreign trade turnover with the CIS countries has grown by 25.8 percent. Restoration of trade links was taking place with all CIS countries minus Turkmenia whose trade turnover with Russia contracted by 52.2 percent.

The Peoples' Republic of China is Russia's top trading partner since 2010. China's share rose to 14.9 percent in 2017 (14.1 percent in 2016) in Russia's foreign trade turnover. At the same time, Russia has adverse balance with China: in 2016, it amounted to USD 10.1 billion, and in 2017 – USD 9.1 billion.

Russia has adverse balance with other APEC countries: Viet Nam (USD -1.4 billion), Indonesia (USD -1.7 billion), the US (USD -1.8 billion), Malaysia (USD -0.9 billion), and Thailand (USD -1.2 billion). As a result, Russia has adverse trade balance with the entire Asia-Pacific economic cooperation region (*Fig. 56*).

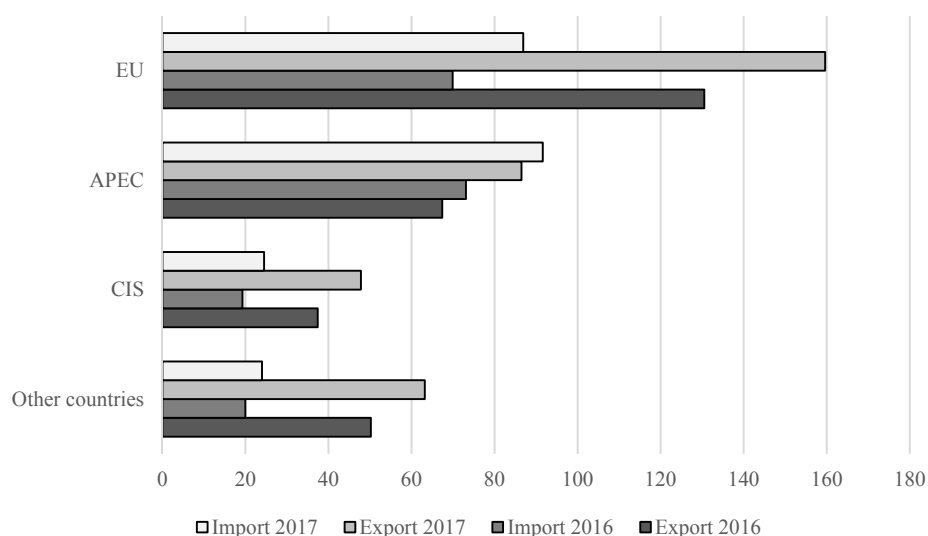


Fig. 56. Principal indexes of Russia's foreign trade across regions (USD bn)

Source: FCS of Russia.

4.8.5. Russian foreign trade regulation¹

Tariff regulation

Export customs duties. “Important tax maneuver” terminated in 2017 bringing down oil export duties and light oil products and raising Mineral extraction tax (MET) and export duty on heavy oil products. The government planned to introduce a fuel oil export duty hike to 100 percent of that on crude oil. However, the oil producing companies lagged behind with upgrading their refining capacities aimed at increasing depth of refining. Ministry of Energy and Ministry of Finance coordinated middle course version, which envisaged gradual increase of fuel oil duties and a hike to 100 percent happened in 2017 (*Table 47*).

¹ Materials of information and legal web site GARANT.RU were used in drafting this chapter.

Table 47

**Rates of export customs duties on crude oil and petroleum-based products
in 2014–2017 (USD/t)**

	Crude oil	Petroleum-based products	
		2014	
January 1	401.0	264.6	
		Light oil products	Heavy oil products
February 1	386.3	251	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
October 1	344.7	224.0	227.5
November 1	316.7	205.8	209.0
December 1	277.5	180.3	183.1
		2015	
January 1	170.2	81.6	129.3
February 1	112.9	54.1	85.8
March 1	105.8	50.7	80.4
April 1	130.8	62.7	99.4
May 1	116.5	55.9	88.5
June 1	144.4	69.3	109.7
July 1	143.1	68.6	108.7
August 1	133.1	63.8	101.1
September 1	109.2	52.4	82.9
October 1	91.5	43.9	69.5
November 1	97.1	46.6	73.7
December 1	88.4	42.4	67.1
		2016	
January 1	73.3	29.3	60.1
February 1	52.0	20.8	42.6
March 1	39.5	15.8	32.3
April 1	54.9	21.9	45.0
May 1	66.0	26.4	54.1
June 1	80.6	32.2	66.0
July 1	95.9	38.3	78.6
August 1	90.1	36.0	73.8
September 1	80.0	32.0	65.6
October 1	91.9	36.7	75.3
November 1	92.7	37.0	76.0
December 1	90.4	36.1	74.1
		2017	
January 1	79.1	23.7	79.1
February 1	89.5	26.6	89.5
March 1	91.0	27.3	91.0
April 1	88.9	26.6	88.9
May 1	84.0	25.2	84.0
June 1	80.0	24.0	80.0
July 1	80.9	24.2	80.9
August 1	74.4	22.3	74.4
September 1	84.1	25.2	84.1
October 1	87.9	26.3	87.9
November 1	96.1	28.8	96.1
December 1	105.0	31.5	105.0

Sources: Regulation of RF Government, Information released by Ministry of Economic Development of Russia.

In compliance with Regulation of the RF Government of August 15, 2016 No. 797 “On Introduction of Amendments in Rates of Export Customs Duties on Goods Moved from the Russian Federation Outside the Borders of Members of Agreement of Customs Union,” since September 2016, export customs duties were lifted on 200 headings, and reduced on 7 headings.

For example, export customs duties were reduced on sunflower seeds, lead, zinc and cobalt waste and scrap. Slashed to zero export customs duties on precious and semi-precious gems, unrefined copper, waste and lead scrap, coke and semi-coke from lignite, gas and coal tar, naphthalene, bituminous mastic, red fish (red salmon), soybeans, among other.

By the Regulation of the RF Government of August 19, 2017 No 984 “On Introduction of Amendments in Rates of Export Customs Duties on Goods Moved from the Russian Federation Outside the Borders of Members of Agreement of Customs Union,” and in compliance with Russia’s commitments within the WTO, from September 2017, Russia cut export duty rates on rawhide, iron-and-steel waste and scrap, refined copper and copper alloy, and articles made from basic metals.

Import customs duties

Pursuant to the Decision by the Collegium of the Eurasian Economic Commission of May 11, 2017 No. 44, in the framework of commitments undertaken by the Russian Federation at the accession to the World Trade Organization in 2012, from September 1, 2017 Russia reduced rates of Common Customs Tariff (CCT) on around 1,000 tariff headings. Duty rates changed on fish, cheese, vegetables, fruits, seeds for sowing, sources, cosmetics, detergents, ceramics, metal products, scooters, among others. For example, import duty rates were reduced on garments from 9.2 to 6.5 percent, tableware and kitchen utensils, as well as refrigerators from 13.6 to 12 percent, Pacific salmon from 4.4 to 3 percent, cod from 6 to 5 percent, and roses from 7 to 5 percent.

Also within the commitments undertaken by the Russian Federation at the accession to the WTO, the Board of the Eurasian Economic Commission took a decision on June 23, 2017 about the change of import duty rates regarding 472 codes TNVED EAEU from the list of the so called sensitive goods, such as equipment assembled on means of transport, drones, certain types of aircraft, textiles, other products of light industry, fish and sea food, among other. Similar changes were introduced into certain decisions of the EEU Board regarding import duty rates, which were applied during the transition period in Armenia, Kyrgyzstan, and Kazakhstan.

New rates were effective since early September 2017. The average weighted of import duty rate decreased to 5.3 percent (it was 5.4 percent from January 1, 2017). To note, prior to the accession to the WTO in 2012, the average import duty constituted 9.6 percent. During the first year following the accession, the reduction affected solely 10 percent of tariff headings (out of 11,000). By September 2015, the average import duty was reduced to 5.5 percent (in 2014–2015, rates declined on more than 4,000 tariff headings). By the end of the transition period in 2019, the EAEU average import duty should constitute 4.5 percent.

Non-tariff regulation

In November 2017, the WTO released its sixteenth monitoring report on Group of 20 (G20) trade measures.¹ G20 economies implemented a total of 16 new trade-restrictive measures during the period from mid-May to mid-October 2017. They are new of increased effective tariffs, export restrictions and localization of added value. This averaged over three new measures per month against six measures imposed in the period from October 2016 through May 2017. In 2015, around eight new trade-restrictive measures were imposed per month.

¹ The World Trade Organization web site: https://www.wto.org/english/news_e/news17_e/g20_wto_report_november17_e.pdf

Over the same period, G20 imposed 28 measures aimed at facilitating trade, including abolishment and reduction of tariffs and simplification of customs procedures. Nevertheless, it should be noted that measures aimed at trade-facilitating during the period under review were applied to goods, which value volume in the world trade turnover came to USD 27 billion, which was notably less than the previous monitoring period – USD 163 billion. During the reporting period, the value volume of good under the trade-restrictive measures also contracted to USD 32 billion against USD 47 billion seen in the previous monitoring period. The majority of trade-facilitating measures imposed in the framework of International Harmonized Commodity Description and Coding System (HS) included such goods, as “Nuclear reactors, boilers, equipment and mechanisms, and their components” (HS84) – 43.5 percent, “Electrical machinery and equipment and their components” (HS 85)–24.9%, “Instruments and optical, photographic, cinematographic, measuring, controlling, precision, medical and surgical devices and instruments, and their components” (HS 90) – 11.4%, and “Cereals” (HS 10) – 3.7 percent.

Currently, G20 economies implement 12,224 trade-restrictive measures. According to the WTO data as of June 30, 2017, sanitary and phytosanitary measures accounted for the highest share in the overall number of imposed trade-restrictive measures (28.5 percent of the total non-tariff measures). They are followed by technical barriers to trade (21.5 percent) and anti-dumping measures (13.8 percent).

The latest available data for January-June 2017 demonstrate a slight increase of the number of anti-dumping investigations initiated by G20 economies in comparison with the previous six months (July-December 2016). In H1 2017, G20 economies initiated 123 anti-dumping investigations against 118 such investigations initiated in H1 2016. The number of investigations initiated by Brazil, India, and the United States significantly fell from July 2016 to June 2017 compared to July 2015 to June 2016. Over the same period, Argentina notably increased the number of investigations (from 8 to 21), Canada (from 4 to 19), and Turkey (from 8 to 19). Although anti-dumping investigations not always result in anti-dumping measures, the growing number of anti-dumping investigations speak for a probable increase of implemented measures.

In early October 2017, the European Parliament adopted new anti-dumping rules designed to protect jobs and industrial production in the EU. The EU Assembly Resolution¹ indicates that they are designed to “update the trade defense instruments to deal with anti-dumping imports” by including in the existing rules social and environmental criteria, freeing European companies from excessive bureaucratic burden, assisting small and medium businesses. The Resolution envisages tougher EU rules against dumping and subsidized dumping from third countries.

The European Union imposed anti-dumping duties on eight type of Russian goods, anti-dumping investigations are under way against two type of Russian goods (hot-rolled steel and ferrochrome), review of anti-dumping measures are under way on two types of Russian products.

According to the Register of trade-restrictive measures² as of December 1, 2017, 143 restrictive measures were revealed, which limit access to the markets of Russian good. Mainly, they are anti-dumping duties, which account for 30.1 percent of the overall number of imposed measures, sanitary and phytosanitary measures account for 11.9 percent (SPS measures), and technical barriers – 10.5 percent (TBT measures) (*Table 48*).

¹ European Commission web site // http://europa.eu/rapid/press-release_MEMO-16-3605_en.htm

² <http://www.ved.gov.ru/mdb/information/database/>

Table 48

Market protective measures applied by third countries against goods from the Russian Federation

	2014	2015	2016	2017
Restrictive measure				
Anti-dumping measures	40	39	40	43
Special safeguard duty	9	15	17	13
Countervailing duty	–	1	1	1
TBT	9	9	10	15
SPS	3	7	11	17
Quotas (including tariff quotas)	2	3	3	3
Excises on the basis of discrimination	5	4	5	7
Ban on imports	4	3	4	6
Risks of imposition of measures	5	5	5	8
Other non-tariff measures	25	24	29	30
TOTAL	102	110	125	143

Source: Register of restrictive measures as of December 1 of the corresponding year.

Currently 19 investigations against Russian goods have been initiated, of which 13 are anti-dumping, four are special protective, two investigations regarding impact of imports on the US national security, as well as six reviews of anti-dumping measures. Two agreements on suspension of anti-dumping procedure in the US are in effect. However, two agreements on termination of anti-dumping procedures are in force (regarding uranium products and thick-gage plate).

Within the framework of sanctions implemented by the European Union, the U.S., Japan, Ukraine, Switzerland, Norway, Australia, New Zealand, Iceland, Lichtenstein, Montenegro, and Albania a ban is imposed on imports of goods originated from Crimea and Sevastopol.

Moreover, in response to events happened in Crimea and in the east of Ukraine, restrictive measures were applied against a number of Russian organizations and individuals by the European Union, the U.S., Canada, Japan, Ukraine, Switzerland, Norway, Australia, New Zealand, Iceland, Lichtenstein, Montenegro, and Albania.

Protective measures of domestic market

Application of the protective measures in the Eurasian Economic Union (EAEU) has been regulated by Articles 48–50 of the Treaty on the Eurasian Economic Union of May 29, 2014, and by the Protocol on application of special protective, anti-dumping and countervailing measures in relation to third countries (Annex No. 8 to the Treaty on the Eurasian Economic Union). At present, seventeen protective measures of domestic market are effective in the EAEU.

Table 49

Protective measures of domestic market effective in the EAEU

№	Product	Type of measure	Exporter	Date of expiry
1	2	3	4	5
AD-8	Rolled steel with polymer coating	Anti-dumping	PRC	30.06.2017
AD-3	Rolling bearings	Anti-dumping	PRC	20.01.2018
AD-12	Iron enamel tubs	Anti-dumping	PRC	25.01.2018
AD-9	Graphite electrodes	Anti-dumping	Ukraine	25.01.2018
AD-11	Cold-worked seamless stainless pipes	Anti-dumping	PRC	14.05.2018
AD-10	Light commercial vehicles	Anti-dumping	Germany, Italy, Turkey	14.06.2018
AD-7	Steel forged rolls for rolling mills	Anti-dumping	Ukraine	25.06.2019
AD-15	Citric acid	Anti-dumping	PRC	09.04.2020
AD-14	Kitchen and cutlery from corrosion-resistant steel	Anti-dumping	PRC	18.06.2020

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1	2	3	4	5
AD-16	Tubing and casing steel seamless pipes for drilling and oil and gas production	Anti-dumping	PRC	22.09.2020
AD-17	Bulldozers	Anti-dumping	PRC	11.12.2020
AD-18	Truck tires	Anti-dumping	PRC	17.12.2020
AD-19	Steel all-rolled wheels	Anti-dumping	Ukraine	21.01.2021
AD-21	Corrosion-resistant tubes and pipes	Anti-dumping	Ukraine	25.02.2021
AD-13	Rods	Anti-dumping	Ukraine	29.04.2021
AD-1	Certain types of steel pipes	Anti-dumping	Ukraine	01.06.2021
AD-20	Ferrosilicon manganese	Anti-dumping	Ukraine	27.10.2021

Source: http://www.eurasiancommission.org/ru/act/trade/podm/mery/Pages/measures_list_applied.aspx

Tariff quotas. Decision of the Board of the Eurasian Economic Commission of August 18, 2017 No. 97 “Of implementation for 2018 of tariff quotas regarding certain types of agricultural goods transported to the customs territory of the Eurasian Economic Union, as well as volumes of tariff quotas regarding these goods, transported to the territory of member of the Eurasian Economic Union” imposed tariff quotas on import of meat and meat bypass. This list includes cattle meat, pork, poultry meat and sub products, port trimming, certain types of buttermilk and modified buttermilk. Distribution of quotas among the EAEU member states was established. Quotas are applied to goods under customs procedure for domestic consumption (except produced and imported from the CIS countries).

Embargos and import restrictions. In the course of 2017, agricultural products from Turkey were gradually returning to the Russian market. Decree of the Government of the Russian Federation of November 30, 2015 adopted a list of agricultural products, raw materials and foodstuffs produced in Turkey and are banned from January 1, 2016 for imports to the territory of the Russian Federation. Decree of the Government of the Russian Federation of March 9, 2017 No. 276 this list was reduced. The following products were excluded from the list: carnations, fresh and refrigerated onions, underground onion, cauliflowers and broccoli sprout among others. The Federal Service for Veterinary and Phytosanitary Surveillance lifted the ban on imports of green leaf lettuce, salad iceberg, pepper, vegetable marrows and pumpkins from nine Turkish enterprises starting from September 1, 2017. From October 30, the ban was lifted on imports of aubergines and pomegranates from 27 Turkish enterprises.

Decree of the Government of the Russian Federation of June 2, 2017 No. 672 “On introduction of changes into the Decree of the Government of the Russian Federation of November 30, 2015 No. 1296 and repeal some Acts of the Government of the Russian Federation” lifted the ban on imports to Russia of frozen dressed chickens and turkeys and their by-products, fresh and refrigerated cucumbers and pickling cucumbers, fresh apples, pears, grapes, wild strawberries and strawberries. Decree of the Government of the Russian Federation of October 26, 2017 No. 1301 imports of Turkish tomatoes was permitted from November 1 in volume determined by the Ministry of Agriculture of Russia (not more than 50 thousand tons till the end of 2017).

Executive Order of the President of Russia of June 30, 2017 No 293 “On extension of special economic measures aimed at provision of security of the Russian Federation” in response to the extension of the sanction regime imposed against Russia till the end of 2018 extended the ban on imports of certain types of agricultural products, raw materials and food stuffs originated from the European Union, the U.S., Canada, Ukraine, Norway, Australia, Albania, Montenegro, Iceland, Lichtenstein.

4.8.6. Integration processes

The Federal Law of November 14, 2017 No. 317-FZ ratified Agreement on Customs Code of the Eurasian Economic Union. The Customs Code is designed to optimize customs operations, further liberalization of customs rules and codification of effective agreements. Provision of international agreements under the law of EAEU are being codified. The Code envisages maximum use of the information technologies in declaration and release of goods and simplification of some procedures (for example, customs warehouse). The Code allowed for shorter length for goods release in non-risk deliveries (which does not require revision). Goods release procedure is described in more detail. The Code envisages the status of the authorized economic operator, coordination of customs authorities within the Union have been regulated. On the other hand, customs payment procedure remained unchanged (prior to goods release), significant number of reference rules to bylaws including at the national level, which implies differences in tax administration rules on the EAEU common customs territory, multiple stages of customs clearance. The Customs Code of the EAEU entered into force on January 1, 2018.

Trade and economic agreements of the EAEU. The free trade zone agreement between Eurasian Economic Union (EAEU) and the Socialist Republic of Vietnam (SRV) will come into force starting October 5, 2016,¹ which creates new conditions for trade and economic activities for business of EAEU and Vietnam. Vietnam was the first country signing the free trade zone agreement with the EAEU.

Table 50

Negotiation tracks on trade and economic agreements of EAEU as of December 1, 2017

Ratified free trade zone (FTZ)	Agreement with the Socialist Republic of Vietnam effective from October 2016
Upon completion of the fifth round of negotiations between EAEC and the Ministry of trade of China, joint statement on the completion of negotiations on the Agreement of trade and economic cooperation was signed on October 1, 2017.	Agreement on economic partnership between the Eurasian Economic Union and China is practically ready and can be signed in early next year.
Routs of the dialogue, negotiations/consultations under way.	Iran – “abridged” FTZ. India – FTZ. Israel – 3 FTZ. Singapore – FTZ. Egypt – FTZ. Serbia – common FTZ between the EAEU and Serbia will replace bilateral FTZ with Belarus, Kazakhstan, and Russia.
Prospective candidates (working groups, display of interest, memorandums).	South Korea. Cambodia. Mongolia. Peru. Chili.

Source: Eurasian Economic Union (Edited by Vinokurova E.Yu.). Center for Integration Studies. St. Petersburg. 2017, p. 163.

Implementation of the Agreement had a positive impact on the Russian-Vietnamese trade turnover, which over ten months of 2017 rose by 36.3 percent and hit USD 3.9 billion. Both Russian exports to Vietnam (up by 43.5 percent) and imports from Vietnam (up by 33.3 percent) demonstrate solid upward trend.

¹ Agreement on free economic zone between the Eurasian Economic Union, on the one part, and the Socialist Republic of Vietnam, on the other part: EAEC web site.

During last year, shipments of agricultural products (corn and wheat) from Russia to Vietnam markedly rose owing to the Agreement. Favorable conditions have been created for meat products trade.

In October 2015, Presidents of the EAEU member states adopted a systemic decision for further development of the Union's trade policy. Tasks and landmarks for the EAEU cooperation with key trade partners, strategies for the EAEU promotion in the world trade relations have been formed.

4.8.7. WTO Agreement on trade facilitation

The WTO Trade Facilitation Agreement (TFA) adopted by the 9th Ministerial Conference of the WTO members at Bali (Indonesia) in December 2013. This document was the first major agreement between WTO members since the Uruguay round of twenty years before. This Agreement development was launched in 2004 and took around nine years for completion. Now it is ratified by 110 WTO members.

The TFA contains provisions for expediting the movement, release and clearance of goods, including goods in transit. It also sets out measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues. It further contains provisions for technical assistance and capacity building in this area. Solution of these issues is of high interest for small and medium –size businesses, which will open for them new horizons for international trade participation. The WTO members' commitments to reform customs procedures and red tape, raising efficiency of international shipments, as well as provision of access to information and express-delivery channels will permit small businesses to widen their logistical capacity and proactively participate in global supply chain, reduce costs of exporting their goods.

The WTO report (2013) noted that trade facilitation will result in reduction of costs from USD 350 billion to USD 1 trillion due to reduction of trade costs by 10-15 percent, increase of trade flows and revenues, creation of sustainable business environment and attraction of foreign investment.

On February 26, 2016, the Federation Council of the Russian Federation adopted protocol to the Marrakesh agreement, which envisaged incorporation of Trade Facilitation Agreement into Annex 1 to the Marrakesh Agreement on establishing the WTO.

It should be noted that the Federal Customs Service has been taking serious measures in this direction. Large sums have been invested in electronic declaration, automatic collection and interdepartmental exchange of customs information, all federal okrugs have been developing centers for electronic declaration, and the institute of authorized economic operators is operational. All these innovations mean that Russia has been implementing certain provisions of this WTO Agreement, although problems remain. Implementation of single-window system is lagging behind. There are complaints against methods of levying customs duties on the basis of the so called risk factors.

In the World Bank Doing Business 2018 report, Russia is ranked 100 out of 190 countries up 40 places owing to a new deep-sea port on the Gulf of Finland, which increased competition and reduce costs on border control in St. Petersburg port.

4.9. Russia's participation in the WTO trade dispute settlement system¹

The Russian Federation acceded to the World Trade Organization (WTO) on August 22, 2012, and was therefore authorized to participate in the WTO trade dispute settlement system. The WTO dispute settlement system is in place pursuant to the Dispute Settlement Understanding (DSU)². Hence the Russian Federation has been entitled since August 2012 to resort to the system to uphold its trade interests. Dispute settlement proceedings in the WTO is a five-stage process:

- 1) *bilateral consultations* (within 60 days from filing a request for consultations);
- 2) *establishment and composition of a Panel* at the request of any party in dispute to consider the subject matter in dispute (within 45 days from filing a request for Panel composition);
- 3) *Panel stage* (within 6–9 months from date when the Panel kicks off), and the Dispute Settlement Body (DSB) has authority to adopt a Panel report and to issue recommendations (about 60 days of the Panel report);
- 4) *Appellate Body report proceedings*, if a party to a dispute has filed an appeal (60–90 days from filing an appeal), the DSB has authority to adopt the Appellate Body report and to circulate the DSB's recommendations and rulings to the parties (30 days of the Appellate Body report);
- 5) *surveillance of the implementation* of the DSB's recommendations and rulings (not more than 15–18 months of DSB's adoption of the Panel report or the Appellate Body report).

According to the 2017 year-end data, the Russian Federation was a party to 54 disputes in the WTO: as the complaining party in 6 disputes, as the responding party in 8 disputes, as a third party in 40 disputes.

In 2017 the Russian Federation filed to the DSB two new complaints: against the European Union over the imposition of anti-dumping measures affecting certain cold-rolled flat steel products from Russia (DS521) and against Ukraine over restrictions, bans, requirements and procedures relating to trade in goods and services and transit (DS525). In 2017, Ukraine filed WTO complaint against the Russian Federation over restrictive measures affecting the importation and transit of certain Ukrainian products (DS532). The Russian Federation has brought its measures into conformity with the WTO rules and regulations in two disputes to which it is the responding party (DS475 and DS485) (see *Table 51*).

In 2017, the Russian Federation reserved its third-party rights to 9 disputes, some of which were settled. In some cases, the Russian Federation gained indirectly benefits from the participation in the WTO dispute settlement system.

¹ This section is written by Marina Baeva, RANEPА, VAVT under Russian Ministry for Economy; Alexander Knobel, the Gaidar Institute, RANEPА, VAVT under Russian Ministry for Economy.

² https://www.wto.org/english/tratop_e/dispu_e/dispu_e.htm.

Table 51

Russia as complaining or responding party to WTO trade disputes

Dispute	Subject matter at issue	Current status of disputes (as of 2017 year end)
1	2	3
Complainant		
DS474: The European Union – Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports from Russia (December 23, 2013 ¹)	The European Union used “cost adjustment” methodologies for the calculation of dumping margins in anti-dumping investigations and reviews (The European Union rejected cost and price information of producers and exporters in the country of origin (Russia)). The European Union verified the expiration date of the anti-dumping measures without having adequate data on continuation and collection of anti-dumping duties and injury caused.	Panel composition stage (July 22, 2014)
DS476: The European Union – Certain Measures Relating to the Energy Sector (April 30, 2014)	The European Union's Third Energy Package: Gas producers may not own trunk pipelines located on the EU territory. Operators that are controlled by foreign persons must be subject to a special certification procedure.	Panel proceedings (March 7, 2016)
DS493: Ukraine – Anti-Dumping Measures on Ammonium Nitrate (May 7, 2015)	When conducting anti-dumping investigations of ammonium nitrate imports from the Russian Federation, Ukraine failed to base its findings on electric power prices offered by Russian producers in the Russian Federation and used instead third countries' prices (cost adjustment).	Panel proceedings (February 2, 2017)
DS494: The European Union – Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports from Russia (May 7, 2015)	When conducting anti-dumping investigations of imports of welded pipes and ammonium nitrate imports from the Russian Federation to determine dumping margins, the European Union failed to take account of the information on producer and export costs and prices and, instead, relied on third countries' prices (cost adjustment).	Panel composition stage (December 16, 2016)
DS521: Anti-dumping measures on certain cold-rolled flat steel products from Russia (January 27, 2017)	When conducting anti-dumping investigations, the European Union failed to base its findings on the information provided by Russian producers and instead had replaced it with unfounded data and incorrect estimates.	Consultations stage (January 27, 2017)
DS525: Ukraine – Measures relating to trade in goods and services and transit (May 19, 2017)	A complex complaint against Ukraine's restrictive measures affecting the trade in goods and services from the Russian Federation.	Consultations stage (May 19, 2017)
Respondent		
DS462: The Russian Federation – Recycling fee on motor vehicles (complaint by the European Union, July 9, 2013)	The Russian Federation imposed measures, the so called “recycling fee”, on motor vehicles while exempting, under certain conditions, domestically manufactured motor vehicles. Fee assessment provides too much of a difference in fee size between brand new and secondhand motor vehicles.	Panel composition stage (November 25, 2013)
DS463: The Russian Federation – Recycling fee on motor vehicles (complaint by Japan, July 24, 2013)	The Russian Federation imposed extra measures (the recycling fee) on imported motor vehicles while exempting, under certain conditions, domestically manufactured motor vehicles.	Consultations stage (July 24, 2013)
DS475: The Russian Federation – Measures on the importation of live pigs, pork and other pig products from the European Union (complaint by the European Union, April 8, 2014)	Russia's ban on the importation of pork and other pig products from the European Union constitutes a disproportional measure because just a few minor outbreaks of African swine fever (ASF) of wild boars were confirmed, and promptly contained, near the border with Belarus. The European Union challenges the Russian Federation's ASF regionalization of the EU territory.	Request for complaining party's retaliatory measure. Oral hearing (January 3, 2018)
DS479: The Russian Federation – Anti-dumping duties on light commercial vehicles from Germany and Italy (complaint by the European Union, May 21, 2014)	Russia's anti-dumping investigations and determination of dumping margins on light commercial motor vehicles are inconsistent with the WTO rules, particularly Determination of Dumping, Determination of Injury, Evidence, Definition of Domestic Industry, Public Notice and Explanation of Determinations.	Appeals filed. Appellate Body report proceedings (February 20, 2017)

¹ Parenthesized is the date of request for consultations.

Cont'd

1	2	3
DS485: The Russian Federation – Tariff treatment of certain agricultural and manufacturing products (complaint by the European Union (EU), October 31, 2014)	Russia's 15 percent or 10 percent duty rates on goods such as paper and paperboard were applied in excess of the 5 percent bound rate. Customs duties on certain types of goods are above the bound rate when their customs value is below the bound rate.	The responding party met the DSB's recommendations and rulings (June 8, 2017)
DS499: The Russian Federation – Measures affecting the importation of railway equipment and parts thereof (Ukraine, October 21, 2015)	The Russian Federation has suspended validation of certificates issued to manufactures of railway equipment and railway rolling stock until after new technical regulations are introduced. The Russian Federation has rejected applications for new certificates.	Panel proceedings (December 16, 2016)
DS512: The Russian Federation – Measures Concerning Traffic in Transit (complaint by Ukraine, September 14, 2016)	The Russian Federation imposes restrictions on traffic in transit from Ukraine via the Russian Federation to the Republic of Kazakhstan or the Republic of Kyrgyzstan: Ukrainian railway and motor cargo traffic in transit to the Republic of Kazakhstan and the Republic of Kyrgyzstan through the Russian Federation must go strictly from the Republic of Belarus, provided that certain terms and conditions are met. Additionally, a ban was imposed on goods in transit with other than zero tariff rates, and a ban was imposed on the goods in transit covered by Russia's sanctions.	Panel proceedings (June 6, 2017)
DS532: The Russian Federation – Measures concerning the importation and transit of certain Ukrainian products (complaint by Ukraine, October 13, 2017)	The Russian Federation imposed restricting measures affecting imports and transit of juice products, beer, beer-based beverages and other alcoholic beverages, confectionary products, wall paper and similar wall coverings originating from Ukraine via the Russian Federation to third countries. Exports of the above Ukrainian products fell considerably, with a halt in exports of a few items.	Consultations stage (October 13, 2017)

Source: own compilation based on data posted on the WTO official website: https://www.wto.org/english/tratop_e/dispu_e/dispu_by_country_e.htm.

4.9.1. 2017 updates on WTO trade disputes to which Russia is the complaining party

DS493: Ukraine – Anti-dumping measures on ammonium nitrate from Russia (complaint by the Russian Federation)

On 7 May 2015, the Russian Federation requested consultations with Ukraine regarding anti-dumping measures imposed by Ukraine on imports of ammonium nitrate originating from the Russian Federation.¹

The Russian Federation challenged that Ukraine, while conducting anti-dumping investigations of ammonium nitrate imports from Russia, had failed to base its findings on the electric power prices of offered by Russian producers in the Russian Federation and instead had relied on third countries' prices (cost adjustment). Furthermore, the Russian Federation claims that Ukraine's measures are inconsistent with some other terms and provisions of the Anti-Dumping Agreement.

Since consultations failed to settle the dispute between the Russian Federation and Ukraine, the Russian Federation requested on February 29, 2016 the establishment of a Panel. At its meeting on 22 April 2016, the DSB established a Panel. On 2 February 2017, the Panel was composed. The Panel expected to issue its final report to the parties not before the first quarter of 2018, in light of the amount and complexity of the work involved.

¹ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds493_e.htm.

DS521: The European Union – Anti-dumping measures on certain cold-rolled flat steel products from Russia (complaint by the Russian Federation)

On January 27, 2017, the Russian Federation filed a request to the WTO for consultations with the European Union in respect to anti-dumping measures affecting certain cold-rolled flat steel products from the Russian Federation.¹ Since August 5, 2016, the European Union further extended the EU anti-dumping duties on cold-rolled flat steel products from the Russian Federation at the request of the European Steel Association (Eurofer), which accused Russian and Chinese steel companies of deliberately cutting prices for cold-rolled flat steel products. Russia's exports of the products at issue to the European Union in 2016 dropped 84 percent from 2015, marking a decline in total exports of the products to 10 percent in 2016 from 46 percent in 2015.² The anti-dumping duties are 34 percent for PAO Severstal, 18.7 percent for OAO Magnitogorsk Iron & Steel Works, 36.1 percent for PAO NLMK and the rest of the companies. The Russian Federation claims the investigation was inconsistent with the Anti-Dumping Agreement and GATT 1994.

The Russian Federation expressed concerns about the European Union had failed to base its findings on the information provided directly by Russian producers and instead had replaced it with unfounded data and incorrect estimates. The Russian Federation claimed that the determination of injury and the examination of causal relationship between the alleged dumping imports and the injury to the domestic industry had been performed in violation of respective rules and regulations.

The Russian Federation previously filed complaints against the European Union over anti-dumping measures in respect of the application of "cost adjustment" practice during anti-dumping investigations (DS474), and anti-dumping measures affecting imports of welded pipes and ammonium nitrate from the Russian Federation (DS494).

DS525: Ukraine – Measures relating to trade in goods and services and transit (complaint by the Russian Federation)

On May 19, 2017, the Russian Federation filed a request to the WTO for consultations with Ukraine in respect to restricting measures, bans, special requirements and measures against Russian goods, services and persons as well as traffic in transit via Ukraine in force since 2014. The request is a complex request that challenges³:

- The import ban covers a number of categories of food products (in particular meat products, dairy products, fish products, confectionary, tea, potato products, such as crisps, etc.), spirits and beer, cigarettes, railway and tram track equipment, diesel-electric locomotives, octanol, potash, chloride, detergents, certain agricultural chemicals, certain plant products, etc.;
- The special treatment of sanitary, phytosanitary and veterinary control in respect of food, light industry products, cosmetic products and household chemicals originating from the Russian Federation;
- The special measures on imports of Russian books and other printed materials. Imports and distribution of printed materials originating from, manufactured in and/or delivered from Russia are prohibited, except materials approved by the Ministry of Information Policy of

¹ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds521_e.htm.

² UN COMTRADE data base// <http://comtrade.un.org/>.

³ <http://www.interfax.ru/business/563152>.

Ukraine. Furthermore, not more than 10 items of printed materials in the luggage of individuals entering Ukraine are allowed;

- The special tax treatment on imports of used motor vehicles from the Russian Federation;
- The prohibition and discriminatory restrictions on the involvement of many Russian companies in Ukrainian industries such as engineering industry, banking sector, service industry (including the Internet), software, air transport services, etc.;
- Residents of the Russian Federation and persons directly or indirectly controlled by or acting on behalf of residents of the Russian Federation may not participate in privatization;
- The restrictive measures on transactions involving the national currency of Ukraine;
- The ban on accreditation of journalists and representatives of certain Russian news agencies and other mass media.

The Russian Federation claimed that the above measures make the treatment granted to products of the Russian Federation less favorable than the one granted to like products from Ukraine and other countries. The measures have an unreasonably restrictive and distorting impact on trade. Furthermore, the measures were not published in a manner that would enable governments and traders to become acquainted with them. Interested persons were not granted an opportunity to comment on proposed regulation. No reasonable period of time between publication and the effective date of the regulation was allowed. The measures were not duly notified to the WTO. According to the Russian Federation, the measures are inconsistent with some of the provisions set forth by the GATT 1994, the Sanitary and Phytosanitary Agreement¹, the Agreement on Technical Barriers to Trade², the Agreement on Import Licensing Procedures, the GATS³ and the Protocol of Ukraine's Accession to the WTO. The WTO dispute settlement system helps the Russian Federation demonstrate that Ukraine itself is affected by an adverse economic effect of its restrictive measures, underlining the importance of observing the WTO principles.⁴

4.9.2. 2017 updates on WTO trade disputes to which Russia is the responding party

DS475: The Russian Federation – Measures on the importation of live pigs, pork and other pig products from the European Union (complaint by the European Union)

Early in April of 2014 the European Union filed a request to the WTO for consultations with the Russian Federation concerning certain measures adopted by the Russian Federation that affect the importation of live pigs and their genetic material, pork, pork products and certain other commodities from the European Union, purportedly because of concerns about African swine fever outbreaks and the imposition of a ban on the importation of all types of finished pig products originating from Poland and Lithuania.⁵

Since consultations failed to settle the dispute, the European Union requested on June 27, 2014 the establishment of a panel. At its meeting on July 22, 2014, the DSB established a Panel. On August 19, 2016, the Panel report was circulated to Members. The

¹ Sanitary and phytosanitary measures.

² Technical barriers to trade.

³ General Agreement on Trade in Services.

⁴ <https://www.gazeta.ru/business/2017/05/20/10683623.shtml#page1>.

⁵ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds475_e.htm.

Panel found that the restricting measures were inconsistent with the standards set out in the OIE (Office International des Epizooties) and, therefore, with the Agreement on the Application of Sanitary and Phytosanitary Measures (SPM). The Panel also found that the Russian Federation failed to duly assess risks based on scientific data for the application of the principle of regionalization whereby trade may be conducted with certain areas of a country that are claimed pest- or disease free or of low pest or disease prevalence, provided that the rest of the country's territory is facing an unfavorable situation. The Russian Federation instead imposed a EU-wide ban on the importation of pork and live pigs. The Panel also resolved that the imposed measures were applied in a discriminatory manner and constituted a hidden ban on trade.

On September 23, 2016, the Russian Federation notified the DSB of its decision to appeal to the Appellate Body report certain issues of law and legal interpretations in the Panel report. On September 28, 2016, the European Union notified the DSB of its decision to cross-appeal. The Appellate Body report issued its report on February 23, 2017. The DSB adopted the Appellate Body report on March 21, 2017. The Appellate Body report confirmed the Panel report's inferences about the restrictive manner of Russia's measures imposing a EU-wide import ban on live pigs and certain pork products. The Appellate Body report upheld the Panel report's inferences that the import ban on live pigs and certain pork products from all the EU countries was a restrictive measure of the Russian Federation, and the Appellate Body report also upheld that no limits whatsoever on Panel's assessment of the EU requirements for the restrictive measures were imposed under the terms and conditions of Russia's WTO accession. According to the Ministry of Economic Development of Russia, the inferences were not in line with the previously stated Russia's stance and triggered issues that should be discussed with the European Union on a bilateral basis. In particular, it follows from the Panel report's inferences that the measures are inconsistent with the WTO agreement, and therefore the Russian Federation has no obligation to use the enclosed documents for pig products supplies as previously agreed with European Union. The Appellate Body report thus disowned the Russian obligation to the European Union under the Protocol of Russia's Accession to the WTO to observe the terms and conditions of pork supply, under which live pigs, pork meat and raw meat worth hundreds of millions of euro had already been supplied, and suggested the European Union to reach new agreements with the Russian Federation. In its report, the Appellate Body reported in a more general manner that Russia not only can but also must make, on a unilateral basis, amendments to the bilateral veterinary certificates as previously agreed with other WTO members.¹

The Appellate Body report upheld in general the Panel report's inferences, the DSB's recommended that the Russian Federation bring the measures found to be inconsistent with the WTO rules and regulations. On April 19, 2017, the Russian Federation notified the DSB, pursuant to Article 21.3 of the DSU, that it intended to implement the recommendations and rulings of the DSB in accordance with its WTO obligations. The Russian Federation explained that it needed a reasonable period of time for the implementation of the DSB's recommendations and rulings. On June 2, 2017, the Russian Federation and the European Union notified the DSB that they had agreed on a reasonable period of time of 8 months and 15 days from the date of the adoption of the Appellate Body report. Accordingly, the reasonable period of time was set to expire on 6 December 2017, and the Russian Federation had met the DSB's requirements by that time: the ban on the importation of live pigs, pork meat and raw

¹ http://pticainfo.ru/news/?ELEMENT_ID=53214.

meat preparations from the entire territory of the European Union and its Member States was removed, excluding ASF affected administrative territories as set out in a respective Appendix. Furthermore, the Russian Federation adopted the EU-Russia agreed forms of bilateral veterinary certificates. Additionally, the Ministry of Economic Development of Russia noted that the ban on food imports imposed in retaliation to European sanctions would stay in force, and was therefore not a subject matter of the dispute.¹

The European Union claimed the Russian Federation had failed to bring its measures into compliance with the DSB's recommendations and rulings. Therefore, on December 19, 2017, the European Union made a request seeking retaliatory measures of suspending concessions under the covered agreements in 1.39 billion euro a year (total value of the relevant exports in 2013) plus a yearly increase rate of 15 percent. The Russian Federation objected to this request. Oral hearing was scheduled for January 3, 2018. On January 25, 2018, the Russian Federation, in its turn, filed a request to the WTO for consultations with the European Union over its compliance assessment with the DSB's recommendations and rulings (the original Panel normally performs compliance assessment).

DS479: The Russian Federation – Anti-dumping duties on light commercial vehicles from Germany and Italy (complaint by the European Union)

May 21, 2014 the European Union filed a request to the WTO for consultations with the Russian Federation over the Russian Federation's levy of anti-dumping duties on light commercial vehicles from Germany and Italy.² In May 2013, the Eurasian Economic Commission (EEC) imposed 5-year anti-dumping duties on light commercial vehicles from Germany, Italy and Turkey, ranging within a rate of 11.1, 23 or 29.6 percent depending on a specific manufacturer. The measures led to an anti-dumping investigation that the EEC conducted at the request of OOO Sollers Yelabuga.

A Panel was established on October 20, 2014. The Panel presented its report late in January 2017. The Panel found that the EEC's investigation incorrectly defined "the domestic industry", considered only one manufacturer (that submitted its application) while disregarding the GAZ Group, which, according to the Panel, had led to wrong inferences in the examination of the alleged injury to the domestic industry and in the examination of causal relationship between dumping imports and the injury. In addition, the Panel found that the EEC's price analysis had failed to consider appropriately the effect of the financial crisis of 2009 and to assess correctly the amount of dumping margin (the amount by which the normal value of goods in exporting country exceeds the export price). The Panel found that the Russian Federation was acting inconsistently with some of the provisions set forth by the Anti-Dumping Agreement, whereas it rejected most of the EU complaints, recommending the Russian Federation to bring its measures in conformity with the WTO obligations. In February 2017, Russia and the European Union filed their appeals. The Appellate Body failed to present within the recommended period of time its final report to the parties, in light of the amount and complexity of the work involved. The appellate proceedings are pending.

¹ <https://www.rbc.ru/rbcfreenews/5a27ccc99a79474b20fce4f8>.

² https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds479_e.htm.

DS485: The Russian Federation – Tariff Treatment of Certain Agricultural and Manufacturing Products (complaint by the European Union)

On October 31, 2014, the European Union filed a request to the WTO for consultations with the Russian Federation regarding the tariff treatment that it accords to certain goods in both agricultural and manufacturing sectors, which are inconsistent with Russia's obligations as a WTO member.¹ In particular, duty rates of 15 percent or 10 percent on goods such as paper and paperboard, were applied in excess of the 5 percent bound rate. Furthermore, when the customs value was below a certain value, customs duties on certain goods were charged in excess of the bound rate, thus violating the WTO agreement on customs valuation.

At its meeting on March 25, 2015, the DSB established a panel. On August 12, 2016 the Panel report on the trade dispute between the European Union and the Russian Federation regarding Russia's import duties on certain agricultural and manufacturing products was circulated to Members. The Panel rejected the EU charges of the systemic nature of Russia's violations of its WTO commitments regarding import tariff on paper, palm oil and refrigerators, which is an important resolution for the Russian Federation. On November 10, 2016, the Russian Federation and the European Union notified the DSB that they had agreed on a reasonable period of time of 7 months and 15 days to comply with the DSB's recommendation and rulings. The period expired on May 11, 2017. On June 8, 2017, the Russian Federation notified the DSB that it had adopted the respective ECE rulings in order to comply with the DSB's recommendations and rulings.

DS499: The Russian Federation – Measures affecting the importation of railway equipment and parts thereof (complaint by Ukraine)

On October 21, 2015, Ukraine filed a request to the WTO for consultations with Russia over measures affecting the importation of railway equipment and parts thereof (in particular, railway cars and railway points).²

Ukraine claims that the Russian Federation has suspended the conformity assessment certificates previously registered to Ukrainian producers of railway products until new technical regulations are introduced and therefore rejected applications for new conformity assessment certificates. Ukraine's key complaints are that the Russian Federation discriminates goods originating from Ukraine, whereas no discriminatory measures have been imposed on liked products originating from other WTO members and Russia-made products. The foregoing measures have raised unnecessary barriers to the international trade, and no reasoned explanations for the imposed measures were provided by the Russian Federation authorities to Ukrainian exporters and to the Ukrainian authorities. Ukraine claims that the Russian Federation authorities have failed to duly meet some of the conformity assessment procedures. Furthermore, the Russian Federation authorities' conformity assessment requirements have been in excess of the information and payment size requirements. On November 10, 2016, Ukraine requested the establishment of a panel. The Panel proceedings are pending since March 2, 2017. The Panel expects to circulate its report in April 2018.

¹ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds485_e.htm.

² https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds499_e.htm.

DS512: The Russian Federation – Measures Concerning Traffic in Transit (complaint by Ukraine)

On September 14, 2016, Ukraine filed a request to the WTO for consultations with the Russian Federation regarding alleged multiple restrictions on traffic in transit from Ukraine through the Russian Federation to third countries (in Central/Eastern Asia and Caucasus).¹ In July 2016, the Russian Federation introduced a requirement for Ukraine to ensure that international railway and motor cargo traffic in transit from Ukraine to the Republic of Kazakhstan and the Republic of Kyrgyzstan through the Russian Federation go strictly from the Republic of Belarus, provided that cargo spaces of motor and railway vehicles, spaces and containers and other places in which goods are or may be contained are equipped with means of identification (stamps), including means of identification that are operated using the technology of Global Navigation Satellite System (GLONASS), as well as drivers of cargo motor vehicles are required to obtain certain registration cards when entering the territory of the Russian Federation. Additionally, a ban was imposed on goods in transit with other than zero tariff rates in conformity with the EEU unified customs tariff, as well as a ban was imposed on sanctioned (by Russia) goods in transit.²

Ukraine claimed the Russian Federation imposed the measures in response to the Free-Trade Agreement between Ukraine and the European Union (in effect since January 1, 2016), which were inconsistent with the WTO's provisions concerning free transit, because they violated free transit across the territory of the Russian Federation via the easiest routes for international traffic in transit from Ukraine, and also because Russia's treatment of traffic in transit was based on the national flag on vehicles and the origin of goods. The Russian Federation is treating the traffic in transit from Ukraine less favorably than other goods in transit into/from third countries. Ukraine also claimed that the publishing of Russia's respective rules and regulations was deliberately ill-timed so that the Ukrainian government and business community had no opportunity to review them. Ukraine claimed the Russian measures were inconsistent with the WTO provisions concerning the overall abolishment of quantitative restrictions, as well as the Protocol of Russia's Accession to the WTO. According to data from Ukraine, Ukraine's trade with Central/ Eastern Asian and Caucasian countries dropped by 35.1 percent year-on-year in January-June 2016 as a result of Russia's restricting measures affecting goods in transit.

On February 9, 2017, Ukraine requested the establishment of a panel. The Panel was established on March 21, 2017. The dispute is on pending status at the Panel stage since November 17, 2017. The Panel expects to circulate by the end of 2018 the final report to the parties to the dispute.

DS532: The Russian Federation – Measures Concerning the Importation and Transit of Certain Ukrainian Products (complaint by Ukraine)

On October 15, 2017, Ukraine filed a request to the WTO for consultations with the Russian Federation over restrictive measures affecting the trade of juice products, beer, beer-based beverages and other alcoholic beverages, confectionary products, wall paper and similar wall

¹ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds512_e.htm.

² Russian President's Executive Order No. 319 of July 1, 2016, an update to the Russian President's Executive Order of No. 1 January 1, 2016 On Measures in the Provision of Economic Security and National Interests of the Russian Federation in International Cargo Transit from the Territory of Ukraine to the Territory of the Republic of Kazakhstan via the Territory of the Russian Federation.

coverings from Ukraine.¹ In its consultations request, Ukraine asserts that these measures apply separately and in addition to those previously challenged under DS512, Russia – Traffic in Transit. In 2013–2015, the Russian Federation imposed measures restricting the importation of Ukrainian juice products, beer, beer-based beverages and other alcoholic beverages, confectionary products, wall paper and similar wall coverings. Furthermore, the Russian Federation prohibits traffic in transit of certain of those products from Ukraine, through its territory, to third countries. The exportation of the Ukrainian products at issue from Ukraine to the Russian Federation has dropped significantly, with cessation of exports of a few product items. The exportation of Ukrainian beer into the Russian Federation in 2015 tumbled 99.8 percent from 2012, sugar and confectionary products were down 93 percent, wall paper and liked wall coverings fell 72 percent. Ukrainian beer exports into the Russian Federation plummeted to 1 percent of Russia’s total beer exports in 2015 from 73 percent in 2012, and to 0.2 from 33 percent, respectively, of Russia’s total beer imports.²

Ukraine claims that the measures were applied in a non-transparent and unpredictable manner by the Russian Federation, and were not published and duly administered, and are inconsistent with some of the provisions set forth by the GATT 1994, the Trade Facilitation Agreement (TFA), the Agreement on Technical Barriers to Trade, the Sanitary and Phytosanitary Agreement and the Protocol of Russia’s Accession to the WTO. This is the first case of trade dispute that includes complaints against inconsistency with the TFA provisions in force since February 22, 2017.

4.9.3. 2017 updates on WTO trade disputes to which Russia is a third party

Since the date of accession to the WTO Russia has reserved its right as a third party in 40 WTO trade disputes, about 30 percent of them have been settled. Russia’s third-party participation is commonly driven by not just a substantial trade interest, but mostly by the participation practice in certain types of trade disputes as well as an issue of systemic interest in the application of WTO rules and regulations. Technically different disputes initiated by various complaining parties often have common measures imposed by responding parties. WTO disputes to which the Russian Federation is a third party have the following subject matters in general (see *Table 52*).

Table 52

Russia’s third-party participation in WTO trade disputes

Subject matter	Disputes
1. Restrictive (environmental or otherwise) measures on imports	DS400, DS401, DS469, DS484, DS495
2. Safeguard investigations and measures (anti-dumping measures, countervailing measures and special safeguards)	DS414, DS437, DS449, DS454, DS468, DS471, DS473, DS480, DS488, DS490, DS496, DS513, DS516, DS518, DS523
3. Restrictive measures on exports	DS431, DS432, DS433, DS508, DS509
4. Intellectual property rights	DS441, DS458, DS467
5. Subsidies (including tax incentives and other types of allowances)	DS502, DS456, DS472, DS487, DS497, DS489, DS510, DS511, DS522
6. Tariffs and tariff quotas	DS492, DS517
7. Economic and trade sanctions	DS526

Source: Baeva M.A. (2014) WTO Trade disputes to which Russia is a party, and the WTO trade dispute settlement mechanism // Russian Foreign Economic Journal, 3. PP. 75–90.

¹ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds532_e.htm.

² UN COMTRADE data base// <http://comtrade.un.org/>.

Table 53 presents updates on WTO disputes with Russia's third-party participation until 2017. The following is summary of nine trade disputes to which the Russian Federation reserved its right as a third party in 2017.

Table 53

Status of WTO trade disputes with Russia's third-party participation until 2017

Dispute	Subject matter at issue/updates in 2017, interest to Russia
DS456: India – Certain Measures Relating to Solar Cells and Solar Modules (complaint by the United States, February 6, 2013)	<p>The DSB found that the Indian government's decision to restrict the use of foreign-made components to meet the domestic content requirements for solar cells and solar modules was inconsistent with WTO non-discriminatory obligations. December 19, 2017, the United States requested the authorization of the DSB to suspend concessions or other obligations on the grounds that India had failed to comply with the DSB's recommendations and rulings.</p> <p>This dispute is of importance for Russia from the perspective of having the opportunity to ramp up Russia's exports of the products at issue to India as soon as the restrictions are lifted, given that exports of this type of products to India account for about 5 percent of total Russia's exports of the like goods.¹ The highly important issue of developing alternative types of energy in Russia has elevated the interest in using the domestic content of products in manufacturing as well as subsidies that may be deemed inconsistent with the WTO rules and regulations.</p>
DS471: The United States – Certain Methodologies and their Application to Anti-Dumping Proceedings Involving China (complaint by China, December 3, 2013)	<p>When doing anti-dumping investigations, the United States used zeroing under the exceptional weighted average-to-transaction (WA-T) methodology: the average-weighted price of export transactions higher than or equal to the normal value is zeroed; therefore, such transactions are excluded from the determination of a single dumping margin rate, thus increasing it. China claims the foregoing methodology is inconsistent with the Anti-Dumping Agreement, in particular Determination of Dumping, Evidence, Imposition and Collection of Anti-Dumping Duties. The Panel upheld nearly all of the China's complaints. Following the Appellate Body report, in May 2017, the DSB recommended the United States to bring its measures in conformity with the WTO rules and regulations on a date not later than August 22, 2018.</p> <p>Anti-dumping investigations and measures were the subject matter of most of the disputes initiated by the Russian Federation, indicating that participation in such disputes is an issue of systemic interest of the Russian Federation. In April 2017, the United States initiated anti-dumping investigations into hot-rolled rods against companies from Russia. Therefore, the Russian Federation has interest in the methodologies used by the United States when doing anti-dumping investigations.</p>
DS472, DS497: Brazil – Certain Measures Concerning Taxation and Charges (complaint by the European Union, December 19, 2013 and Japan, July 2, 2015)	<p>The complaining parties claimed that Brazil employed specific programs in the automotive sector and the electronics and technology industry, and tax advantages and government support were granted for Brazilian producers and exporters, which was inconsistent with the WTO basic principle (the National Treatment). Domestically manufactured goods enjoyed lower taxes than imported goods, tax advantages were granted when using domestic intermediate goods and subsidies for exporters on a contingency basis. The Panel report was circulated on August 30, 2017. The Panel upheld in general the Brazil's complaints and recognized that the measures were inconsistent with the respective WTO rules and regulations. The Panel found that the discriminatory measures of the program might facilitate the creation of a competitive and sustainable domestic industry that could ensure enough supply to the domestic market. Brazil, however, failed to prove that the imposition of the measures was needed to ensure "continuity of supply" because it failed to consider properly imports. The Panel concluded that the other approaches (such as non-discriminatory subsidies or lifting of trade barriers for imported digital TV equipment) proposed by the complaining parties were in conformity with the WTO rules and regulations and more efficient for the achievement of the stated goals. Brazil and the European Union filed their appeals in the fall of 2017.</p> <p>The Russian Federation has interest in this dispute from the perspective of application of taxation and charging practices, as well as from the settlement perspective of disputes arising therefrom.</p>
DS473: The European Union – Anti-Dumping Measures on Biodiesel from Argentina (complaint by Argentina, December 19, 2013)	<p>Argentina challenged Basic Regulation No. 1225/2009 dated November 30, 2009, anti-dumping investigations and EU measures on biodiesel fuel, particularly the application of "adjustment of costs" methodology. On October 26, 2016, the DSB adopted the Appellate Body report and the Panel report and recommended to bring the foregoing measures into conformity with WTO rules and regulations. Although the application of "adjustment of costs" practice was not held inconsistent with the WTO rules and regulations, the EU anti-dumping investigations and measures affecting biodiesel fuel from Argentina were found inconsistent with the same.</p> <p>At the DSB meeting on October 23, 2017, the European Union notified the DSB that the WTO-inconsistent anti-dumping measures on biodiesel (Regulation (EU) 2017/1578) had been amended to ensure the full implementation of the DSB recommendations and rulings in this dispute. Argentina welcomed the EU status report and reiterated its satisfaction with the adoption of the Implementing Regulation and further indicated that it was closely monitoring the appeal brought to the European Court of Justice by the EU Commission against the decision of the EU General Court annulling the imposition of a definitive anti-dumping duty on imports of</p>

¹ UN COMTRADE data base // <http://comtrade.un.org/>.

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Dispute	Subject matter at issue/updates in 2017, interest to Russia
	<p>biodiesel from Argentina. In addition, Argentina reiterated its serious concern about the European Biodiesel Board's announcement of its intention to submit a petition to the EU Commission to initiate a subsidy investigation against Argentinean biodiesel imports.</p> <p>Russia noted that the amendments to the EU Regulations were made at the time (in 2002) when the Russian Federation was granted the full market economy status. In particular, the amendments authorized the European Union to adjust costs recognized in documents provided by producers/exporters on the basis of "information on other representative markets." The Russian Federation claims this practice is inconsistent with the WTO rules and regulations. Under the Anti-Dumping Agreement, data must reflect costs relating to the manufacture and sales of goods under investigation. The Russian Federation posits that the meaning of the term "damping" has nothing to do with prices of manufacturing assets.</p>
<p>DS484: Indonesia – Measures Concerning the Importation of Chicken Meat and Chicken Products (complaint by Brazil, October 16, 2014)</p>	<p>Brazil challenged restrictive measures and procedures affecting the importation of Brazilian chicken meat and chicken products into the Indonesian market; in particular, the non-recognition of the Brazilian sanitary certificate, the imposition of non-automatic import licensing regime, the need for pre-approval of the importation of goods at issue by the Indonesian Ministry of Agriculture, restrictions on transit, etc. On November 17, 2017, the DSB adopted the Panel report and recommended Indonesia to bring the measures in conformity with the WTO rules and regulations. The Panel found that the Indonesia's measures were inconsistent with the provisions of WTO agreements, but some of the respondent's complaints were rejected (transit restrictions). In December 2017, that it required a reasonable period of time to comply with the DSB's recommendations and rulings.</p> <p>The Russian Federation does not export chicken meet and chicken products to Indonesia because of the above Indonesian restricting measures on imports. However, respective export contracts might be signed if the above measures are removed. Russia's participation in the dispute is explained by its interest in the application of Sanitary and Phytosanitary Measures and technical barriers to trade in conformity with the WTO rules and regulations, as well as the practice of resolving such disputes.</p>
<p>DS487: The United States – Conditional Tax Incentives for Large Civil Aircraft (complaint by the European Union) (December 19, 2014)</p>	<p>In November 2013, the United States broadened largely the scope of aerospace conditional tax incentives as extra subsidies aimed at promoting the Boeing manufacture of new models of large 777X civil aircraft in relation to the development, manufacture, and sale of large civil aircraft in the State of Washington. The European Union alleges that the measures constitute specific subsidies that are prohibited by the WTO. In its report the Appellate Body rejected the EU appeal. The Appellate Body resolved with the regard to the US appeal that the Panel had failed to prove that the tax rate at issue constituted a subsidy that was deemed inconsistent with the WTO rules and regulations. On September 22, 2017, the DSB adopted the Appellate Body report and the Panel report and resolved that no further actions were required on the side of the responding party.</p> <p>The Russian Federation has interest in the settlement of the above trade dispute from the perspective of domestic content of products in manufacturing, as well as tax incentives that may lead to specific subsidies that can be deemed inconsistent with the WTO rules and regulations, particularly in the aerospace industry.</p>
<p>DS488: The United States – Anti-Dumping Measures on Certain Oil Country Tubular Goods from Korea (complaint by Korea, December 22, 2014)</p>	<p>Korea claimed that the U.S. anti-dumping investigations and measures affecting oil country tubular goods (OCTG) were inconsistent with the WTO rules and regulations. The United States used the constructed normal value for the determination of normal value, without properly considering actual data of the Korean respondents and actual third-country market sales. The Panel circulated its report in November 2017, rejecting 7 out of the 8 Korean complaints, upholding that the United States had failed to construct correctly the CV profit, without properly considering the data of the Korean respondents. The Panel rejected requests relating to the consistency with the WTO rules and regulations and the U.S. laws and regulations concerning the determination of normal value and export value, proceedings, public notice.</p> <p>The dispute concerns the application of methodologies for anti-dumping investigations, which is an issue of systemic importance of the Russian Federation. U.S. exports of goods at issue account for 35 percent of total Russian exports of the like goods and for 4 percent of total U.S. imports.¹</p>
<p>DS490, DS496: Indonesia – Safeguard on Certain Iron or Steel Products (Chinese Taipei, February 12, 2015 and Viet Nam, June 1, 2015)</p>	<p>The complaining parties claimed that investigation and special safeguard measures imposed on imports of certain flat-rolled iron or steel products were inconsistent with the WTO requirements. Using outdated data on imports Indonesia failed to provide evidence of substantial growth in imports and that it had caused a serious injury (or posed a threat of serious injury) to the domestic industry. No evidence was presented of how factors that were not related to imports could have caused the damage. No opportunity for consultations was provided. The measures are inconsistent with the general MFN-treatment because they were imposed on imports from selected countries – Indonesia excluded imports originating in 120 developing countries, including the Russian Federation, from the application of the specific duty. The Panel report was circulated on August 18, 2017, founding that the measures did not constitute special safeguard measures. The Panel recommended to bring the measures in conformity with the MFN-treatment. Appeals were filed in the fall of 2017.</p> <p>The Russian Federation is interested in how disputes over the application of safeguard measures and respective investigations are settled in practice. Russia's interest in the participation in the above dispute is indirectly related to the effect of Indonesia's anti-dumping measures in force since December 27, 2013 to</p>

¹ UN COMTRADE data base// <http://comtrade.un.org/>.

Dispute	Subject matter at issue/updates in 2017, interest to Russia
	December 26, 2018 on imports of Russian flat-rolled iron or steel products (some companies are subject to 20 percent tax duties). ¹
DS492: The European Union – Measures Affecting Tariff Concessions on Certain Poultry Meat Products (complaint by China, April 8, 2015)	<p>The European Union renegotiated tariff concessions for poultry meat products imported from Thailand and Brazil that were determined as the only WTO Members that held a “principal” or “substantial” supplying interest in the tariff concessions at issue, whereas China was denied negotiations although it held a principal or substantial supplying interest, too. Tariff-rate quotas (TRQ) were applied almost in full to Brazil and/or Thailand, and out-of-quota rates are far above the rates that were prior to the modifications of concessions. The Panel report was circulated in March 2017. With respect to two of the ten TRQs at issue in this dispute, the Panel found that the European Union's allocation of TRQ shares among supplying countries was inconsistent with the requirements. Furthermore, the Panel found that the European Union's allocation of TRQ shares among supplying countries was inconsistent with the requirements of GATT 1994 and upheld China's claim that its increased ability to export poultry products to the European Union following the relaxation of the SPS measures in July 2008 was a “special factor” that had to be taken into account by the European Union when determining which countries had a “substantial interest” in supplying the products concerned, or when determining the TRQ shares to be allocated to the category of “all other” countries that were not recognized as substantial suppliers (including China). The Panel rejected China's other claims in this dispute. The DSB recommended the European Union to bring its measures in conformity with the WTO requirements, the parties to the dispute sought to reach an agreement on a reasonable period of time.</p> <p>The dispute is of interest from the perspective of updates to bound tariffs lists, understanding of negotiation procedures, etc. Furthermore, the European Union has quotas, albeit on insufficient volumes, for the Russian Federation (about 30,000 tons of poultry meat or poultry meat products).²</p>

Source: own compilation based on data posted on the WTO official website: https://www.wto.org/english/tratop_e/dispu_e/dispu_by_country_e.htm.

DS510: The United States – Certain Measures Relating to the Renewable Energy Sector (complaint by India)

On September 9, 2016, India filed a request to the WTO for consultations with the United States in respect to U.S. measures relating to domestic content requirements and subsidies instituted by the governments of some of the US states³ through programs that provide performance-based incentives for using domestic content for customers of light and power business for generating electricity through solar, wind and anaerobic digestion technologies, in particular programs on renewable energy cost recovery incentive payment, self-generation, water and power's solar incentives, as well as tax incentives for ethanol production and tax credits for biodiesel blending and storage, etc. India claims that the above measures are incompliant with the US obligations under the National Treatment on Internal Taxation and Regulation, subsidies and quantitative restrictions. On January 17, 2017, India requested the establishment of a panel. The Panel was established on March 21, 2017. However, the dispute was still at the Panel composition stage at the end of 2017 although the recommended dates were up.

The Russian Federation reserved its third-party right in 2017. On the one hand, this trade dispute, as well as the like trade dispute between the United States and India (DS456),⁴ to which Russia is a third party, is of importance to Russia from the perspective of increasing exports of like goods to the above countries. Russian exports of like goods to India as a percentage of total Russian exports of the like goods dropped to approximately 5 percent in 2016 from 8 percent in 2013.⁵ On the other hand, the development of alternative sources is significant enough so

¹ A review of existing restrictions on Russian goods in foreign markets // http://www.ved.gov.ru/rus_export/partners_search/torg_exp/.

² Ibid.

³ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds510_e.htm.

⁴ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds456_e.htm.

⁵ UN COMTRADE data base// <http://comtrade.un.org/>.

that the Russian Federation pay due consideration to the use of domestic content in production as well as subsidies that may be regarded inconsistent with the WTO rules and regulations.

DS511: China – Domestic Support for Agricultural Producers (complaint by the United States)

On September 13, 2016, the United States filed a request to the WTO for consultations with China regarding certain measures through which China appears to provide domestic support in favor of agricultural producers, in particular, to those producing wheat, India rice, Japonica rice and corn.¹ The United States challenges China's statutory and regulatory enactments of 2011–2016 aimed at accelerating the promotion of agricultural science and technology innovation and continuing to strengthen the capacity to guarantee agricultural product supplies, accelerating the development of modern agriculture and further increasing rural development dynamism, further deepening reform of the grain distribution system, raising the wheat and rice minimum purchase price, national temporary reserve purchases of corn, etc.

The United States claims that China's measures are inconsistent with its WTO obligations because the level of internal support to Chinese agricultural producers is in excess of its commitment level at China's accession to the WTO. In particular, internal support to Chinese agricultural producers, as measured by the current aggregate measurement of support τ (AMS), is in excess of its commitment level in 2012–2015 due to internal support to producers of wheat, rice, corn, etc. Annually, China provides domestic support in excess of its product-specific de minimis level of 8.5 percent for each of wheat, Indica rice, Japonica rice, and corn.

The Panel proceedings have been underway since June 27, 2017. The Russian Federation reserved its third-party rights in 2017. The Russian Federation has significant interest in the dispute because during the implementation of the challenged China's statutory and regulatory enactments Russian exports of the products at issue to China as a percentage of total Russian exports of the like products fell to 0.2 percent in 2016 from 7 percent in 2012 as Russian rice exports were down to 0.7 percent from 16 percent.²

DS513: Morocco – Anti-Dumping Measures on Certain Hot-Rolled Steel from Turkey (complaint by Turkey)

On October 3, 2016 Turkey filed a request to the WTO for consultations with Morocco regarding the imposition of definitive anti-dumping measures, and certain aspects of the underlying investigation, by Morocco on imports of certain hot-rolled steel from Turkey³. Turkey considers that the Moroccan "preliminary import declaration" requirements for goods that are subject to anti-dumping duties appear disputable. Turkey considers that the imposition of provisional anti-dumping measures appears to be an additional impermissible "specific action against dumping" that is inconsistent with the WTO rules and regulations.

The complaining party considers that the anti-dumping investigations and measures by themselves cannot be reconciled with the GATT 1994, and the Anti-Dumping Agreement, in particular because the Moroccan authorities failed to conclude the investigation within the maximum 18-month deadline. The Moroccan authorities rejected all the data on sales, costs and other data from Turkish exporters, and instead applied "facts available" to determine the dumping margins. For a reason inconsistent with the WTO standards, the Moroccan authorities

¹ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds511_e.htm.

² UN COMTRADE data base// <http://comtrade.un.org/>.

³ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds513_e.htm.

determined incorrectly Turkish exporters' failure to disclose the required data or otherwise denied access to the required data. Not all the essential facts were disclosed with respect to the decision to use available data as well as decisions on whether the data from the exporters were reliable or not and why secondary source data were used. Furthermore, the Moroccan authorities failed to make analysis of injury to the domestic industry, in particular they failed to provide a reasoned and adequate explanation of their finding of injury and causation of the factors in their entirety.

The Panel proceedings are pending since May 17, 2017. The Panel expects to circulate its report not sooner than in the middle of 2018. The Russian Federation has a substantial trade interest in the dispute because in 2016 Russian iron exports to Morocco accounted for 6 percent of total Russian exports of the like products, 1 percent of total Moroccan imports of the like products.¹ The Russian Federation has a systemic and practical interest in anti-dumping disputes.

DS516: The European Union – Measures Relating to Price Comparison Methodologies (complaint by China)

On December 12, 2016, China filed a request to the WTO for consultations with the European Union concerning certain provisions of the EU regulation pertaining to the determination of normal value for “non-market economy” countries in anti-dumping proceedings involving products from China.² When determining normal value, the European Commission will be able to reject data on internal prices and costs in an exporting country if the country has “significant distortions for the goods in question”, in which case data on prices and costs (including raw materials) from producers and exporters are not resulting from the play of competitive market forces due to the effect of government participation. The list of such cases remains open. China was treated as “a non-market economy country” within the 15-year transition period following the China’s accession to the WTO. Although the period ended on December 11, 2016, the European Union continues to determine normal value using a special methodology. Therefore, China considers that the European Union acts inconsistently with the WTO rules and regulations. The Panel is on pending status since 10 July 2017. The Panel expects to circulate its report not sooner than the second half of 2018.

The Russian Federation filed complaints to the WTO against the European Union over the use of the cost-adjustment methodology during anti-dumping investigations (DS474 and DS494). China and the European Union are Russia’s essential trade partners. In 2016, Russian exports to the European Union accounted for 46 percent of total Russia’s exports as imports from the European Union represented 38 percent of total Russia’s imports, with 10 and 21 percent, respectively, in exports and imports with China.³

DS517: China – Tariff Rate Quotas for Certain Agricultural Products (complaint by the United States)

On December 15, 2016 the United States filed a request to the WTO for consultations with China concerning China's administration of its tariff rate quotas, including those for wheat, short- and medium- grain rice, long grain rice, and corn.⁴ The United States claimed that China

¹ UN COMTRADE data base// <http://comtrade.un.org/>.

² https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds516_e.htm.

³ UN COMTRADE data base// <http://comtrade.un.org/>.

⁴ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds517_e.htm.

had failed to meet its obligations under the Protocol of China's accession to the WTO because tariff rate quotas for wheat, rice and corn are non-transparent and unpredictable. Furthermore, the United States claimed that China acted inconsistently with provisions of the GATT 1994 because of bans or restrictive measures affecting imports outside duties, taxes and other charges, failed to notify publicly of quantities allowed for imports of each tariff rate quota, and of their updates. On August 18, 2017 the United States filed a request to the WTO for the establishment of a panel. The Panel was established on August 31, 2017.

The Russian Federation has significant interest in the dispute because in 2016 Russia's exports of like products to China fell to 0.2 percent of Russia's total exports of like products from 7 percent in 2012 as rise exports dropped to 0.7 percent from 16 percent, respectively.¹

DS518: India – Certain Measures on Imports of Iron and Steel Products (complaint by Japan)

On December 20, 2016, Japan filed a request to the WTO for consultations with India concerning certain measures imposed by India on imports of iron and steel products into India. Japan challenged temporal special safeguard measures imposed by India on imports of "hot-rolled flat products of alloy or non-alloy steel in coils of a width of 600 mm and beyond". On September 14, 2015, a safeguard measure in the form of a 20 percent safeguard duty came into force for a period of 200 days. Final special safeguard measures in the form of ad valorem duty minus anti-dumping duties, if any, progressively being brought down from 20 to 10 percent up until March 13, 2018 were imposed on March 29, 2016. The duties were imposed on products with minimum import prices.

Japan claims that India was acting inconsistently with some of the provisions set forth by the GATT 1994 and the Agreement on Safeguards. In particular, India failed to make reasoned and adequate findings and inferences in its determination with respect to the alleged unforeseen developments, and how those alleged unforeseen developments resulted in increased imports of the products concerned causing or threatening serious injury to domestic producers. India failed to make reasoned and adequate findings and inferences in its determination as to the causal link between the alleged increase in imports and the alleged serious injury and/or threat of serious injury to the domestic industry, and how that effect has resulted in increased imports. India failed to provide reasonable public notice to all interested parties and appropriate means in which interested parties could present evidence and their views, including the opportunity to respond to the presentations of other parties and to submit their views. India failed to notify the Committee on Safeguards upon starting investigation concerned causing or threatening serious injury and the reasons for the investigation. India failed to provide adequate opportunity for prior consultations with Members having a substantial export interest of the products concerned. The Panel proceedings are pending since June 22, 2017.

The Russian Federation has significant interest in the findings of investigations. Russia's exports of all the like products to India contracted 44 percent in 2016 from 2015 and one produce ceased to be exported following India's imposition of the above measures.²

¹ UN COMTRADE data base// <http://comtrade.un.org/>.

² UN COMTRADE data base// <http://comtrade.un.org/>.

DS522: Canada – Measures Concerning Trade in Commercial Aircraft (complaint by Brazil)

On February 8, 2017, Brazil filed a request to the WTO for consultations with Canada with respect to measures concerning trade in commercial aircraft.¹ That was Brazil's fourth dispute against Canada in respect to Brazilian measures against Canada concerning government support of the aircraft industry. Brazil challenges alleged government subsidies to Bombardier, in particular though the C-Series Aircraft Program. Brazil considers that the government of Quebec, holding a 49 percent interest in Bombardier, invested C\$1.3 billion in the Canadian manufacturer of planes, knowingly violating the market competition.² Furthermore, Brazil considers that the measures appear to be prohibited subsidies and inconsistent with the Agreement on Subsidies and Countervailing Measures. The panel composition is on pending status since September 29, 2017.

In 2015, the Russian Federation already reserved its third-party rights in a like dispute launched by the European Union against the United States with regard to aircraft industry subsidies (DS487, Airbus and Boeing). The industry, the application of measures of support to the industry, the practice of challenging measures that appear to be inconsistent with the WTO rules and regulations, as well as systemic issues of such disputes are critical to the Russian Federation.

DS523: The United States – Countervailing Measures on Certain Pipe and Tube Products (complaint by Turkey)

On March 8, 2017, Turkey filed a request to the WTO for consultations with the United States with respect to countervailing measures imposed by the United States on certain types of pipe and tube products from Turkey.³ Turkey complains that the United States acted inconsistently with the United States' obligations under the Agreement on Subsidies and Countervailing Measures and the GATT 1994, particularly the United States' determination that certain entities are "public bodies", providing an alleged financial impact that conferred a benefit (within the meaning of Article 1 (*Definition of a Subsidy*) of the Agreement on Subsidies and Countervailing Measures); the United States' determination whether a subsidy is specific to an enterprise or industry or group of enterprises or industries within the meaning of Article 2 (*Specificity*) of the Agreement on Subsidies and Countervailing Measures, because of the United States' failure to substantiate its determination of specificity on the basis of positive evidence; the United States' use of facts available, and application of adverse inferences, in calculating subsidy rates; the United States' determination of injury based on cumulated imports, including imports from countries not subject to countervailing duty investigations or reviews (Article 15.3 (*Determination of Injury*) of the Agreement on Subsidies and Countervailing Measures).

The Panel proceedings are pending since September 14, 2017. Apart from having interest in practicing countervailing investigations and respective measures, as well as challenging measures that appear to be inconsistent with the WTO rules and regulations, the Russian Federation has significant practical interest in findings of the dispute. In 2016, Russia's export of like products to the United States dropped nearly 60 percent year-on-year, and Russia's

¹ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds522_e.htm.

² <https://aeronautica.online/2016/12/23/brazil-vs-canada-in-wto/>.

³ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds523_e.htm.

exports to the United States fell 6 percent of total Russia's exports in 2016 from 14 percent in 2015.¹

DS526: The United Arab Emirates – Measures Relating to Trade in Goods and Services, and Trade-Related Aspects of Intellectual Property Rights (complaint by Qatar)

On July 31, 2017, Qatar filed a request to the WTO for consultations with the United Arab Emirates (DS526)², Bahrain (DS527)³ and Saudi Arabia (DS528)⁴ over measures relating to trade in goods and services as well as trade-related aspects of intellectual property rights. In June 2017, the foregoing countries and then a few other Arab nations announced they were cutting off all diplomatic relations with Qatar over Qatar's alleged involvement in activities aimed at destabilizing the region. In addition, they imposed economic and trade sanctions against Qatar, including a transit blockade to/from Qatar. The states put forward claims and demands on Qatar. Qatar appealed to the WTO over the measures imposed against Qatar in the context of attempts at economic isolation by the United Arab Emirates, Bahrain and Saudi Arabia (hereafter we consider only the dispute between Qatar and the United Arab Emirates, to which the Russian Federation reserved its rights as a third party).

The UAE appears to institute or maintain prohibitions or restrictions, other than duties, taxes or other charges, on the importation of products of the territory of Qatar, and on exportation of products to the territory of Qatar. The UAE bans Qatari nationals from travelling to and remaining in the UAE in order to provide services, as well as bans on the provision of services by Qatari service suppliers established in the UAE. They include bans on the supply of (digital and other) services from Qatar to consumers of the UAE as well as prohibitions on nationals of the UAE to travel to and remain in Qatar in order to consume Qatari services. Furthermore, the UAE appears to deny freedom of transit through the territory of the UAE, via the routes most convenient for international transit, for traffic in transit to or from the territory of Qatar, which prevents Qatari service suppliers from supplying services. Attempts at economic isolation entail interference with intellectual property rights enjoyed by nationals of Qatar. Specifically, these measures include prohibitions or restrictions on displaying and accessing television content over which Qatari nationals hold copyrights and related broadcasting rights. Qatar considers the above measures are inconsistent with the GATT 1994, the GATS and the TRIPS.

As of the end of 2017, the dispute was at the panel composition stage. Many WTO members, including the Russian Federation, reserved their third-party rights in the dispute between Qatar and the UAE dispute. The Russian Federation has interest in this dispute from the perspective of further mastering the complaint procedure in retaliation of economic and trade sanctions because like disputes are normally not disputed by the DSB, which is a hot issue to the Russian Federation because it is already under sanctions. The Russian Federation also filed a complaint against Ukraine over restrictions, bans, requirements and procedures relating to trade in goods and services and transit (DS525). Furthermore, the complaining parties also demanded closure of Al Jazeera, which is somewhat similar to the restrictions against RT America, a Russian television station which broadcasts on cable in the United States, because both of them provide an alternative content.

¹ UN COMTRADE data base// <http://comtrade.un.org/>.

² https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds526_e.htm.

³ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds527_e.htm.

⁴ https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds528_e.htm.

* * *

The Russian Federation continues to participate actively in the WTO trade disputes settlement system. In 2017, the Russian Federation was faced with 12 new trade disputes in the WTO: as the complaining party to two disputes, as the responding party to one dispute and as a third party to nine disputes. Only two out of the six disputes initiated by the Russian Federation in the period between 2012 and 2017 were pending as of the end of 2017. Reports on the disputes against the European Union over the European Union's Third Energy Package (DS476) and against Ukraine over anti-dumping measures on ammonium nitrate (DS493) are expected not sooner than late in 2017 and not sooner than in Q1 2018, respectively.

The Russian Federation has brought its measures in conformity with the WTO rules and regulations as a result of two out of the eight disputes to which the Russian Federation is the responding party (DS475 and DS485). The European Union, however, requested for retaliatory measures against one of the above disputes. One dispute against the Russian Federation over anti-dumping duties on light commercial vehicles from Germany and Italy is at Appellate Body stage (DS479). Two disputes initiated by Ukraine are at the Panel stage (DS499 and DS512). Panel reports are expected in April 2018 and late in 2018, respectively.

Most of the WTO disputes to which the Russian Federation is the complaining or responding party are disputes with the European Union and Ukraine. From the complainant's perspective, the Russian Federation has interest mostly in anti-dumping investigations and anti-dumping measures, particularly in steel and chemical industries. Most of the complaints against the Russian Federation concerned technical trade barriers, sanitary and phytosanitary measures, anti-dumping measures, investment measures that affect trade, tariffs, restrictions on traffic in transit.

The Russian Federation tends to reserve its third-party rights in disputes over measures relating to steel products, agricultural produce, automotive and aircraft products, as well as renewable energy sources. A special emphasis is placed on disputes over anti-dumping investigations that lead to anti-dumping measures. The Russian Federation reserves its third-party rights in disputes not only because it has significant trade interest but also the practice of participation in disputes as well as systemic interest in application of WTO rules and regulations. A good illustration is the Russian participation as a third party to the dispute between Qatar and the UAE over measures relating to trade in goods and services as well as trade-related aspects of intellectual property rights (DS526). The Russian Federation has interest in this dispute from the perspective of further mastering the complaint procedure in retaliation of economic and trade sanctions because like disputes are normally not disputed by the DSB, which is a hot issue to the Russian Federation because it is already under sanctions, and because the country filed a complaint against Ukraine over restrictions, bans, requirements and procedures relating to trade in goods and services and transit (DS525).

It's extremely important that the Russian Federation adhere to the right stance and tactics of participation in WTO disputes with a view to developing mutual trade with member-countries pursuant to the WTO rules and regulations while upholding its interests. The Russian Federation should exploit opportunities offered by the WTO trade disputes settlement system should. In addition, the country's reputation as a credible and responsible trade partner and WTO member is particularly essential.

Section 5. The social sphere¹

The positive economic trends of 2017 – GDP growth, record-low inflation rate, revival of consumption and other – were estimated by most experts and analysts as evidence of the country's embarking on a positive economic trajectory and the year 2017 was generally regarded as the year of economic revival. However, such a conclusion would not be complete without assessment of households' well-being and other parameters which serve as indicators of the state of things in the social sphere. Economic processes have a decisive effect on the ongoing main social processes. In the past three years, an unstable and inconsistent economic situation in Russia could not but give rise to substantial changes in households' social and economic situation. At the same time, the entire number of factors which were not related to the macroeconomic and volatile dynamics, but justified by other processes preset by lengthy previous periods affected much the social sphere.

5.1. The situation of the household sector: households' incomes, consumer's market and labor market

5.1.1. Incomes and the rate of households' poverty and inequality

In 2017, households' real disposable cash income decreased by 1.7 percent as compared to the relevant period of 2016 with growth in real accrued wages and the real size of granted pensions amounting to 3.4 percent and 3.5 percent, respectively (*Fig. 1*).

It is noteworthy that in 2017 growth in the real size of pensions as compared to 2016 was largely justified by a lump-sum payment of RUB 5,000 to pensioners early in 2017.

Due to the economic crisis, a decrease in the real size of granted pensions and households' real cash incomes was observed in 2015–2016 and from 2014, respectively. In 2015, real wages fell substantially by 9 percent on the previous year, however, later they started to grow little by little. Despite a renewal of growth in the real size of pensions and real wages, real disposable cash incomes keep falling.

If the current situation is compared with the 2008–2009 crisis, it can be pointed out that a decrease in households' incomes and wages in real terms was short-lived then and a drop in real wages was more substantial than that in real incomes.

¹ Sections 5.1–5.4 are authored by experts of the Institute for Social Analysis and Forecasting RANEPa: Elena Avraamova, Alexandra Burdyak, Elena Grishina, Marina Eliseeva, Dmitry Loginov, Victor Lyashok, Tatiana Maleva, Nikita Mkrtychyan, Aleksandra Polyakova, and Yulia Florinskaya.

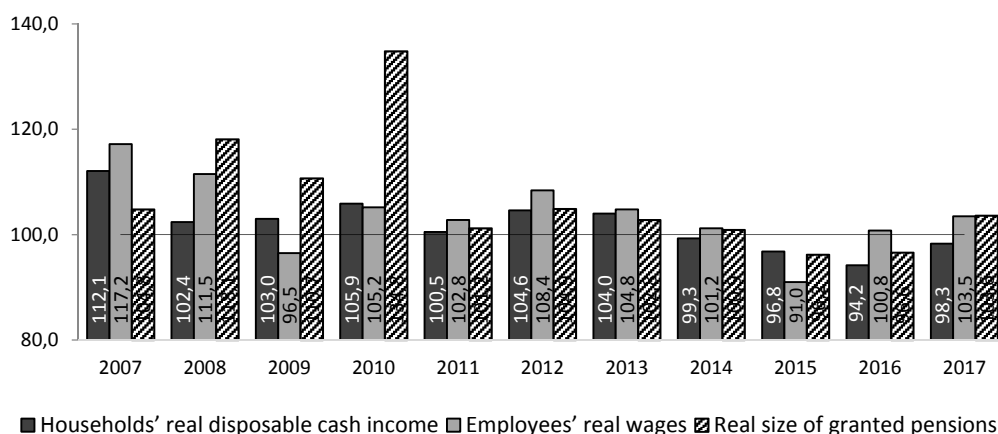
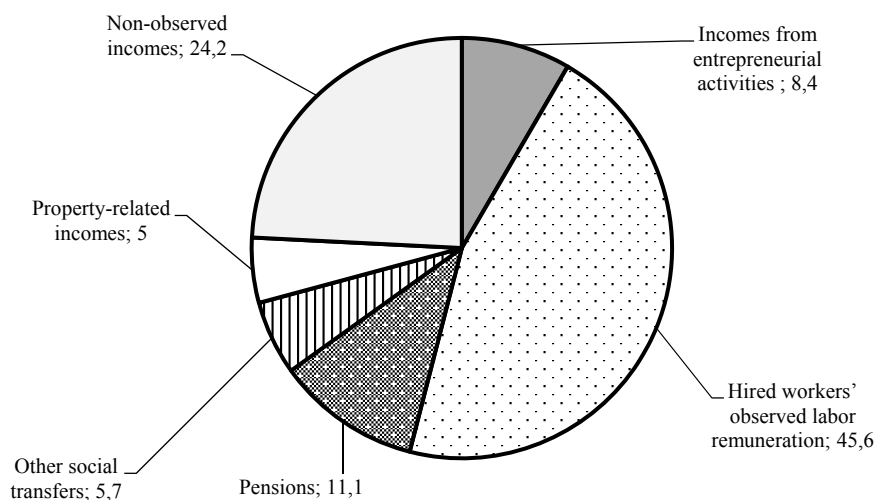


Fig. 1. Dynamics of households' real disposable cash income, real accrued wages and real size of granted pensions in 2007–2017, % change on the previous year

Source: The Rosstat

What is the factor behind the current difference in the dynamics of households' real cash incomes and that of real wages and pensions?

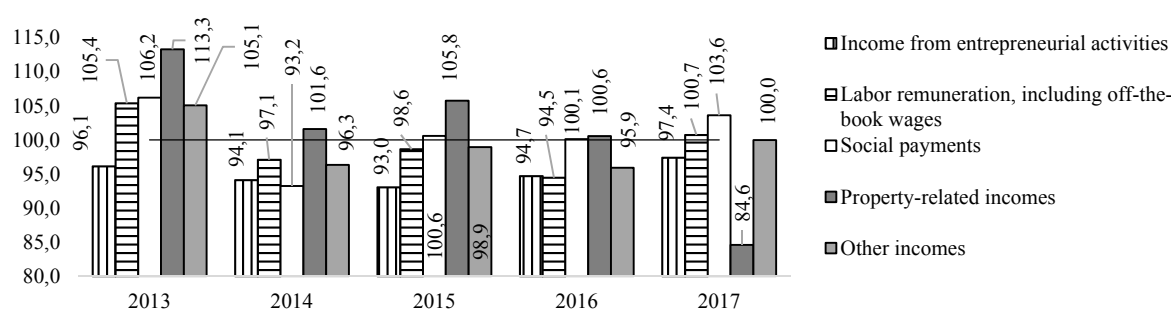
This can be explained by the fact that in H1 2017 in the cash income pattern the observed labor remuneration of hired workers and pensions accounted maximum for 60 percent of the overall volume of households' cash incomes (*Fig. 2*).



Note. The observed labor remuneration of hired workers is specified with military pay of servicemen taken into account.

Fig. 2. The pattern of households' cash incomes, H1 2017, %

Calculations show that individual components of households' cash incomes (incomes from entrepreneurial activities and property-related incomes) which account for over 13 percent of the total volume of cash incomes decreased in real terms in 2017 as compared to the previous year (*Fig. 3*).



Note. In accordance with the Rosstat's methods, property-related incomes include dividends, interests on deposits, yield on securities and return on investments.

Fig. 3. The dynamics of households' cash income components in real terms in 2013–2017, % change on the previous year

Source: The Rosstat

In 2017, reduction of property-related incomes as compared to the previous year can be explained by a lower rate of income on deposits: according to the data of the Central Bank of Russia the weighted average interest rate on deposits with a term of up to a year amounted to 5.27 percent in December 2017 against 6.5 percent in December 2016, while that on deposits with a term of over one year was equal to 6.39 percent in December 2017 against 7.57 percent in December 2016.¹

So, in 2014–2016 negative dynamics of most components of households' cash incomes in real terms, including the real volume of labor remuneration with off-the-book wages taken into account were observed.

In 2017, a decrease in the real volume of property-related incomes and incomes from entrepreneurial activities could have a negative effect on households' cash incomes and prevented their growth in real terms even amid growing real wages and pensions.

A reduction of households' real disposable cash incomes with growth in real terms in workers' observed wages could be brought about, among other things, by redistribution between the observed and non-observed labor remuneration in favor of the observed one, as well as vigor efforts taken by the tax authorities to fight illegal wages. In particular, if in 2015 growth in the individual income tax volume was lower than that in the volume of households' cash incomes, in 2016–2017 it was higher (*Fig. 4*) and the evidence of that was redistribution in favor of the transparent portion of the labor remuneration.

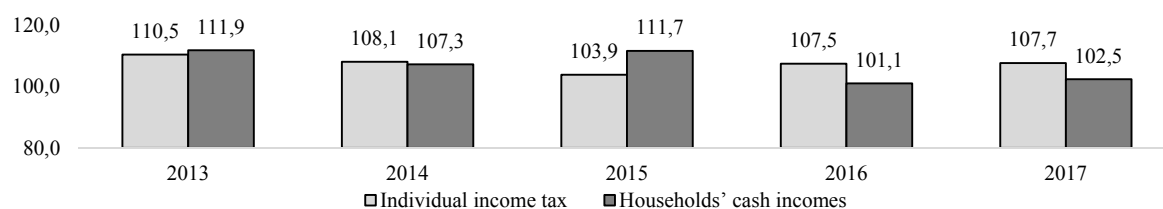


Fig. 4. Dynamics of households' cash incomes and the individual income tax (IIT) in nominal terms in 2014–2017, % change on the previous year

Source: The Rosstat and the Federal Treasury of the Russian Federation

¹ URL: http://www.cbr.ru/statistics/?PrtId=int_rat

The pattern of households' cash incomes changes with the time: the share of social payments is growing (over 70 percent of the volume is made up by the pensions), while that of income from entrepreneurial activities is diminishing (*Fig. 5*).

Growth in the share of pensions in the pattern of households' cash incomes can be explained, in particular, by an increase in the share of people beyond the working age in the number of people who are over 15 years old. In the period from January 1, 2014 till January 1, 2017, the number of people aged over 15 years old grew from 28.0 percent to 30.1 percent.

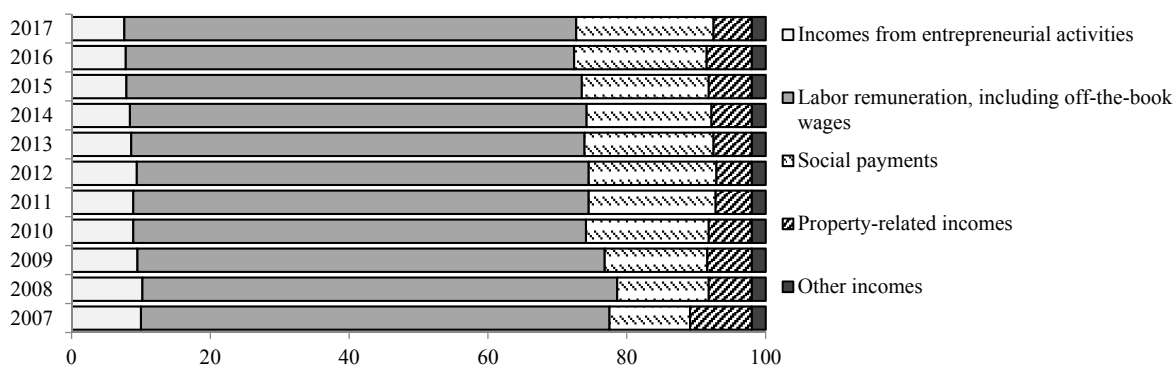


Fig. 5. The pattern of households' cash incomes, 2007–2017, %

Source: The Rosstat

According to the Rosstat's data, in January-September 2017 the rate of poverty stood at 13.8 percent which is below the level of the relevant period of 2015–2016, but higher than in 2012–2014 (*Fig. 6*).

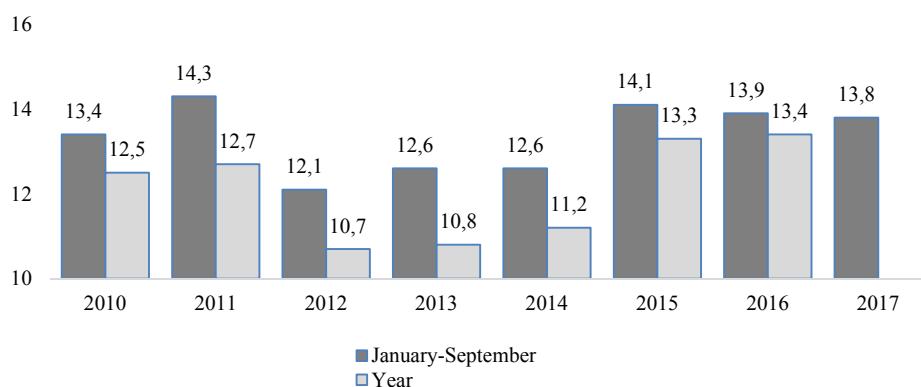


Fig. 6. The share of households with cash incomes below the minimum subsistence level nationwide in 2010–2017, % of the total number of the population

Source: The Rosstat

So, despite some decrease in the rate of poverty in January-September 2017 as compared to the relevant period of 2015 and 2016, the goal of attaining the pre-crisis level of poverty is still far from being achieved and requires efforts to be made to prevent households' real cash incomes from falling and promote more substantial growth in wages, pensions and social payments.

For instance, during the 2008-2010 crisis the measures taken by the Government to increase the minimum monthly pay, unemployment benefits and pensions prevented the rate of poverty from growing and helped reduce the share of low-income people to 10.7 percent by 2012.

In Q3 2017, correlation of households' cash incomes and pensions with the minimum subsistence level amounted to 305 percent and 152 percent, respectively, that is, a decrease compared to the level seen in Q3 2010–2016.¹ Despite the fact that in Q3 2017 wages increased somewhat (from 316 percent to 338 percent) against the minimum subsistence level as compared to Q3 2015, they failed yet to achieve the level seen in the same period of 2010–2014.

So, as a result of the economic crisis the level of households' cash incomes, wages and pensions decreased considerably against the minimum subsistence level and that is the evidence of worsening of households' financial situation.

In Q4 2017, the level of the subjective poverty rate (the share of individuals who estimate their financial situation as “bad” or “very bad”) amounted to 24.9 percent, which is below the level seen in the same period of 1998–2016 (*Fig. 7*).

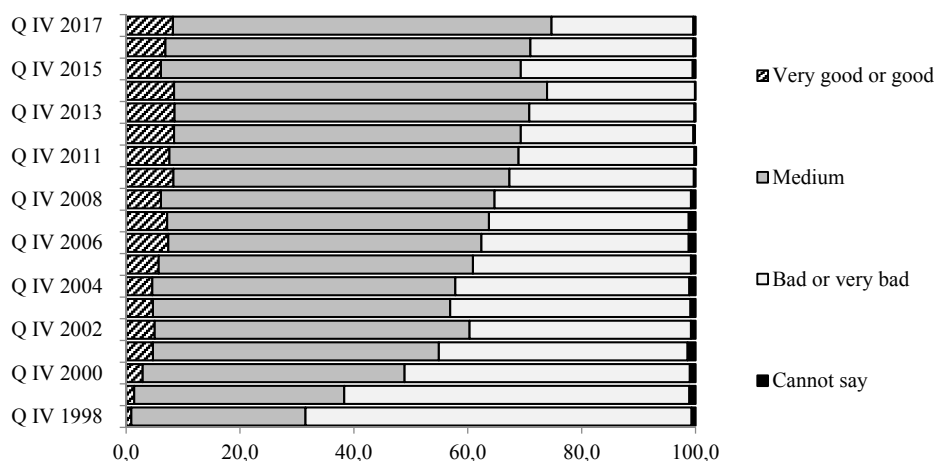


Fig. 7. Estimation by households of their current financial situation, Q4 1998–2017, %

Source: The Rosstat

In 2017, the level of income differentiation was below that seen in 2006–2015 (*Fig. 8*).

The analysis has shown that recovery growth in the observed labor remuneration in real terms is so far unable to overcome the negative trend of households' declining real cash incomes due to reduction of other cash income components in real terms. Apart from that, mixed dynamics of households' real incomes and wages can be explained by modification of the pattern of households' cash incomes and redistribution between the observed and non-observed labor remuneration in favor of the observed one on the back of vigor efforts by tax authorities to uncover “shadow” schemes of labor remuneration.

¹ An exception is only Q3 2015 when the correlation between the size of pensions and the minimum subsistence level for pensioners amounted to 152 percent, too.

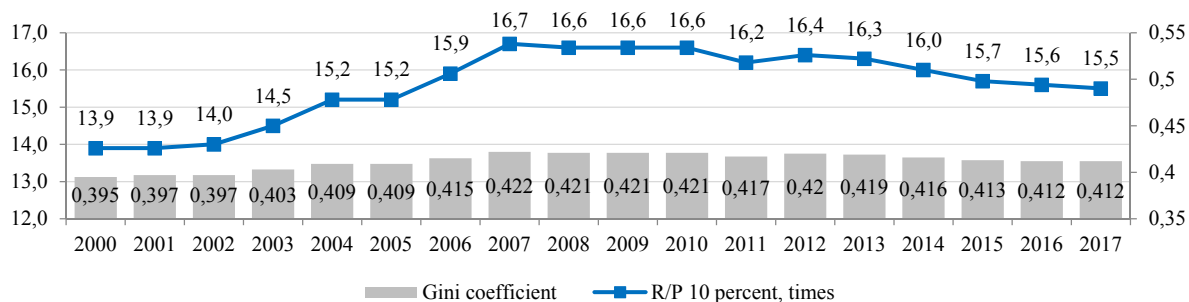


Fig. 8. The level of income inequality, 2000–2017

Source: The Rosstat

Despite a somewhat decrease in the poverty rate in January-September 2017 as compared to the level seen in 2015-2016 and gradual recovery of households' consumption in 2017, the goal of reducing the rate of poverty to the pre-crisis level and restoring households' financial situation are far from being achieved and require active efforts to be taken to prevent households' real cash incomes from falling and promote substantially growth in wages and social payments.

5.1.2. Retail trade turnover and consumer price index

The analysis of retail trade dynamics is crucially important for comprehension of households' social and economic situation. In January-December 2017, the retail trade turnover amounted to RUB 29.8 trillion (101.2 percent as compared to the relevant period of the previous year in comparative prices). As seen from *Fig. 9*, the trade turnover value has surpassed for the first time since the pre-crisis period (that is from 2014) the edge of growth of 100 percent, though it is still short of that index value.

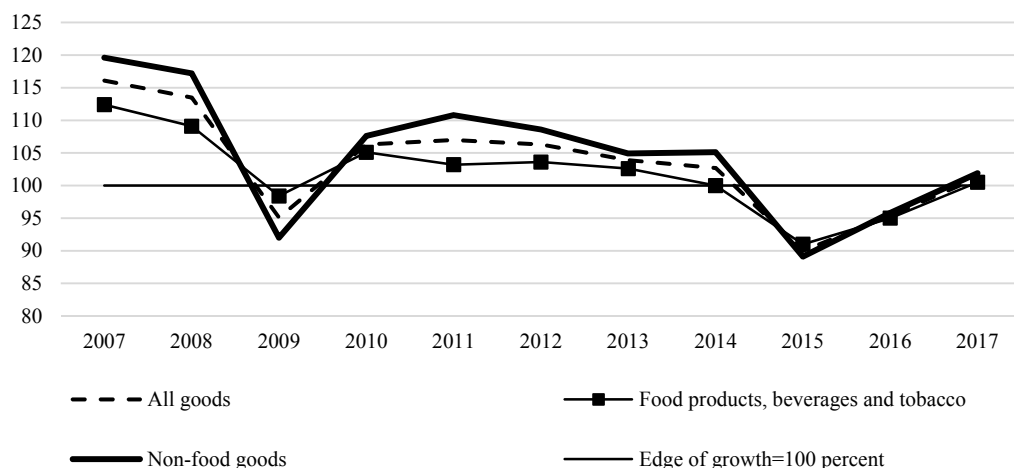


Fig. 9. The dynamics of retail trade in food products, beverages and tobacco, as well as non-food products in January-October, % change on the relevant period of the previous year in comparative prices

Source: The Rosstat

Growth in the non-food product turnover in comparative prices amounted to 3.4 percent. The food product turnover, including beverages and tobacco happened to be higher than the edge of growth (102.8%). It is noteworthy that in previous years the non-food product turnover in comparative prices used to be higher than that of food products, beverages and tobacco. An exception is two pre-crisis years: 2009 and 2015. However, in January-October the retail trade turnover fell by 16.7 percent, including a decrease of 13 percent and 19.8 percent in sales of food products and non-food products, respectively, as compared to the pre-crisis year 2014.

Early in 2017, the turnover of both the components of the retail trade kept falling in monthly terms as compared to the relevant period of the previous year in comparative prices. However, starting from April, the non-food product turnover, as well as the turnover as a whole surpassed the edge of growth. Starting from July, the turnover of food products, beverages and tobacco saw positive dynamics (*Fig. 10*).

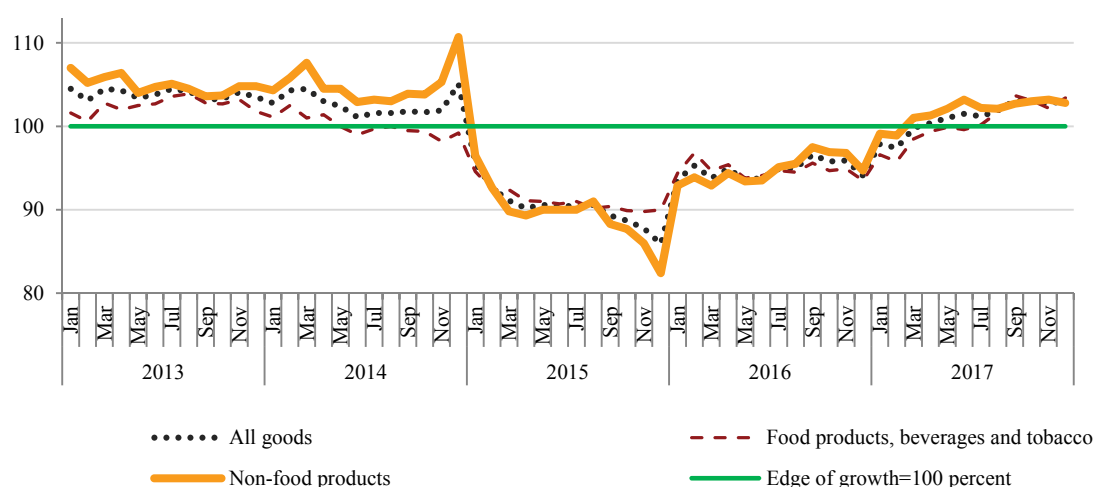


Fig. 10. Monthly dynamics of the retail trade turnover and components thereof in comparative prices, % change on the relevant month of the previous year

Source: The Rosstat

In 2017 the consumer price index stood at the level of 103.7 percent as compared to the previous year, including 103 percent, 104 percent and 104.2 percent as regards food products, non-food products and services, respectively. As seen from *Fig. 11*, in 2017 the rate of inflation kept falling as in 2016. In the period under review, the highest growth rates of prices of food products were observed in 2014 and 2015, however, starting from 2016 the index of consumer prices of food products was the lowest. Apart from that, 2014 and 2015 saw the lowest growth rates of prices on services, but by 2017 their growth rates became virtually equal to those of appreciation of non-food products.

Generally, in 2017 the inflation rate turned out to be the lowest in the entire period under review (2007–2017); the index of the rate of inflation in 2012 was almost similar to that of the year 2017, though the inflation rate in 2012 was at the level of over 1 percent higher than the values of the current year depending on the category of goods and services. It is to be noted that the rate of inflation happened to be somewhat lower than the target level of 4 percent.

The dynamics of the consumer price index (December on December) saw higher growth in prices of services in the period under review (4.4 percent) than that in prices of food products (1.1 percent) and non-food products (2.8 percent).

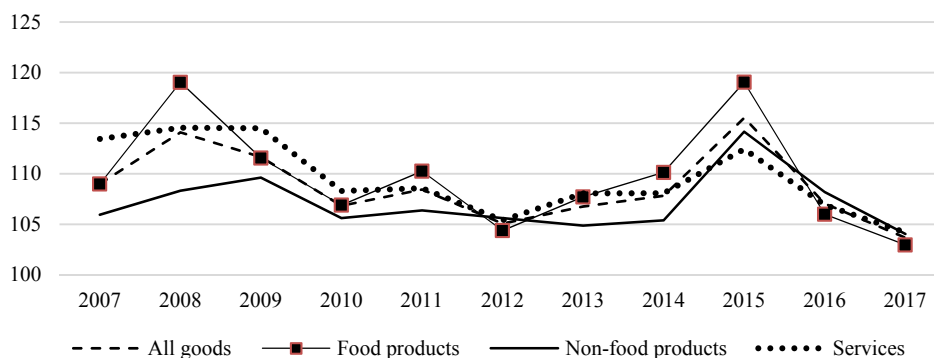


Fig. 11. The overall index of consumer prices, % change on the previous year

Source: The Rosstat

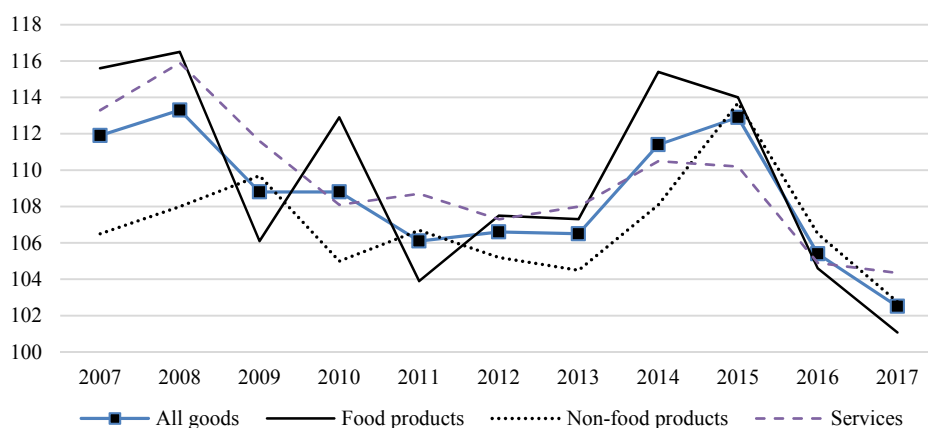


Fig. 12. The overall index of consumer prices, indices of prices of food products, but not of non-food products and services for a year, December on December of the previous year, %

Source: The Rosstat.

With a 3.7 percent inflation rate officially calculated by the Rosstat, household surveys showed that according to the opinion of the median consumer the inflation rate fell to 10 percent by December 2017, while in December 2016 – February 2017 it was equal to about 15 percent. Also, it is to be noted that the median consumer expects further growth of 8.7 percent a year in prices: both the indicators – the observed and expected rates of inflation – hit the record-low values during three years of observations. However, over a half of the respondents (57 percent in H2)¹ believed that at the end of 2017 the rate of inflation would be much higher than 4 percent declared by the Central Bank of the Russian Federation and as we can see their expectations based on their own subjective perceptions of consumer price rises materialized. Non-food

¹ Based on the results of the POF survey of 2,000 people. Source: Change in Inflationary Expectations and Consumer Sentiments Based on Household Surveys. OOO “inFOM”. December 2017 / Central Bank of the Russian Federation. URL: http://www.cbr.ru/collection/collection/file/3739/fom_17_12.pdf

products and services mentioned by respondents more often than other and which prices were growing at a higher rate included the following: housing and public utility services, gasoline, pharmaceuticals and medicines. According to respondents, the leaders as regards price rises were meat, poultry, dairy products, cheese, sausages, fish, seafood, fruits and vegetables.

As seen from the Rosstat's surveys, the share of those who expect considerable growth in prices in the near future decreased from 41.4 percent of the population in Q1 2017 to 36.8 percent in Q4 2017. Late in 2014 – early in 2015, the share of such estimates amounted to 2/3 of the respondents. It is noteworthy that 12 percent of the respondents believed that prices would remain approximately at the same level and 48.7 percent of the respondents (the data on Q4 2017) expected them to grow somewhat in future. In the above-mentioned research by the Public Opinion Foundation (POF), the issue of price modification concerns the next month and forthcoming 12 months and despite the initially different correlation between the pessimistic and optimistic expectations, the dynamics of comparative indices points to the growing share of respondents who believes that prices will go down. So, embarking on the trajectory of a low real inflation rate and promise to stick to the policy of maintaining low growth rates of prices in future have not changed much consumers' inflationary expectations.

The consumer confidence index measured by the Rosstat on the basis of survey of 5,100 persons in all the regions of the Russian Federation¹ in Q3 2017 rose by 3 percentage points on the previous quarter and amounted to -11 percent, while in Q4 2017 it remained at the same level. After hitting the record-low of -32 percent in Q1 2015 and subsequently falling to -30 percent in Q1 2016, the value of the consumer confidence index at the end of 2017 gradually recovered to the level seen late in 2013 and early in 2014.

5.1.3. Consumer lending

In 2017, households were granted RUB 9.2 trillion worth of loans, that is, 5 percent more than in 2013, the most favorable year for consumer lending among all the previous years. So, the volume of lending to individuals have already attained the pre-crisis level (growth of 5.2 percent by 2013), however, with the rate of inflation in real terms taken into account, it failed to do so (*Fig. 13*).

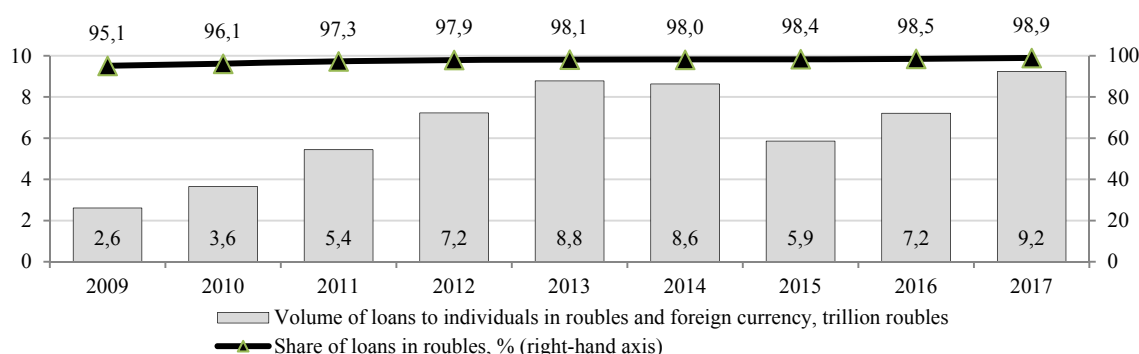


Fig. 13. Volumes of loans extended to individuals in 2009–2017 and the share of loans extended in roubles

Source: The Central Bank of the Russian Federation

¹ Households' Consumer Expectations / The Rosstat. –URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/level/#

Most borrowers take loans in roubles; the share of loans in the national currency increased from 95 percent to 99 percent in the period under review. So, foreign currency loans accounted for 1.1 percent of the volume of loans extended to individuals in 2017.

The peak growth rates of lending to individuals were observed in 2011 when households were granted 50 percent more funds (in roubles and foreign currency) in loans than a year before. Then, growth rates started to slow down and the volumes of loans extended in 2014 turned out to be almost the same as a year before, while the year 2015 saw a decrease of 32 percent on the previous year (*Fig. 14*). In the past two years, growth rates of 23 percent–28 percent a year made up for that drop. At the same time, in 2015–2017 households’ cash incomes in real terms did not virtually change.

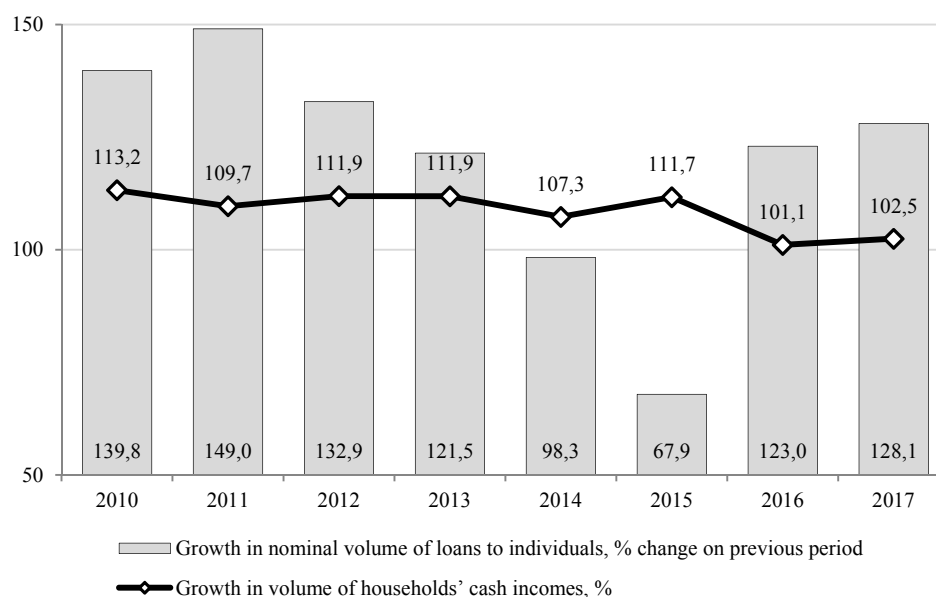


Fig. 14. Growth in the nominal volume of loans to individuals and growth in the volume of households’ cash incomes, % on the previous year

Source: The Central Bank of the Russian Federation; the Rosstat.

Shrinkage of the influx of new borrowers could not, but affect the volume of households’ debts on loans to banks: at the year-end 2015 the volume of debt fell to RUB 10.6 trillion. Late in 2017, borrowers owed banks RUB 12.1 trillion, a record-high sum throughout the entire period of observations. So, in nominal terms (without price rises taken into account) individuals’ debts to banks became record-high at the year-end 2017. The share of rouble loans in individuals’ overall debt to banks rose from 88.9 percent of the debt on all the loans in roubles and foreign currency in 2009 to 99.2 percent in 2017 (*Fig. 15*). Consequently, the share of loans in foreign currency decreased to 0.8 percent of the overall debt, thus demonstrating weak correlation between consumer lending and the current exchange rate of foreign currencies.

Households’ debt on loans increased by 7.4% in nominal terms as compared to the pre-crisis year 2013. The problem related to overdue consumer loan payments whose share grew to 8.1 percent in 2015 was gradually smoothed over with new loans being extended; the share of problem debts decreased to 7.0 percent of households’ debt on loans at the year-end 2017.

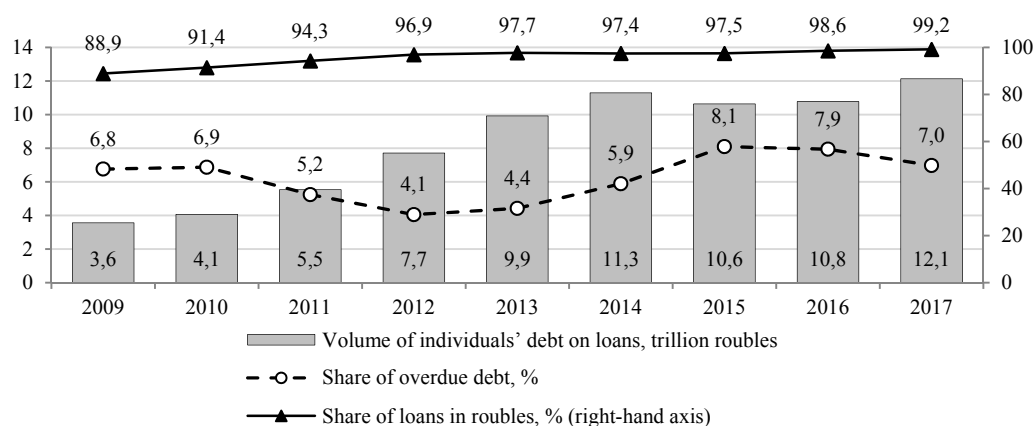


Fig. 15. The volume of individuals' debt on loans in 2009–2017, trillion roubles, the share of the overdue debt and the share of debt on loans in roubles, %

Source: The Central Bank of the Russian Federation

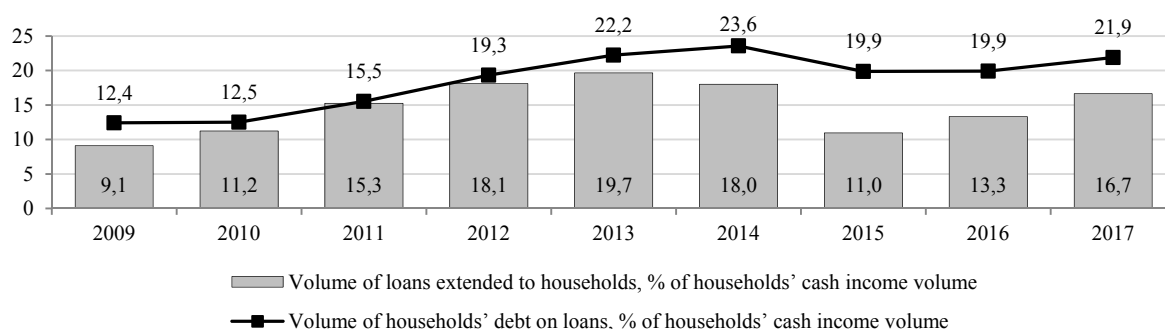


Fig. 16. Growth in the volume of individuals' debt on loans in January-September 2009-2017 as a whole, % change on the relevant index of the previous year

Source: The Central Bank of the Russian Federation, The Rosstat.

Amid households' stagnating cash incomes in nominal roubles (without the rate of inflation taken into account) in the past two years, consumer lending undoubtedly saw positive dynamics. However, in 2017 the volume of loans to individuals amounted to about 17 percent of households' cash incomes, that is, less than in 2012 (Fig. 16), while households' overall debt on loans, to 22 percent of households' annual income which failed to recover to the level of the pre-crisis year 2013, too.

5.2. Labor market

In 2017, the labor market saw positive dynamics as regards some indicators and negative ones as regards other. A workforce reduction forecasted by experts long ago began this year (Fig. 17). After attaining the record-high number in 2007, the number of workforce stabilized at the level of 75.4 million – 75.8 million people (with residents of the Crimea not taken into account), but within 12 months of 2017 it fell by 0.5 million people, that is, nearly 1 percent of all the economically active population. Workforce is an acyclic indicator which does not react to economic growth or slump. The current dynamics can be explained completely by

demographic factors: reduction of the number of working age people, exit from the labor market of generations born in the 1950s and incoming of small cohorts of people born late in the 1990s. As seen from the forecasts, with the current level of economic activities maintained among the population the workforce may decrease by 10 percent to 70 million people in the next decade.¹ So, it is expected that employers will be facing more often problems related to workforce shortages.

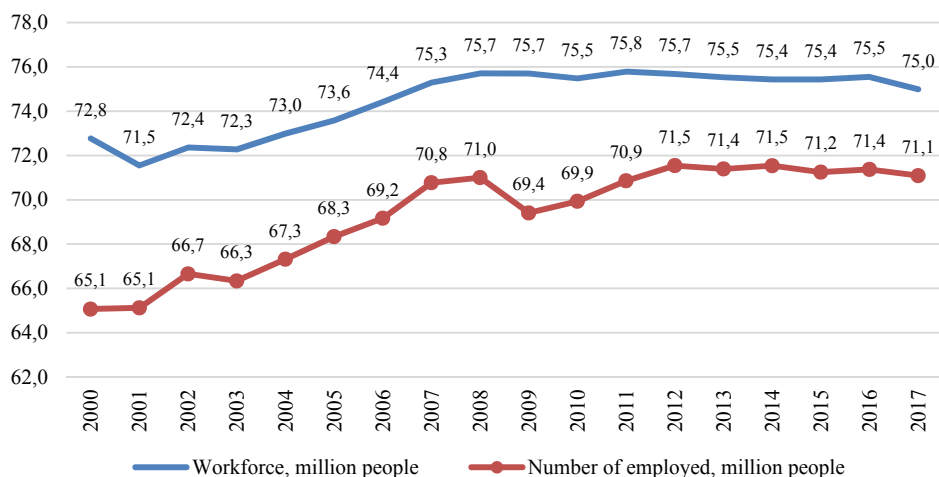


Fig. 17. The number of the workforce and the employed (without residents of the Crimea taken into account), million people

Source: The Rosstat

A decrease in the workforce took place on the back of reduction both of the number of the employed and unemployed. In 2017, the number of the employed fell by 251,000 persons. It is to be noted that it is comparable with the situation of 2015 when this indicator fell by 293,000 persons. However, if in 2015 a decrease in the number of the employed was primarily related to shrinking demand on labor due to economic recession, at present it can be justified by demographic processes.

At the same time, the number of the unemployed decreased by 276,000 persons. In 2017, the average rate of unemployment (under the ILO’s methods) amounted to 5.2 percent. The registered unemployment fell to its historic low of 1.1 percent. A gradual decrease in the value of the above indicators is related both to upgrading of the economic situation in Russia and decline of the natural rate of unemployment. Proceeding from the dynamics of the past five years, it can be stated that full employment was observed in Russia in the 2010s and it was not affected even by the economic recession of 2015–2016.

According to the preliminary data of the Rosstat, in 2017 wages increased by 3.5 percent in real terms and amounted on average to RUB 39,144 (*Fig. 18*). In the first three quarters of 2017, growth rates of wages were insignificant, but they sped up considerably in Q4 2017. However, labor remuneration is still far from its pre-crisis value: by December of the previous year it amounted to 96 percent of the value seen in the relevant period of 2013. With the current growth rates maintained, it will require a year to achieve the pre-crisis level.

¹ V.E. Gimpelson, A.A. Zudina. Labor Market Demographic Problems// The Demoscope Weekly. 2017. No. 729–730. URL: <http://demoscope.ru/weekly/2017/0729/tema01.php>

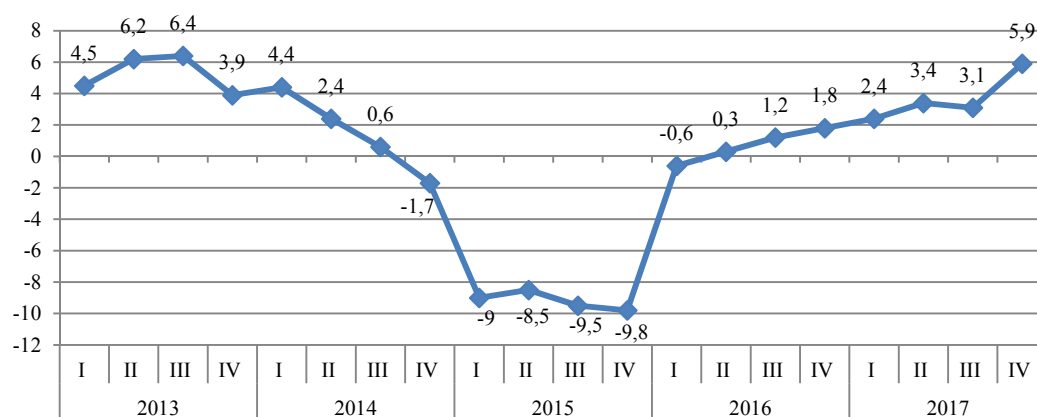


Fig. 18. Growth in real wages as compared to the relevant index of the previous year, %

Source: The Rosstat

Sectorial differences in labor remuneration still exist: wages grow at a high rate in the agrarian sector, mining and manufacturing (particularly, in the printing industry, the textile industry, as well as the pharmaceutical industry, production of petrochemicals and motor vehicle manufacturing) and at a lower rate in public administration. Growth rates of wages in education and healthcare sped up by the year-end which fact can be explained by fulfillment of May Executive Orders of the President.

According to business surveys, the situation on the labor market has stabilized. The Russian economic barometer points to growth in loading of the available workforce. The indicator in question is based on estimates of executive managers of enterprises in different industrial sectors where 100 means the normal monthly level. After a short-term drop in 2015, recovery processes began and by the mid-2017 this indicator virtually attained its pre-crisis maximum. This evidence underpins the statement that full employment has been achieved on the Russian labor market.

Not surprisingly, in such a situation employers start utilizing their employees more intensely and the average number of working hours per worker is growing. In 2017, this indicator increased to 1759 hours a year which is the local maximum in the past decade.

In 2017, some evidence of a change in long-term trends of employment in the informal sector emerged. From the beginning of the crisis the share of those unofficially employed has been decreasing, however, it is related to the reduction of the number of those who do extra work in that sector (Fig. 19). In Russia, secondary employment is not normally permanent and falls considerably during a crisis. So, in analyzing the phenomenon of employment in the informal sector it is important to take first into account those who are permanently employed there. The share of the latter kept growing at a constant rate in 2013–2016. However, in the first three quarters of 2017 that share fell by 0.7 percentage points as compared to the same period of 2016; the share of all the employed there, including those who have an extra job in the informal sector decreased by 1.5 percentage points. So, in 2017 a decrease in the number of the employed took place primarily in the informal sector, while the number of the employed in the formal sector remained more or less the same.

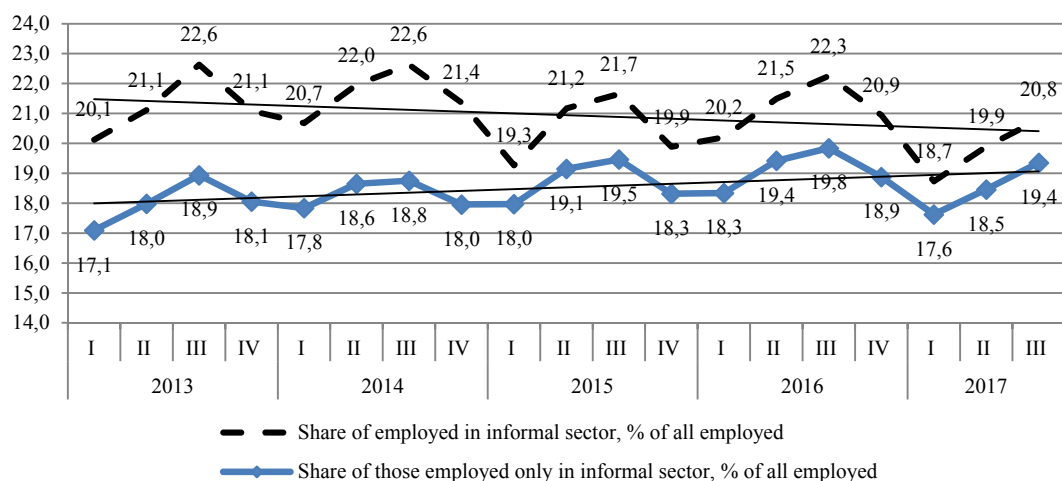


Fig. 19. The share of the employed in the informal sector

Source: The Rosstat

What factor is behind the reduction of the informal sector on the labor market from the beginning of 2017? In 2016, the informal sector saw a substantial decrease in wages, while in the formal sector, particularly, at large and mid-sized enterprises wages kept growing. In our view, a dramatic drop in labor remuneration in the informal sector is the main factor behind the outflow of workforce therefrom.

Proceeding from the data of the Rosstat, it can be stated that the labor market has overcome crisis developments of 2015–2016, which were fairly moderate and “not quite critical ones”. The rate of unemployment returned to the level of the year 2014, while the average number of working hours even exceeded the pre-crisis level. The last repercussion of the latest economic slump was the low level of wages as compared to the pre-crisis one. However, it is believed that reduction of the workforce is going to lead to a higher competition for it among employers and, consequently, promote growth in wages. According to the available data for 2017, the outflow of the employed started in the informal sector where the level of wages was substantially lower and kept falling as opposed to positive dynamics in the formal sector (particularly, at mid-sized and large enterprises).

5.3. Households’ social well-being

The analysis of households’ opinions and estimates as regards dynamics and prospects of this country’s development, their own financial situation, as well as activities to upgrade or preserve the attained level of well-being was based on the data of the Online Monitoring of Households’ Social Well-Being carried out by the Institute for Social and Economic Analysis, RANEPА since 2015.¹ Within a year, eight waves of the sociological survey are carried out by

¹ “The Online Monitoring of the Socioeconomic Situation of the Population in Russia” is published on the RANEPА’s Web-site¹, as well as in a series of articles of the *Economic Development of Russia* journal: E.M. Avraamova, A.Ya. Burdyak, V. Yu. Lyashok. *The Social Trends and Economic Situation of the Russian Population (based on the results of a regular online monitoring by the Institute for Social Analysis and Forecasting, RANEPА)* // The Economic Development of Russia. 2017. No. 3. – pp. 82–89; E.M. Avraamova, E.E. Grishina, T.M. Maleva, A.G. Polyakova. *The Socioeconomic Situation of the Population: Analysis of Current Trends (based*

means of personal questionnaire surveying of a comparable sample which is representative for the adult population. The sample includes 1600 respondents in each wave. Detailed results can be found in the Institute’s annual reports.¹

5.3.1. Assessment of changes in the economic situation

In 2017, sentiments about the economic situation in the country became much less critical. The opinion that the economic situation stabilized and no shocks should be expected started to prevail. For the first time in the entire period of observations (2015-2017), this opinion was shared by more than a half of the households (*Fig. 20*).

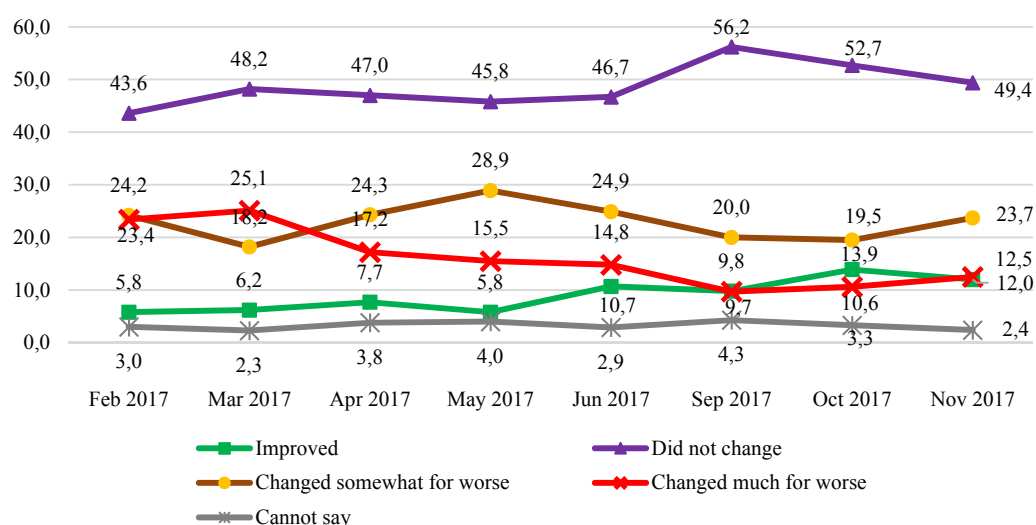


Fig. 20. Distribution of answers to the question: “How did the economic situation change in the past year?”, %

If the entire series of observation is analyzed (*Fig. 21*), it appears that this opinion started to be shared by most people not at once, but after they passed through the period of a high economic discomfort early in 2015 and domination of negative estimates of the situation early in 2016.

The estimates of the economic situation changed: the number of those who thought that the economic situation changed much for the worse was gradually declining from H2 2016, while the share of those who estimated the situation as getting stable started to grow. Until that, the share of negative estimates fluctuated around maximum values with the historic-maximum achieved in 2016. However, only few could see improvement of the economic situation, though this share of the population amounted to 12 percent by the year-end 2017.

on the results of a regular Online Monitoring by the Institute for Social Analysis and Forecasting) //The Economic Development of Russia. 2017. No. 2. – pp. 46–57.

¹ 2014–2015: The Economic Crisis – Social Dimension. Edited by *T.M. Maleva*. Scientific Report – Moscow. The Delo Publishers, 2016. – p. 112.; 2016: The Socioeconomic Situation of the Population: The Ongoing Crisis or A New Reality? Edited by *T.M. Maleva*. Scientific Report – Moscow. The Delo Publishers, 2017. – p. 102 .

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trends and outlooks

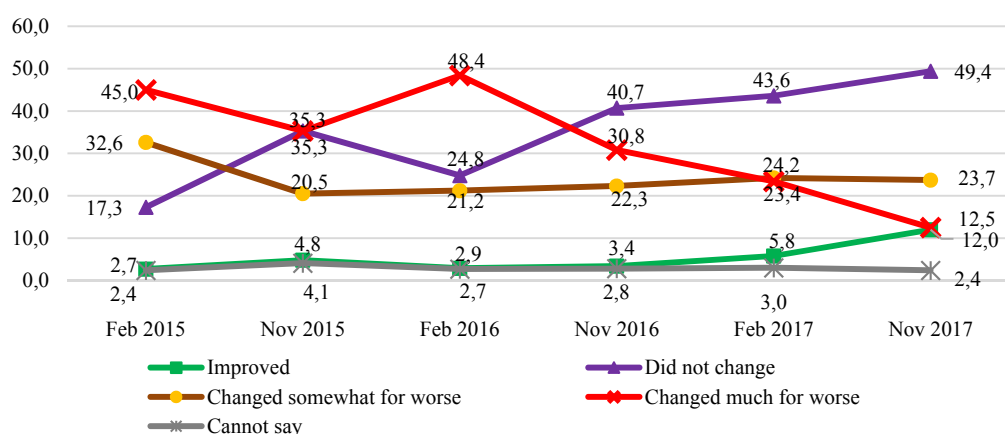


Fig. 21. Assessment of changes in the country's economic situation, %

Changes in the estimates of the prospects of the economic development are not that unambiguous. Despite the prevailing opinion that no substantial changes should be expected in either way, in H2 2017 about 1/3 of the households believed that changes for the worse could occur within the next two-three years or even further. At the same time, in 2017 the number of those who expected improvement of the situation increased somewhat to amount to 17%. There is still a fairly high degree of uncertainty in assessment of the prospects of economic development as it is seen from the considerable share of those who “cannot say”; however, it is to be noted that the share of such estimates decreased (Fig. 22).

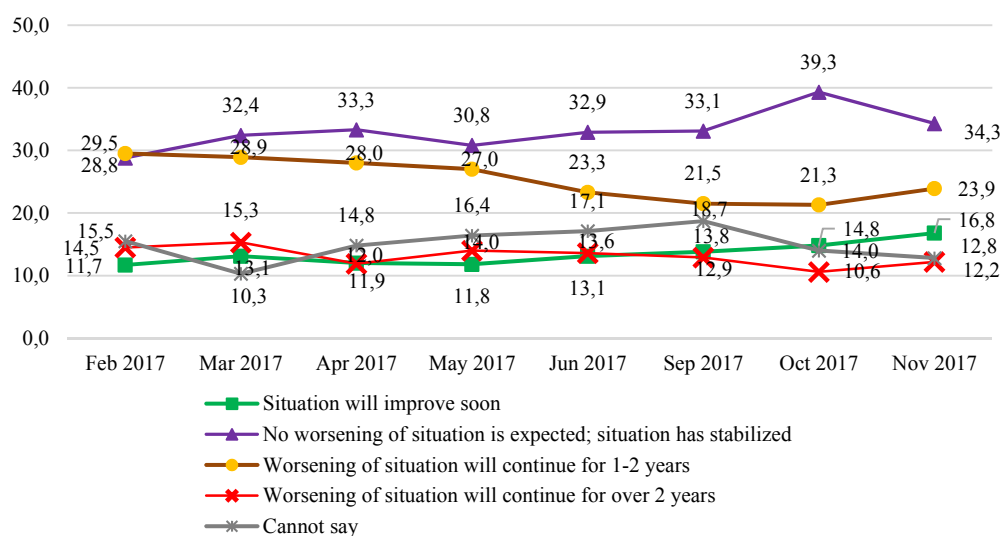


Fig. 22. Assessment of the prospects of the country's economic development, %

Generally, proceeding from the data of 2017 the following two large groups of the population can be singled out: a larger group is made up of optimists who believe that the crisis is over, while a smaller one, of pessimists who think it is still going on. Representatives of these two groups differ much by age: the younger the respondents, the more positive estimates they make about the prospects of economic development. Other social and economic factors, such as the standard of education and the type of settlement where respondents reside do not have such a strong effect on individuals' ideas about the prospects of economic development.

Throughout the entire period of observations, the dynamics of economic development estimates are moving towards moderation which suggests stabilization of the economic situation without any particular evidence of positive development amid high uncertainty.

Estimates of the effect of negative economic developments on the population changed the least during the period of observations (*Fig. 23*). The fact that the number of those whom the crisis affected in no way increased within a year by 7 percent and nearly three times over as compared to the beginning of 2015 (by the end of 2017 the size of the relevant group virtually amounted to 17 percent) can be attributed to positive changes in the social well-being. Simultaneously, in the past year the share of those affected by crisis phenomena decreased.

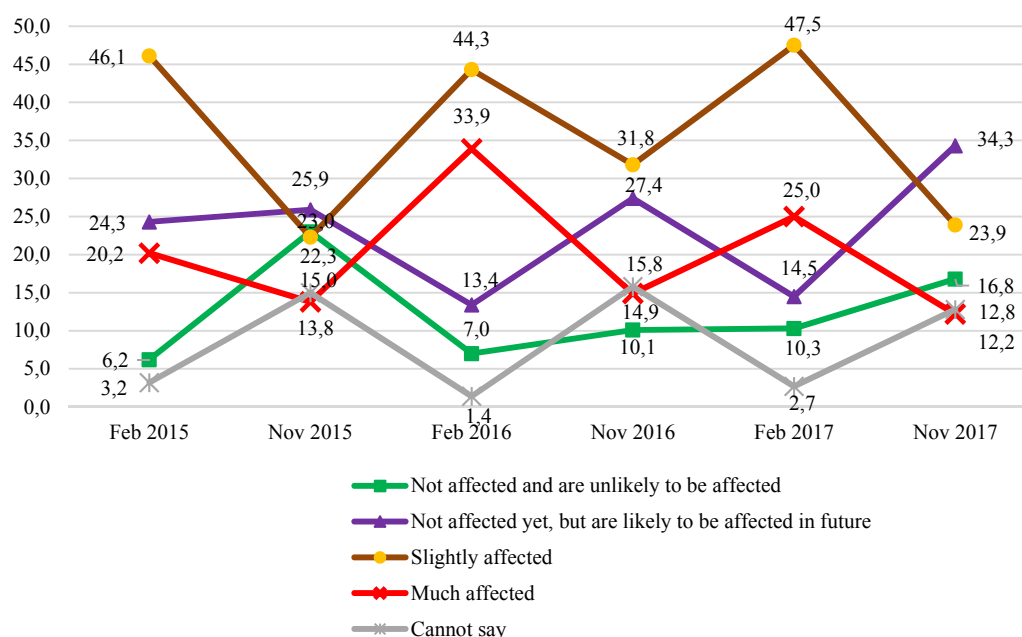


Fig. 23. Estimation of the effect of crisis phenomena on households' economic situation, % of those who selected the relevant answer

Generally, despite the positive dynamics of households' involvement in the crisis situation, the share of those who believe that they were affected one way or another by the crisis remains high.

5.3.2. Households' adaptive behavior

At first, households reacted to crisis developments in the economy by cutting expenditures on goods and services and even refusing to buy some of them. It is to be noted that regardless of their financial standing and social status most Russians started to tighten their belts. Then, households (about 1/3) started to use actively their personal subsidiary plots (PSP); this is the most traditional form of a response to a crisis.

At the same time, in 2017 popular adaptive strategies which can be divided into active and passive ones were formed (*Table 1*).

Table 1

Households' adaptive behavior, % of those who carry out a relevant strategy, November 2017 (it was admissible to give several types of answers)

Types of adaptive behavior	Sorts of adaptive behavior	Forms of adaptive behavior	Number of respondents
Active adaptation	Activation of investment strategies	Purchasing of foreign currency	7.6
		Purchasing of securities	1.6
		Formation of savings	17.6
	Activation of labor strategies	Search for additional job	4.4
		Search for one-time earnings	13.1
		Search for regular earnings	8.2
	Investments in human capital	Investments in education	4.7
Investments in health		24.6	
Passive adaptation	Activation of PSP	Intensification of work on personal subsidiary plot	29.3

Though the passive strategy related to utilization of PSP still prevails, other strategies emerged: activation of financial strategies of one or several forms is typical of 22 percent of the households; labor strategies are carried out by 20% of the Russians, while investments in human capital are common to 26 percent of the households.

The choice of a type of the adaptive strategy depends on the level of education and age of a person. The level of education has a substantial effect on utilization of financial strategies: the higher the level of education the more often this type of adaptation is used. Also, among people with a higher education degree there are more individuals who carry out labor adaptive strategies or invest in development of human capital that creates competitive advantages for its owners. However, utilization of PSP does not depend on the level of education: this type of activities is equally carried out by representatives of all education groups.

There is difference in adaptive behavior of the three enlarged age groups. As regards younger people, they engage more in financial strategies and investments in human capital by means of consumption of educational services; middle-aged people utilize more labor strategies and PSP, while elder people put to use PSP and make investments in human capital through consumption of medical services.

Based on the data received, it is feasible to make up the following breakdown of the adaptive behavior:

- Lack of adaptive behavior: 42.1 percent;
- Active adaptive behavior (one or several types): 29.5 percent;
- Active adaptive behavior, additional utilization of PSP: 18.1 percent;
- Activation of PSP without other types of adaptive behavior: 10.3 percent.

As seen from the data of *Table 2*, personal efforts of an adaptive nature have an effect on households' situation during the crisis.

Table 2

The effect of crisis developments on respondents' situation depending on their adaptive efforts, November 2017, % by line

Adaptive efforts	Question: Was household affected by economic crisis?			
	Not affected and is unlikely to be affected	May be affected in future	Slightly affected	Much affected
Lack of adaptive behavior	17.5	20.0	40.7	21.8
Active adaptive behavior	19.0	15.6	47.4	18.0
Active adaptive behavior supplemented by utilization of PSP	10.8	13.9	54.1	21.2
Activation of PSP without other types of adaptive behavior	4.3	20.1	47.6	28.0

So, the largest share of those who were not affected by negative economic developments is concentrated among representatives of the group which demonstrated active adaptive behavior. In this group, the share of those who were much affected by the crisis is the smallest one. At the same time, those who demonstrated an active adaptive behavior are not free of fears for the future because they understand risks related to financial and economic activities. A lack of adaptive behavior is typical of the two opposite groups of households: those who were not virtually affected by the crisis and those who had either no adaptive resources or the minimum amount of them.

5.3.3. Social expectations

As was shown above, with a high uncertainty in estimates the economic prospects of this country are perceived by most people as stable, though without a development impulse. The same perceptions were formed in respect of a personal economic situation: changes for the better and for the worse are expected by comparable and small groups of respondents; it is to be noted that negative estimates prevail (*Fig. 24*).

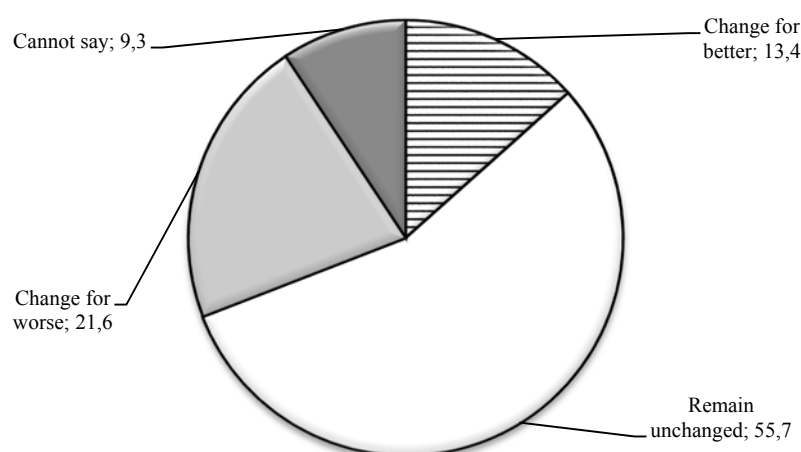


Fig. 24. Distribution of answers to the question: “How is your family’s financial situation likely to change next year?”, % of those who selected the relevant answer, November 2017

Changes for the better are expected more by people with higher education, while changes for the worse, by those who have no vocational training (*Table 3*).

Table 3

The expected dynamics of financial standing, by educational groups, % by line, November 2017

Level of education	Expected dynamics of financial standing			
	Change for better	Stable	Change for worse	Cannot say
General secondary education	11.9	52.1	24.3	11.7
Elementary / secondary vocational training	12.7	58.1	21.3	7.9
Higher education	15.7	55.4	19.7	9.2

Younger people usually have more social optimism than other age groups: one young Russian in four believes that his/her financial standing will change for the better, while among middle-aged people only one person in ten expects it (*Table 4*).

Table 4

**The expected dynamics of financial standing, by age groups, % by line,
[November 2017**

Age	Expected dynamics of financial standing			
	Change for better	Stable	Change for worse	Cannot say
Under 35 years old	17.8	56.0	18.4	7.8
35 – 60 years old	12.4	53.9	23.9	9.8
Over 60 years old	9.1	59.5	21.1	10.3

As seen from the data of *Table 5*, the existing situation in the economy will reproduce and even intensify further the existing inequality because according to expectations of representatives of different income groups the worse-off will be getting poorer, while the better-off, richer.

Table 5

**The expected dynamics of financial standing, by material status groups,
% by line, November 2017**

Material status	Expected dynamics of financial standing			
	Change for the better	Stable	Change for the worse	Cannot say
Low	5.6	44.7	41.2	8.5
Medium	13.0	60.0	16.4	10.6
Above average	23.8	63.2	5.1	7.9

It is to be noted that efforts in terms of active forms of adaptive behavior promote substantially life chances, but do not necessarily guarantee a higher living standard (*Table 6*). So, among those who carry out active adaptive strategies one in five expects his/her material status to change for the better, while less than 20 percent, for the worse.

Table 6

**The expected dynamics of financial standing depending on adaptive efforts,
% by line, November 2017**

Adaptive efforts	Expected dynamics of financial standing			
	Change for better	Stable	Change for worse	Cannot say
Lack of adaptive behavior	9.3	60.4	20.3	10.0
Active adaptive behavior	20.5	51.7	18.2	9.6
Active adaptive behavior supplemented by utilization of PSP	15.5	52.1	26.2	6.2
Activation of PSP without other types of adaptive behavior	5.4	55.1	28.7	10.8

Summing up the above, it is noteworthy that the perception of the economic situation became much less critical in 2017. A Half of the households believes that the situation has stabilized and does not expect any shocks. At the same time, about 1/3 of the Russians thinks that the economic situation may change for the worse within two-three years or more.

In the past year, the share of those who believe that they were affected by negative economic developments (both slightly or much) decreased by 10 percent. The existing economic situation will reproduce if not intensify inequality because according to expectations of representatives of different income groups the worse-off will be getting poorer, while the better-off, richer.

Though the passive strategy of adaptation with utilization of PSP still prevails, other strategies emerged as well, for example, activation of financial strategies of one or several forms is typical of 22% of households, labor strategies are carried out by 20% of the Russians, while investments in human capital are made by 26% of the households.

Personal efforts of an adaptive nature have an effect on households' situation during the crisis. So, the largest share of those who were not affected by negative economic developments is concentrated among representatives of the group which demonstrated active adaptive behavior. In this group, the share of those who were much affected by the crisis is the smallest one. At the same time, those who demonstrated an active adaptive behavior are not free of fears for the future because they probably understand risks related to financial and economic activities. A lack of adaptive behavior is typical of the two opposite groups of households: those who were not virtually affected by the crisis and those who had either no adaptive resources or the minimum amount thereof.

5.4. Migration processes

5.4.1. The long-term migration

Russia's population keeps growing on the back of the international migration, but in 2017 the extent of this growth was lower than in 2011–2016. According to the data of the year-end 2017 migration growth amounted to 211,900 persons. It is sufficient enough to make up for the renewed natural decline of the population, but population growth will be insignificant.

In 2016–2017, the quarterly dynamics of migration indices became smoother as compared to the previous years (*Fig. 25*): this is the effect of adaptation both to new migration accounting methods and some stabilization in Ukraine wherefrom the migration in 2014–2015 led to dramatic growth in the number of arrivals.

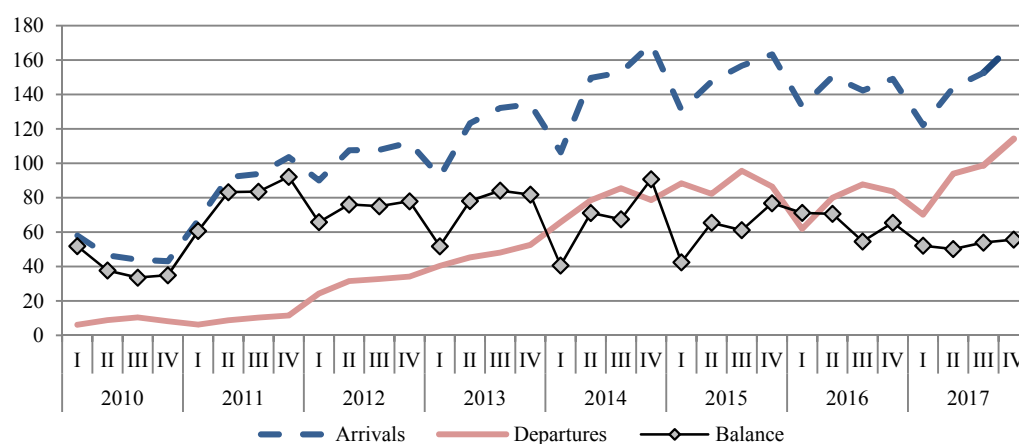


Fig. 25. The long-term international migration to Russia in 2010–2017, quarterly data, thousand persons

Source: The Rosstat.

Ukraine remains Russia's main migration donor, but its role in the overall migration growth is declining as compared to 2015–2016. As compared to the data on 2016, the number of those who came from Ukraine to Russia decreased by 15.8 percent, while the number of those who left increased by 72.4 percent; as a result, migration growth fell by nearly 60 percent.

Migration growth with Uzbekistan failed to recover to the level seen in 2012–2013, while that with Tajikistan resulted in that country's becoming Russia's second largest migration partner (*Table 7*).

Apart from Tajikistan, migration growth was observed with Belarus, Kirgizia, Armenia and Turkmenistan, but in absolute terms the indicators on all the above countries, except for Belarus, failed to surpass the values seen in 2012–2013. A gradual decrease in migration growth with Moldova for a number of years is probably the evidence of a stepwise exit of that country from Russia’s “migration orbit” and a greater reorientation of migration from Moldova to the EU countries.

In 2017, migration growth of 45 percent with far abroad countries was facilitated by Georgia and Abkhazia. The Russian statistics does not take into sufficient account departures from Russia to far abroad countries; there are great discrepancies between the Russian statistical data and those of recipient countries.¹

Table 7

**Growth (decline) in migration of Russia’s population with foreign countries,
2012-2017, thousand persons**

	2012	2013	2014	2015	2016	2017
International migration, total	294.9	295.9	280.3	245.9	261.9	211.9
With CIS countries	268.4	274.9	270.2	237.8	255.3	203.4
including:						
Azerbaijan	18.1	17.2	12.4	10.7	10.4	8.6
Armenia	32.0	32.2	24.0	20.6	12.0	14.0
Belarus	10.2	3.7	6.8	4.9	2.1	11.8
Kazakhstan	36.7	40.1	40.8	34.8	37.1	32.7
Kirgizia	24.1	19.8	15.3	10.0	11.0	19.4
Moldova	18.6	20.6	17.6	17.4	14.4	9.6
Tajikistan	31.4	33.6	19.4	11.4	27.3	34.6
Turkmenistan	3.9	3.8	2.6	2.3	2.4	2.9
Uzbekistan	56.3	67.3	37.1	-20.4	19.7	22.2
Ukraine	37.0	36.4	94.4	146.1	118.8	47.7
With other countries	26.5	21.0	10.1	8.2	6.7	8.4

Source: The Rosstat.

So, in 2017 it became clear that migration growth may decrease with time and fail to facilitate progress in attaining the target value (300,000 persons by 2025) envisaged by the Guidelines for Demographic Policy of the Russian Federation in the Period till 2025. In the past few years, Russia has not obtained any serious reserves to promote population growth. The inflow of migrants from the main donor countries is unstable, while beyond the post-Soviet space there is none. Amid a renewal of the natural decline of the population and possible aggravation of it in future, a decrease in the migration inflow may result in the overall reduction of Russia’s population in years to come.

In the past few years, the number of in-country migrants in Russia stabilized. In 2017, it increased by 53,200 persons (1.3%) as compared to 2016. A more than two-fold growth in the number of in-country displacements as a result of changes in accounting methods introduced in 2011 has exhausted.

At present, no substantial changes in the internal migration indicators are expected as a result of adaptation of accounting methods to new rules and exhaustion of the majority of timing² and other effects related to introduction thereof.

¹ Russia’s Demographic Challenges. An analytical report prepared by the Center for Strategic Research. November 2017. M. 2017

² These include, for example, an increase in migration growth in 2011 on the back of quick growth in the number of arrivals with a delay in growth in departures, as well as decline in Russia’s population in exchange with Uzbekistan in 2015. In the in-country migration, a delay in departures is probably related to growth in the overflow

The number of regions with positive migration growth decreased from 36 in 2016 to 28 in 2017 because of reduction of migration growth based on the international migration which made up for the outflow of the population in most regions to main superregional centers of attraction of the population. Such centers of attraction remain unchanged: Moscow and the Moscow Regions – the leaders – are followed by large centers, such as St. Petersburg, the Leningrad Region and the Krasnodar Territory. Apart from them, in January-August 2017 substantial migration growth was observed in the Republic of Crimea, the city of Sevastopol, the Tyumen Region, the Novosibirsk Region, the Voronezh Region and the Kaliningrad Region.

At the same time, a decline of the migration was registered in most regions of the Far Eastern Federal Okrug, the Siberian Federal Okrug, the North Caucasian Federal Okrug and Privolzhsky Federal Okrug. The migration outflow from the eastern part of the country is still going on (Fig. 26). But if in the previous year the main outflow took place in the regions of the Far Eastern Federal Okrug, in 2017 the Siberian Federal Okrug became the leader in absolute terms. Expectations that the population outflow from the Far East is going to stop¹ have failed to materialize again.

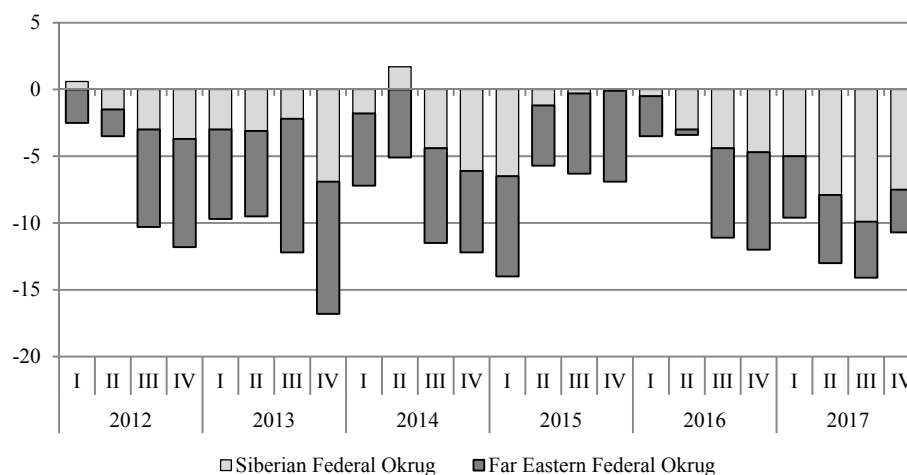


Fig. 26. Migration growth (decline) of the population of the Siberian Federal Okrug and the Far Eastern Federal Okrug in 2012–2017, quarterly data, thousand persons

Source: The Rosstat.

The “new stability” of migration volumes after 2011–2012 in Russia (the previous one took place in the 2000s) shows that volumes of the long-term internal migration do not react either to crisis developments in the economy or economic growth. The lines of migration remain unchanged, too. Among the centers of attraction of migrants, the top three leaders are still the same, while centers of the second order saw insignificant changes.

of the population between different parts of the country and growth in migration decline of the rural population in 2011-2014 with a subsequent return of the net migration index to the level of the previous decade.

¹ Trutnev told about the factors behind ceasing of the outflow of the population from the Far Eastern Federal Okrug / RIA Novosti. June 12., 2016; Trutnev: Population Outflow from the Far East Decreased Four Times Over / Ekho Moskv. June 09, 2017.

5.4.2. The temporary migration

The results of the temporary migration in 2017 explicitly suggest that there was no radical turning point in the trends. Despite the fact that the beginning of the year was quite “promising”, in summer and autumn the number of arriving migrants failed to attain the index value seen in 2016, to say nothing of 2013–2015. As of the year-end, 9.2 million foreigners arrived in the Russian Federation, that is, 4 percent and 17 percent less than in 2016 and 2014, respectively.

The main donors – CIS states – of the temporary migration to Russia remain the same. Late in December, 7.9 million of CIS nationals stayed in the territory of the Russian Federation (*Table 8*), or 86% of the entire number of foreigners who arrived in the Russian Federation.

Table 8

Arrivals of foreign nationals from CIS states in the Russian Federation as of the specified date, persons

	04.12.14	31.12.15	31.12.16	31.12.17
Azerbaijan	598646	528790	531085	610287
Armenia	499084	474527	459878	476799
Belarus	506759	648895	713446	660903
Kazakhstan	581516	642808	573572	494145
Kirgizia	554808	552207	592063	625204
Moldova	586069	498698	489669	393181
Tajikistan	1052822	870226	872509	943872
Uzbekistan	2275290	1819140	1511344	1657335
Ukraine	2476199	2537246	2443047	2012064
CIS, total	9131193	8572537	8186613	7873790

Source: The Main Department for Internal Migration of the Ministry of the Interior of the Russian Federation, the Central Database for Accounting of Foreign Nationals.

The main trends of the past few years are as follows: the number of arrivals of foreigners from the member-states of the Eurasian Economic Union is high (particularly, there is explicit growth in the number of arrivals of Kirgiz nationals after Kirgizia joined the Eurasian Economic Union); a migration decline in 2015–2016 gave way to growth in the number of migrants from Azerbaijan, Uzbekistan and Tajikistan in 2017, however, the migration for Uzbekistan and Tajikistan failed to return so far to the record-high volume seen in 2014; there is a reduction of the number of foreigners from Moldova and Ukraine (the number of Ukrainian nationals in the territory of the Russian Federation have not returned yet to normal volumes prevailing prior to 2014, that is, before the developments in the South-East of Ukraine).

There is no renewal of the temporary migration to the previous volumes in the segment of arrivals of foreigners from far-abroad developed countries (*Table 9*). A decrease in the number of foreigners from these countries started from summer 2014 and has never stopped, while small fluctuations are not worth to be accounted for. As compared to the pre-crisis year 2013, the temporary migration index fell 2.6 times over, while in respect of individual countries (the US, Spain and the UK), 5 to 7 times over.

As of the year-end, 3.61 million of foreign nationals arrived in Russia for the purpose “to work on hire” (including 3.47 million of labor migrants from CIS states and 139,000 migrants from far-abroad countries), which number is higher than in 2016 (3.55 million), but lower than in 2015 (3.78 million) as of the same date. It means that the continued decrease in the temporary migration volumes is probably not accompanied by further reduction of such a category of migrants who “officially”¹ declared to be labor migrants. The one-time number of such migrants

¹ If the “work on hire” purpose of visit is not specified in the migration card at arrival, it will be impossible for a migrant afterwards to receive work permit documents and conclude an official labor contract with an employer.

has fluctuated at the level of 4 million persons for three years running; this figure is added about 0.5-1 million of illegal labor migrants who come to Russia with other purposes, for example, a private trip, but work on hire instead.

Table 9

Arrivals of foreign nationals from some far-abroad countries to the Russian Federation as of the specified date, persons

	13.11.13	05.11.14	01.11.15	01.11.16	01.11.17	2017/2013, %
Germany	352335	244662	122131	115425	111792	32
Spain	77200	45935	15864	15579	14337	19
Italy	77193	53649	30489	28244	24388	32
UK	174061	111275	38637	29142	23944	14
Finland	108312	77665	46513	99065	73715	68
France	65559	53382	35968	29268	26963	41
EU as a whole	1177829	850513	481567	516368	448566	38
USA	220086	142405	50638	52840	44370	20

Source: The Main Department for Internal Migration of the Ministry of the Interior of the Russian Federation, the Central Database for Accounting of Foreign Nationals.

More and more labor migrants seek to legalize themselves. As of December 31, 2017, in Russia 1.7 million migrants had valid work permit documents (patents or licenses to work) and another million of labor migrants came from the member-states of the Eurasian Economic Union, that is, they had a title to get an official employment without any work permit documents. So, nearly 75 percent of labor migrants could potentially work legally in Russia.

Within 12 months of 2017, migrants were issued 1.8 million permit documents which is more than in 2016, but still less than in 2015 and, particularly, in 2014 (*Table 10*).

Table 10

Execution of work permit documents in the Russian Federation in 2014–2017, persons

	12 months of 2014	12 months of 2015	12 months of 2016	12 months of 2017
Work permits for foreign nationals (FN)*	1334899	177175	133215	139595
$\begin{matrix} \text{Incl} \\ \text{Excl} \end{matrix}$ Work permits for skilled workers (SW)*	158644	22099	14775	17333
Work permits for high-skilled workers (HSW)	34225	41829	25469	21363
Patents**	2379374	1779796	1492203	1658119
Total	3714273	1956971	1625418	1797714

* From January 1, 2015 work permits are issued only to foreign nationals from countries with a visa regime.

**From January 1, 2015 patents are issued to foreign nationals from countries with a visa-free regime for employment by individuals and legal entities.

Source: The Main Department for Internal Migration of the Ministry of the Interior of the Russian Federation, Form 1-RD.

Migrants' monthly payments for patents are becoming an important item of revenues of regional budgets: the tax amount received for 12 months of 2017 was equal to RUB 51 billion (RUB 45 billion for the same period of 2016 and RUB 33 billion in 2015). A larger amount of those payments is made by migrants from Uzbekistan and Tajikistan: in 2017 86 percent of patents were issued to migrants from these countries (82 percent in 2016). As per the results of the year-end 2017, there was no growth in the Russian labor market segment related to foreign labor. A transfer of migrants from the informal sector to legal employment is going on, but the extent thereof is not very high; it is not the evidence of promotion of economic opportunities for migrants, but a factor of gradual adaptation to new conditions. Employment in Russia attracts mainly migrants from the Central Asia and, to a smaller extent, high-skilled migrants

from other countries (Ukraine, Moldova and far-abroad countries) who can select other countries to go to apart from Russia.

5.5. The state of education in the Russian Federation in 2017¹

Recently the Russian education system went through significant qualitative and quantitative changes, which were both meaningful and institutional. At the same time, the system of education has been developing both extensively and rigorously. Preschool education has reached greater number of children. Extended learning activities of children have achieved new heights. Secondary vocational education included training of skilled workers and mid-tier specialists. Over eighty percent of high school graduates enter universities now. The unified state exam (USE) which was widely introduced in 2009 has become an important regulator for high school graduates flows to universities, which significantly increased educational migration of the young people. For example, in 2016, over 7.6 percent of high school graduates from other subjects of the Russian Federation strived to enter Moscow and St. Petersburg universities. Meanwhile before the introduction of USE that number did not exceed 1.5 percent of applicants, and the number of those wishing to enter universities in other regions has gone up from 3.5 percent to 16.5 percent.²

According to Rosstat, the number of employees with higher education in the system of education in 2015 hit 33.0 percent³ (in 2005 – 26.6 percent), and those with tertiary education (higher plus secondary vocational education) – 58.8 percent (in 2005 – 51.8 percent).

From 2008, Russia has been creating new architecture for the education system, which presently consists of the federal universities, national research universities, and Basic universities. Moreover, there is a pool of universities (leading ones), which received the right to set their own education standards (in addition to the federal and national research universities).

The 5/100 project, which kick started in 2012, was aimed at strengthening Russia's position on the world higher education market by entering of no less than five Russian universities on the top 100 list of world university rankings by 2020. In 2017, solely the Moscow State University (however, it was not in the 5/100 project) entered the QS World University Rankings (QS rating is produced as a result of experimental and analytical assessment of activities of various world universities and is carried out by Quacquarelli Symonds consulting company). Other Russian universities boast of high rankings solely in QS-BRICS rankings and in a host of subject rankings.

In 2015, according to the Human Development Index Russia took 49th place among 188 countries. It fell into the category of countries with a very high level of human development. In the meantime, weak (insufficient) impact of growing human capital on the economic growth rates, social and technological development remains an issue.

¹ This section is written by Sergey Belyakov, Center for Continuing Education Economics (CCEE) IAES-RANEP; Tatiana Klyachko, CCEE IAES-RANEP; Elena Semionova, CCEE IAES-RANEP; Galina Tokareva, CCEE IAES-RANEP.

² According to Monitoring the Effectiveness of School Education (hereinafter – MESE) conducted by CCEE IAES – RANEP (till 2009 – data of sociological studies of CCEE IAES – RANEP).

³ According to certain experts estimates – 37%.

5.5.1. Pre-school education

Provision of early childhood education represents the main trend in education in contemporary society. It is worth noting that by that indicator Russia is ahead or is at a high level compared to the OECD countries.

For example, around 47 percent of Russian children under 2 years are covered by programs of early childhood education compared to the average 36 percent in OECD. In Russia 78 percent of 3-year olds have been covered by early childhood education against 71 percent in OECD. The scope of early childhood education of 4-year-olds is less in Russia than in OECD countries (83 percent against 86 percent). The same situations is true of 5- and 6-year-olds. In Russia, preschool education is available for 83 percent of 5-year-olds and for 88 percent of 6-year-olds. Meanwhile, OECD boasts of around 90 percent figure. Meanwhile, many European countries create conditions for early childhood education to be provided by mother or father until the age of three. In support of that, a mother or a father receive an allowance for a child, consulting centers are set up, and pedagogical training is provided. Russia is taking the same rout by creating consulting centers for parents. At the same time, there is a shortage of nurseries in Russia (in 2017, 326 thousand children stay in line for nurseries or 28 percent of all children attending nurseries). Putin proposed support measure for low-income families on the birth of their first child (the monthly allowance of around RUB 10,500 for a child until the baby turns 18 months) could significantly aggravate this issue. Mothers of the low-income families will send their child to a nursery and will rush to work when the allowance stops. It should be noted that availability of pre-school education differs much across Russian regions (around one third of regions miss this indicator), although following President's May 2012 decrees the situation began improving. Nurseries overcrowding has been growing in several regions aiming at eliminating lines for kindergartens and nurseries. For example, in the Chechen Republic there are 138 kids for 100 available places, in the Republic of Adygea there are 132 kids, in the Republic of Tyva there are 120 kids, in the Republics of Dagestan and North Ossetia there are 118.6 and 118.2 kids, respectively, in the Republic of Bashkortostan there are 114.4 kids for 100 available places. Thus, workload on the teaching staff is increasing in those establishments; the quality of educational services provided is dropping together with child minding; sickness rate among children goes up.

5.5.2. Secondary (school) education

The average maximum number of students per classroom in case of elementary and secondary education in Russia remains relatively low: twelve students fill the private school classroom and eighteen students fill the typical public school classroom, which is significantly less than on average across the OECD countries where the class size is twenty-one students. In high school, average maximum number of students per classroom in Russia constitutes eleven students in private schools and twenty students in public schools against twenty-two and twenty-four students, respectively, across the OECD. Noticeably less maximum number of students per classroom in Russia is due to a large number of underfilled and ungraded village schools (average maximum number of students per class comes to eleven-fourteen students)¹, which is due to large distances and underdevelopment of road network (in large Russian cities between twenty-four--twenty-six students fill the classroom).² Large distances and existing

¹ Russian regions – Socio-economic indexes, 2016.

² Ibid.

road network do not allow transportation of students from villages to urban schools (for example, as it is done in Germany or Finland). Transportation of children to the so-called basic (large) village schools is done where possible in all subjects of the Russian Federation. That is why, restructuring of village schools network has run its course.

Large cities boast of educational parks and education centers, which, on one side, increases the effectiveness of budget funds appropriation and ensures a wider choice of specialization in high school, and, on the other side, merger of weak schools with a strong one in many cases undermines accumulated pedagogical experience of a strong school and results in reduced quality of education in a unified educational institution

The level of development of many schools and the lack of conditions for the adoption of modern educational technologies remains an issue. Meanwhile, from 2005 through 2015, the number of schools in disrepair fell fourfold – from 1,796 to 439 (*Fig. 27*). However, still 2,700 schools lack sewerage and hot water supply.

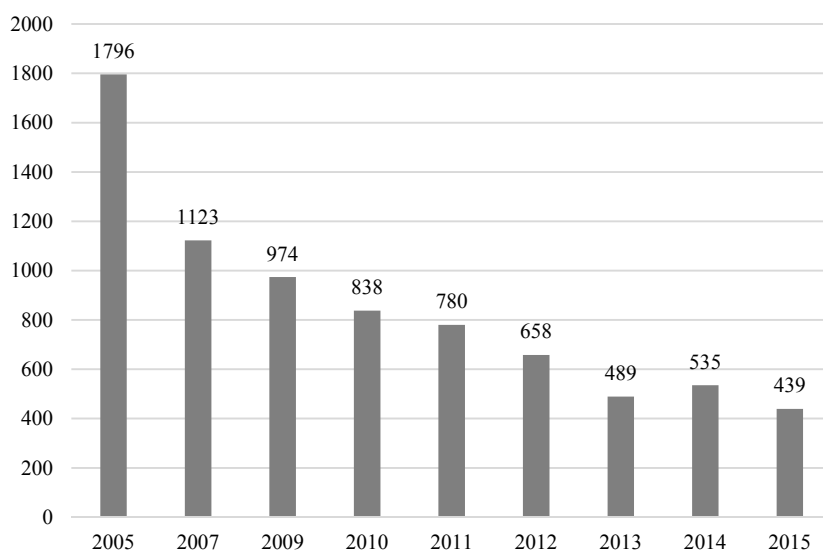


Fig. 27. Number of schools in disrepair, u.

According to MSE, during 2016–2017, parents’ dissatisfaction with the conditions their children get education went up twofold including dissatisfaction with school facilities and resources. Especially high such dissatisfaction grew in rural areas and urban-type settlements. Despite all taken efforts, twenty-three percent of students study in second and third shifts (in 1991, in RSFSR twenty-seven percent of student studied in second and third shifts, meanwhile, since then the overall number of school students fell from 21 million to 15.2 million).

Personnel problem in the system of general education has formally been resolved: schools practically lack vacancies – 99.2 percent of workplaces have been taken. However, according to Monitoring of schools’ effectiveness, parents’ dissatisfaction went up in 2017 owing to the lack of subject teachers in schools where their children go. The share of such parents is low – 2.3 percent, but in 2016 they were less – solely 1.2 percent. There is a shortage of subject teachers in foreign languages, mathematics, chemistry, and biology.

Speaking about the teachers, in 2016, the RANEPА’s Monitoring of Effectiveness of School Education demonstrated sharp rise of the teachers’ dissatisfaction with their salaries—nearly two

thirds of respondents were dissatisfied with their salaries (against 56 percent in 2015). The peak of dissatisfaction passed in 2017 (or was somewhat levelled). At the same time, the share of teachers willing to go on pension increased (from 10.3 percent in 2015 to 12.2 percent in 2016). In the meantime, 72 percent of teachers do not plan to leave their occupation, while part of the teachers stay at school not so much as being satisfied with their work being afraid to find a job outside the system of education. Such attitude of the teachers is negatively telling on their motivation and undoubtedly negatively affects teaching process.

It is not growing teaching workload that recently brings complaint from teachers but a rapid growth of bureaucratic workload and although often fictitious control over their pedagogical activity and lack of trust in their professionalism.

The inflow of young school teachers somewhat increased from 2016 (*Fig. 28*)

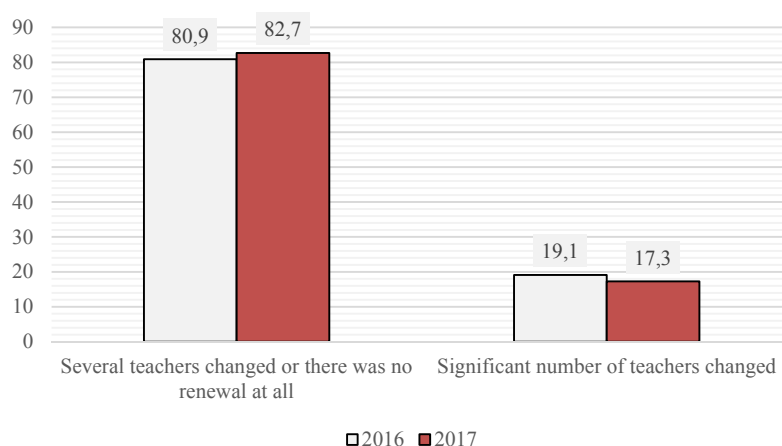


Fig. 28. Renewal of teachers personnel, %

Teachers with longstanding work in educational institutions indicate that young teachers are attracted to school first of all not by growing salaries but by stability of employment in the wake of economic uncertainty and what is more important by the specific work schedule, i.e. by additional side business (*Fig. 29*)

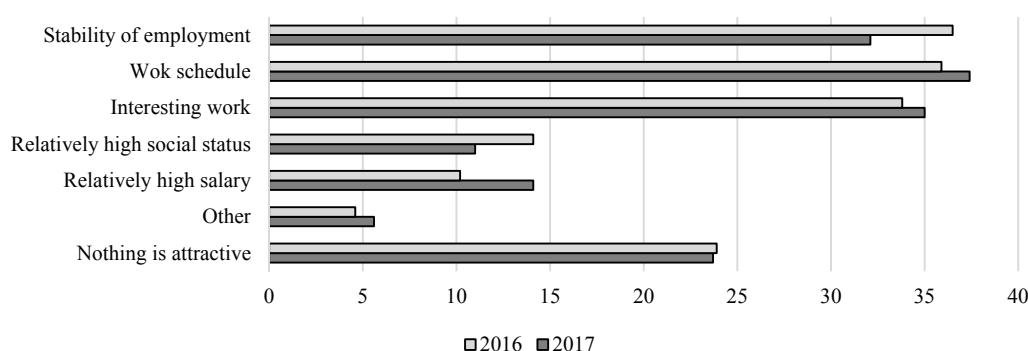


Fig. 29. Factors Determining the Attractiveness of Secondary School Teaching in the Eyes of Young Teachers, % (More Than One Poll Answer Was Allowed)

The low share of young teachers together with dissatisfaction with the salaries coupled with falling teachers' motivation to work productively represent an obvious issue of the general education development in Russia.

Currently student as a rule better master modern IT technologies compared with the teachers and are able easily and quickly (than the teachers) search for required information. Many students switch to a different, which is contrary to traditional process, delivery mode (they do it individually). The traditional process of learning is viewed by the high school students as detached from reality.

Development of multinational and multireligious student groups, growing number of migrants' children who badly master the Russian language (even at a simple level) represent another complex challenge facing by the school.

It should be noted that although the number of schools which boast of innovation changes is growing, the number of schools which are in a difficult state.

5.5.3. Extended learning activities for children

Extended learning activities for children is viewed by the parents and society as one of major conditions for obtaining modern (good) education (*Table 11*).

Table 11

Households' view on factors affecting good formal education for children, %

Assertion	Consensus level			
	Complete consensus	Rather agree	Rather disagree	Completely disagree
In order to get good education, one has to attend a good school	49.0	37.3	10.2	3.6
<i>In order to get good education, one has to attend extended learning activities</i>	<i>36.9</i>	<i>44.8</i>	<i>15.8</i>	<i>2.6</i>
In order to get good education, one has to study individually	56.1	29.4	11.5	3.0

Source: CCEE.

At the same time, around ten percent of schools deliver *various* extended learning activities, which, by parents' opinion, reduces their availability for the majority of households. Nevertheless, nearly fifty percent of preschool-aged children attend activities at youth athletic centers, music and art schools, art centers, hobby groups and clubs, etc.

At present, residents of small and even medium-size towns as well as villages (in 2017, solely 10.2 percent of parents indicated that their children managed to obtain extended learning activities at schools, in small town – a shade over 40 percent, and in regional and administrative centers – around 50 percent) meet with major problems regarding obtaining extended learning activities by their children.

Parents largely link extended learning activities with the need to sit successfully the main state exam (MSE) and unified state exam (USE). Even parents of primary school kids take aim at passing MSE and USE by their children in five-seven years and one of the targets of extended learning activities view preparation for those exams. In junior high school preparation for the exams becomes even more important and in high school this task become paramount (*Fig. 30*).

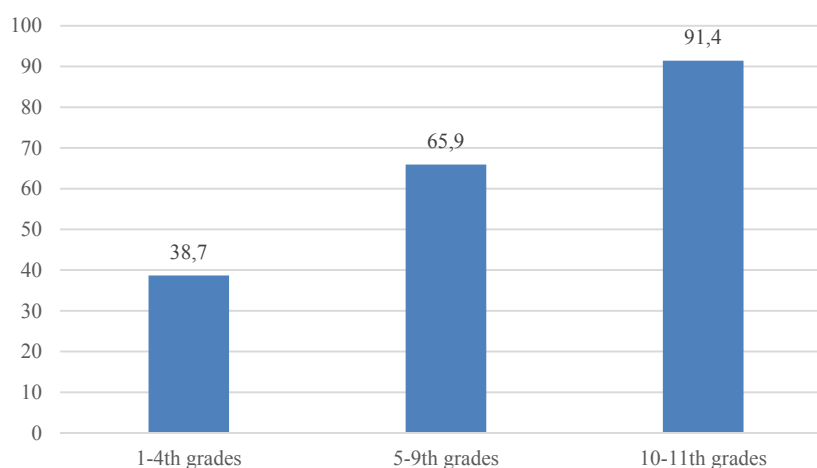


Fig. 30. Preparation for successful of state final certification as a target of extended learning activities depending on the school grade, % of those attending extended learning activities

Thus, already at the junior high school, two thirds of parents consider preparation for MSE more important than versatile education of their children, and in high school, this task becomes paramount for over 90 percent of households with children attending graduation class.

In spite of the fact that the Law “On Education in the Russian Federation” grants the form of network implementation both of basic and extended learning programs there is no real implementation mechanism, which could have ensured this possibility including to credit the knowledge obtained in the system of extended learning activities into the framework of school learning process. Contractual form of network implementation permit to resolve solely a limited number of tasks because the ratio of per capita funding in its present form does not allow to separate spending on certain types of educational activity in case of its network implementation.

5.5.4. Secondary vocational education

Following the countrywide implementation of the USE in 2009 and the introduction of the Main state exam (MSE) as mandatory in 2014 (the experiment was carried out since 2004) over 40 percent of junior high school graduates went to continue their education in the system of secondary vocational education (SVE) (SVE train blue-collar workers and mid-ranking specialists). Around 15–17 percent of high school graduates head to the secondary vocational education. Thus, around 50–52 percent of those who in due course started school went to the secondary vocational education.

This resulted in a way to avoid the USE owing to the fact that the vocational education graduates have the right to enter universities on profession-oriented departments without taking exams. However, according to the 2016 Rosstat’s sample survey only 7 percent of the vocational education graduates (mid-ranking specialists) entered universities straight after graduating from the secondary vocational education institutions compared to 35 percent registered seven to ten years ago. It should be noted that the dropout rate from the system of the secondary vocational education exceeds 30 percent. After a while dropouts partially return to the educational institutions (young men usually return after having served in the army) but, as a rule, to different programs (professions/specialties).

According to surveys of teachers in the SVE system conducted by the Monitoring of educational economics,¹ the share of the teachers who use lab instruments does not exceed 20 percent. Meanwhile, 13 percent of heads of the secondary vocational education institutions indicated that they lacked lab instruments and around 40 percent of surveyed consider provided instruments as outdated (such situation is observed in the regional institutions). The secondary vocational education institutions of Moscow and St Petersburg are privileged in having instruments corresponding to the world level of technological development in this area.

5.5.5. Higher education

Higher education has been accumulating issues linked with:

- Demographic pitfall trap till 2024 when the number of students will be declining steadily (*Fig. 31*);
- Increasing number of institutional issues and issues due to the imbalance in management and financing of universities (for example, budget financing of sectoral higher educational institutions where the adopted model of per capita financing resulted in a sharp reduction of allocation of budget funds for leading medical, agrarian higher educational institutions, institutes for transport and this issue remains unresolved for over a year);
- Shortage of budget funding owing both to a contraction of federal budget expenses on higher education and adopted model of per capita financing;
- Outdated universities' facilities and resources;
- Tough financial situation of the universities that are not popular among young people but are very important for the long term economic development of the country;
- Presence of several poorly coordinated systems of the universities performance assessment: monitoring of universities performance evaluation system, licensing and accreditation of universities and institutions, tender for distribution of enrollment numbers (state-funded places and budget financing);
- Ageing faculty members, differentiated salaries and growing academic workload;
- Preparation for becoming quickly out of date programs despite the constant adoption of new Federal state educational standards.
- With the model of per capita funding operating in socio-economic and humanitarian higher educational institutions (first group which does not require lab equipment) for example in Moscow, expenses on the faculty members salaries per one group of state-funded bachelor students in 2016 constituted 81.5 percent of the overall volume of public funds allocated in line of per capita funding on such group. Meanwhile, according to the basic normative salaries should constitute 54.6 percent. Thus, underfunding in the higher educational institutions of this type constitutes around third per one study group. In case of master's degree and post graduate course the situation is better as a whole as in the higher educational institutions training engineering and technical specialists especially with respect to those where the training requires sophisticated lab equipment. The level of underfunding remains high although this underfunding varies depending on the higher educational institution type and regional location.

¹ Monitoring of educational economics conducted by NRU HSE from 2002.

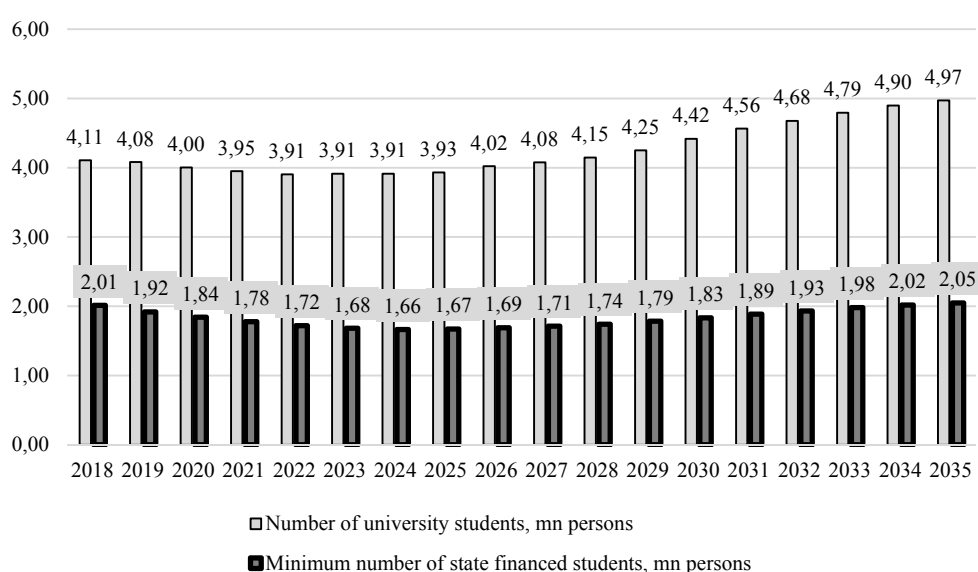


Fig. 31. Forecast number of university students and the minimum number of state-funded students, million persons (average forecast version)

With the provisions put forth in Presidential Executive Order No 597, which stipulates that the average faculty salaries should go up to 200 percent of the average salary size in each given region by the year 2018. *Actual salaries of the faculty members*, according to the Monitoring of educational economics, in 2017 constituted RUB 30-38,000, which was equal or below the average across the country’s economy. According to the Rosstat data, in January-September 2017, the average faculty members salary in higher educational institutions on average across the Russian Federation constituted RUB 57,283 exceeding the average salary across the country by 1.7 times.¹

5.5.6. Supplementary vocational education

In 2016, Russia boasted of the highest rate of adult population (between 25–64 age group) with tertiary education compared to the OECD countries and partner countries that release data with nearly 58.8 percent against 38 percent on average among the OECD countries and 27 percent on average among G20. Moreover, 94 percent of Russians boast of complete secondary education, which is significantly above the average index for the OECD countries – 5 percent.² At the same time, Russia compared to the OECD countries is behind with respect to supplementary vocational education and supplementary social³ education.⁴

As a rule, adoption of the new technologies requires advanced training and retraining of employees. According to research data released by RANEPa only 9.5 percent of employees with vocational education went in for re-education in 2016. Where there is no advance training the adoption of the new equipment and consequently manufacture of pioneer products (or the

¹ See: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/salaries/

² Education at a Glance, OECD, 2016.

³ Education of migrants and pensioners.

⁴ It should be noted that in Russia unlike in most of the OECD countries population coverage by these types of education comprise solely formal advance training courses, while abroad this also includes conference attendance and participation in seminars and methodological associations, etc.

same products of higher quality) as may be supposed does not take place or happens in very small volumes at Russian enterprises. Consequently, the low level of the working population coverage by supplementary vocational education (according to Rosstat, 13.8 percent in 2013)¹ indirectly indicate the low level of the implementation of innovations in the Russian economy.² According to the sociological surveys, the majority of employees indicate that the employer either is not interested in the training and education of employees or lacks funds for that or employees have no time.

Presently, the high level of supplementary vocational education coverage is characteristic of the oil and gas sector, nuclear industry, number of transport and communications sectors, and ICT sphere. Recently, the social sphere sectors boast of significant growth of coverage (however, in many cases it is rather formal).

5.5.7. State-funded education

Of late years there is a gradual reduction of the GDP share of expenses on education (*Fig. 32*).

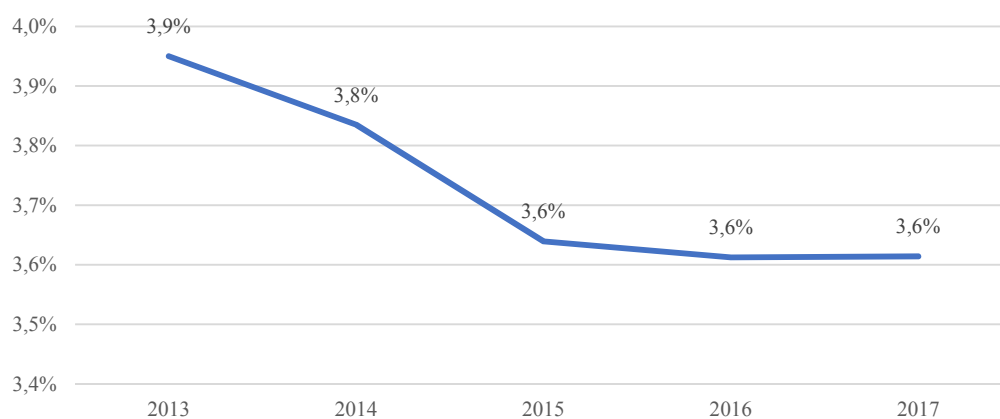


Fig. 32. GDP ratio of expenses on education in 2013–2017, %

The secondary vocational education (SVE) system having stable budget funding experiences rapid growth of students, which puts it in a tight situation (SVE has a low share of extra budgetary funds). As a result, budget expenses per state-funded student (training of mid-ranking specialists) significantly decreased since 2014 (*Fig. 33*).

From 2013, the GDP share of budget expenditure on basic education fell by 0.7 p.p. constituting in 2017 merely 1.75% of GDP. This is a wake-up call amid the number of students has been growing. Moreover, as was shown above parents' dissatisfaction has also been gradually growing. However, over 84 percent of the parents consider that the school efficiently performs its duties.

¹ According to Rosstat data released in 2016, the coverage of the working population by the programs of supplementary vocational education (SVE) constituted 20.1 percent, which raises doubts.

² In 2015, only 9.3 percent of institutions in Russia were engaged in the innovation activity (Innovation activity in the Russian Federation. Information and statistics materials. Moscow. Scientific Research Institute – Federal Research Center for Projects Evaluation and Consulting Services, 2016.).

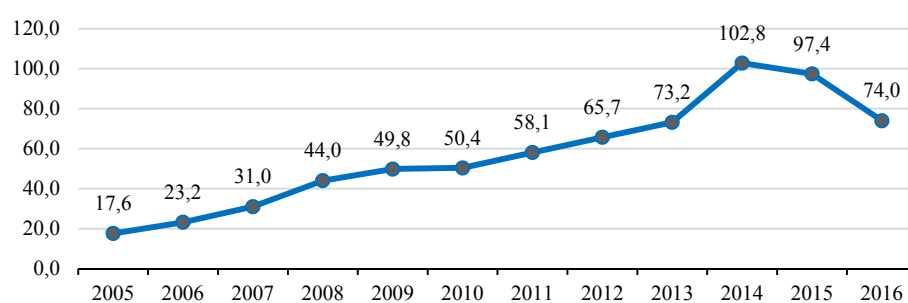


Fig. 33. The Russian Federation consolidated budget expenditure per one student attending training programs for mid-ranking specialists

In 2013–2017, budget expenditure on pre-school education stayed around 0.8 percent of GDP. However, in case the nursery sector is expanded the indicated share must be increased otherwise the situation in pre-school institutions for the kids of 3–7 will get for the worse due both to the increased involvement of kids in pre-school learning activities and to growing numbers of kids of that age group. Overcrowding in those group will increase, which will result in inferior quality of provided educational services. Moreover, kids' sickness rate in groups will increase, which will lead to negative social and economic consequences.

The government expenditure on education declined from 0.7 percent to 0.5 percent of GDP. The number of state-funded students has been contracting recently, however it was not so sharp compared to the decrease of the overall number of university students. Nevertheless, precisely the decrease of the number of state-funded places maintained public expenditure per one state-funded student in the nominal terms at a rather stable level (Fig. 34). Meanwhile, in real terms the situation has been getting worse despite deceleration of inflation.

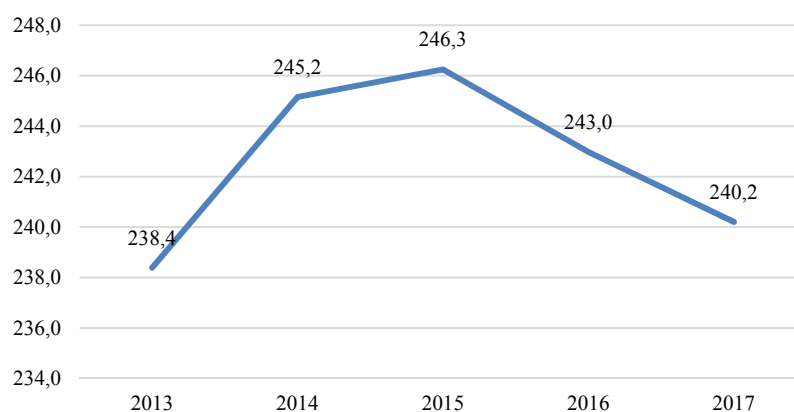


Fig. 34. Public expenses per one state-funded student, thousand rubles

* * *

In 2017 as a whole, the state of the system of education remained rather stable although its resource base was contracting. First signs of parents' dissatisfaction with the system of school education appeared. They indicated inferior conditions of educational services provision and shortage of teachers. Waiting line for nurseries has been growing. In the number of regions kindergartens suffer from overcrowded groups. Secondary vocational education suffers from double pressure – on the one part, the number of students is growing, which is by 93 percent is state-funded, and on the other part, public funding has been contracting. As a result, secondary vocational education trains specialists to work with outdated technologies. The majority of the SVE graduates do not work according to their speciality.

Public inadequate funding of higher education comes to around one third. As a result, the task of raising international competitiveness of Russian universities is achieved at the expense of those higher educational institutions, which can not compete with leading Russian universities. In the long-term, this leads to a decline of the overall level of higher education in Russia.

5.6. The housing market in Russia's cities in 2017¹

The actual development pattern displayed by the Russian economy in 2017 only in part answered the expectations voiced by the expert community in late 2016. First of all, last year there was no sustainable recovery at the macroeconomic level. Although the year-end GDP growth rate amounted to 1.5 percent, it still demonstrated rather strong volatility of its index over the course of the year. However, the professional participants of the real estate market, as well as Russian businesses in general, usually look not at GDP or industrial output indices, but at the exchange rate of the national currency, the movement of wages and salaries, and consumer demand, because the latter better describe the existing risks, while the movement pattern of GDP serves only as a background indicator.

A much more significant factor determining the situation in the real estate market is the movement pattern, in nominal and real terms, of personal disposable income. According to *Rosstat* data, that index has been on the wane in annual terms for four straight years (with the exception of January 2017, when a one-time benefit was paid to pensioners). Meanwhile, the decline in 2017 (1.7 percent) was several times less deep than in 2016 (5.8 percent). From May 2017 onwards, the slowdown trend displayed by the decline rate became obvious, in contrast to the situation in 2015–2016, and this was a good macroeconomic signal for the real estate market, although still a very weak one.

The consumer inflation in Russia, having shrunk more than by half relative to 2016, hit its record high of the entire period since the onset of market reforms. In response to the more favorable situation in the foreign market (relative to 2016) associated with rising export prices of oil, the RF Central Bank could reduce its key rate. Over the course of 2017, the key rate was reduced six times, to the level of 7.75 percent per annum, thus pushing down the interest rates on bank loans. The overall volume of housing mortgage loans in 2017 increased more than 37 percent to RUB 2,021.4 billion, thus plunging below its previous record low of 2014

¹ This section is written by Georgy Malginov, the Gaidar Institute, RANEPa and Sergey Sternik, Financial Institute under the RF Government, JSC Sternik's Consulting.

(RUB 1,753 billion).¹ The average weighted interest rate on housing mortgage loans issued from the year-beginning amounted to 10.64 percent (in 2016 – 12.48 percent).

The record-high growth in the volume and relative share of housing mortgage loans in the total volume of consumer loans in response to the plunge of inflation, the RF Central Bank's key rate, and the interest rates on housing mortgage loans, occurred alongside the continuing downward movement of per capita personal income. Hence the universally observed halt in the downward movement of prices, which gave way to stagnation (stabilization at the bottom point of the cycle).

5.6.1. The behavior of housing market prices

The main indices describing the movement patterns of prices in the secondary housing market across Russia's cities are shown in *Table 12*².

The study sample consists of 27 cities and one region (Moscow Oblast, for which by-town average data were collected), including 21 capitals of RF subjects, with total population of more than 43 million.³

If this index is to be applied as a classification criterion, the sample appears as follows:

- the city of Moscow (approximately 12.4 million);
- Moscow Oblast (total urban population of approximately 6.1 million) and the city of St. Petersburg (approximately 5.3 million) (approximately 11.35 million in total);
- 10 cities with the population of more than 1 million (other than Moscow and St. Petersburg) (Novosibirsk, Yekaterinburg, Nizhny Novgorod, Kazan, Chelyabinsk, Omsk, Samara, Krasnoyarsk, Perm, Voronezh) (more than 12.25 million in total);
- 9 cities with the population between 500,000 and 1 million (Tyumen, Togliatti, Barnaul, Ulyanovsk, Irkutsk, Yaroslavl, Vladivostok, Kemerovo, Ryazan) (approximately 5,650 million in total);
- 3 cities with the population between 200,000 and 500,000 (Stavropol, Surgut, Shakhty) (more than 1.0 million in total);
- 3 cities with the population of less than 200,000 (Syzran, Pervouralsk, Tobolsk) (approximately 0.4 million in total).

In Moscow's secondary market, after the price index surge in late 2014, it continued its upward movement until March 2015. Thereafter, it began to decline, and then stabilized from June 2016 onwards. Relative to the December price level, its plunge in 2016 amounted to 3 percent. Over the course of 2017, prices remained practically stable, and their index for December (RUB 210,200 per m²) was only 0.8 percent below its December 2016 level. Relative to December 2015, the price index lost 3.8 percent, and relative to March 2015 (its pre-crisis record high) – 14 percent.

¹ The total amount of all issued housing loans is somewhat higher than the total amount of ruble-denominated housing mortgage loans cited here, but they take up more than 99 percent of the total housing lending market.

² The sources of secondary market data are the companies included in the Public Graph of Secondary Realty Market Prices Dynamics in Russia's Cities (<http://realtymarket.ru/Publi-nii-grafik-cen-vtori-noi-nedvijimostigorodo/>); the sources of primary market data are listed in the Note to *Table 13*.

Data processing and interpretation was done in accordance with the guidelines described in G. M. Sternik, S. G. Sternik. *Real Estate Market Analysis for Professionals: Monograph*. Moscow, Ekonomika, 2009.

³ Unlike the sample used for analyzing the price situation on the secondary market in the previous annual review (see G. Malginov, G. Sternik., S. Sternik. *Dynamics of prices on residential real estate. // Russian Economy in 2016. Trends and Outlooks* (Issue 38). Gaidar Institute, Moscow. 2017, pp. 286-290), it does not include Kirov, Vladimir and Smolensk.

Table 12

**Prices on the secondary housing market in Russian cities
in 2015–2017**

City (region)	Average per unit supply price, thousands of rubles per m ²			Price index in December 2016 relative to December 2015		Price index in December 2017 relative to December 2016	
	December 2015	December 2016	December 2017	in nominal terms	in real terms (IGS ¹)	in nominal terms	in real terms (IGS)
Moscow	218.5	212.0	210.2	0.970	0.920	0.992	0.968
St. Petersburg	103.0	106.0	107.4	1.029	0.976	1.013	0.988
Vladivostok	96.8	93.8	95.9	0.969	0.919	1.022	0.997
Moscow Oblast	90.9	81.9	81.0	0.900	0.855	0.989	0.965
Surgut (Tyumen Oblast)	71.3	69.0	69.8	0.968	0.918	1.012	0.987
Yekaterinburg	70.7	68.1	67.3	0.963	0.914	0.988	0.964
Nizhny Novgorod	68.4	64.9	62.3	0.949	0.900	0.960	0.937
Kazan	65.3	68.4	68.9	1.047	0.994	1.007	0.982
Samara	62.6	62.1	59.6	0.992	0.941	0.960	0.937
Novosibirsk	60.4	58.4	58.5	0.967	0.917	1.002	0.978
Tyumen	58.9	59.3	59.3	1.007	0.955	1.000	0.976
Irkutsk	57.9	52.0	56.4	0.898	0.852	1.085	1.059
Krasnoyarsk	54.8	51.3	52.6	0.936	0.888	1.025	1.000
Yaroslavl	53.6	51.3	48.6	0.957	0.908	0.947	0.924
Perm	52.7	49.8	49.3	0.945	0.897	0.990	0.966
Kemerovo	49.1	45.7	44.3	0.931	0.883	0.969	0.946
Omsk	46.7	44.3	43.2	0.949	0.900	0.975	0.951
Barnaul	46.5	44.0	44.0	0.946	0.898	1.000	0.976
Voronezh	45.8	44.4	43.6	0.969	0.920	0.982	0.958
Ryazan	45.8	44.2	43.7	0.965	0.916	0.989	0.965
Togliatti (Samara Oblast)	44.8	41.2	39.3	0.920	0.873	0.954	0.931
Tobolsk (Tyumen Oblast)	44.3	42.6	49.3	0.962	0.912	1.157	1.129
Syzran (Samara Oblast)	42.4	39.0	36.7	0.920	0.873	0.941	0.918
Chelyabinsk	41.6	42.7	43.2	1.026	0.974	1.012	0.987
Ulyanovsk	41.2	39.6	38.7	0.961	0.912	0.977	0.953
Pervouralsk (Sverdlovsk Oblast)	38.6	36.8	36.1	0.953	0.904	0.981	0.957
Stavropol	37.6	38.9	39.5	1.035	0.982	1.015	0.990
Shakhty (Rostov Oblast)	34.8	34.6	33.8	0.994	0.943	0.977	0.953

Meanwhile, the prices in the territory within the previously established city borders (Old Moscow), following their lengthy decline began to increase once again from spring 2017 onwards, and after a slight decline during the last few months of that year, amounted in December to RUB 212,600 per m², which roughly corresponds to their level in late 2016. In New Moscow, prices were on decline throughout the major part of the year and then stabilized in Q4, amounting to RUB 109,200 per m² in December.

In autumn 2015 – spring 2016, the leading indicator of prices, which reflects the price expectations of sellers (the median unit asking price of a resale (newly offered) housing property, in Moscow's total secondary market and in the city territory within its former borders was below the total/median supply price, and then by November 2016 these two indices became approximately equal. Over the period from December 2016 through March 2017, the mean unit

¹ The IGS index was calculated by applying the formula $IGS = HPI/CPI$, where HPI is the housing price index in rubles, and CPI is the consumer price index.

asking price of new (newly offered) supply was above the total supply price, and then in the interval from April through December it once again plunged below the total supply price. Meanwhile, prices in the secondary market during the first period declined, during the second period were relatively stable, during the third period were on the rise, and during the fourth period there emerged a general trend towards decreasing prices. The movement patterns of the total supply price and the new supply price in the secondary markets of both New Moscow and Moscow Oblast were demonstrating similar regularities. Over May-June 2017, these prices both in New Moscow and Moscow Oblast were at the same level, which is indicative of price stability over the subsequent periods.

In Moscow Oblast's secondary market, prices became stabilized, after a long decline, at RUB 81,000 per m² in December 2017. Over the previous year, they lost 1.1 percent, and relative to December 2015 – 11 percent.

In St. Petersburg, the housing prices on the secondary market, on the contrary, began to demonstrate an upward trend, rising in December 2017 to RUB 107,400 per m². Their growth over that year relative to December amounted to 1.3 percent.

In the other cities, the secondary market prices over the period 2015–2016 and until mid-2017 were mostly on the wane. In H2 2017, there was a general trend towards stabilization, and in several cities there was an onset of price growth.

As seen by their year-end indices, prices increased in Tobolsk (by 15.7 percent), Irkutsk (by 8.5 percent), Krasnoyarsk (by 2.5 percent), Vladivostok (by 2.2 percent), Stavropol (by 1.5 percent), Chelyabinsk and Surgut (by 1.2 percent each). In Kazan, Novosibirsk, Tyumen, Perm, Barnaul, as in the city of Moscow, prices varied in the interval of +/-1 percent. At the same time, about a half of all the cities included in our sample demonstrated a decline in prices. Thus, prices lost 4–6 percent in Nizhny Novgorod, Samara, Togliatti, Yaroslavl, and Syzran; 1–3 percent in Moscow Oblast, Ryazan, Yekaterinburg, Voronezh, Pervouralsk, Ulyanovsk, Shakhty, Omsk, and Kemerovo.

Meanwhile, almost all the cities demonstrated a decline in housing prices (IGS index) in real terms (when cleared of inflation in the consumer market). The few exceptions were Tobolsk (growth by 12.9 percent), Irkutsk (growth by 5.9 percent), and Krasnoyarsk, where housing prices in real terms stayed at their year-end 2016 level. Among the other cities, we may point out Kemerovo, Nizhny Novgorod, Samara, Yaroslavl, Togliatti, and Syzran, where housing prices lost more than 5–7 percent. At the same time, practically everywhere (except in Kazan and Samara) the drop in housing prices in real terms was less deep than in 2016.

Data on primary housing market prices are available for 12 cities and Moscow Oblast (*Table 13*).

In Moscow's primary housing market, after a surge in supply prices in late 2014, the beginning of the next year saw their continuing growth as a form of the population's response to the ruble's depreciation. This growth later on gave way to a long period of predominantly downward movement of housing market prices. In 2017, they displayed some slight fluctuations, amounting in December to RUB 179,900 per m²; in contrast to the situation in the secondary market, this price index value represents a rise (by 1.8 percent) relative to December 2016. However, relative to December 2015, the price index dropped by 1.5 percent, and relative to January 2015 (the pre-crisis record high) – by 17.1 percent.

Table 13

Prices on the primary housing market in Russian cities in 2015–2017

City (region)	Mean unit asking price, thousands of rubles per m ²			Price index in December 2016 relative to December 2015		Price index in December 2017 relative to December 2016	
	December 2015	December 2016	December 2017	in nominal terms	in real terms (IGS)	in nominal terms	in real terms (IGS)
Moscow	182.6	176.7	179.9	0.968	0.918	1.018	0.993
St. Petersburg	100.4	101.7	100.6	1.013	0.961	0.989	0.965
Moscow Oblast	80.3	81.9	85.1	1.020	0.968	1.039	1.014
Kazan	62.9	66.7	69.1	1.060	1.006	1.036	1.011
Novosibirsk	60.4	58.8	59.9	0.974	0.924	1.019	0.994
Tyumen	55.1	53.4	56.6	0.969	0.919	1.060	1.034
Surgut (Tyumen Oblast)	55.1	53.4	56.6	0.969	0.919	1.060	1.034
Samara	54.2	53.3	46.3	0.983	0.933	0.869	0.847
Yaroslavl	52.9	49.8	50.6	0.941	0.893	1.016	0.991
Rostov-on-Don	50.6	51.3	52.0	1.014	0.962	1.014	0.989
Tobolsk (Tyumen Oblast)	46.0	46.3	49.3	1.007	0.955	1.065	1.039
Kemerovo	42.0	40.7	39.6	0.969	0.919	0.973	0.949
Stavropol	34.8	35.9	36.3	1.032	0.979	1.011	0.986

Source: for Moscow and Moscow Oblast – Moscow Association of Realtors Committee on Analysis and Consulting (data released by Miel Group, Miel ‘Novostroiki’; JSC Sterniks Consulting); for the city of St. Petersburg – Group of Companies ‘Real Estate Bulletin’; for Kazan – www.tatre.ru; for Novosibirsk – RID Analytics; for Surgut and Tobolsk – Federal Real Estate Agency ‘Etazhi’; for Tyumen – UPConsAllt, Federal Real Estate Agency ‘Etazhi’; for Samara – Samara Oblast’s Housing and Mortgage Fund (SOHMF); for Yaroslavl – LLC ‘Metro-Otsenka’; for Rostov-on-Don – EMT Consulting; for Kemerovo – LLC ‘Sibgrad-development’; and for Stavropol – LLC ‘Small Enterprises Development Center ‘Ilekta’.

Meanwhile, in 2017, housing prices within the city's former borders (Old Moscow) for a major part of the year were on the decline, but then over the year's last few months increased to RUB 196,200 per m² in December, thus practically returning to the same level as in late 2016. In New Moscow, after a slight drop that continued until the end of spring, prices became stabilized from August-September onwards, and in December amounted to RUB 98,400 per m² in the primary market.

In Moscow Oblast, after a slight surge in May 2016, the primary market prices moved close to the level of prices in the secondary market and then continued their downward movement, followed by stabilization from autumn 2016. From March 2017, they displayed a slight growth, and thus the primary market prices moved ahead of those in the secondary market, their level in December 2017 (RUB 85,100 per m²) being 3.9 percent above their previous year's level.

Beside the city of Moscow and Moscow Oblast, growth of prices in the primary market could be observed in the majority of other Russian cities. The corresponding price growth indices in Kazan and Surgut (3.6 percent) were close to those in Moscow Oblast, and those observed in Novosibirsk (1.9 percent) – close to those in the city of Moscow, Yaroslavl, Rostov-on-Don, and Stavropol, where they varied between 1.1 and 1.6 percent. The leaders, however, were Tobolsk and Tyumen (6–6.5 percent). At the other end of the spectrum was Samara, where prices over that year lost 13.1 percent; and Kemerovo and St. Petersburg, where their plunge was far less dramatic (by 2.7 percent and 1.1 percent respectively).

The housing price index in real terms (IGS index) increased relative to 2016 in Tobolsk and Tyumen (by 3–4 percent); and in Kazan, Moscow Oblast and Surgut (by 1–1.5 percent). However, in the majority of cities in our sample prices declined, but almost everywhere their

plunge was less deep than a year earlier. One exception was Samara, where in 2017, the housing price index in real terms lost more than 15 percent.

Thus, while in 2016 the supply prices in the secondary and primary housing markets across Russia's cities mainly continued to decrease, in 2017 they displayed a trend towards stabilization, and in some cities – even towards growth.

5.6.2. The housing market in and around Russia's capital: the main factors determining the behavior of prices and market activity

Since the price situation in the market is determined by the interplay of demand and supply, it is necessary to analyze the movement patterns of both these factors.

The shrinking demand for housing products and the market absorption rate in 2015 translated into an increasing market supply at stalled prices in the territory in and around the city of Moscow (Fig. 35 and 36).

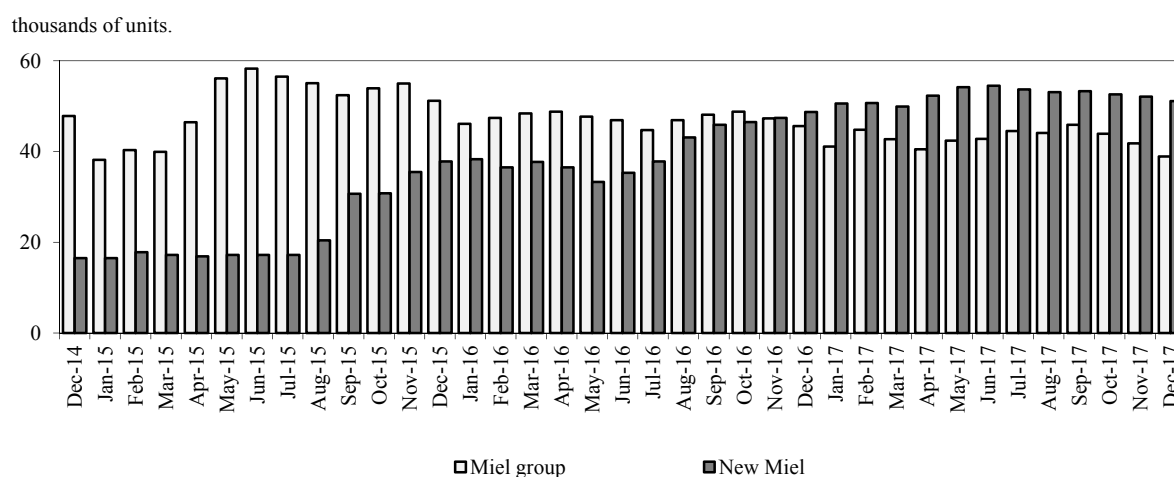


Fig. 35. The volume of apartment supply in the city of Moscow's housing market in 2015–2017

Source: Miel Group, New Miel.

In the secondary segment of Moscow's housing market, supply growth started in April-May and continued until the year-end of 2015 (from 38,000–40,000 to 51,000–58,000 apartments per month). In 2016, the supply volume somewhat shrank, during some periods (year-beginning and year-end, and also the summer months) coming close to the level of April 2015. The stalling supply caused by a notable drop in the market absorption rate, coupled with the dwindling demand, pushed down the market prices, and in 2016, the shrinking supply resulting from the increased absorption rate led to stabilization of the price trend.

In Q1 2017, the average monthly supply volume (approximately 43,000 apartments) plunged below the April 2015 level. In April 2017, it dived even deeper (to 40,500). Because of the low demand, many apartments put up for sale were removed from the market. Then, towards the end of Q2, there was a return to the year-beginning indices (42,400 apartments in May, and 42,800 apartments in June). In Q3, the supply volume increased further (44,500 in July; 44,100 in August; 45,900 in September). However, later on this trend failed to strengthen, and in Q4

2017, supply was steadily on the wane (43,900 in October; 41,800 November; 38,900 in December).

This downward trend is indicative of the sellers' expectation of a significant growth in housing prices at some point in the future; i.e., at present the owners consider the prices of their apartments to be underrated by the market. Such expectations are based solely on recent experiences, and they take no account of the possibility of a long-term market stagnation, or even a 'tectonic' downward shift of the market prices forever, as a result of changes in the national economy's overall structure, when square meters of residential real estate, together with barrels of oil, can no longer be used as speculative instruments to generate super-profits.

In Moscow's primary market, the supply volume surged from August 2015 onwards (from 17,000–18,000 to 30,000–38,000 apartments per month), in H2 2016 it increased to 43,000–47,000 apartments per month, and in December – to 48,700.

Over H1 2017, the supply volume was still on the rise. While in Q1 2017 its average monthly index was 50,400, in June it increased to 54,500. This happened as a result of the placement on the market of some new housing complexes (buildings) completed in the course of the projects launched during the 'fat' years, although the number of new projects dwindled, and the market absorption rate increased. However, that surge was followed by a gradual decline, due to the increasing market absorption rate at year-end. The volume of supply in Q4 2017 (52,600 in October; 52,100 in November; 51,100 in December) was below the average monthly index of Q3 (more than 53,000), but still notably above the corresponding index for 2016.

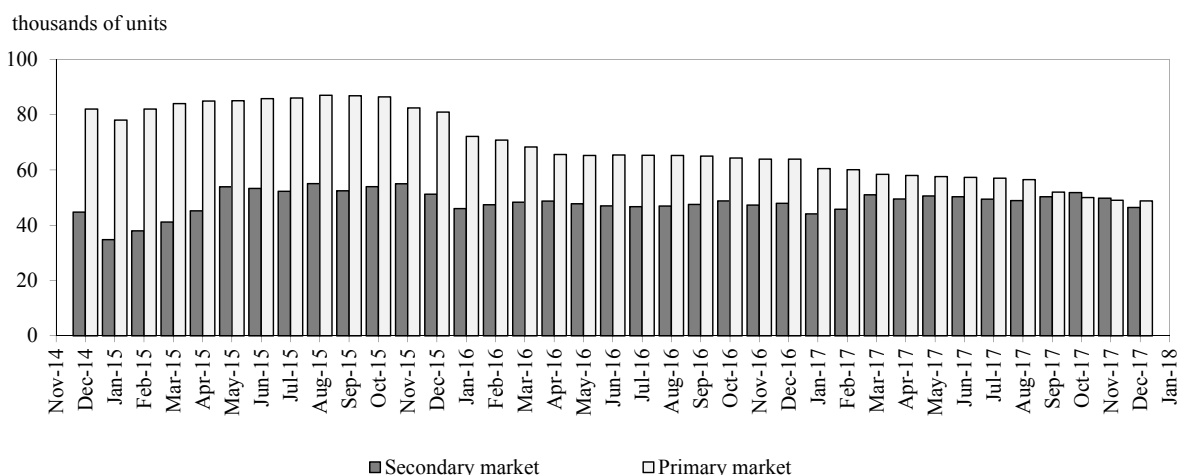


Fig. 36. The volume of apartment supply in Moscow Oblast's housing market in 2015–2017

Source: Miel Group, NewMiel

In Moscow Oblast, the volume of supply in the secondary market increased from 34,800 apartments in January 2015 to 53,000–54,000 apartments in May-June, and until the year-end stayed at the level of 51,000–55,000 apartments per month. In 2016, this index shrank to 46,000–49,000 apartments per month. Over January-February 2017, the volume of supply declined further to 44,000–45,000 apartments per month, but then once again began to grow, to 50,600 apartments in May, and after a slight drop in the summer rose to 51,800 apartments in October. During the last few months of 2017, the volume of supply shrank to 46,400 apartments in December, which is slightly above the corresponding year-beginning index.

In the primary market of Moscow Oblast, the volume of supply was gradually increasing over the major part of the year 2015 (from 78,000 to about 87,000 apartments per month in August-September), and then that growth gave way to decline (to 63,900 apartments in December 2016). In 2017, the shrinkage of supply volume continued, and in December it amounted to 48,800 apartments per month. This movement pattern can be explained by the gradual decline in the number of new housing construction projects alongside the slightly shrinking market absorption rate.

Thus, over the period 2015–2016, the supply of apartments in the city of Moscow and Moscow Oblast increased significantly, thus creating conditions, in face of the shrinking demand, for a plunge of housing market prices. Over the last few months of 2017, the primary market supply in the city of Moscow began to shrink. In Moscow Oblast over last year, the primary market supply was on the wane due to the shrinking number of new construction projects. Towards the year-end, the secondary market supply also began to shrink both in the city of Moscow and in Moscow Oblast, as the sellers were nursing their expectations of a new price surge.

Having analyzed the supply indices, we are now going to follow the movement patterns of the housing market absorption rate and housing mortgage indices, which serve as the main quantitative parameters of the current status and prospective trend in the housing market on the demand side.

In the primary market for construction projects and housing units put up for sale, in view of the institutional conditions typical of the year 2017, the principal market absorption indicator, as before, was the number of registered shared construction participation agreements (SCPA), its total index for Russia being 699,500, which is roughly equal to the previous year's index.¹

Meanwhile, the annual volume of housing mortgage loans earmarked for shared construction projects according to data released by the Bank of Russia, was RUB 661.2 billion, which is 15.9 percent above the corresponding index for 2016 (RUB 570.7 billion), and the monthly volume of housing mortgage loans in December 2017 (RUB 85.0 billion) increased by 18.4 percent relative to December 2016 (RUB 71.8 billion), thus rising 13.6 percent above the record high of February 2016 (RUB 74.8 billion). In this connection it is necessary to note that, in spite of this significant growth, the relative share of housing mortgage loans earmarked for shared construction projects in the total volume of issued housing mortgage loans amounted, in 2017, to approximately 1/3, thus returning to its 2015 level (vs. approximately 39 percent in 2016).

The Top 10 regions, ranked by their number of registered SCPAs as of year-end 2017, were Moscow Oblast, the city of Moscow, the city of St. Petersburg, Krasnodar Krai, Leningrad Oblast, Novosibirsk Oblast, Rostov Oblast, the Republic of Bashkortostan, the Republic of Tatarstan, and Krasnoyarsk Krai. Taken together, these accounted for approximately 59 percent of the total number of concluded contracts. Relative to 2016, this index increased in 7 regions and declined in 3 regions (Krasnodar Krai, Leningrad Oblast, and Novosibirsk Oblast). The best movement pattern of the number of SCPAs relative to the same period of the previous year (including the contracts for apartments and non-residential premises situated in multi-unit residential buildings) was observed in the city of Moscow where, according to data released by the Federal Service for State Registration, Cadastre and Cartography (*Rosreestr*), over the 12-month period of 2017, the number of concluded agreements soared by 45.9 percent;

¹ These indices include not only the number of apartment purchase agreements, but also those for the purchase and sale of non-residential premises situated in multi-unit residential buildings.

meanwhile, in Moscow Oblast, the indisputable leader in terms of the number of concluded agreements in absolute terms, the growth index (2.7 percent) was lowest for this particular group of regions.

Let us now take a closer look at the movement pattern of the number of deals in the housing markets of the city of Moscow and Moscow Oblast.

After a notable plunge in the number of registrations of SCPAs in 2015, the market absorption rate demonstrated growth revival as early as Q1 2016: the falling prices in Moscow's primary market and the onset of macroeconomic stabilization triggered the return on the market of postponed demand, among other things, through the spillover of buyers from Moscow Oblast's market (*Fig. 37*).

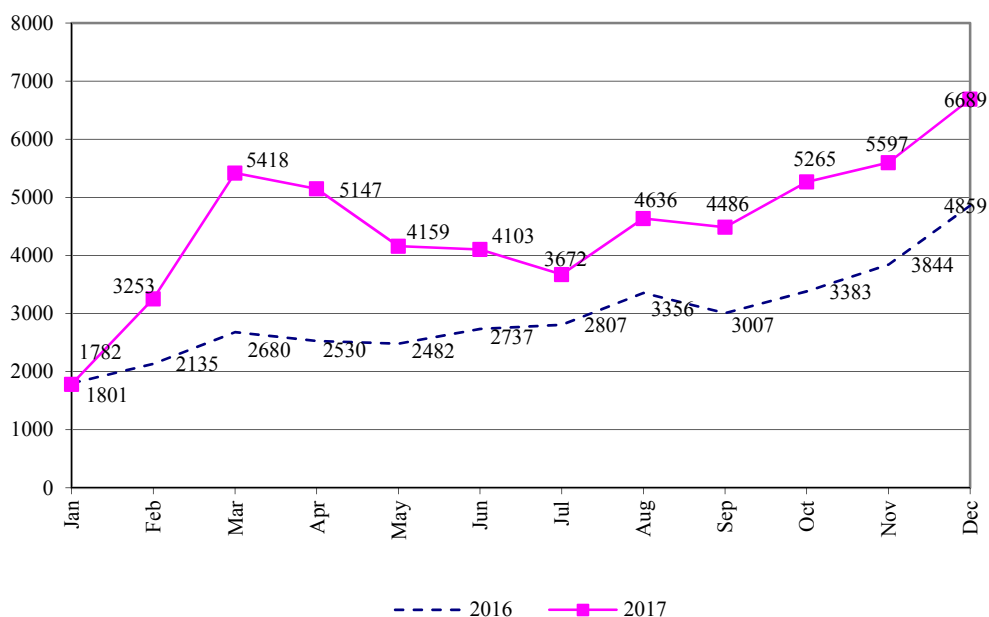


Fig. 37. The rate of registration of SCPAs of apartment houses in the city of Moscow in 2016–2017

Source: Rosreestr Administration for the city of Moscow.

In Q1 and Q2 2017, in response to the rising global oil prices, the ruble's strengthening, the declining inflation rate, and a decrease in the personal income decline rate, the number of shared construction participation agreement registered in the primary market increased to 10,500 and 13,400 respectively, rising relative to the corresponding periods of the previous year by 58 percent and 73 percent respectively. In Q3 (12,800 SCPAs) and Q4 (17,600 SCPAs), the growth indices amounted to 39.5 percent and 45.2 percent, which represents a notable decline relative to the corresponding periods of the previous year. On the whole in 2017, a total of 54,207 shared construction participation agreements were registered in Moscow, which represents a more than 1.5-times rise relative to 2016 (35,621 SCPAs). If we look at monthly indices, there occurred a notable leap in March, which then gave way to a slight drop. When at the end of the summer the upward trend reappeared, the number of registered SCPAs rose above the March index only during the year's last two months. In December 2017, the *Rosreestr*

Administration for the city of Moscow registered 6,689 shared construction participation agreements, which represented an increase by 37.7 percent relative to December 2016.

That trend was caused by the drop in the personal income decline rate, the slow-down of inflation, and the decrease in interest rates on housing mortgage loans (HML), the factors that weaken the inclination to save and boost the desire to consume. Besides, for the last year or two, in response to the toughening of norms stipulated in the law on shared construction activity (214-FZ), the developer companies are no longer eager to deal with housing construction cooperatives in the framework of preliminary contracts for property sale. Instead, they are switching to shared construction participation agreements. In addition, they sharply shortened the period between the signing of a SCPA and its registration with *Rosreestr*; as a result, the number of registered SCPAs notably increased. However, in response to the increasing share of apartments being sold after a given housing unit has been put in operation (not under a SCPA, but under a purchase and sale contract), the number of registered SCPAs is not declining.

Some notable growth was also observed in Moscow's housing mortgage lending market. In 2017, the *Rosreestr* Administration for the city of Moscow registered a total of 54,402 housing mortgage deals, which is 24.2 percent above the corresponding index for 2016 (43,876) (*Fig. 38*).

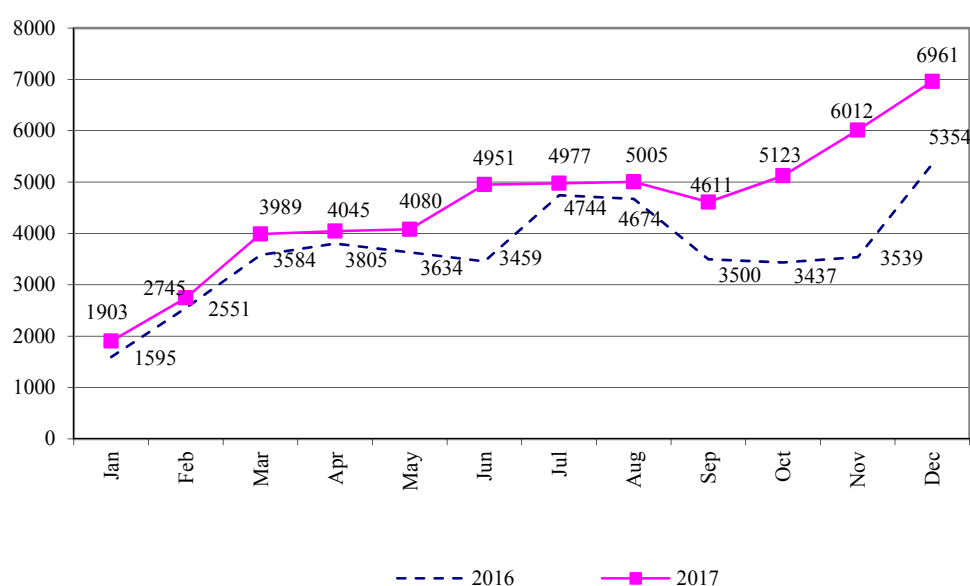


Fig. 38. The movement pattern of the number of registered housing mortgage deals in Moscow in 2016–2017

Source: *Rosreestr* Administration for the city of Moscow.

The quarterly movement pattern of was as follows. In Q1 and Q3 2017, the growth indices relative to the corresponding periods of 2016 were lowest (11.7 percent and 13 percent respectively); in Q2, the growth index was as high as 20 percent. The year end was traditionally marked by a surge in buyer activity. In Q4 2017, the growth index was highest (46.8 percent), being comparable with the growth index of registered SCPAs over the same period. In December, a total of 6,961 housing mortgage contracts were registered, which represents

growth by 15.8 percent relative to November 2017, and by 30 percent relative to December 2016.

It was in December 2017 that, for the first time over the entire period of functioning of the *Rosreestr* Administration for the city of Moscow, the number of registered shared construction participation agreements and the number of housing mortgage loans issued during one month simultaneously rose above 6,000 each. And according to the year-end results of 2017, the total number of registered SCPAs and that of housing mortgage deals in the housing market were roughly equal.

Obviously, the recovery processes in Moscow's housing market are sustained primarily by the growing interest of buyers in new housing units. Alongside the favorable economic situation, the attractiveness of the housing market's primary segment was boosted, in 2017, also by the new provisions introduced in legislation in order to protect the buyers of residential properties and to reduce the volume of bureaucratic procedures involved in the registration of a title to property. Thus, over the course of one year, the *Rosreestr* Administration for the city of Moscow, by taking a number of systemic administrative decisions, managed to cut the number of suspensions associated with entries in the cadastre records and registration of title to property nearly 4-fold, which represents another record high of the entire period of existence of the registration system in Moscow.

At the same time, Moscow's secondary housing market, in spite of the shorter registration procedures, was demonstrating a controversial movement pattern of purchase and sale (or exchange) deals, which markedly deviated from the movement patterns of the primary market indices.

As seen by the year-end results of 2017, the total index of titles to property registered in Moscow on the basis of apartment purchase and sale (or exchange) contracts amounted to 123,894, vs. 126,045 in 2016 and 113,769 in 2015; in other words, the volume of deals involving apartments in Moscow's secondary market demonstrated a relative stability.

In H1 2017, the market absorption rate hit its record low of the last 3 years: in Q1, it amounted to 23,500, and in Q2, to 31,200, which is 16.7 percent and 9.6 percent below the corresponding indices for 2016. In Q3, the absorption rate in Moscow's secondary market was 29,800 deals, which is 5.7 percent above the corresponding index for the same period of the previous year. In Q4, it rose to 39,400, having jumped 12 percent relative to Q4 2016. At the same time, there was a plunge by 6 percent in December relative to December 2016, and the year-end total index (decline by 1.7 percent) is indicative of a rapid outflow of buyers to the primary market. The reasons for that outflow are the reduced interest rates on housing mortgage loans and the stabilization of demand in the secondary market.

The movement pattern of the number of registered shared construction participation agreements in Moscow Oblast significantly differed from that in the city of Moscow: from late 2015, there has been a steady quarter-on-quarter decline of the market absorption rate in the primary market in response to shrinking household incomes and buyer outflow to the cheapening primary market of the city of Moscow.

In Q1 2017, the absorption rate in the primary market plunged, relative to the same period of the previous year, to 21,800 SCPAs (or by 13.3 percent). A reversal of that trend became visible in Q2 and Q3: the market absorption rate increased to 22,700 and 23,800 contracts respectively, which represents growth by 8.1 percent and 2.4 percent respectively. Experts have explained this fact by the altering structure of supply in favor of the cheaper and more liquid apartments situated in the medium-distance and long-distance districts of Moscow Oblast.

However, in Q4, the number of registered SCPAs once again shrank to 22,800, which is 4.2 percent less than the corresponding index for 2016. As a result, the market absorption rate for 2017 amounted to 91,100 SCPAs.

When this index is set against the number of SCPAs registered in Moscow (54,200), the following proportional distribution of the market absorption rate across the primary markets of Moscow and Moscow Oblast becomes obvious: in 2017, as a year earlier, a greater part (62.7 percent) was taken by Moscow Oblast. However, the city of Moscow's share (37.3 percent) increased by approximately 10 percentage points relative to 2016 (27.7 percent), thus demonstrating a reorientation of the buyer flow towards the relatively cheapening market (with due regard for the quality and location factors).

In Moscow Oblast's secondary market, the number of registered housing property deals has been on decline for a third straight year (beginning from Q1 2015), the year-end index for 2017 amounting to 49,392 units, which represents a decline by 1/5 relative to 2016.

Thus, the year 2017 saw a continuing hectic growth of the absorption rate (demand) in Moscow's primary market, which happened against the backdrop of rising oil prices, the declining USD-to-ruble exchange rate and inflation rate, and stabilization of household incomes. These factors determined the elevation of the psychologically acceptable apartment price threshold in the primary market, the lowering interest rates on HMLs, and the increasing relative share of housing mortgage agreements in the total volume of housing deals. The supplementary factors were the institutional innovations associated with the expected abolition of shared construction participation agreements and, consequently, of the possibility to buy an apartment at a discount in an early phase of a housing construction project, as well as the uncertain macroeconomic expectations for the period after the 2018 presidential election. Therefore there is a high probability of a 'rebound', in mid-2018, from the already achieved level. The effects of these factors in the secondary market of the city of Moscow and the primary market of Moscow Oblast were more subdued, and so the shrinkage of the market absorption rate was halted.

5.6.3. The construction, commissioning, and market supply of new housing units

Over the course of 2017, the total volume of housing stock put into operation amounted to 79.2 million m², which is 1.2 less than in 2016; so, the scale of decline in the housing construction sector was five times lower than a year earlier (*Table 14*).

The decline pattern in the housing construction sector over the past two years resembled the situation in 2009–2010, when during the second year it continued in a receding, inertia-driven mode. In this sense, the year-end results of 2017 are comparable with those of 2010. Meanwhile, when taken in absolute terms, the volume of housing stock put into operation is much higher than both the pre-crisis record high of 2008 and the indices observed in 2011–2013, while at the same time is lower than the level of 2014. Its quarterly movement pattern is indicative of a positive trend. The volumes of housing stock put into operation in Q1 and Q2 2017 were below the corresponding indices for 2016. In Q3, on the contrary, these indices surged above both the previous year's indices and those for 2015. The period-end results of Q4 demonstrated continual growth relative to 2016, while when taken in absolute terms, the volume of housing stock put into operation came close to its 2015 index.

Table 14

**The rate of commissioning of residential buildings across
Russia in 1999–2017**

Year	Total area, millions of square meters	Growth rate, percent	
		relative to previous year	relative to 2000
1999	32.0	104.2	105.6
2000	30.3	94.7	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	84.2	119.4	277.9
2015	85.3	101.3	281.5
2016	80.2	94.0	264.7
2017	79.2	98.8	261.4

Source: Rosstat; own calculations.

More than half of that index was taken up by multi-apartment residential buildings, the total volume of such properties put into operation over January-December 2017 amounting to 45.9 million m², which represents a decline by 5.3 percent, or by 2.5 million m², relative to 2016.

The issue of failure, by some developer companies, to fulfill their obligations has remained vital. Thus, according to data entered in the Single Register of Developer Companies (SRDC)¹, each of the developer companies on the Top 10 list moved the project completion deadline for at least one of its residential buildings put into operation in 2017. In approximately 74 percent of cases, the residential complexes completed and put into operation by the market leaders have a history of postponed deadlines. The deviation from the planned deadlines is usually up to 3 months, which so far has not resulted in a failure to meet the deadlines, stipulated in the contracts with participants in shared construction projects, for the formalization of their titles to the completed apartments.

In 2017, developer companies put into operation a total of 241,100 one-family homes with total area of 32.7 million m², which is 2.8 percent more than in 2016, when the movement pattern of the corresponding index for one-family homes was worse than that of the total index for the housing construction sector. The relative share of the former, in terms of total area, in Russia's total index of completed housing construction projects amounted to 41.6 percent, which roughly corresponds to its 2015 level, although over the period 2010–2014 it had been stably above 43 percent.

One of the reasons for the plunge, in 2017, of the volume of current housing construction projects across Russia was the insufficiently strict control of the implementation of the government support programs, the main focus of those programs being on infrastructure financing.

¹ <https://erzrf.ru>.

Thus, the Collegium of the RF Accounts Chamber reviewed the results of the audit of the RF Ministry of Construction, Housing and Utilities in the part of implementation, in 2016–2017, of its priority projects, and revealed some implementation failures associated with the priority project *Housing Mortgage and Housing Lease*, its main goal being that of increasing the volume of housing properties put into operation over the period 2017–2020 by 20.4 million m² through attracting financing from extrabudgetary sources.

The project is implemented in the framework of co-financing, from the federal budget, of massive-scale housing construction projects and envisages the creation of appropriate social and transport infrastructure as established in the subprogram titled *Promotion of the Housing Construction Development Programs of Subjects of the Russian Federation* of the Federal Target Program *Housing* for 2015–2020. The allocated subsidies are spent on the construction of social infrastructure entities, the construction or reconstruction of motor roads in the new residential micro-districts; besides, they are earmarked for covering the interest on loans taken in order to fund the creation of engineering infrastructure on the land plots designated for economy-class residential development projects.

As was noted at the Collegium's meeting, the participation of the regions in the implementation of both the subprogram and in the associated projects is mainly declarative (in 2016, these were participated by 18 regions, in 2017 – by 33 regions). The cash execution of expenditure earmarked for subsidies in the subprogram framework amounted in 2016 to RUB 4.2 billion, in 2017 – to RUB 19.6 billion, while the implementation, in per annum terms, of the relevant budget allocations for both years amounted to approximately 96 percent.

Positive movement patterns in the housing construction sector were observed in more than half of all the regions, including most of those territories where the total volume of housing stock put into operation was in excess of 1 million m² (*Table 15*).

Table 15

**The commissioning of residential housing in Russia's regions 2017
(ranked in descending order)**

Region	Housing stock put in operation, percent relative to 2016
Leningrad Oblast	120.7
St. Petersburg	113.5
Chelyabinsk Oblast	106.7
Republic of Dagestan	104.2
Krasnodar Krai	103.7
Nizhny Novgorod Oblast	102.3
Perm Krai	102.3
Rostov Oblast	101.8
Moscow	101.0
Sverdlovsk Oblast	101.0
Voronezh Oblast	100.6
Lipetsk Oblast	100.5
Republic of Tatarstan	100.1
Chechen Republic	99.9
Moscow Oblast	98.7
Belgorod Oblast	96.3
Saratov Oblast	93.5
Samara Oblast	93.2
Tyumen Oblast (with autonomous districts)	92.6
Republic of Bashkortostan	91.2
Novosibirsk Oblast	77.9
Krasnoyarsk Krai	75.9

Source: On Housing Construction in 2017 (in Russian), www.gks.ru.

As follows from *Table 15*, the index of the total volume of housing stock put into operation, which considerably exceeded Russia's average (more than by 3 percent), was noted in Leningrad Oblast, Chelyabinsk Oblast, the city of St. Petersburg, the Republic of Dagestan, and Krasnodar Krai. Another 8 regions demonstrated positive movement patterns of that index, but its actual value was lower (under 3 percent). At the same time, shrinking volumes of housing stock put into operation were seen in 9 regions, including Saratov Oblast, Samara Oblast, Tyumen Oblast, Novosibirsk Oblast, the Republic of Bashkortostan, and Krasnoyarsk Krai, where the plunge of that index amounted to 6–25 percent.

Moscow Oblast demonstrated a decline that was less deep than the corresponding Russia's average (1.3 percent), and so it retained its leading position among Russian regions by the total volume of housing stock put into operation in absolute terms (approximately 8.8 million m²). In the city of Moscow, after a deep plunge in 2016, there occurred a slight growth (1 percent); however, by its total volume of housing stock put into operation in absolute terms, which was slightly above 3.4 million m², it still fell behind the city of St. Petersburg (more than 3.5 million m²). St. Petersburg, together with Leningrad Oblast (more than 2.6 million m² in the latter), became leaders by that index (13.5 percent and 20.7 percent respectively), the latter joining the top five regions alongside Krasnodar Krai (approximately 4.7 million m²).

The relative share of the city of Moscow and Moscow Oblast in the volume of completed housing construction projects in the total economy was 15.5 percent, of which the greater part was taken up by Moscow Oblast (11.2 percent), and the city of Moscow accounted for 4.3 percent. In the overall structure of newly completed housing construction projects, the relative share of residential complexes situated in the territories that were recently included in the city borders shrank very noticeably (from 1.7 to 1.0 million m²). Consequently, the relative share of New Moscow amounted to less than 30 percent vs. approximately one half in 2016. The aggregate relative share of the entire region in and around Russia's capital (including Moscow Oblast) remained at its 2016 level, which is somewhat less than in 2014–2015, but more than in the pre-crisis years (2012–2013) after the change of Moscow's administrative borders.

In 2017, Moscow continued to demonstrate its housing construction market consolidation. As reported by Realty.Vesti.ru, almost half of the total volume of housing stock put into operation was taken up by the construction projects completed by five companies. According to data released by the Mayor of Moscow's office, these were PIK Group, MR Group, the Administration for Civilian Construction (a treasury enterprise relying on budget financing), GK Absolut, and LSR Group. It is not surprising that, in spite of the modest movement pattern demonstrated by the market at large, practically all the leaders of Moscow's housing construction sector demonstrated, in their previous year's reports, high growth rates and two-digit growth rate of proceeds.

Some idea as to the future prospects of the housing construction sector can be derived from an analysis of the ongoing construction projects, based on the difference between two opposite vectors – the volume of newly launched construction projects and the volume of housing stock put into operation. Over the past two years, the former was on the decline, but the rate of decline displayed by the latter was even faster, and so the resulting index of current construction project volume was on the rise until mid-2017.

After the current construction index hit its record high in September 2017 (120.0 million m²), the volume of housing stock put into operation began to increase over the year's last few months, while that of newly launched construction projects, and consequently the total housing

construction sector index, began to decline. According to data presented in the SRDC's report *Housing Construction by Professional Developers*,¹ in December 2017 the volume of current construction projects shrunk at once by 2.8 percent, or by 3.3 million m². As of December 2017, developer companies were engaged in construction a total of 14,500 multi-apartment residential buildings with a total floor area of 115.8 million m². A year earlier, the volume of current construction projects was 111.0 million m². The bulk of these ongoing construction projects implemented by developer companies is taken up by multi-apartment residential buildings.

In December, the developer companies operating in the Russian Federation were erecting a total of 5,074 residential complexes, each of these possibly consisting of several residential buildings (or parts of buildings) in 82 regions. At the same time, as before, more than half of all housing construction projects are being implemented in only six regions. The highest housing construction volume is registered in Moscow Oblast (13.4 percent of the total area of residential units). Second comes the city of Moscow (10.8 percent), followed by the city of St. Petersburg (10.5 percent). Next, with a wide gap, come Krasnodar Krai (7.1 percent), Leningrad Oblast (5.6 percent), and Novosibirsk Oblast (3.0 percent).

In response to the decline in the rate of inflation, the situation with lending available to big developer companies is notably improving. Director of the Credit Products and Processes Department of Sberbank Sergey Bessonov, in his interview with the *Kommersant* Newspaper, said that the total volume of loans issued to corporate customers operating in the sector of commercial and residential real estate development was RUB 1.6 trillion. Out of this sum, 15 percent (RUB 245 billion) is taken up by housing construction loans (approximately 500 residential development projects).² In the event of a massive-scale switchover to project-based financing, Sberbank expected growth by approximately 1.5 times relative to the year-end index for 2017, which points to the bank's preparedness to issue loans to developer companies in the amount of up to RUB 370 billion, this being the total volume of its one-time loan portfolio.

However, that amount is 13.5 times less than the actual amount of financing needed by the housing construction sector in order to meet the goal, set by the RF President, of the annual volume of housing stock put into operation amounting to 110–120 million m². Its achievement will require loans to the value of not less than RUB 5 trillion, according to the statement made by Head of the National Association of Developer Companies (NOZA) Leonid Kazinets at the meeting of the Council for Strategic Development and Priority Projects, which took place on December 20, 2017.

Last year saw the continuation of reform, launched in 2015–2016,³ of the ***system of share construction projects in the housing construction sector*** by introducing significant alterations to the original provisions of the Federal Law No 214-FZ.

The main alterations were introduced by Federal Law 'On the Public Legal Company for the Protection of Rights of Citizens – Participants in Share Construction Projects In Case of Insolvency (Bankruptcy) of Developer Companies, and on the Introduction of Alterations in Some Legislative Acts of the Russian Federation' No 218-FZ dated July 29, 2017.⁴

¹ <https://erzrf.ru>.

² *Kommersant* Review No 239, December 22, 2017.

³ For more details, see *Russian Economy in 2016. Trends and Outlooks* (Issue 38). Gaidar Institute, Moscow, 2017, pp. 299–301.

⁴ In addition, by separately adopted laws, the notion of *economy-class housing* was replaced by standard housing, and the provisions stipulated in the law on share construction schemes extended to apply to the relations associated with the attraction of personal financial resources of citizens and legal entities for the purpose of share funding of

Firstly, high qualification requirements to a developer company were introduced. It is established that this can be an economic society, it, or its core company, or any of the subsidiaries of its core company, having experience (not less than 3 years) of participating in the construction (or creation) of multi-unit residential buildings with total area of not less than 10,000 m², and having permits, received in the procedure established by legislation on urban development activity, for putting into operation such multi-unit residential buildings in the capacity of a developer company, and (or) technical customer, and (or) general contractor in accordance with a building construction contract. While the previously established requirements to the grounds for gaining access to land plots are preserved, these are augmented by the requirement to the company name, which must contain the words 'specialized developer company'.

Secondly, the right to attract the monies of participants in shared construction projects has been made subject to several tough restrictions.

The construction (or creation) of multi-unit residential buildings and (or) other real estate properties specified in the project documentation is done within the limits set by one construction permit. A developer company is not allowed to simultaneously implement the construction (or creation) of multi-unit residential buildings and (or) other real estate properties on the basis of several construction permits.

The other newly introduced compulsory requirements are the existence of project documentation and a positive expert estimation of the project documentation; requirements to the amount of own equity of the developer company (not less than 10 percent of the planned cost of the construction (or creation) of multi-unit residential buildings and (or) other real estate properties specified in the project declaration); requirements to the availability of money (not less than 10 percent of the construction project cost) in the bank accounts of the developer company opened with an authorized bank;¹ the obligations of the developer company unrelated to the attraction of monies from the participants in a shared construction project or to the construction project (not more than 1 percent of the construction project cost), the absence of obligations associated with various types of loans, with the exception of targeted loans, associated with the attraction of monies from the participants in a share construction project and the construction (or creation) of multi-unit residential buildings and (or) other real estate properties covered by one construction permit; the issuance or release of securities, with the exception of shares; the absence of obligations to secure the fulfillment of obligations assumed by third parties; a ban on the use of property owned by the developer company to secure those obligations, and to secure the fulfillment, by the developer company, of its own obligations unrelated to the attraction of monies from the participants in a shared construction project and to the aforesaid construction project.

The right to attract monies from the participants in a shared construction project is also limited by the requirement that the mandatory payments (contributions) to the compensation fund created at the expense of those participants, and also secured by property acquired by way of investing the aforesaid monies, should be effectuated prior to the State registration of the shared construction contract whereby the transfer of residential premises is envisaged.

the construction of multi-unit residential buildings and (or) other real estate properties, and arising in connection with the renovation of the housing stock of the city of Moscow.

¹ A bank created in accordance with RF legislation and included by the Bank of Russia in the list of banks answering the criteria established by the RF Government. The Bank of Russia, on a monthly basis, publishes the updated list on its official website.

The annual accounting (financial) reports of the developer company should be submitted for a mandatory audit and disclosed together with the auditor's resolution not later than 120 calendar days after the end of each reporting year. The intermediate accounting (financial) reports are to be prepared by the developer company for Q1, H1, and first nine months of each year, and to be disclosed not later than 5 calendar days after the end of the relevant intermediate reporting period.

Thirdly, a set of tough restrictions is applied to the managerial bodies of a developer company and its participants with regard to their criminal record (if any), disqualification, involvement in insolvency (bankruptcy) procedures, participation in capital.

Fourthly, the use of monies by a developer company is regulated (20 permitted expenditure items are specified, limits are established for the permitted amount of spending, the permitted amount of advance payments is specified, a list of banned commercial operations is introduced, etc.).

In order to properly perform in accordance with the law, the developer company, the technical client, and the general contractor operating under contracts concluded with the developer company, are obliged to open a bank account with one authorized bank and to settle only through that account; in this connection, the developer company is allowed to have only one settlements account in accordance with the procedure regulating its operations.

Fifthly, the regime of protecting the interests of participants in shared construction projects has been altered.

The functions associated with the creation of a shared construction compensation fund secured by mandatory payments (contributions) transferred by developer companies are performed by the public legal company 'Fund for the Protection of Rights of Citizens – Participants in Shared Construction Projects' set up in accordance with Federal Law No 218-FZ¹ by way of reorganizing the non-profit organization (NPO) with the same company name, founded by the RF Government through the RF Ministry of Construction.

At its request, developer companies are obliged, within ten days from the date of receiving the request, to submit to the Fund their accounting (financial) reports and the documents (information) verifying their data. The compensation to the citizens participating in shared construction projects under contract whereby the transfer of residential premises is envisaged is paid in accordance with the aforesaid law.

Besides, the Single Housing Construction Information System was created, which functions on the basis of programming products, technical tools and information technologies ensuring the collection, processing, storage, access to, placement and use of information on housing construction projects, as well as other information pertaining to housing construction. The System is operated by the single development institution functioning in the housing sector, i.e. the Agency for Housing Mortgage Lending (AHML).

It is necessary to note that the package amendments to Federal Law No 214 regulating the participation in shared construction projects obviously aims at strengthening the regulation of the activities of developer companies by elaborating on the legislative details. At the same time, they vividly illustrate the existing issues and lack of stability in that sphere.

The previously established share construction participant protection scheme through the special compensation fund, initially created on the basis of the AHML, had existed for only

¹ Its creation was envisaged in the RF Government's Decree No 1231, dated 7 October 2017, which approved the Provision on its supervisory board, the Procedure for the appointment of its Director-General, and the Charter of this organization.

about a year. In addition to the organizational legal alterations, the amount of a developer company's contribution to the compensation fund has been increased to 1.2 percent of the contract price established by agreement between all the participants in a shared construction project in the contract whereby the transfer of residential premises is envisaged. Previously, the amount of contribution could not exceed 1 percent of the planned cost of the construction (or creation) of a multi-unit residential building and (or) other real estate property entity specified in the developer company's project declaration.

The requirements, introduced only recently, in 2016, whereby the minimum amount of the charter capital of a developer company was to be calculated relative to the maximum total area of all property entities being created in the framework of share construction projects by the developer company and related legal entities, were abolished. The norms stipulating the obligations under surety agreements with banks and the insurance of the civil responsibility of a developer company were likewise abolished.

On December 21, 2017, the Chairman of the RF Government approved the Plan of measures designed to replace, over a three-year period, the monies of individuals attracted by way of financing the construction of multi-apartment residential buildings and other real estate entities, by bank loans and other forms of financing. The roadmap envisages a two-phase transition to escrow accounts.¹

During the transition phase (from July 1, 2018 through June 30, 2019), the contracts with participants in shared construction projects must rely on the already traditional scheme that envisages the use of individuals' monies by developer companies directly, the individual participants being protected both by the mechanism envisaged in the law on shared construction (as amended as of the latest date), and by the new mechanism based on escrow accounts and (or) special settlements accounts designed to service the contracts concluded in the framework of share construction projects, the expected relative share of such contracts amounting to approximately 30 percent of the total number of registered contract existing at the period-end of Q2 2019.

The final phase (from July 1, 2019 through December 31, 2020) will involve the switchover of all the contracts concluded with the participants in shared construction projects aiming at erecting multi-unit residential buildings, where the contract with the first participant has been concluded after July 1, 2019, to the mechanism based on escrow accounts and (or) special settlements accounts designed to service the contracts concluded in the framework of shared construction projects, the expected relative share of such contracts amounting to not less than 95 percent of the total number of registered contracts existing at the period-end of Q4 2020.²

According to some expert estimations, the changes in the housing construction financing system will inevitably bring down the volume of new housing stock being put into operation.

In the opinion of M. Litinetskaya ('Metrium Group'), by far not all the developer companies will be able to satisfy the requirements set by banks. The amendments to legislation were introduced in order to remove from the sector all unreliable market players. The 'purge' will in the main target small developer companies and impose constraints on the entry of new

¹ Escrow account is a special savings account where funds can be disbursed only on certain liabilities. It is opened for temporary accumulation of funds to be disbursed for specific purposes. As far as shared construction projects are concerned, this instrument envisages transfer of co-investors' funds as work progresses and the developer's report is submitted to the bank.

See also *Russian Economy in 2016. Trends and Outlooks* (Issue 38). Gaidar Institute, Moscow, 2017, p. 299.

² <http://government.ru/news/30734>, December 25, 2017

developers on the market. The transition to project-based financing will become yet another undertaking of the authorities which, in the long run, will leave the sector at the disposal of a few dozens of big players, and not thousands of players, as in the present situation. Under such conditions, the volume of new housing stock being put into operation will shrink for a certain period of time, but this temporary negative effect will be overcome by the construction industry. However, the risk of low developer activity will still be there, because now the financing of the entire sector will be directly dependent on the situation in the national economy and the monetary policy of the regulator. The ruble's depreciation and a surge in interest rates on loans may bring to a halt all the new projects.¹

President of the Institute for Urban Economics N. Kosareva noted that the institutional structure of the market is changing. Therefore the volume of housing construction projects may shrink by 10–20 percent, and the full transition from share construction projects to project-based financing will take no less than five years.²

5.6.4. The forecast for Moscow's housing market for 2018

A retrospective verification of the forecasted price index movement pattern in Moscow's housing market (plotted in June 2014) by setting it against the actual data revealed that, in December 2014 and early 2015, due to the macroeconomic shock and the surge of demand, housing prices in the secondary and primary markets rose 15–16 percent above their forecasted values (*Fig. 39*). Over the period of December 2015 and the year 2016, the actual and plotted prices were practically identical. For 2017, it was forecasted that prices would decline by 2–3 percent in the secondary market, and by 3–5 percent in the primary market. The actual data demonstrated a plunge by only 0.8 percent in the secondary market and a rise by 1.8 percent in the primary market. The deviation from the forecasted values was 1–2 percent in the secondary market and 5–7 percent in the primary market.

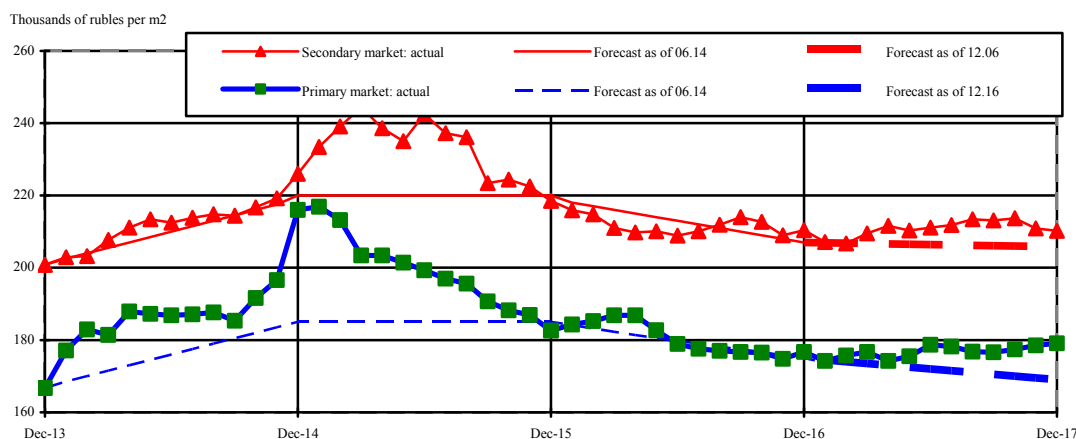


Fig. 39. A comparison of the movement patterns of actual and forecasted prices in Moscow's housing market in 2013–2017

Source: for data: Analytical Committee, Moscow Realtor Association; for forecasts: LLC Sterniks Consulting

¹ <https://erzrf.ru/news/>, December 12, 2017.

² <https://erzrf.ru/news/>, October 28, 2017.

Thus, the forecast for 2017 calculated relative to price of oil at USD 40 per barrel (decline of prices by 3–5 percent) turned out to be too pessimistic, because in H2 the prices became stabilized. It is noteworthy that there was a consensus with regard to the subsequent downward trend displayed by housing prices, although the majority of Moscow experts predicted that prices would fall by 10–20 percent.

In 2017, supply growth in Moscow's primary housing market (in response to the significantly increased market absorption rate) halted and gave way to decline, while effective demand continued its upward movement, thus pushing the demand/supply ratio to positive zone, which resulted in market stabilization and heralded a renewal of price growth. Similar regularities were also observed in the secondary market.

The stabilization of prices in the housing markets of Moscow and other cities throughout Russia occurred in spite of the continuing shrinkage of real disposable household income. The main driver behind the transition from recession to stabilization at the bottom point of the market development cycle (stagnation) was growth of the volume of housing mortgage loans associated with the rising prices of energy carriers, lowering key rate of the RF Central Bank, and plunging interest rates on housing mortgage loans.

Thus, over the period 2016–2017, against the backdrop of general stabilization and even an onset of growth in the Russian economy, it was still displaying some negative phenomena. At the same time, the crisis peak (when household income in nominal terms plunged for the first time) was already a thing of the past, but the prospects for recovery, from the point of view of the effects on the real estate market, are still controversial: real incomes are still far from their 2013 baseline level, and their growth is unsustainable.

The monetary authorities are gradually easing their monetary policy. However, even after the key rate was twice reduced by the RF Central Bank over the course of Q1 2018 (to 7.25 percent), it is still far above the inflation rate. The regulator's conservative approach can largely be explained by the high inflation expectations of the Russian people. This has to do both with the continuing slide of household incomes in real terms and with the imperfections of the RF Central Bank's information policy.

In 2018, we can expect multi-vector effects of the following factors influencing the price movement patterns.

The world's leading experts predict that oil prices and the USD exchange rate will demonstrate relatively stable fluctuations in the intervals of 60–65 USD per barrel and RUB 60–65 per USD. Russia's GDP growth is expected to be slightly higher than in the previous year – 1.7–2.0 percent.

The official forecasts do not promise a rapid economic growth, the most probable index being at the level of 2–3 percent. The basic and target scenarios of the RF Ministry of Economic Development envisage that in 2018, GDP will gain approximately 2.1–2.2 percent, as it was expected on the basis of the year-end results of the previous year, and then its growth rate may rise above 2.5–3 percent (only if the target scenario becomes a reality). The conservative scenario predicts the annual growth rate below 1 percent, and its rise towards 1.5 percent by 2020.

In the Gaidar Institute's *Monitoring of Russia's Economic Outlook* it is suggested that the Russian economy is returning to a cyclical growth pattern (approximately 1.5–2 percent per annum). The possibility to accelerate the growth rate is linked to structural reforms, including

the budget maneuver, which consists in increasing the expenditures on education, healthcare and infrastructure and cutting unproductive expenditures.¹

Last year, the predicted growth of real disposable household income failed to occur, but this year this may become possible due to the minimum wage coming closer to the subsistence level, and the increased pensions and other benefits after the end of the presidential electoral cycle. Besides, demand can be boosted, and price decline prevented, by the new program of subsidizing the interest rates on housing mortgage loans (up to 6 percent) for some population groups.

At the same time, in conditions of the mounting pressure created by the economic sanctions, the government may begin to implement some unpopular measures, e.g., reducing the relative share of self-employed population, and making job cuts at the inefficiently performing enterprises in the framework of their reorganization, which will push down the household income growth rate.

Given these baseline data, with due regard for the actual result achieved in 2017, we predict that prices in Moscow's housing market in 2018 may fluctuate in the interval ± 1.5 –2.0 percent, which means ongoing stagnation with an uncertain time horizon.

¹ S. Drobyshevsky, S. Sinelnikov-Murylev. Russia's Economic Growth Characteristics in 2017-2018: Incentives and Constraints // Monitoring of Russia's Economic Outlook: Trends and Challenges of Socio-Economic Development. No 2 (63). February 2018, pp. 7–11.

Section 6. Institutional changes

6.1. Federal property and privatization policy¹

6.1.1. Federally owned companies and organizations: quantitative changes

2016 saw first publication of data from a performance measures framework for federal property management that was adopted on January 29, 2015 by Russian Government's executive order No. 72 in lieu of performance measures for a public sector monitoring conducted by Rosstat in the early 2000s in pursuance of the Russian Government's executive order No. 1 dated January 4, 1999 (as further amended on December 30, 2002). The performance measures framework contains data for the number of federal state unitary enterprises (FSUEs) and joint-stock companies (JSCs) with government equity participation that were previously published in privatization programs over a 3-year period (since 2011) and one-year period (prior to 2011). A new Forecast Plan (Program) for Federal Property Privatization and Guidelines for Federal Property Privatization for 2017–2019 adopted early in 2017² contains data dated only as of early 2016 (*Table 1*). As of early 2017, according to the Report of the Federal Agency for State Property Management (hereinafter Rosimushchestvo) on the implementation of privatization program for 2017–2019, the Russian Federation owned 1108 FSUEs and held an interest of 11 and 17 percent in 1416 JSCs and LLCs, respectively, marking a decline from the previous year's number of economic agents with the same legal form of business. However, developments and processes that took place in 2017 only can be described using data from the performance measures framework for federal property management.

As of July 1, 2017, the Russian Federation owned 1247 JSCs and held a full ownership interest in 1058 FSUEs, 53 federal treasury enterprises (FTEs) and 16244 federal government agencies (FGAs). According to annualized data, the number of FSUEs dropped 320 (more than 23 percent), the number of JSCs with government equity participation fell 324 (more than 20 percent), the number of federal government agencies was down 746 (or 4.4 percent). Furthermore, the number of FTEs increased 12.8 percent. In absolute terms (6 units), however, the increase is difficult to compare with the decline in the number of economic agents with

¹ This section is written by Georgy Malginov, the Gaidar Institute, RANEPa; Alexander Radygin, the Gaidar Institute, RANEPa.

² See the Gaidar Institute's previous review: Russian Economy in 2016: Trends and Outlooks (Issue 38). M., 2017, pp. 357–360.

other types of ownership related to federal property. The same is true for JSCs in which a golden share was used (which gives its holder the power to participate in corporate governance) whose number dropped nearly 5 percent (or by 4 JSCs). Changes that influenced FTEs and JSCs with a golden share took place mostly in H1 2017. Changes over a shorter timeframe in the number of entities with basic types of ownership were as follows: the number of unitary enterprises declined 15 percent, shareholding companies were down 8 percent, government agencies slid 3.6 percent.

Table 1

Federally owned companies and organizations registered with federal property register and performance measures framework for federal property management, 2010–2017

Date	Number of shareholding companies with federal equity participation		Number of other federal property owners		
	Equity participation / of which JSCs	golden share in absence of equity participation	FSUEs	FTEs	FGAs
As of January 1, 2010	3066/2950 ^b		3517 ^b		
As of January 1, 2013	2356/2337 ^b		1800/1795 ^b	72	20458
As of January 1, 2016	1557/1704 ^b	88/64 ^c	1488/1247 ^b	48	16194
As of April 7, 2016 ^a	1683/1620 ^d		1236	48	16726
As of July 1, 2016	1571	82	1378	47	16990
As of January 1, 2017	1356/ 1416 ^c	81	1245/1108 ^c	48	16846
As of July 1, 2017	1247	78	1058	53	16244

^a golden share is not accounted in the register but mentioned in Rosimushchestvo's documents as part of data on government equity participation;

^b the number of JSCs and FSUEs according to data from privatization programs for 2010–2013, 2014–2016 and 2017–2019 (the latter contains data based on OKVED classification (Russian Classifier of Economic Activities) that refer to companies with an interest owned by the federal government);

^c according to data from the federal property register;

^d the numerator shows total corporate entities including ZAOs (closely-held companies) and OOOs (LLCs), the denominator shows equity participation (the difference is supposedly represented by the number of JSCs with a golden share which is not explicitly specified);

^e according to data from The 2017 Report on Execution of the Forecast Plan (Program) for Federal Property Privatization for 2017–2019.

Source: The Forecast Plan (Program) for Federal Property Privatization and Guidelines for Federal Property Privatization for 2011–2013; The Forecast Plan (Program) for Federal Property Privatization and Guidelines for Federal Property Privatization for 2014–2016; www.economy.gov.ru, April 23, 2013; The Rosimushchestvo's Performance Report for 2015 ; The Forecast Plan (Program) for Federal Property Privatization and Guidelines for Federal Property Privatization for 2017–2019; Statistical data on The performance measures framework for federal property management, www.gks.ru, March 20, 2016, September 05, 2016; March 20, 2017, September 05, 2017; The Report on Execution of the Forecast Plan (Program) for Federal Property Privatization 2017–2019 in 2017.

Shareholding companies in which the federal government owns an interest are best characterized by Rosimushchestvo's year-end reports regarding the management of federally owned equity shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies that are published since 2012.

According to data from the Federal State Information and Analytical System "Unified State Property Management System (FSIAS USPMS) as of August 01, 2017, the federal property register contained data on 1298 JSCs with an interest owned by the federal government, including 78 JSCs in which the federal government holds a golden share.¹

¹ The 2016 year-end report on the management of federally owned shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies.

Rosimushchestvo, however, could fully exercise shareholder rights with respect to only 529 out of 1298 JSCs (40.8 percent compared with 46.1 percent as of summer 2016 and 52.1 percent as of summer 2012); therefore, past year's changes followed the trend since 2014 towards continuous contraction of the percentage share of companies where Rosimushchestvo can fully exercise shareholder rights.¹

The rest of 769 companies were:

- JSCs with shareholder rights transferred on the federal government's behalf to other federal executive authorities and federally owned corporations (e.g., to the Ministry of Defense of Russia, GC Rostec, Rosatom, or a deed of trust was concluded with such JSCs) (306 JSCs, or 23.6 percent of total JSCs);²

- JSCs in which the federal government owned an interest of less than 2 percent, where under Chapter 1, Article 53 of Federal Act No. 208-FZ 'On Joint-Stock Companies' dated December 26, 1995 the shareholder is not entitled to put matters on the agenda of a general meeting of shareholders) (276 JSCs, or 21.3 percent of total JSCs);

- JSCs in bankruptcy proceedings (135 JSCs, or 10.4 percent of total JSCs);

- JSCs in liquidation, reorganization (36 JSCs, or 2.8 percent of total JSCs);

- JSCs in which the Russian Federation had de facto no ownership interest (e.g., federally owned shares were previously privatized, contributed to the equity of vertically-integrated companies (hereinafter VICs) or in the stage of federal ownership registration) (16 JSCs, or 1.2 percent of total JSCs).

Data on recent years' changes in the population of JSCs where Rosimushchestvo's shareholder rights were restricted, including the grounds for restrictions, are presented in *Table 2*.

The first thing to be noted is that the absolute number of JSCs where Rosimushchestvo's shareholder rights are restricted decreased by more than 10 percent (or nearly 90 JSCs) from 2016, marking the deepest annual decline since 2013, which was caused primarily by a more than 1/5 decline in the number of JSCs in which the federal government owned a minority interest of less than 2 percent. The number of companies in bankruptcy proceedings decreased by 15 (or by one tenth) and of those in liquidation and reorganization by 12 (or by one fourth).

Table 2

Quantity and structure of joint-stock companies with government equity participation where Rosimushchestvo's shareholder rights are restricted, 2012–2017

¹ The absence of restrictions on Rosimushchestvo's shareholder rights does not necessarily mean that sector-specific federal executive authorities involved in the process on a common basis have no corporate governance powers in respective companies, based on the division of powers set forth in the Provision of Federally Owned Shares in Joint-Stock Companies and the Russian Federation's Golden Share (*Participation in Corporate Governance*) in Joint-Stock Companies (adopted by Government Executive Order No. 738 dated December 03, 2004).

² Making a single group of JSCs where shareholder rights on the government's behalf are transferred to other than Rosimushchestvo federal executive authorities, government corporations (GCs) and trustees does not seem quite correct because one of the base characteristics of GCs as corporate entities falling into the category of not-for-profit institutions under the Russian legislation is GC's ownership of their assets/properties, which by and large must include federally owned shares transferred to them in the form of asset contribution.

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Total		Gov ^r ment interest is less than 2 percent		Shareholder rights transferred to other entities		In bankruptcy proceedings		In liquidation		Government has no ownership interest	
quantity	as a percentage of total JSCs	quantity	as a percentage of total JSCs	quantity	as a percentage of total JSCs	quantity	as a percentage of total JSCs	quantity	as a percentage of total JSCs	quantity	as a percentage of total JSCs
As of August 01, 2012											
1258	47.9	434	16.5	387	14.75	156	5.95	55	2.1	226	8.6
As of August 01, 2013											
988	42.3	465/ 134 ⁶	19.95	316	13.55	145	6.2	59	2.5	3	0.1
As of July 7, 2014											
949	45.3	436/ 78 ^b	20.8	302	14.4	146	7.0	57	2.7	8	0.4
As of August 01, 2015											
884	47.4	373/ 75 ^b	20.0	291	15.6	151	8.1	60 ^d	3.2	9	0.5
As of August 01, 2016											
858	53.85	349/ 61 ^b	21.9	297	18.65	150	9.4	48 ^d	3.0	14	0.9
As of August 01, 2017											
769	59.25	276/ 60 ^b	21.25	306	23.6	135	10.4	36 ^d	2.8	16	1.2

^a under Chapter 1, Article 53 of Federal Act No. 208-FZ 'On Joint-Stock Companies' dated December 26, 1995 the shareholder is not entitled to put matters on the agenda of a general meeting of shareholders;

^b the denominator shows the number of JSCs in which the Russian Federation concurrently holds a golden share (participation in corporate governance);

^c other government executive authorities, federally owned corporations, or there were trust deeds in effect;

^d including JSCs under reorganization;

^e in which the Russian Federation held *de facto* no ownership interest (federally owned shares were previously privatized, contributed to the equity of vertically-integrated companies, issue of shares is not registered, cessation of business due to liquidation or reorganization), but the data was on the stage of registration with the register.

Source: Rosimushchestvo's 2011–2016 year-end reports on the management of federally owned equity shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies, own calculations.

The number of JSCs in which shareholder rights were transferred to other entities, and in which the Russian Federation held *de facto* no ownership interest increased marginally, but in aggregate the increase (up 11 JSCs) was less in absolute terms than the decline in the number of JSCs in liquidation and reorganization. As a result, the JSCs where Rosimushchestvo's shareholder rights were restricted made up the biggest group of companies with shareholder rights transferred to other entities (23.6 percent), whereas in 2016, by contrast, the biggest group was comprised of JSCs in which the federal government owned an interest of less than 2 percent.

The decline in the share of companies in which the federal government had no full control was led not only by increase in the share of JSCs in which the federal government owned a minority interest of less than 2 percent, but also due to selected privatization priorities with regard to companies where Rosimushchestvo could fully exercise shareholder rights (*Table 3*).

Table 3

Dynamics of quantity and structure of shareholding companies by share of government equity participation and by inclusion in forecast privatization plans in 2012–2017

Date	Shareholding companies (JSCs and LLCs)									
	JSCs total	interest, percent	where government's interest comprises							
			100 percent		50–100 percent		25–50 percent		2–25 percent	
			quantity	percent	quantity	percent	quantity	percent	quantity	percent
As of August 01, 2012										
– JSCs where Rosimushchestvo could fully exercise shareholder rights*	1371/2629**	100.0	886	64.6	76	5.55	211	15.4	198	14.45
As of August 01, 2013										
– JSCs where Rosimushchestvo could fully exercise shareholder rights*	1345/2333**	100.0	874	65.0	83	6.15	185	13.75	203	15.1
– JSCs included in forecast privatization plans***	975	100.0	716	73.4	41	4.2	116	11.9	102	10.5
As of July 7, 2014										
– JSCs where Rosimushchestvo could fully exercise shareholder rights*	1147/2096**	100.0	709	61.8	66	5.8	171	14.9	201	17.5
– JSCs included in forecast privatization plans***	842	100.0	596	70.8	36	4.3	113	13.4	97	11.5
As of August 01, 2015										
– JSCs where Rosimushchestvo could fully exercise shareholder rights*	980/1864**	100.0	589	60.1	55	5.6	142	14.5	194	19.8
– JSCs included in forecast privatization plans***	668	100.0	469	70.2	18	2.7	90	13.5	91	13.6
As of August 01, 2016										
– JSCs where Rosimushchestvo could fully exercise shareholder rights*	735/1593**	100.0	469	63.8	48	6.5	91	12.4	127	17.3
– JSCs included in forecast privatization plans***	478	100.0	336	70.3	14	2.9	56	11.7	72	15.1
As of August 01, 2017										
– JSCs where Rosimushchestvo could fully exercise shareholder rights*	529/1298**	100.0	325	61.4	38	7.2	76	14.4	90	17.0
– JSCs included in forecast privatization plans***	278	100.0	176	63.3	11	4.0	51	18.3	40	14.4

* exclusive of (1) JSCs where the federal government owned an interest of less than 2 percent, (2) JSCs where shareholder rights on the federal government's behalf were executed by other entities (other government executive authorities, federally owned corporations, or under fiduciary management agreements), (3) JSCs in bankruptcy (in bankruptcy proceedings), (4) JSCs in liquidation, (5) JSCs in which the Russian Federation had de facto no ownership interest (federally owned shares were previously privatized, contributed to the equity of vertically-integrated companies);

** the denominator shows total number of JSCs according to data from the federal property register;

*** including only those in which Rosimushchestvo could fully exercise shareholder rights.

Source: Rosimushchestvo's 2011–2016 year-end reports on the management of federally owned equity shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies; own calculations.

Table 3 presents data showing growth drivers in the share of companies where the federal government had no full control due a small government ownership interest. The point is that within the population of shareholding companies in which Rosimushchestvo (The Federal Agency for State Property Management) could fully exercise shareholder rights, the share of shareholding companies with federal government's full, controlling and blocking interest were included in privatization programs of 2011–2013 and 2014–2016 is generally bigger than the share of companies in which the federal government owned a minority interest. Forecast privatization plans included not more than half of the latter, 80 percent and more of companies in which the federal government owned a controlling interest, approximately 50 percent and more of companies in which the federal government owned a majority interest,¹ and more than 60 percent of companies in which the federal government held a blocking interest (*Table 4*).

Table 4

Share of JSCs, covered by forecast privatization plans, of total shareholding companies where Rosimushchestvo could fully exercise shareholder rights, by amount of government ownership interest, 2012–2016, percent

Date	Full interest (100 percent)	Controlling interest (50–100 percent)	Blocking interest (25–50 percent)	Minority interest (2–25 percent)
As of August 01, 2013	81.9	49.4	62.7	50.2
As of July 07, 2014	84.1	54.5	66.1	48.3
As of August 01, 2015	79.6	32.7	63.4	46.9
As of August 01, 2016	71.6	29.2	61.5	56.7
As of August 01, 2017	54.2	28.9	67.1	44.4

Source: Rosimushchestvo's 2011–2016 year-end reports on the management of federally owned equity shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies, own calculations.

The said trend saw a minor correction in 2016. The share of companies (covered by the privatization program) in which the federal government owned a minority interest more than doubled (approximately 57 percent), which was less than the share of companies in which the federal government owned a controlling interest (nearly 72 percent) and a blocking interest (61.5 percent), whereas the share of companies in which the federal government owned a majority interest was less than 30 percent. The 2017 ratio was approximately the same between the groups of companies. However, the percentage of JSCs (covered by a new forecast privatization plan) in which the federal government owned a minority interest came out to be the smallest in five years (44.4 percent). Furthermore, although the share of JSCs with a government full ownership interest dropped noticeably, it stood above 50 percent (54.2 percent). By contrast, the share of blocking ownership interest came out to be the biggest (more than 2/3).

An examination of data from the performance measures framework for federal property management, including but not limited to federal level, provides the following results (*Table 5*).

Table 5

Number of public-sector organizations registered with Rosimushchestvo, including its local branches, and with federal property managers of subjects

¹ Excluding 2015, when the share of companies (covered by the privatization program) with a federal government majority ownership stood at 1/3 or less.

**of the Russian Federation in 2013–2014 and number of economic agents
relating government property, 2016–2017 (according to state registration data)
by legal form of business**

Date	Total	SUEs including federal treasury enterprises	Government agencies	Shareholding companies	
				with government ownership interest of more than 50 percent	in which public-sector shareholding companies have ownership interest of more than 50 percent
as of January 1, 2013	67003 ^a	4891	56247	3501	2364
As of July 1, 2013	66131 ^a	4589	56100	3201	2241
as of January 1, 2014	64616 ^a	4408	54699	3097	2412
As of July 1, 2014	63635 ^a	4236	54173	2988	2238
as of January 1, 2016	65587 ^b	4284	56693/56649 ^c	3888 ^d	...
As of July 1, 2016	65218 ^b	3982	56893/56856 ^c	3718 ^d	...
as of January 1, 2017	64457 ^b	3719	56548/56507 ^c	3532 ^d	...
As of July 1, 2017	62655 ^b	3294	55414/55361 ^c	3353 ^d	...

^a including organizations whose state-registered articles of association do not provide specific types, but exclusive of joint-stock companies in which an interest of more than 50 percent is jointly owned by the federal government and foreign companies;

^b including economic agents with a legal form of business other than unitary enterprises, government agencies and shareholding companies (workmen's cooperative associations and consumer cooperatives, associations (unions), condominium associations, funds, public not-for-profit organizations, etc.);

^c exclusive of national science academies and private institutions that are not classified as institutions under the new Framework but must be excluded to ensure a correct comparison;

^d total number of shareholding companies regardless of the amount of government's ownership interest (equity participation), data on the number of shareholding companies with a controlling interest owned by the federal government are only available for JSCs with an interest owned by the federal government;

^e total institutions established by the Russian Federation and subjects of the Russian Federation (excluding national science academies and private institutions that under the new Framework are classified as institutions but must be excluded to ensure a correct comparison).

Source: The Development of Public Sector of Economy in the Russian Federation in 2012 (pp. 7–11), in H1 2013 (pp. 7–11), 2013 (pp. 7–11), in H1 2014 (pp. 7–11), M., Rosstat, 2013–2014, Statistical data on indicators for efficient management of federally owned property, www.gks.ru, March 20, 2016, September 05, 2016, March 20, 2017, September 05, 2017.

The total number of economic agents in federal ownership, under the new framework, stood at about 62.7 thousand by mid-2017, approximately 2.6 thousand (or by 4 percent) less than previous year's number and approximately 1 thousand less than that reported in mid-2014.¹

The number of unitary enterprises decreased from mid-2016 by approximately 700 (or more than 17 percent) for certain categories of economic agents, by more than 350 (or nearly 10 percent) for shareholding companies, by nearly 1.5 thousand (or by 2.6 percent) for government agencies. However, the number of government agencies by mid-2017 still remained bigger than 3 years ago.

An examination of the dynamics over a shorter timeframe shows that in H1 2017 the number of unitary enterprises decreased by 11.4 percent, shareholding companies by more than 5 percent, government agencies by 2 percent.

6.1.2. Privatization policy

The Forecast Plan (Program) for Federal Property Privatization and Guidelines for Federal Property Privatization for 2017–2019 adopted by Russian Government's executive order

¹ Although the recent public sector development bulletin was released for the period of January-September 2014, the semiannual data dated as of July 01, 2014 also can be applied to a medium-term analysis.

No. 227-r dated February 08, 2017 kicked off in the previous year. This was the third privatization program developed given an extension of the scheduled period (from 1 to 3 years) of the Forecast Plan (Program) For Federal Property Privatization based on the spring-2010 amendments to the existing Privatization Act. Updates and amendments were not made on a regular basis. A total of 15 laws and regulations containing amendments were adopted in 2017 (22 in 2014), when the previous 3-year program kicked off, plus three in December 2013).

As a reminder, the new privatization program included seven companies whose privatization was based on special decisions of the Russian President and the Russian Government with due regard to market trends and recommendations of lead investment consultants, including four companies (AO NCSP Group (NCSP), United Grain Company, Prioksky Non-Ferrous Metals Plant (PNFMP), Kristall Production Corporation) in which the federal government plans to cease to hold its stake, and three companies in which the federal government plans to reduce its stake: to 29 percent plus one share in ALROSA and to 25 percent plus one share in Sovkomflot and VTB Bank (PAO). However, no information on pending deals for the companies is available, except that deals were preliminary announced for VTB Bank (PAO), Sovkomflot and NCSP.¹ In his interview in Q1 2018 Head of Rosimushchestvo Dmitry Pristanskov said preparations were underway with regard to Sovkomflot and United Grain Company (the latter is being worked out jointly with The Ministry of Agriculture of Russia), whereas a VTB deal was not on the table yet.²

2017 saw the completion of consolidation of Vnukovo and Sheremetyevo airports that was launched under the previous privatization program of 2014–2016. In late spring 2017, AO Sheremetyevo International Airport (hereinafter AO SIA) was finally reorganized through merger of AO Sheremetyevo Airport to which the federal government previously contributed 83.04 percent of its interest in AO Sheremetyevo International Airport (SIA). The federal government's interest (30.43 percent) in the consolidated operator entered into the list of strategic JSCs. In early fall 2017, the reorganization of AO Vnukovo Airport, AO Vnukovo Invest and OOO AVIATECHINVEST was completed through merger with AO Vnukovo International Airport in which the federal government owns an interest of slightly more than 25 percent.

Apart from that, the year-end results are as follows. According to data from the Federal Budget Execution Progress Report dated as of January 1, 2018 (by source of federal budget deficit internal financing) that was published on the official website of the Federal Treasury of Russia, proceeds from disposition of shares and other forms of equity participation of the federal government amounted to RUB 14284.5 million, that's more than double the federal budget revenues from privatization forecast in the privatization program (RUB 5.6 billion annually, excluding equity shares in biggest companies).

More than half of the amount (RUB 8531.7 million) came from the implementation of Russian Government's executive orders No. 1430-r dated September 02, 2010 and No. 1172-r of June 09, 2016 as well as the terms and conditions stipulated by the Sub-agreement of June 23, 2016 to the Agreement of October 9, 2010 between Rosimushchestvo and PAO FC Sistema concerning a hire purchase (within five years) of USD 777 million worth of 547,312,918 federally owned equity shares in Shyam Teleservices Ltd., a joint venture between Russia-based Sistema Group and Shyam Group of India whose ordinary shares, due to an increase in its equity by a total amount (in Indian Rupees) equivalent to USD 600 million, were

¹ www.rosim.ru, January 26, 2017.

² www.rosim.ru, February 28, 2018.

acquired by the Russian Federation in 2010 under a Russia-India agreement expanding the use of money coming from India's repayment to the Russian Federation for loans that India obtained from the former Soviet Union and from the Russian Federation in 2007, and The Federal Budget Act of 2010–2012. The above deal involving an asset not covered by the existing privatization program became the only deal outside the scope of standard privatization procedures. It is difficult to comment on the deal because assets of this type (with government equity participation in joint ventures) were seldom privatized. Putting aside behind-the-scenes details, the only thing to say is that the amount (more than RUB 8.5 billion) received by the federal government is less than one fifth of USD 777 million, at *the exchange rate quoted as of end-June 2016*.

Excluding the above amount, RUB 5.19 billion worth of 46 shares (interests) in shareholding companies (JSCs) were sold In 2017, and decisions on terms of privatization were made with regard to 18 federal state unitary enterprises (FSUEs). The number of sold shares (interests) in shareholding companies was almost one fourth as much as that (179) in 2016, below the pre-crisis level of 2009 (52 companies), the lowest in the 2000s. More than three thirds (36) of the overall sold shares were specified in tender announcements made back in 2016. The amount of deals (RUB 5.19 billion) fell less dramatically (45 percent) but was below annual figures posted over the previous three years (RUB 8.0 billion in 2014, RUB 7.3 billion in 2015, RUB 9.5 billion in 2016). The number of privatized FSUEs also came out to be less than the lowest amount (26) seen in 2013 (*Table 6*).

Table 6

Comparative data on dynamics of privatization of FSUEs and federally owned shares, 2008–2017

Period	Number of privatized federally owned enterprises (federal property) (according to data from Rosimushchestvo)		
	Privatized FSUEs, quantity	sold equity shares in JSCs, quantity	sold federal treasury properties, quantity
2008	213	209 ^b	...
2009	316+256 ^c	52 ^b	...
2010	62	134 ^b	...
2008–2010	591+256 ^c	395 ^b	... ^d
2011	143	317 ^e /359 ^b	3
2012	47 ^f	265 ^f	40
2013	26	148 ^f	22
2011–2013	216	730 ^e	65
2014	33	107 ^e	12
2015	35 ^e	103 ^e	38
2016	60 ^e	179 ^e	282
2014–2016	125 ^e	389 ^e	332
2017	18	46 ^b	77 ^b

^a all preparatory works were completed and decisions on terms of privatization made;

^b including shares (incl. federal treasury properties for 2017) announced for sale in the previous year;

^c the number of FSUEs where the public-offer decision was made by the Ministry of Defense of Russia in addition to those where the same decision was made by Rosimushchestvo;

^d the available information on disposition of other assets in the specified period is reduced to four military immovable properties in the period between October 2008 and January 2009, as well as decisions made on terms of privatization and on publication of tender announcements in late 2010, for which bidding results were summarized in 2011;

^e excluding disposition of shares with investment consultants' assistance;

^f estimated value based on data from the Rosimushchestvo's Report on Execution of the Forecast Plan (Program) For Federal Property Privatization 2011–2013 with regard to the total number (216) of FSUEs where executive orders on terms of public-offer privatization were issued in 2011–2013, and on the year-end data for 2011 and 2013;

⁸ with regard to certain enterprises where decisions on terms of privatization were revoked in 2015–2016 and then made again; therefore the total number of FSUEs where privatization decisions were made during three separate years is somewhat bigger than that shown in the tabular year-end data for 2014–2016 (125).

Source: Rosimushchestvo's Performance Report in 2008; Report on Execution of the Forecast Plan (Program) For Federal Property Privatization za 2009, M., 2010; Ministry of Economic Development's Final Report for Federal Property Privatization in 2010; The Ministry of Economic Development's 2011 Final Report for Federal Property Privatization; The Report on Execution of the Forecast Plan (Program) For Federal Property Privatization 2011–2013; The Report on Execution of the Forecast Plan (Program) For Federal Property Privatization 2014–2016 in 2014, www.rosim.ru, February 19, 2015; The Report on Execution of the Forecast Plan (Program) For Federal Property Privatization 2014–2016 in 2015, www.rosim.ru, February 08, 2016, Report on Execution of the Forecast Plan (Program) For Federal Property Privatization 2014–2016 in 2016; The Report on Execution of the Forecast Plan (Program) for Federal Property Privatization 2017–2019 in 2017.

The biggest deal was disposition of 100 percent interest (RUB 1515 million) in AO Shyolkovsky Factory of Secondary Precious Metals (Moscow Oblast). The deal was conducted by AO The Auction House of the Russian Federation (AHRF), including four bidders that took 602 steps to raise the price by one fourth to RUB 301 million.¹ The top-5 sales also included a Moscow-based printing house (RUB 1115.5 million), Novosibirsk Refinery Plant (RUB 880 million), Skochinsky Mining Institute (Moscow Oblast, RUB 354 million), Moscow Central Multi-Corporate Enterprise of Construction Engineering Research (RUB 202.2 million). Therefore, more than 60 percent of revenues from standard disposition of equity shares in JSCs operating within the Moscow metropolitan area, where real-estate ownership per se provides ample income opportunities apart from (or instead of) core business activities.

Disposition of 17 shares (out of the 65 shares offered) worth RUB 4.84 billion (93.3 percent of total revenues) in AO RAD contributed most to the final outputs. The 2017 year-end total amount of deals is comparable with that (RUB 5.3 billion) seen in 2015, but the number of sold shares halved (17 from 34). Final results of disposition of equity shares in 38 JSCs including 20 JSCs whose shares were sold by independent sellers (AO RAD, OOO VEB Capital) are expected to be summarized in Q1 2018.

In 2017, the number of sold federal treasury properties (77), which, like in the previous year, was bigger than the number sold shares (interest) in shareholding companies, decreased by nearly 3.7 times from 2016 (282), doubling the number (38) seen in 2015. Similar to shares (interests), however, the overwhelming share (67) of sold properties included properties announced for sale in 2016.

At the same time, announcements of disposition of 204 properties were published in 2017, 10 of which were sold, whereas bidding for 69 properties was declared void, and sales results for another 125 are to be summarized in Q1 2018. Therefore, excluding the most recent large group, the sales were less than 13 percent successful. Total amount of deals decreased by 4.5 times (to RUB 282.67 million). Unlike with shares (stakes), independent sellers play a supplementary role in selling federal treasury properties. AO RAD sold only 9 (RUB 28.60 million) out of the 56 properties it was entitled to sell, thereby contributing only 10 percent to the final outputs.

In 2017, Rosimushchestvo took measures to establish and expand 13 vertically-integrated companies in pursuance of Russian President's executive orders (18) and Russian Government's decisions (6) on the establishment/expansion of vertically-integrated companies. In this respect, 36 FSUEs, equity shares in 44 JSCs and in 10 federal treasury properties were

¹ www.rosim.ru, March 22, 2017.

included in the 3-year privatization program. As of 2016 year-end, decisions on terms of privatization were made for 14 FSUEs, 38 JSCs and one federal treasury property.

The last year's slump in privatization dynamics is explained in part by relatively late adoption of a forecast plan (program); therefore it was not until the middle of Q1 2017 that asset evaluation and presale preparations were started.

The key reason, however, was lack of adequate demand, particularly at local level, as was acknowledged by Rosimushchestvo's managers in the middle of the fall of 2017.¹ Approximately 60 percent of failed auctions were due to lack of bids (126 out of 209 (total sales) in 2017). Most of the privatized assets were low liquid assets with restricted sales opportunities because of weak financial standing, pre-bankruptcy, lack of actual business operations, and a gap between offered prices and potential purchase estimates.

Transition to a new sales mechanism whereby sales arranger's services are paid by buyers (not out of the federal budget) and deals are conducted only in electronic format (via six platforms selected in late 2015) possibly played a certain role as well. Lots are distributed between them in an open manner, in random order at meetings of a core committee. In order to increase transparency, lots are distributed in presence of authorized representatives of each electronic platform as well as representatives of the Federal Antimonopoly Service of the Russian Federation (FAS) and the Ministry of Economic Development of Russia. Assets are sold in different formats in accordance with key forms of privatization (auctions, public offering and Dutch auctions). Natural persons and corporate entities across the country can participate in sales that are held on platforms well known for purchasers.

Neither the previous year's Federal Budget Act nor the 2018–2020 Federal Budget Act No. 362-FZ of December 5, 2017, including the schedules thereto, provide explicit information on the amount of revenues from privatization. In addition, an explanatory note to a federal government's bill specified revenues from federal property privatization and public borrowings as separate sources of financing of the federal budget deficit. As distinct from previous years' bills, the 2017 federal budget bill and some of the documents attached thereto contained data from the Forecast Plan (Program) For Federal Property Privatization that underpinned the forecast for federal budget revenues from privatization. The same data were provided in the explanatory note and in estimates for the breakdown of budget deficit sources of financing.

Federal budget revenues from federal property privatization are projected at RUB 13.0 billion in 2018, RUB 12.2 billion in 2019, RUB 11.4 billion in 2020. They will represent the least possible contribution to the federal budget deficit financing: revenues from privatization are projected at 1.7 percent of fundraising via public borrowings in 2018, 1.5 and 1.1 percent in 2019 and 2020, respectively. The values for 2018–2019 are less than forecast proceeds from disposition of federal property, excluding equity shares in biggest companies specified in documents attached to the Federal Budget Bill for 2017 and the Planning Period of 2018–2019 that was submitted by the Russian Government in fall 2017 (RUB 13.6 billion in 2018 and RUB 13.9 billion in 2019).

According to the 2017 outputs of the ongoing Forecast Plan (Program) For Federal Property Privatization, it's highly likely that the foregoing projection for revenues from privatization will be correct. According to data from federal budget reports, the amount of proceeds from disposition of shares and other forms of government equity participation (RUB 14.3 billion) is higher than the amount projected for 2018–2020.

¹ www.rosim.ru, October 19, 2017.

The projected federal budget revenues from privatization are based on the Privatization Program for 2017–2019 adopted in early 2017 by Russian Government’s executive order No. 227 that announced privatization of seven biggest companies in accordance with decisions of the Russian President and the Russian Government when establishing specific dates and procedures with consideration for market trends and recommendations of lead investment consultants. The Russian Government has made no decisions on disposition of blocks of equity shares in biggest companies in 2018–2020; therefore there are no projections for proceeds from disposition of such blocks of shares in 2018 and in the planning period of 2019–2020, according to Rosimushchestvo.

6.1.3. Amendments to privatization laws and regulations

The past year was marked by major amendments to privatization laws and regulations.

In July 2017, the Privatization Act in force since 2001 underwent a drastic amendment regarding the list of purchasers of federal and municipal property (Article 5 thereof). The stop list of purchasers was extended. Prior to the amendment, only federal and municipal unitary enterprises and agencies, corporate entities in which the Russian Federation, subjects of the Russian Federation and municipalities own an interest of more than 25 percent, except when federal and municipal property are contributed to the charter capital of companies, could be deemed to be eligible to purchase federal and municipal property. Under the new amendment, purchasers also can be corporate entities registered in nations or territories included in the Finance Ministry’s list of nations and territories that offer easy tax terms and/or do not disclose/provide information concerning financial operations (offshore zones) (hereinafter offshore companies)¹, as well as corporate entities controlled by an offshore company or by a group of persons running an offshore company. The terms “group of persons” and “control” are applied within the meaning of Articles 9 and 11 of the Competition Protection Act 2006.

The federal government thus used in part its recently debated endeavors to tighten privatization regulations.² New restrictions were imposed on purchasers of federal or municipal property announced for sale on the official website and defined since July 1, 2017 by the Russian Government³ in compliance with amendments to the Act 2008 Concerning Procedures for Foreign Investment in Economic Facilities of Strategic Importance for National Defense and Security (No. 57-FZ). According to Rosimushchestvo’s representatives, the task set by the Russian President in early 2016 to find new owners of privatized assets within the Russian jurisdiction and to prevent further offshorization of the Russian economy was thus been accomplished. A legal mechanism is under elaboration to prevent, through disclosure of data on beneficiaries, “nominal” corporate entities from participating in privatization.⁴

Another last year’s critical amendment was a provision adopted by Russian Government’s executive order No. 748 dated June 26, 2017 with regard to selection of legal entities for

¹ The list contains 40 countries. Cyprus, a traditional in recent 25 years source of pseudo-foreign investment for the Russian economy, was, however, removed from the list in 2012.

² See Gaidar Institute’s annual reviews: *Russia’s Economy in 2014: Trends and Outlooks (Issue 36)*. M., 2015, p. 393 and *Russia’s Economy in 2015: Trends and Outlooks (Issue 37)*. M., 2015, p. 388.

However, other proposed regulations regarding law-enforcement agencies’ powers to check on bidders in privatization deals and the liability of valuers have not been enacted yet.

³ www.torgi.gov.ru

⁴ www.rosim.ru, October 18, 2017.

arranging on behalf of the Russian Federation disposition of privatized federal property and/or exercise the seller functions.

The cumbersome selection procedure includes decisions on selection and establishment of a selection committee, plus a two-stage selection procedure.

A pivotal role in the process is assigned to the Ministry of Economic Development which in pursuance of orders and instructions of the Russian President or the Russian Government decides to launch a selection procedure approved by an order specifying federally owned properties that are planned to be privatized, the composition (including not less than five members of the Ministry¹) of the selection committee led by a chairperson in the capacity of deputy minister. Another essential role is assigned to the committee secretary in charge of collecting bids from corporate entities, drafting and publishing of tender announcements. Persons having personal interest in final selection results, or persons affiliated with bidders may not be members of the committee.

The selection committee shall take all decisions by open ballot recorded in the minutes thereto. Decisions shall be deemed taken when approved by more than half of the members votes cast. In the event of a tie, the chair of a committee meeting or, in his/her absence, the deputy chair shall be entitled to a casting vote.

Where selection is made with regard to federally owned properties specified in Section II of the privatization program and intended for disposition through auction, through public offering (if the auction is declared void), including in electronic format, the Ministry of Economic Development shall attach to its executive order information on disposition of such federally owned properties via specified channels. The property included in Section II of the Forecast Plan can be grouped into lots.

In pursuance of instructions and orders of the Russian President or the Russian Government, the Ministry of Economic Development may decide to terminate the selection procedure in any stage and publish a notice thereof on the Ministry's official website. Should corporate entities have questions regarding the selection procedure, they shall send their requests to the Ministry of Economic Development which shall respond thereto within three working days.

The initial stage of selection procedure includes collection of information on potential candidates for the purpose of federal property disposition and formalized comparison of their professional and qualification level on a score-based ranking.

Within 5 working days of the date of decision to start a selection procedure, the Ministry of Economic Development shall publish a notice thereof on its official website and send a letter of invitation by mail (the letter may be sent via e-mail or by fax) with attached draft agency agreement to be concluded with a corporate entity. Where the selection date is postponed, as shall be recorded in the minutes thereto, the selection committee shall publish a notice thereof on the Ministry's official website and communicate thereof to corporate entities by phone, fax or via e-mail.

Applications for participation in the selection procedure must be accepted within at least 15 calendar days. Corporate entities shall submit their applications in the manner and within the period prescribed by the notice published on the Ministry's official website and by the letter of invitation.

Corporate entity's application for participation in the selection procedure must include its obligations to: (1) sign an agent agreement with Rosimushchestvo; (2) conduct fair market

¹ Rosimushchestvo's representatives can be engaged to participate in the committee.

valuation of federal property by a valuator under an agreement between the agent and the valuator on behalf and at the expense of the agent; (3) obtain on its own behalf and for its own account an expert report of a self-regulatory asset valuator on whether the market valuation report meets Russia's legal requirements and the valuation of equity shares is correct; (4) sign on behalf of the Russian Federation a purchase/sale agreement with purchasers of privatized federal property under the terms and conditions set forth in the agency agreement; (5) present a report on possible deal structuring that could maximize federal budget revenues.

Applications for participation in the selection procedure (apart from the attached letter of interest regarding organization on the federal government's behalf of disposition of privatized federal property and/or acting in the capacity of seller and documents authorizing a person in question to sign on behalf of the corporate entity an application for participation in the selection procedure) are based on information presented in two standard formats of presentation of information of interest¹ signed by an authorized person. The information underpins corporate entity's scores in further ranking for selection purposes.

A corporate entity shall be liable for the authenticity of the information presented in the application for participation in the selection procedure. Where the information proves incorrect, the Ministry of Economic Development shall submit to the Russian Government a draft note to take the corporate entity off the list approved in 2010 and updated in 2017 (comprising 23 organizations). Corporate entities can modify or withdraw their applications, as shall be deemed valid at any period time before the expiration of the time limit for the *submission thereof* to the Ministry of Economic Development.

Envelopes with applications for participation in the selection procedure shall be opened at a meeting of the selection committee on the selection date specified in the notice thereof, as shall be recorded on the same date in the selection final protocol. Within 10 working days of the date of opening of envelopes with applications for participation in the selection procedure, the committee shall check on whether the applications meet the existing presentation requirements and corporate entities shall be ranked according to their scores.

Scores are determined (calculated) by indicators for the assessment of proposals of interest in two standard forms.

As prescribed by **Form 1**, scores are calculated *by three blocks of indicators*:

(I) corporate entity's qualifications and past experience;

(II) the composition of a team of corporate entity's personnel, as well as other natural and corporate entities engaged to participate in organization of disposition of property, that will prepare and organize the disposition of property;

(III) corporate entity's past experience in cooperation with government agencies.

A specific set of criteria is applied to each of the foregoing blocks. Blocks I and III refer to the number and the amount (USD in millions) of various deals in which a corporate entity was

¹ Where selection concerns federal properties listed in Section II of the privatization program, information about a corporate entity shall be presented as prescribed by Form 2.

previously involved (as a global coordinator, bookrunner¹ (underwriter)², lead organizer, consultant³).⁴

Block I includes four criteria: (1) corporate entity's (preparation and management of) equity offering deals in international markets in recent 3 years⁵ (excluding its own shares); (2) preparation and management of deals involving equity shares in Russian companies in recent five years (excluding shares in the corporate entity)⁶; (3) preparation and management of deals involving equity shares and other securities of companies operating in the core industry of federal property⁷; (4) participation (if any) in managing deals involving equity shares and other securities of federally owned properties.⁸

Block III includes two criteria: (1) cooperation with foreign governments (or government agencies acting on the authority of foreign governments) in organization of privatization deals and/or equity/securities offering⁹; (2) cooperation with the Russian Government, administrations of subjects of the Russian Federation (or government agencies acting on the authority of such administrations) in organization of privatization deals or equity/securities offering in recent five years.¹⁰

Block II includes five criteria: (1) persons (3 or less) in charge of organization and coordination of deals at top level (senior managers) who can, among other things, attend meetings with the seller and the issuer; (2) industry-specific bankers (availability of bankers

¹ Bookrunner is a firm involved in book building. The term is applied for investment purposes. Bookrunner can be underwriter, arranger and/or lead-manager, that is, normally an investment bank or company.

² According to all the criteria set forth in Blocks I and III with regard to the role of bookrunner, the indicator for transaction volume per corporate entity must be calculated by dividing total transaction volume by the number of bookrunners involved in the deal.

³ According to all the criteria set forth in Blocks I and III, where the corporate entity is acting as consultant, all M&A deals for various groups of companies must be specified.

⁴ Only one role per deal can be specified. Only closed deals must be specified, and information must be based on data from independent rating agencies (Dealogic, Bloomberg (if no data available from Dealogic), Mergermarket (where information on M&A deals is presented) with obligatory reference to the source).

⁵ The role of global coordinator, or bookrunner (underwriter) in offering shares (of both Russian and foreign issuers) in international markets.

⁶ The role of global coordinator, or bookrunner (underwriter) in offering shares of Russian issuers (incorporated both in and outside Russia), consultant on M&A deals with Russian companies (incorporated in/outside Russia).

⁷ The role of global coordinator, or bookrunner (underwriter) in offering equity in companies operating in the core industry of federal property, lead arranger and/or bookrunner deals involving issuance of corporate bonds of companies operating in the core industry of federal property, consultant on M&A deals in the core industry of federal property.

⁸ The role of global coordinator, or bookrunner (underwriter) in corporate equity shares offering, lead arranger and/or bookrunner in corporate bonds offering. By contrast to the above criteria, there is no requirement to calculate the transaction volume for a specific corporate entity by dividing total transaction volume by the number of bookrunners involved in the deal. As to the role of consultant, all the M&A deals that were made in the interests of the company must be specified.

⁹ The role of global coordinator, or bookrunner (underwriter) in privatization via offering of equity shares and/or depository receipts directly owned by the federal government, in managing equity offering and/or depository receipts of companies with government equity participation (apart from securities directly owned by the government), the role of lead arranger and/or bookrunner in managing the issuance of sovereign bonds, consultant in privatization through mergers and acquisitions.

¹⁰ The role of global coordinator, or bookrunner (underwriter) in privatization via offering equity shares and/or depository receipts directly owned by the federal government, in managing equity offering and/or depository receipts of companies with government equity participation (apart from securities directly owned by the government), the role of lead arranger and/or bookrunner in managing the issuance of sovereign bonds, consultant in privatization through mergers and acquisitions.

specializing in the industry that will be involved in the deal); (3) specialists of equity capital markets (availability of specialists of equity capital markets that will be involved in the deal);¹ (4) analytical unit (availability of personnel to provide analytical services for the company, sector-specific analysts of Extel and/or Institutional investor rankings); (5) specialists of trading in stocks and/or government bonds of Russian companies who will be involved in the deal (including their geographical distribution in bank offices).²

A set of assessment indicators for proposals of interest, as prescribed by Form 2, is much more moderate regarding selection of federal property included in Section II of the privatization program, and therefore standard procedures are applied to disposition of such federal property.

Block I includes only two criteria: (1) persons (3 or less) in charge of organization and coordination of deals at top level (senior managers); (2) analytical unit (personnel who will provide analytical services for the company (specifying the personnel's past experience in an attachment thereto)).

Block II includes a single criterion: cooperation with the Russian Government, administrations of subjects of the Russian Federation (or government agencies acting on their authority) in organizing privatization deals in recent five years (specifying all deals in which the corporate entity was involved as tender arranger (seller) in privatization of federal property, and total sales volume (in million of rubles)).

Scores based on assessment indicators for proposals of interest are calculated by special formulas, where a corporate entity is scored against each criterion and scores represent a sum of imputed values reflecting the results achieved while performing various roles based on past experience and qualification potential.

The said imputed values are calculated as the ratio of the indicator (e.g., the number of deals, total volume of completed sales, total staff), specified in the information attached to the application of a specific corporate entity, to the highest value of the indicator for a particular role, with allowance for respective coefficient, specified in applications for participation in selection procedure submitted by corporate entities.

Assessment indicators for proposals of interest include values of coefficients as prescribed by both forms for all the aforementioned criteria (specifying the highest score per each of them).

In both forms, the resulting score is calculated as a sum of all scores for blocks of assessment indicators for proposals of interest.

Not more than 5 corporate entities with highest scores that make them eligible for the second stage selection procedure shall be selected based on the final calculation of assessment indicators. Where corporate entities have submitted four or less proposals with regard to the same privatized federal property, assessment indicators shall not be calculated and such persons shall be qualified for *the second stage selection procedure*.

Within 10 working days from the date of selection committee's final protocol for applications for participation in the selection procedure the Ministry of Economic Development shall send by mail (or in e-document format) a decreasing coefficient request to corporate entities qualified for the second stage selection procedure.

¹ Criteria (2) and (3) include, apart from respective specialists, the Russian office (specifying, in a schedule thereto, offices located around the globe), the Russian language skills, key personnel (3 or less) who will manage the deal on a daily basis (including participation in meetings with seller's representatives).

² The schedule for all groups of engaged personnel (except those involved in disposition of equity shares) contains their past experience, proper nominations for sector analysts, as well as details for senior managers, when necessary.

The decreasing coefficient ranges within 1 and 0 and is applied to fee caps for organization on the federal government's behalf of disposition of privatized federal property and/or acting in the capacity of seller. Where a deal is conducted through auction, public offering or public listing, the fee cap may not be more than 2 percent, and, as the case may be, 1 percent. The fee includes all required corporate costs including fees paid to engaged corporate entities and mandatory payments under the Tax Code of the Russian Federation.

Corporate entities shall submit their decreasing coefficient bid in the manner and within the period prescribed by the decreasing coefficient request (not less than within 2 working days). Bids shall contain a letter in which corporate entities shall specify the amount of decreasing coefficient (including the amount in words) and which shall be delivered inside a separate sealed envelope. Like in the initial stage, corporate entities can modify or withdraw their bids at any period of time before the expiration of the time limit for the submission thereof to the Ministry of Economic Development.

Envelopes with decreasing coefficient bids shall be opened at a meeting of the selection committee on the first working day following the date of expiration of the time limit for the submission thereof. A final bid opening protocol shall be issued, containing the name of the winner, that is, a corporate entity with the lowest decreasing coefficient bid.

Where all bids contain the same decreasing coefficient, the selection committee shall decide to send another request to corporate entities to submit their decreasing coefficient bids.

The notice of final selection results shall be posted on the official website of the Ministry within 3 working days from the date of signing of the final bid opening protocol by the chair of the selection committee.

Based on the selection results, the Ministry of Economic Development shall prepare and submit to the Russian Government draft decisions to engage a corporate entity to arrange on the federal government's behalf disposition of privatized federal property and/or to exercise seller functions, and shall pay the corporate entity a fee for the foregoing services. The Russian Government shall include the following information in a draft decision: (a) the name of federally owned properties intended for privatization, (b) the winner's name, (c) the fee paid to the winner.

Obviously the proposed mechanism is an attempt to bridge one of the most serious gaps emerged in the regulatory and legal framework after a package of major amendments to Privatization Act was adopted late in spring 2010.

As a reminder, one of the attempts entitled the Russian Government to engage corporate entities to arrange disposition of privatized property. This actually referred, on the one hand, to engagement of investment consultants to organize deals involving disposition of equity shares in biggest companies specified in Section I of the privatization program, i.e. sales according to tailor-made schemes based on separate decisions, and on the other hand, engagement of private sellers to sell properties specified in Section II of the privatization program, and therefore standard procedures are applied to the disposition of such federal property.

The selection of the former and the latter has not been governed by any regulation to date.

In 2010, the Russian Government adopted a list of 23 corporate entities to be engaged to organize on the federal government's behalf disposition of privatized federal property and/or to act in the capacity of seller, of which the Ministry of Economic Development was in charge of the selection procedure. More than half of the listed companies are biggest foreign investment banks and companies: (Credit Suisse (Moscow), BNP Paribas Bank, Royal Bank of Scotland, Citigroup Global Markets, Unicredit Securities, SG Corporate Finance Advisory, Deutsche

Bank, J.P. Morgan Bank International, Merrill Lynch Securities, Morgan Stanley, Barclays Capital, Raiffeisen Investment, UBS, a branch of private LLC GOLDMAN SACHS (Russia)). The Russian business was represented by banks (Sberbank, VTB Capital, Alfa-Bank, Gazprombank, MDM Bank) as well as other finance institutions (investment companies VEB Capital and Troika Dialog, Renaissance Broker Limited, OAO The Auction House of the Russian Federation). Sberbank was taken off the list in 2012, which nevertheless could conduct the respective activity via ZAO Sberbank CIB (formerly known as Troika Dialog).

Organizers for tailor-made deals in the course of 3-year privatization programs in 2011–2013 and in 2014–2016 were selected from the list. While less than a half of such deals (6 out of 13) were completed exclusively by Russian organizations in the course of the privatization program in 2011–2013¹, they played a key part under new conditions in the course of the privatization program in 2014–2016. In 2013, OAO The Auction House of the Russian Federation started acting as seller in disposition of property according to standard procedures. Furthermore, in 2014–2016 independent sellers (The Auction House of the Russian Federation and OOO VEB Capital) represented more than half of total proceeds (apart from biggest sales).

An updated version of the list was adopted shortly after approval of the aforementioned provision on selection of legal entities by Russian Government's executive order No. 1497-r dated July 14, 2017. The list continued to include 23 companies although their composition underwent drastic changes. Five corporate entities were taken off the list, most of which represented foreign capital (Deutsche Bank, Royal Bank of Scotland, Barclays Capital, SG Corporate Finance Advisory, as well as Russian MDM Bank), and representative offices of another three foreign entities changed their legal form.² At the same time, the list was extended to include PAO ROSBANK, Ernst & Young Valuation and Advisory Services LLC, ATON, AO RAEX Expert Agency, MEF-Audit Auditing and Consulting Group, Solid Financial House. Therefore, there was a shift toward Russian organizations, most of which were private nonbank entities.

Moving on to an analysis of legal entities selection to arrange on behalf of the Russian Federation disposition of privatized federal property and/or exercise the functions of seller, it's worth noticing that the proposed system built upon a combination of the initial selection focused on professional and qualification potential and the ultimate selection focused on the best bid of potential bidders has right to exist.

There is a whole host of drawbacks though.

First, the selection only can be applied to the list of 23 corporate entities.

Second, there is unsettled issue with respect to selection of privatized property for disposition under tailor-made schemes and otherwise, that is, distribution between Sections I and II of the privatization program. According to standard property disposition procedures, properties can be grouped into lots, but there are no well-defined grounds for the grouping.

Third, indicators for presentation of information of interest as prescribed by Form 1 (Block I (information of corporate entity's past experience)) upon the criterion of company's participation (if any) in management of deals involving equity shares and other federally owned securities of contain no confirmation requirement based on data from independent rating

¹ Foreign finance institutions otherwise acted as agents, although subsidiaries and affiliates of privatized companies participated in particular cases (for example, Sberbank in 2012 and VTB in 2013).

² Raiffeisen Bank, Citibank and Unicredit Bank replaced their respective finance companies.

agencies. The same holds true past experience in cooperation with government agencies of both forms of presentation of information of interest.¹

Fourth, indicators for presentation of information of interest as prescribed by Form 1 (Block 2 (the composition of corporate entity's team as well as other natural and corporate entities engaged to arrange disposition of property that will be involved in the preparation and disposition of properties) contain no past experience requirement with regard to Russian equity sales specialists as opposed to all other groups of specialists.

Fifth, there are questions to be answered regarding the degree of objectivity with regard to coefficients used for calculations, criteria-based highest scores, rating agencies' data as a source of information.

Sixth, there are many questions to be answered regarding the second-stage selection scheme in particular.

The Program lacks a well-defined fee cap, albeit some amounts (in percentage terms) are applied, for organization on the federal government's behalf of disposition of privatized federal property and/or acting in the capacity of seller.

It is unclear why the decreasing coefficient criterion applied to the fee cap is preferred to the classic price format applied to government procurement. The selection of the winner as a corporate entity that offers the lowest decreasing coefficient is even more controversial.

In general, considering that the July 2016 amendments to the Privatization Act established that the fee of specified corporate entities must be excluded from the price of federal property disposition and instead must be covered by the auction winner or through public offering on top of the fee, it is not at all obvious that the federal government should regulate the fee because the federal budget has ceased to be a source thereof. Under Article 6 thereof, however, the fee at the expense of the buyer is mentioned within the context of auction and public offering, thereby raising an important question about whether this regulation refers to disposition of property under tailor-made schemes based on separate decisions, and therefore the property is included in Section I of the privatization program.

Seventh, apart from apparent complexity of the selection mechanism as a whole, there is noticeable well-known contrast to the overall commitment to digitalization of managerial procedures: electronic sales and interconnection are mentioned among other things, regular mail and means of telephone communication can be used, the envelope opening plays a pivotal role.

In pursuance of the foregoing document, Russian Government's executive order No. 1720-r dated August 10, 2017 established a list of 65 JSCs whose blocks of equity shares are to be transferred to AO The Auction House of the Russian Federation (AHRF), a company 5-year experience, for disposition through auction and public offering (if the auction is declared void), with services paid under the new scheme.

The agent fee for managing and arranging disposition of equity shares must be excluded from the price of disposition of equity shares and instead must be paid by the winner² on top of the purchase price of privatized equity shares to agent's account within 5 working days from

¹ In Form 1, this applies only to the criterion regarding cooperation with administrations of subjects of the Russian Federation (or government agencies acting on the authority of such administrations) in organization of privatization deals or equity/securities offering in recent 5 years.

² However, the agent fee for disposition of unsold blocks of equity shares included in the list approved by Russian government's executive order No. 1419-r dated July 29, 2014 continued to be covered by federal budget appropriations.

the date of disposition of equity shares in joint-stock companies to the amount established for each block of equity shares.

A 2 percent fee, measured as a percentage of the offering price, is paid for the overwhelming majority of 65 blocks of equity shares, except a 1.9 percent fee for 3 blocks, 1.89 percent for 2 blocks, 1.95 percent for one block of equity shares, with the lowest fee of 0.889 percent for AO Almazny Mir that was previously included in the privatization program in 2011–2013 (Section I). In 2015, an auction for a block of equity shares in AO Almazny Mir was suspended due to the imposition of interim measures in the course of arbitration proceedings in a third-party dispute between private shareholders. However, there is no information available on the selection of AO RAD under the new provision on selection of corporate entities to arrange on the federal government's behalf disposition of privatized federal property and/or to act in the capacity of seller.

In pursuance of the provision, Rosimushchestvo prepared and submitted to the Ministry of Economic Development proposals regarding 170 blocks of equity shares in JSCs covered by the ongoing privatization program to be further transferred to corporate entities authorized to act in the capacity of seller on the federal government's behalf for the purpose of privatization measures.

AO The Auction House of the Russian Federation and Limited Liability Company "Investment Company of Vnesheconombank" (VEB Capital) were announced the winners out of 147 shareholding companies selected by the Ministry of Economic Development, and therefore the Russian Government will be recommended to appoint the foregoing companies as sole contractors under a government contract for arrangement and disposition on the federal government's behalf of the federal property in question. Similarly, three companies (AO RAD and VEB Capital as well as AO RAEX Expert Agency) were selected with regard to 391 out of the 620 federal treasury properties proposed by Rosimushchestvo.

Various existing laws and regulations governing the privatization process were updated and amended by Russian Government's executive order No. 1164 dated September 26, 2017, including a provision on disposition of federal and municipal properties through auction, dedicated auction, public offering, sales with no price offer, as well as arrangement and disposition of federal or municipal property in electronic format.

Basically, the amendments intend to make it possible at regional and municipal levels to engage corporate entities to act in the capacity of seller under agreements on a competitive basis. New regulations were introduced to govern the relationship between them and bidders (tender guarantee¹ and its confirmation, imposition of sanctions for failure to comply with the transfer time limits, for winner's avoidance or refusal to enter into a purchase/sale agreement at a set date, information support, etc.).

Furthermore, regarding the improvement of privatization laws and regulations, Rosimushchestvo prepared amendments to the existing regulatory and legal framework (the

¹ Where corporate entities are engaged to sell properties through auction, public offering and in electronic format, the tender guarantee is to be credited to one of the accounts specified in the notice and opened with two and more credit institutions that meet the requirements set forth by Article 2 of Act No. 213-FZ dated July 21, 2014 "On Opening of Bank Accounts and Letters of Credit, on Conclusion of Bank Deposit Agreements, Agreements on *Securities Holders Register* Maintenance by Shareholding Companies that are of Strategic Importance for the Military-Industrial Complex and the National Security of the Russian Federation, and Amendments to Certain Legal Acts of the Russian Federation."

Privatization Act, the Land Code and the provision on federal or municipal property tender) with regard to privatization of cultural heritage buildings/sites.

The key amendments intend to:

- refine the procedure of privatization of cultural heritage buildings/sites;
- provide an opportunity of privatization of cultural heritage buildings/sites in bad condition, save for the underlying land;
- impose extra requirements to confirm potential buyer's solvency.

The foregoing package is now under consideration by various federal executive authorities.

6.1.4. Administration of public-sector entities

The list of strategically important companies and joint-stock companies underwent changes in 2017.

The list was extended to include FSUE (Russian National Guard's FSUE Okhrana) and AO (VO Safety). Twelve FSUEs were taken off the list, of which six companies (including Kaliningrad Fishing Seaport, while the rest of them are related to the nuclear industry, the defense industry and air traffic control) will merge with other unitary enterprises, five companies will be incorporated into JSCs whose equity shares will be transferred as government asset contribution to government corporations (GCs) (GC Rosatom – 4¹, GC Rostec with a follow-up contribution to the charter capital of AO Concern Avtomatika – 1), and one company (Almazjuvelirexport Foreign Economic Association) will be incorporated into JSCs with the 100 percent government ownership interest.

There were another two essential entries to the list of strategically important companies: a 88.04 percent increase in the threshold of federal corporate control in PAO Rosseti Federal Grid Company and a 30.43 percent in Sheremetyevo International Airport (SIA). That was the third increase in the federal corporate control in the former (54.52 percent in 2012, 61.7 percent in 2013 and 85.31 percent in 2015), and the SIA is in a final stage of consolidation of its assets within the Moscow Aviation Hub.

The federal government's equity interest in AO Sheremetyevo International Airport was fixed at the end of reorganization, as was prescribed in 2015 by a presidential executive order that established the overall fix scheme. As a reminder, in 2015, the federally owned interest was lowered to an insignificant value (compared with 50 percent plus one share in 2011 and the original 100 percent). The reorganization of AO SIA includes merger of AO Sheremetyevo Airport established in 2016, to which the federal government contributed the main block of equity shares in AO Sheremetyevo International Airport (SIA), accounting for 83.04 percent of the total.

During 2017, Rosimushchestvo conducted policies to establish integrated entities where critical expansion decisions (through presidential executive orders) were previously issued (the transition of GC Rostec blocks of equity shares in Uralvagonzavod Corporation and equity shares in a few joint-stock companies, the charter capital of AO ROSNEFTEGAZ increased to include federally owned interest in 10 JSCs including six industry-specific research and development organizations, while the charter capital of PAO Transneft grew to include seven federally owned immovable properties and 625 land parcels).

¹ On top of that, this government corporation is planned to receive an asset contribution of a full (100%) ownership interest in another two JSCs established through reorganization of FSUEs not listed in the list of strategically important companies.

The contribution of a federally owned (100 percent) interest in Bank “Rossiysky Capital” (PAO) to the charter capital of AO Agency for Housing Mortgage Lending (AHML) deserves a separate notice. Under the Federal Budget Act of 2017–2019 (Article 21, Paragraphs 11 and 14), the Russian Government is entitled to transfer from the Deposit Insurance Agency (DIA) to the Federal Treasury all common and preferred shares of Bank “Rossiysky Capital” (a publicly-traded company) owned and/or acquired by DIA in 2017 at the price such shares were purchased by DIA (book value) and contribute them to the charter capital of AHML by reducing government’s asset contributions under the federal budget acts of 2008–2010 and 2014–2016 to the tune of up to RUB 92 billion.

Moving on to the issue of governance of shareholding companies with government’s ownership interest, a high performance discipline (97 percent) of annual general meetings of shareholders in the 2016 corporate year is noteworthy. Annual general meetings were held in all the JSCs listed in the special list adopted by Russian Government’s executive order No. 91-r dated January 23, 2003, where the federal government’s position regarding some critical issues is regulated at government level (hereinafter the Special List), in all JSCs not listed in the special list, in which the Russian Federation is the sole shareholder, as well as in 90.68 percent of JSCs not listed in the special list, where the federal government owns an interest of more than 2 percent but less than 100 percent.

Further to Russian Government’s decisions at general meetings of shareholders, 385 candidates as members of boards of directors (supervisory boards) of JSCs listed in the special list were approved in the 2016 corporate year,¹ including 179 professional trustees (instead of 174 recommended for election based on final results of the Rosimushchestvo’s Committee for Selection of Independent Directors, members representing the interests of the Russian Federation and independent experts for election as members of governing and supervisory boards of joint-stock companies), 75 independent directors (instead of 82 as recommended) and 131 civil servants (instead of 155 as recommended).²

Given the fact that in 2017 the total absolute number of government representatives in boards of directors of JSCs listed in the special list dropped to the level seen in 2010, shifts in the structure of representatives in corporate governing boards of companies of this group had an effect on the proportion between civil servants and professional trustees. The percentage of the former fell from 50 to 34 percent, whereas the percentage of the latter increased to 46.5 from 30.3 percent. The percentage of independent directors remained unchanged (nearly 20 percent) (*Table 7*).

In 2017, the structure of government representatives saw no significant changes and the proportion between civil servants, professional trustees and independent directors remained equal to that seen a year earlier. During the 5-year period of 2013–2017, the group of JSCs listed in the special list saw the number of civil servants per company increase to 2.73 from 2.0, professional directors to 5.29 from 5.24.³

The composition of audit committees in 2017 saw an increase in civil servants to 68.5 percent compared with 2/3 a year earlier (or 122 persons compared with 56 independent

¹ Excluding PAO State Transport Leasing Company (where the Ministry of Transportation of Russia exercises shareholders rights), AO Corporation MIT (where GC Roscosmos exercises shareholders rights), including PAO Rosseti Federal Grid Company.

² The Russian government takes final decisions to approve candidates as members of governing and supervisory boards of JSCs listed in the special list.

³ According to graphic data, whereas the Rosimushchestvo’s Report reported 5.30 persons per company.

experts). Total number of the latter, however, more than doubled in recent four years, and their number per company increased to 1.17 in 2017 from 0.44 in 2013, with a minor decline from 2016 (1.32).

Table 7

**Dynamics and structure of government representatives
in governing and supervisory boards of JSCs on Special List,
2009–2017**

Year	JSCs, quantity	Government representatives in boards of directors (supervisory boards)								In audit committees: independent experts, quantity
		total		civil servants		professional trustees		independent directors		
		quantity	percent	quantity	percent	quantity	percent	quantity	percent	
2009	36	342	100.0	163	47.7	120	35.1	59	17.2	...
2010	49/59 ^a	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 ^b	63	452	100.0	127/122 ^c	28.1	228/245 ^c	50.4	97/102 ^c	21.5	27
2014	51	402	100.0	106/104 ^c	26.4	199/197 ^c	49.5	97/90 ^c	24.1	45
2015 ^b	50	390	100.0	118	30.3	178	45.6	94	24.1	54
2016 ^b	50	404	100.0	136	33.7	189	46.8	79	19.5	65
2017 ^d	48	385	100.0	131	34.0	179	46.5	75	19.5	56

^a there are some data on election of professional directors as members of governing boards of 59 JSCs;

^b including AO NCSP Group (NCSP), where only civil servants were elected as members of the NCSP board of directors and audit committee;

^c there are some other data (in the denominator) on the composition of government representatives by category (these are possibly preliminary data although the 2014 cumulative number (287) of professional directors (professional trustees and independent directors) published by Rosimushchestvo was equal to the total number of persons of these groups shown in the denominator);

^d including NCSP and the Federal Grid Company of United Energy System (FGC UES), which, as of August 01, 2017, did not approve the composition of board of directors and audit committee at their 2017 annual general meetings of shareholders; therefore, data from Russian Government's directive No. 4643p-P13 dated July 03, 2017 at the annual general meeting of shareholders of September 15, 2017 were used.

Source: The 2011-2016 year-end reports on the management of federally owned equity shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies, own calculations.

With respect to formation of the composition structure of corporate governing boards of companies not listed in the special list (*Table 8*), professional directors and public servants held more than half of seats, 59 percent (931 persons) and 41 percent (646 persons), respectively, in 276 JSCs in which the federal government owned a controlling and blocking interest and therefore had 1577 seats in boards of directors (supervisory boards).¹ In 39 JSCs where the federal government owned a minority interest of less than 25 percent, the composition of members representing the federal government's interests in boards of directors (supervisory boards) was comprised of 100 percent civil servants (58 seats). Even with this factor in place, however, the number of civil servants in boards of directors (supervisory boards) of JSCs not listed in the special list dropped from 1101 in 2016.

¹ Excluding (1) 39 JSCs in which the federal government owned a non-blocking interest and (2) 107 JSCs in which the federal government owned a majority interest or a blocking interest, where decisions to approve professional directors and independent experts were not taken due to various external factors.

Table 8

**Dynamics and structure of professional directors representing
the federal government in governing and supervisory boards of JSCs not listed
in Special List, 2009–2017**

Year	JSCs, quantity	Government representatives in boards of directors (supervisory boards) (excluding civil servants)						In audit committees: independent experts, quantity
		total		professional trustees		independent directors		
		quantity	percent	quantity	percent	quantity	percent	
2009	233	431	100.0	310	71.9	121	28.1	...
2010	389	707	100.0	493	69.7	214	30.3	...
2011	512	1109	100.0	830	74.8	279	25.2	...
2012	822	1860/1869*	100.0	1350	72.6	510/519*	27.4	23**
2013	637/ 245***	1715	100.0	1092	63.7	623	36.3	335
2014	683/ 159***	2094	100.0	1382	66.0	712	34.0	498
2015	527/ 151***	1660	100.0	1267	76.3	393	23.7	330
2016	479/ 123***	1535	100.0	1346	87.7	189	12.3	353
2017	297/ 107***	978	100.0	864	88.3	114	11.7	325

* there are some data on election of 1869 professional directors, including 519 independent directors;

** there are some data on election of 21 representatives (non-civil servants) in audit committees;

*** the denominator shows the number of JSCs with a controlling or minority interest owned by the federal government, where decisions to approve professional directors and independent experts as members of governing and supervisory boards were not taken due to various external factors.

Source: The 2011-2016 year-end reports on the management of federally owned equity shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies, own calculations.

In 2017, as shown in Table 8, the trend towards higher share of professional trustees continued in the midst of drastic decrease (more than 1/3) in the absolute number of professional directors in the overall structure of representatives, and therefore the number of independent directors and their proportion among members representing the federal government (apart from civil servants) hit its lowest (114 persons, or 11.7 percent).

The number of independent experts in audit committees decreased 8 percent year-on-year in 2017, sliding below values seen in 2013 and 2015. The number of professional directors in boards of directors (supervisory boards) as per company increased from 3.20 to 3.29 as the number of independent experts in audit committees climbed from 0.73 to 1.09, doubling the number recorded in 2013.

By 2017 year-end, based on the results of the Committee for Selection of Candidates for the Election of Members of Governing and Auditing Boards in JSCs, Rosimushchestvo compiled a list of candidates for nomination and election as members of governing and supervisory boards of joint-stock companies with an interest owned by the federal government in the 2018 corporate year. One hundred and ninety (190) professional trustees and 68 independent directors as well as more than 60 independent experts were selected as members of boards of directors and audit committees of 48 JSCs listed in the special list. More than 110 professional trustees and independent directors as well as more than 31 independent experts were selected as members of governing and supervisory boards of other JSCs.¹

The following is noteworthy in respect to practical application of in-house regulatory documents of federally owned companies.

¹ www.rosim.ru, December 22, 2017.

By early August 2017, boards of directors (supervisory boards) of 44 out of 50 JSCs listed in the special list approved their draft long-term development programs (LTDPs) and key performance indicators (KPIs) frameworks. LTDPs were in the draft stage in 2 JSCs, draft LTDPs were pending approval in 2 JSCs, and KPIs frameworks were in various stages of interdepartmental reconciliation in 2 JSCs.¹ LTDPs and KPIs progress reports for 2016 were in the draft stage in 37 companies, according to data from Rosimushchestvo.

The foregoing tools were used by approximately 60 percent of companies of a large group of JSCs not listed in the special list in which the federal government owned a joint interest of 50 percent or less, and where Rosimushchestvo exercises shareholder rights (252 JSCs). As of the specified date, 153 JSCs had their LTDPs approved (75 JSCs had their draft programs in the draft stage), 156 JSCs had their KPIs frameworks approved (72 JSCs had their KPIs frameworks in the draft stage).

Apart from developing a corporate development planning framework for the medium term (via LTDPs and KPIs), labor productivity growth policies continued to be under special control.

Forty three out of 50 JSCs companies listed in the special list developed a package (Action List) of labor productivity growth policies, 41 JSCs established metrics for this indicator and their labor productivity growth policies were embedded into LTDPs and management KPIs, 42 JSCs amended their labor agreements (contracts) with sole executive directors (SEDs) and completed the annual form of federal statistical surveys of “Data on labor productivity for companies with government’s ownership interest in the non-financial corporate sector”.²

Less than half of the companies comprising a group of 252 JSCs not listed in the special list in which the federal government owned an aggregate interest of more than 50 percent were covered by most of these policies. Only 112 of them developed a package of labor productivity growth policies, 134 companies established metrics for labor productivity indicator and their labor productivity growth policies were embedded into LTDPs, 123 companies did the same for management KPIs, 98 companies amended their labor agreements (contracts) with sole executive directors (SEDs), 125 companies completed the annual form of the aforementioned federal statistical surveys. A difficult task was to reconcile labor productivity growth with HR policy: more than 40 percent of companies made respective changes in their labor contracts with SEDs.

More than 3/4 of the companies listed in the special list developed and adopted in-house regulatory documents: rules and regulations to increase investment and operational efficiency and cost-efficiency (43 JSCs), internal audit provisions (46 JSCs), quality management framework (45 JSCs), risk management framework (45 JSCs), the procedure for the development and implementation of innovation-led development programs (37 JSCs).

New standard documents regarding corporate governance standardization of companies with an interest owned by the federal government also included new methodological recommendations for comparing technology-led development levels and key performance measures of JSCs with government equity participation, government corporations, federally

¹ PAO State Transport Leasing Company (STLC) (where the Ministry of Transportation of Russia exercises shareholders rights), AO Corporation MIT (where GC Roscosmos exercises shareholders rights), PAO NMTP and AO SIA (with a government’s ownership interest of less than 50%) procured that these issues were addressed, like what STLC and MIT did with regard to approving LTDP frameworks.

² PAO State Transport Leasing Company (where the Ministry of Transportation of Russia exercises shareholders rights), AO Corporation MIT (where GC Roscosmos exercises shareholders rights), PAO NMTP and AO SIA (with a government’s ownership interest of less than 50%) procured that these measures were taken.

owned companies and FSUEs with development levels and performance measures of lead peer companies, that were approved by Protocol No. 2 dated September 19, 2017 at a meeting of the Interdepartmental Task Force for the Implementation of Innovative Development Priorities of the Presidium of President's Council on Economic Modernization and Innovative Development of Russia.

For the purposes of adoption of standards set forth by the recent Corporate Governance Code 2014 (CGC), Rosimushchestvo (in the capacity of shareholder) analyzed FY16 annual statements approved at 2017 annual general meetings of shareholders of 12 biggest federally owned companies in order to check on their compliance with the principles and recommendations set forth by the CGC. According to the analysis as well as information that Rosimushchestvo requested from federally owned companies, all the 12 JSCs reported in their annual statements about adoption of standards and principles set forth by the Code, and such information was presented (except PAO Gazprom) in the format prescribed by the Bank of Russia's Recommendations.

By the summer's end 2017, the Code provisions were adopted 90 percent (compared with 77 percent a year earlier) based on an analysis of JSCs progress reports with regard to their Code Compliance Road Maps.

Best results were achieved in the following categories:

- company secretary (100 percent compared with 60 percent in 2016);
- shareholder rights and equitable treatment of shareholders while executing shareholder rights (93 percent compared with 86 percent in 2016);
- executive compensation framework for members of the board of directors, executive boards and other critical senior managers of companies (92 percent compared with 83 percent in 2016).

Another four sections of the CGC (board of directors, risk management framework and internal control, disclosure of information, information policy, major corporate actions) were adopted more than 70 percent.

Four out of 12 companies achieved best results in adoption of the Code's key sections: PAO Gazprom (100 percent), PAO Aeroflot (100 percent), PAO Sovkomflot (97 percent), PAO NK Transneft (95 percent). Apart from Aeroflot (a growth to 100 from 81 percent), PAO Transneft (a growth to 74 from 58 percent) and PAO RusHydro (a growth to 63 from 38 percent) showed a substantial improvement from 2015, according to Rosimushchestvo. What's questionable is the degree of objectivity in assessing Gazprom, which was not in the lead group in 2015, and then (in 2016) Gazprom came out to share the lead with Aeroflot although its information on adoption of the standards and principles CGC was incompliant with the format prescribed by the Recommendations of the Bank of Russia. A minor setback of the dynamics of Sovkomflot (99 percent at 2015 year-end) is questionable too.¹

The dividend policy mechanism with regard to federally owned companies continued to improve.

As a reminder, this matter is generally regulated by Russian Government's executive order No. 774-r dated May 29, 2006 (as further amended in late 2012), when a provision on dividends payout of not less than 25 percent of JSCs net profits (excluding revenues from financial investment revaluation) emerged, unless otherwise provided by legal acts of the Russian Government.

¹ For more details see Section "Compliance with the Corporate Governance Code: Are There Any Improvements?"

Faced with a tense fiscal environment in 2016, the Russian Government had to adopt a special dividend policy document. Under executive order No. 705-r dated April 18, 2016 regarding dividends payout for 2015, federal government authorities, first of all Rosimushchestvo, were guided by the executive order including a provision on dividends payout of 50 percent of net profits (in various versions).

In 2017, this standard was embodied in Russian Prime Minister's Instruction No. DM-P13-2672 dated April 26, 2017 (hereinafter "the Instruction") to provide decision making on dividends payout of not less than 50 percent of JSCs annual profit calculated in compliance with the international financial reporting standards (hereinafter the IFRS) when shaping the shareholder's position of the federal government towards dividends payout at JSCs with an interest owned by the federal government (including infrastructure companies, oil and gas companies and military-industrial companies).

In May 2017, a list of provisions regulating federal government authorities' decisions on the amount of dividends in companies with government equity participation (including a minimum threshold of 25 percent of JSCs net profits) under executive order No. 774-r of 2006 was extended to include a provision requiring the amount of dividends to be determined on the basis of net profits reported in financial statements, including IFRS-based consolidated statements, as long as JSCs are obliged to make such statements pursuant to the law. Where a specified amount is higher than net profits reported in JSCs financial account statements, dividends must be paid out of retained earnings.

Federal budget revenues administered by Rosimushchestvo in the form of dividends on shares owned by the federal government, with due consideration for decisions made at 2016 annual general meetings of shareholders, totaled more than RUB 187.9 billion as of August 01, 2017, marking a substantial decline from previous year's amount (RUB 237.73 billion), nearly equal to the 2015 amount of RUB 188.8 billion. JSCs listed in the special list were estimated to make up 99 percent of total accrued dividends on shares owned by the Russian Federation, according to a forecast for federal budget revenues from 2016 dividends. As of 2017 year-end, Rosimushchestvo contributed approximately RUB 250.5 billion to the federal budget, of which RUB 243.5 billion came from 25 biggest companies listed in the special list, Head of Rosimushchestvo Dmitry Pristanskov said in an interview.¹

Thirteen top dividend payers that paid more than RUB 1 billion worth of dividends to the federal budget were PAO Gazprom, PAO Transneft, AK ALROSA (PAO), PAO RusHydro, PAO Aeroflot, VTB Bank (PAO), AO Agency for Housing Mortgage Lending, PAO Rostelecom, PAO Sovkomflot, OAO Russian Railways, AO Zarubezhneft, PAO NCSP Group (NCSP), PAO Rosseti Federal Grid Company, of which 11 companies (excluding Gazprom and Rosseti Federal Grid Company) paid not less than 50 percent of their net profits.

Eight of the above JSCs accrued dividends on the IFRS basis, whereas five accrued dividends on the RAS (Russian accounting standards) basis, of which PAO Gazprom and PAO Transneft are noteworthy because their actual figures deviated respectively 40 and 26 percent from Rosimushchestvo's target based on resolutions of their annual general meeting of shareholders (hereinafter AGMS) held in pursuance of Russian Government's directives. Under a government's separate executive order regarding dividends payout in PAO Rosseti Federal Grid Company, the amount of dividends was calculated with consideration for a series

¹ The 2016 year-end report on the management of federally owned shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies, www.rosim.ru, February 28, 2018.

of limits on the amount of company's net profits. In addition, the Russian Government decided to reduce the amount of 2016' dividends for certain JSCs operating in the military-industrial complex.

However, federal budget revenues from dividends deviated from the fiscal target primarily because of lack of RUB 156.5 billion worth of target revenues from AO ROSNEFTEGAZ following a biggest privatization deal late in 2016, when RUB 18.4 billion worth of dividends for the first 9 months of 2016 were transferred along with the proceeds worth RUB 692.4 billion from disposition of a 19.5 percent interest in PAO NK Transneft to the federal budget. Under Russian Government's executive order No. 390-r dated June 30, 2017 regarding calculation of dividends transferred to the federal budget, it was decided that AO ROSNEFTEGAZ would not pay 2016 dividends because of a loss incurred (under RAS) in FY16 as well as transferred interim dividends to the aggregate tune of RUB 24.61 billion.¹

6.1.5. Improving regulatory environment for federal property organizations

Last year's changes in the regulatory and legal framework that governs economic agents related to federal property influenced almost all types of ownership and therefore turned out be essential enough.

Unitary enterprises

The July 2017 (No. 267-FZ) amendments to the Act 2002 in force (No. 161-FZ) introduced a concept of federal unitary enterprise of strategic importance for the military-industrial complex and the national security that covers:

- federal state unitary enterprises (FSUEs) and federal treasury enterprises (FTEs) listed in the list of strategically important companies approved by the President of Russia under the Privatization Act 2001;
- FSUEs and FTEs listed in the list of strategically important companies and organizations approved by the Russian Government under the Bankruptcy Act 2002;
- FSUEs and FTEs designated by a special decision of the Russian President or the Russian Government.

The category of enterprises, including shareholding companies that come under their direct and indirect control, is subject to *restrictions on financial operations* (pursuant to new Article 24.1 of Federal Act No. 161-FZ).

The aforementioned corporate entities may open accounts, covered (deposited) letters of credit with credit institutions, enter into bank account contracts/agreements, bank deposit contracts/agreements with credit institutions, acquire their securities, provided that the Russian ruble is the currency of the contract (a security denominated in Russian rubles), only if a credit institution is listed in the Bank of Russia's monthly list published on its official website² and meets one of the two requirements:³

¹ The 2016 year-end report on the management of federally owned shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies.

² Specifying information on (1) the amount of equity (capital), contingent upon credit institution's consent to the Bank of Russia to disclose the specified information and (2) that a credit institution is covered by mandatory insurance of physical person deposits with Russian banks.

³ Except financial operations with Vnesheconombank.

In addition, the Russian Government was authorized to identify credit institutions that fail to meet the established requirements without including such credit institutions in the list published by the Bank of Russia. However, where

– credit institution's equity is not less than the amount established by the Russian Government as agreed upon with the Bank of Russia and the credit institution meets extra requirements set by the Russian Government¹, including requirements for acquisition of securities of credit institutions and established investment limits according to Russian credit institution's amount of equity (capital) and/or a credit rating under the national rating scale for the Russian Federation;

– a credit institution is directly or indirectly controlled by the Bank of Russia or the Russian Federation, given that the Russian Government is entitled to set extra requirements for operations (deals/transactions).

Similar regulations are established for the aforementioned financial operations involving foreign currencies, including denomination of securities.

Although foreign banks can be involved, the Russian Government is entitled to establish a foreign bank requirement by which specified unitary enterprises and shareholding companies must within a prescribed period of time terminate bank account contracts/agreements and bank deposit contracts/agreements with foreign banks that have failed to meet the existing requirements.

A federal executive authority in charge of developing the national policy and banking regulatory framework shall, at least once in three months from the effective date of Russian Government's requirements, publish on its official website a list of foreign banks that meet the established requirements and specify the date of publication.

Strategically important federal unitary enterprises and shareholding companies that come under their direct and indirect control must:

– notify, in the manner prescribed by the Russian Government, a federal executive authority (the Federal Financial Monitoring Service) authorized to counteracting legalization (laundering) of ill-gotten proceeds and terrorist financing of opening/closure of accounts, change of accounts' details, covered (deposited) letters of credit with foreign banks, conclusion/termination of bank account contracts/agreements, bank deposit contracts/agreements with foreign banks and changes therein, acquisition/disposal of securities of foreign banks;

– terminate bank account contracts/agreements and bank deposit contracts/agreements with credit institutions that have failed to meet the foregoing requirements and have been taken off the list published by the Bank of Russia, within 180 days from the date of publication of the respective list of credit institutions on its official website.²

Since the date of credit institution has been taken off the list, the effective period of bank deposit contracts/agreements, agreements on opening covered (deposited) letters of credit concluded between strategically important federal unitary enterprises as well as shareholding companies that come under their direct or indirect control and such a credit institution may not be extended and the bank account opened therewith under a bank account contract/agreement

foreign-based restrictive policies are in force against such credit institution or its control or key stakeholders, the credit institution must be included in list of the Bank of Russia.

¹ In addition, the Russian government established a requirement for a credit rating level awarded for a Russian credit institution by credit rating agency/agencies covered by the Bank of Russia's register of credit rating agencies, on the basis of Russia's national ranking scale, employing a methodology that meets, as confirmed by the Bank of Russia, the requirements set forth by the Act 2015 governing credit rating agencies in the Russian Federation.

² The Russian Government can reschedule the date of termination of a bank deposit agreement.

or a bank deposit contract/agreement may not be credited, except for the interest on the bank account contract/agreement or the bank deposit contract/agreement.

All these changes in the Unitary Enterprises Act are an integral part of amendments to the Act 2001 ‘Counteracting Legalization (Laundering) of Ill-Gotten Proceeds and Terrorist Financing’ (No. 115-FZ) which established restrictions on financial operations of shareholding companies that are of strategic importance for the military-industrial complex and the national security of the Russian Federation¹ as well as shareholding companies that are under their direct and indirect control. The list is now extended to include federal unitary enterprises, federally owned corporations, federally owned companies and public not-for-profit companies.² At the same time, the fact that credit institutions covered by foreign restrictive policies are mentioned among the federal government’s prerogatives towards identifying credit institutions that have failed to meet the established requirements points to linkage with the impact of recent sanctions imposed against Russian corporate entities.

New essential provisions regarding *operations involving immovable property* were introduced by Russian Government’s executive order No. 739 dated December 3, 2004, which regulates federal executive authorities’ powers to exercise ownership rights over FSUE’s property.

Russian Government’s executive order No. 528 dated May 5, 2017 established that Rosimushchestvo³ shall approve deals involving enterprises’ immovable property worth more than RUB 150 million (under the Valuation Act), except for deals related to leasehold of such property, pursuant to a decision of the Russian Government, the Prime Minister or Prime Minister Deputies (on behalf of the Prime Minister).

An enterprise shall submit proposals regarding deals involving immovable properties that belong to an enterprise by right of economic management, including its transfer under leasehold agreements that shall be subject to standard terms and conditions approved by the Ministry of Economic Development together with justifications thereof and required documents, to the federal executive authority which holds jurisdiction over the enterprise, for further submission to Rosimushchestvo.

To approve deals involving immovable properties that belong to an enterprise by right of economic management, including leasehold thereof, the foregoing agencies shall interact with each other via a federal property management interdepartmental web portal by way of posting electronic documents with enhanced encrypted and certified digital signature.

Rosimushchestvo shall consider proposals for such deals in the prescribed format and decide, not later than 15 working days from the date of publication on the web portal, to approve/deny

¹ Under a special Act 2014 (No. 213-FZ), these are shareholding companies listed in: (1) the list of strategically important shareholding companies approved by the Russian President under the Privatization Act 2001 (excluding credit institutions), (2) the list of JSCs in which the shareholder’s position of the government is determined at government level (excluding credit institutions), (3) shareholding companies that are of strategic importance for the national defense and the national security within the meaning of the Act 2008 (No. 57-FZ) as well as, since summer 2017, (4) other economic agents with a federally owned interest listed in the list approved by the Russian Government.

A Russian government’s draft executive order on adoption of the list of shareholding companies covered by Article 1 of Act No. 213-FZ was under consideration in fall 2017.

² Respective amendments to separate acts governing Vnesheconombank, Housing and Utility Reform Foundation, Rostec, Rosatom, Roscosmos and Avtodor were made in Articles of Act No. 267-FZ dated July 29, 2017.

³ Applicable to enterprises subordinate to The Ministry of Defense of Russia, The Department for Presidential Affairs of the Russian Federation, To the Federal Agency for Marine and River Transport (when securing properties situated within sea ports boundaries), as specified by departments.

a deal by way of notifying thereof on the web portal in the prescribed manner, or, to the extent provided for thereby, shall submit respective proposals to the Ministry of Economic Development for further submission thereof to the Russian Government, upon 5 days' notice to the federal executive authority. Should Rosimushchestvo fail, within 30 working days from the date of federal executive authority's publication thereof on the web portal, submit the respective proposal, the deal shall be deemed not to be approved (excluding deals to be approved on government level).

Enterprises subordinate to the Ministry of Defense of Russia, The Department for Presidential Affairs of the Russian Federation, The Federal Agency for Marine and River Transport (when securing properties situated within sea ports boundaries) shall submit proposals regarding the aforementioned deals together with justifications thereof and required documents to respective departments and agencies which make decisions, like Rosimushchestvo does, to approve/deny the deals or, to the extent provided for thereby, submit respective proposals and documents to the Russian Government.¹

In addition, property sale/purchase deals shall be carried out through auction in the manner prescribed by the federal antimonopoly agency.² At an auction, the offering price of the property is determined by the enterprise on the basis of a property valuation report drawn up as prescribed by the Valuation Act.

A list of documents required for approval of deals involving immovable property that belongs to an enterprise by right of economic management, including leasehold thereof, shall be approved by a federal executive authority in charge of developing the national policy and regulatory framework in respect of property-related matters.³

Therefore, long-standing significant measures were introduced to regulate unitary enterprise powers at federal level.

Prior to the above-described changes, deals involving immovable property were normally approved by Rosimushchestvo with consideration for proposals of the federal executive authority that held jurisdiction over an enterprise, unless otherwise established by other statutory acts adopted under federal laws and regulations.

The new procedure for interaction on the subject matter between various government authorities was elaborated by setting a quantitative criterion (RUB 150 million), when the issue must be considered at government level, as is the case with approval by federal executive authorities (with consideration for the rationale of Rosimushchestvo's position) of deals involving disposition of a stake (ownership interest) in the charter (pooled) capital of shareholding companies or partnerships, enterprise's equity share, approval of decision of enterprise's participation in business and not-for-profit organizations, conclusion of a simple partnership agreement, as well as (exclusively for FSUEs covered by the privatization program)

¹ The Federal Agency for Marine and River Transport shall submit respective proposals and documents to the Ministry of Transport of Russia for approval with the Ministry of Economic Development of Russia and the Ministry of Finance of Russia and for further submission to the Russian government.

² Today, there are existing Rules for tenders or auctions, leasehold agreements, gratuitous use agreements, fiduciary management agreements, other agreements that provide for transferring of ownership regarding federal and municipal property, as approved by executive order No. 67 dated February 10, 2010 of the Federal Antimonopoly Service of the Russian Federation.

³ Today, there is existing a List of documents an FSUE must submit to be eligible to make deals specified by Russian Government's executive order No. 333 dated June 06, 2003, adopted by executive order No. 3142-r dated July 15, 2003 of the Federal Agency for State Property Management of Russia. At the same time, Russian government's executive order No. 333 dated June 06, 2003 ceased to be in force.

approval of major deals, deals involving loans, sureties, bank guarantees, other encumbrances, assignment of claims, assignment of debt, fundraising.

The introduction of auction procedure for disposition of unitary enterprise's property narrows the gap between the process of transfer of ownership thereof with the privatization mechanism, thus inevitably reducing managers' opportunistic behavior and possible malpractices.

Joint-stock companies

Russian Government's executive order No. 851 dated July 19, 2017 introduced major amendments to **the Provision on the management of federally owned shares in joint-stock companies and the Russian Federation's golden share (participation in corporate governance) in joint-stock companies** (hereinafter the Provision) adopted by Russian Government's executive order No. 738 dated December 3, 2004, and **Russian Government's executive order No. 1214 dated December 31, 2010 "Enhancing the governance of publicly traded companies with an interest owned by the federal government, and federal state unitary enterprises"** (hereinafter the Executive Order).

The Provision introduced the following changes.

First, changes in classification of JSCs and the chain of command between various government authorities which shareholder rights are applied to.

A separate group was created to include JSCs listed in the list of strategically important companies adopted by Russian President's executive order 2004 under the Privatization Act, where Rosimushchestvo exercises shareholder rights on the basis of proposals of a federal ministry or federal executive authority authorized to manage federal property under the supervision of the President of Russia or the Russian Government.

Another group was created to include JSCs listed in the special list, in which Rosimushchestvo exercises shareholder rights as agreed upon with a federal ministry (agency). The list was further elaborated. Russian Government's executive order dated August 30, 2017 approved lists of JSCs in which Rosimushchestvo exercises shareholder rights on the federal government's behalf as agreed upon with the Ministry of Industry and Trade (11 JSCs), the Ministry of Energy (10 JSCs), the Ministry of Finance (7 JSCs), the Ministry of Transportation of Russia (6 JSCs), The Ministry of Agriculture of Russia (5 JSCs), The Ministry of Economic Development (3 JSCs), The Ministry of Communications and Mass Media of Russia (2 JSCs), Ministry of Natural Resources (1 JSC), The Ministry of Construction, Housing and Utilities (1 JSC), The Federal State Reserve Agency (1 JSC), The Chief Directorate of Special Programs of the President of the Russian Federation (CDSP) (1 JSC). There were a total of 48 companies, many of which were on the list of strategically important companies.

Now, there is an express reference to the that Rosimushchestvo can on its own discretion exercise shareholder rights regarding the rest of JSCs.

Second, new regulations governing selection of candidates for election as individual (collegiate) executive body (hereinafter I(C)EB) in boards of directors (supervisory boards) and audit committees of JSCs with an interest owned by the federal government can be considered as a standalone matter within the context of amendments to the Provision.

The Ministry of Economic Development jointly with Rosimushchestvo should develop and approve selection criteria for election of candidates for I(C)EB, members of boards of directors (supervisory boards) and audit committees of JSCs, excluding FSUEs established as a result of privatization that operate under the jurisdiction of the Ministry of Defense of Russia and

subordinate to the Facilities and Property Management Office under the President of the Russian Federation.

Organizations, including public organizations, associations (unions), autonomous not-for-profit organizations whose activities are related to association of professional (independent) directors, are entitled to submit to Rosimushchestvo their proposals for nomination of candidates that meet the criteria set by the Ministry of Economic Development. The same holds true for natural persons who can submit their applications exclusively via the federal property management interdepartmental web portal.

Candidates nomination proposals submitted by a federal ministry (agency), organizations, and applications of natural persons shall be considered at meetings of a Rosimushchestvo-led committee for selection of candidates for election as members of governing and supervisory boards in question.¹ Based on decisions of the committee, Rosimushchestvo shall determine the shareholder's position of the federal government regarding nomination of candidates for election for I(C)EB, members of boards of directors (supervisory boards) and audit committees.

Another point to note in this respect is substantial alleviation, in January 2017, of restrictions regarding a person nominated by the Russian Federation (as shareholder) for election as independent director in board of directors, who must not be for recent 12 years a member of the board of directors (supervisory board) of a shareholding company where election is to take place (in lieu of previous five-year requirement).

Third, the Provision underwent changes regarding the preparation of government's position as shareholder, terms for submission of federal authorities' proposals to Rosimushchestvo and a procedure for their interaction.

A federal ministry (authority) shall submit its proposals to Rosimushchestvo regarding matters on the agenda of annual general meeting of shareholders and for nomination of candidates for election as members of corporate governing boards at the meeting (excluding an individual (collegiate) executive body (I(C)EB) whose characteristics are described below), audit committees² regarding joint-stock companies:

- listed in the special list, till November 1st of the year preceding the year of annual general meeting of shareholders (previously, till November 15th);
- listed in the list of strategic companies in which the federal government owns an interest of less than 100 percent of the voting stock, till December 1st of the year preceding the year of annual general meeting of shareholders;
- all JSCs where the federal government holds 100 percent of the voting stock, excluding JSCs listed in the special list, till March 1st of the year of annual general meeting of shareholders (previously, for all JSCs, except till December 1st for JSCs listed in the special list).

The following is the procedure a federal ministry (agency) must follow for submitting to Rosimushchestvo proposals regarding candidates for election for I(C)EB in JSCs listed in the special and strategic lists:

- with regard to JSCs where the federal government holds 100 percent of the voting stock, not later than the earliest of the following: 60 days prior to the termination of I(C)EB office or

¹ The committee's composition and operating procedures shall be approved by Rosimushchestvo as agreed upon with the Ministry of Economic Development of Russia.

² Previously, there were exceptions regarding nomination of candidates for election for I(C)EB in list of matters that underpinned federal ministry's (agency's) proposals to Rosimushchestvo, and the counting committee was mentioned together with the audit committee.

60 days prior to the date of general meeting of shareholders at which matters regarding the formation of I(C)EB are to be decided;

– with regard to the rest of JSCs, not later than the earliest of the following: 120 days prior to the termination of I(C)EB office or 120 days prior to the date of general meeting of shareholders at which matters regarding the formation of I(C)EB are to be decided.

A federal ministry (agency) shall carry out measures for preliminary selection of candidates for election for I(C)EB in JSCs listed in the strategic list under the criteria adopted by the Ministry of Economic Development by publishing respective notices on the federal ministry's (agency's) official website as well as on the federal property management interdepartmental web portal. A notice on preliminary selection of candidates shall be posted within 15 days from the date of publishing.

Proposals of a federal ministry (agency) regarding voting on matters on the agenda of general meeting of shareholders and appointment of a representative for voting at the meeting shall be submitted to Rosimushchestvo within 3 days following the receipt of notice of general meeting of shareholders, but within:

– 20 days prior to the date of general meeting of shareholders at JSCs listed in the special list;

– 15 days prior to the date of general meeting of shareholders at JSCs listed in the list of strategic companies.¹

Where a matter of JSCs reorganization is put on the agenda of special general meeting of shareholders, the terms shall be:

– 40 days for JSCs listed in the special list (previously, 25 days);

– 30 days for JSCs listed in the list of strategic companies (previously, for all JSCs, except 20 days for JSCs listed in the special list).

In the event of disagreement between the federal ministry (agency) and Rosimushchestvo, its head and deputy head shall procure that a consensus meeting is held regarding:

– voting on matters on the agenda of meeting of board of directors (supervisory board) of JSCs listed in the special and strategic lists, not later than 10 days from the date of meeting (the term shall be 15 days if a matter on election of individual (collegiate) executive body is put on the agenda of meeting of board of directors (supervisory board)) (a new provision);

– a call for special general meeting of shareholders of JSCs listed in the special and strategic lists, not later than 15 days prior to the date of call for the meeting (the term shall be 25 days if the matter of election of members of the board of directors is put on the agenda of general meeting of shareholders) (previously, 25 days for all JSCs);

– voting on matters on the agenda of general meeting of shareholders of JSCs listed in the special and strategic lists, not later than 15 days prior to the date of meeting (previously, 15 days for all JSCs).

The requirement that a consensus meeting be held to put proposals for nomination of candidates for election as members of governing boards, audit and ballot committees of JSCs and other matters on the agenda of annual general meeting of shareholders not later than till December 10th of the year preceding the year of annual general meeting of shareholders, till November 25th of the year preceding the year of annual general meeting of shareholders at JSCs listed in the special list (in the event of special meetings of shareholders, not later than

¹ Previously, 15 days for all JSCs, except 20 days for JSCs listed in the special list.

15 days prior to the expiration of the time limit for the *submission thereof* to JSCs) was taken off the Provision.

In the event the consensus meeting fails to lead to an agreement, Rosimushchestvo shall, not later than the date following the date of consensus meeting, present required documents containing a discrepancy list including substantiated position of the parties and proposals of the federal ministry's (agency's) to the Ministry of Economic Development.

In this case, the Ministry of Economic Development shall prepare proposals on the shareholder's position of the federal government with regard to JSCs listed in the special and strategic lists that are to be submitted to the Russian Government:

- on its own discretion in the manner prescribed for determination of shareholder's position of the Russian Federation with regard to JSCs listed in the special list (Paragraph 12 of the Provision);

- as agreed upon with a federal ministry (agency) in respect to proposals to call for special general meeting of shareholders for voting on matters on the agenda of general meeting of shareholders, on matters on the agenda of general meeting of shareholders of JSCs listed in the special list where the federal government holds 100 percent of the voting stock (Paragraphs 13–15 of the Provision).

Fourth, changes also covered the corporate governance toolkit.

It was explicitly established that requirements to the form and the subject-matter of an agreement with a professional trustee shall be approved by the Ministry of Economic Development.¹

Rosimushchestvo shall issue directives for government representatives in boards of directors:

- as agreed upon with a federal ministry or federal agency with regard to JSCs listed in the special list;

- based on the proposals of a federal ministry (agency) with regard to JSCs on the strategic list, excluding those listed in the special list;

- on its own discretion with regard to the rest of JSCs (previously, a federal agency issued directives for government representatives in all JSCs, excluding JSCs that were listed in the special list, on the basis of federal authority's (agency's) proposals.

The **Executive Order** introduced the following essential changes in the functionality of duties of governing boards of joint-stock companies (JSCs) with government equity participation.

Representatives of the interests of the Russian Federation in JSCs, excluding JSCs established as a result of privatization of FSUEs, under the jurisdiction of the Ministry of Defense of Russia and subordinate to the Facilities and Property Management Office under the President of the Russian Federation shall perform monitoring to procure that the above joint-stock companies shall publish information on the web portal regarding:

¹ For JSCs established as a result of privatization of FSUEs under the jurisdiction of the Ministry of Defense of Russia and subordinate to the Department for Presidential Affairs of the Russian Federation, specified by agencies. There was existing a standard contract on representation of interests of the federal government in corporate governing boards of shareholding companies (business partnerships) in which an interest (stake, share) is owned by the federal government, and a procedure for conclusion and registration of such contracts adopted by Russian Government's executive order No. 625 dated May 21, 1996. However, a legal limbo was created after the document was declared to be no longer in force in November 2014.

- the compliance with directives issued by the Russian Government and by Rosimushchestvo in pursuance of executive orders of the Russian President, the Russian Government;

- subsidiaries where more than 50 percent of equity is owned by JSCs in which the federal government owns an interest of more than 50 percent.

Recommendations regarding the contents and the publishing of such information on the web portal shall be approved by Rosimushchestvo which uses the web portal for interacting with:

- natural persons who submit their applications for election for I(C)EB in boards of directors (supervisory boards) and audit committees of shareholding companies;

- organizations including non-government organizations, associations (unions), autonomous not-for-profit organizations whose activities are related to association of professional (independent) directors;

- JSCs, excluding FSUEs established as a result of privatization, that are under the jurisdiction of the Ministry of Defense of Russia and subordinate to the Facilities and Property Management Office under the President of the Russian Federation;

- subsidiaries where more than 50 percent of equity is owned by JSCs in which the federal government owns an interest of more than 50 percent.

With regard to JSCs listed in the special and strategic lists, federal government executive authorities shall:

- approve, within 10 days from the date of receipt of respective documents from JSCs, corporate development strategies and long-term development programs as well as key performance indicators for corporate governing boards;

- monitor via the web portal business and financial operations, including key goals and objectives of corporate development strategies and long-term development programs, the compliance of the individual (collegiate) executive body with decisions of boards of directors (supervisory boards) adopted in pursuance of executive orders of the Russian President, the Russian Government and the Russian Federation as shareholder represented by Rosimushchestvo, the compliance of representatives of the Russian Federation elected according to proposals of a respective federal executive authority with shareholder's directives;

- submit proposals to Rosimushchestvo on matters for the agenda of general meetings of shareholders (meetings of boards of directors (supervisory boards) JSCs) with a view to enhancing the performance of JSCs;

- make sure that the foregoing JSCs publish information on the web portal;

- notify Rosimushchestvo, within 10 days from the date of detection, of lack of information on the web portal that relates to the above obligations of representatives of the Russian Federation to comply with directives of the Russian Government and Rosimushchestvo and subsidiaries with more than half of the equity owned by JSCs in which the federal government owns a majority interest of more than 50 percent.

Therefore a new scheme was launched to provide interaction between various government authorities regarding the governance of JSCs in which the federal government owns an interest. Rosimushchestvo's powers were somehow expanded. An individual (collegiate) executive body of corporate governing boards was for the first time identified, the rights of the professional community and individuals to nominate candidates as members of governing and supervisory boards of such companies were secured. Matters such as selection-criteria based formalization of requirements to government representatives in corporate governing boards and

regulation for a body (committee) that deals with the matters were brought to a higher level (involving the Ministry of Economic Development).

The old scheme included selection criteria for independent directors, representatives of the federal government's interests and independent experts in governing and supervisory boards of JSCs with federal equity participation approved by minutes No. 448 dated August 25, 2014 at a kick-off meeting of the Committee for selection of professional directors and independent experts in governing and supervisory boards of JSCs including those listed in the special list, and by minutes No. 492 of a meeting held on September 24, 2014 between the former head of Rosimushchestvo and representatives of lead nongovernmental/professional organizations. The Committee for selection of professional directors and independent experts acting pursuant to Rosimushchestvo's executive order No. 233 dated June 27, 2014 employed the criteria for decision-making on the expediency of engaging non-civil servants in governing and supervisory boards of JSCs.

In 2017, Rosimushchestvo prepared draft selection criteria for candidates for election as members of boards of directors (supervisory boards) and audit committees of JSCs and draft selection criteria for candidates for election in individual executive bodies (SEDs) of JSCs. The foregoing criteria are designed for selecting professional directors and independent experts as candidates for election as members of boards of directors (supervisory boards), audit committees of JSCs not listed in the special list, candidates for election as SEDs of JSCs, as well as personnel of management organization aspiring to enter into an agreement on delegation of powers to SEDs. Criteria that were first submitted to the Ministry of Economic Development and then discussed and refined for adoption by a Ministry's executive order upon completion of all conciliation procedures.

There is a document that stands apart from the rest – **Russian Government's executive order No. 894-r dated May 10, 2017** – which approved methodological recommendations *for identification and disposition of non-core assets*.

The methodological recommendations intend to facilitate policies of identification and disposition of assets of government corporations, federally-owned companies, JSCs in which the federal government owns a majority interest of more than 50 percent, as well as their subsidiaries (hereinafter organization or shareholding company) that are not used for core business purposes set forth in their charter.

The document sets forth objectives and principles of disposition of non-core assets on the basis of vast set of definitions. The heart of the document is the definition of 'core assets' as assets owned by an organization (entity) and used for core business purposes or essential for the implementation of corporate long-term development program, growth strategy, or compliant with core-asset criteria set forth in the methodological recommendations. Accordingly, non-core assets are defined as assets that fail to meet the definition of 'core assets', including blocks of equity shares (stakes) owned by the organization (entity) in a business entity regardless of its core business, representing, together with blocks of equity shares (stakes) owned by subsidiaries, less than 50 percent of the charter capital.

To identify a core/non-core management accounting unit which is defined as separate asset of a body of assets that have, among other things, potential to generate cash inflows, it is recommended to make analysis of the use of an asset for core business purposes of an organization (shareholding company) or the effect of the asset on the achievement of goals and objectives of the organization (shareholding company) set forth by its corporate development

strategy or long-term development program (LTDP) with consideration for the *criteria for core and non-core management accounting units* (Schedule 1).

The criteria are as follows: (1) location of an asset (immovable property) on the territory occupied by the organization (entity) that is used for core business purposes or as the only possible driveway (pass way) to the territory; (2) a management accounting unit generates more than 5 percent of earnings generated at previous financial year-end; (3) pertinence to socially significant facilities (out-patient clinic, airport, health resort, sports center, dormitory, canteen) where more than 50 percent of earnings come from services to the corporate personnel; (4) signed contracts or other obligations related to the use of management accounting that make up more than 1 percent of the earnings of an organization or shareholding company or more than RUB 1 billion; (5) a management accounting unit owns assets that constitute state or trade secrets, the disclosure of which will entail losses for the organization or shareholding company; (6) a management accounting unit has policies in place to prevent emergencies, to provide information, economic and financial security of the organization or shareholding company and its subsidiaries.

In the event a management accounting unit is used for core business purposes, as well as if a separate asset or a body of assets are not used for core business purposes but still influence the achievement of goals and objectives set forth by a corporate development strategy or LTDP, the management accounting unit shall be deemed to pertain to core assets.

It is otherwise recommended to identify core/non-core assets management accounting units by the following algorithm.

A degree of impact of the above six criteria on each particular management accounting unit is determined *by picking 'Yes' or 'No' answer* ('Yes' means a criterion does have impact or 'No' means it doesn't). An analysis of degree of impact of the criteria on the management accounting unit gives answers to be compared with target answers to identify core assets. If the resulting answers are the same as the target answers, a respective indicator (in percentage terms) shall be assigned to each answer¹, which is '0' when divergence is found. Indicators (in percentage terms) for each answer shall be summarized. Management accounting units are deemed to be core units if the resulting figure is 50 percent or higher, and non-core units is less than 50 percent.

Criteria for identifying core/non-core assets of management accounting units at an organization or shareholding company are more simple (Schedule 2): an asset (1) is essential to ensure a successful performance of management accounting units; (2) is unalienable asset (easement, or the asset constitutes a business secret or is necessary for the purposes of national interests, mobilization training, defense, security). If at least a single answer matches the target answer, the asset of the organization or shareholding company shall continue to be deemed to be a part of the management accounting unit. If neither of the answers matches the target answer, the asset shall be excluded from the core management accounting unit and ceased to be deemed to be a core asset under the criteria set forth by Schedule 1.

A management accounting unit identified as non-core management accounting unit shall be registered with a non-core assets registry. A non-core assets disposition program, a non-core assets registry and an asset disposition action plan shall be developed (updated) based on analysis of core/non-core assets identification, as well as on corporate non-core assets disposition policy selected by an organization (shareholding company), which shall be

¹ Percentage for matching the target answer is set at 20% for the criteria (1) and (4) and 15% for the rest of criteria.

considered and adopted by the board of directors (supervisory board) of the organization (shareholding company) and afterwards published on the company's profile on the federal property management interdepartmental web portal (hereinafter 'the web portal'). The methodological recommendations shall contain requirements to the layout and contents of the above documents.

New non-core assets identified by the organization or shareholding company shall be, within two months of the identification date, registered with the non-core assets registry. The same period is set for updates to the assets disposition program.

Disposition (alienation) of non-core assets to third parties that are meant to be corporate entities and/or natural persons not affiliated with an organization (shareholding company) is recommended to perform through onerous civil transactions including purchase/sale agreements, investment agreements signed upon, including but not limited to, tender results, to the extent that such transactions allow the organization (shareholding company) to *acquire ownership of* an asset (assets) constituting a core asset (assets) for the organization or shareholding company.

Further, gratuitous deals, including gifting, are permitted, in which case gratuitous alienation of non-core asset to federal and municipal ownership is recommended subject to a separate decision of the board of directors (supervisory board) and written approval by a respective public-law entity.

It is recommended that disposition of non-core assets be in compliance with provisions governing tender agreements set forth by the Civil Code of the Russian Federation (Articles 447 and 448 thereof). Selection of a tender organizer to search for bidders and manage competitive disposition of an asset is to be based on lists of corporate entities for managing on the federal government's behalf of disposition of privatized federal property and/or acting in the capacity of seller (23) and for managing disposition of federal and municipal properties in electronic format (6) approved by Russian Government's executive orders No. 1874-r dated October 25, 2010 (last updated on July 14, 2017) and No. 2488-r dated December 04, 2015, respectively.

Methods and procedures for disposition of non-core assets shall be established by corporate documents of an organization (shareholding company) subject to approval by the board of directors (supervisory board) of the organization or shareholding company in conformity with the requirements set forth by Russia's laws and regulations.

Offering price or purchase price of a non-core asset is determined based on a independent valuator report prepared in compliance with the requirements set forth by laws and regulations of Russia and/or of a non-core asset's host country. A non-core asset can be sold at a price below the book value subject to a special decision of the board of directors (supervisory board) of the organization or shareholding company and a respective feasibility report.

Disposition of non-core asset located overseas is recommended to be based on data from the methodological recommendations in the manner prescribed by Russia's laws and regulations, international laws and regulations or laws and regulations of a non-core asset's host country.

In the event a non-core asset is located abroad, its offering price or purchase price shall be determined based on the report of a Russian or foreign independent valuator selected on a competitive basis. In the event valuator selection competitive procedures are declared void more than twice due to a lack of bids, the offering price or purchase price of non-core asset shall be determined by a decision of the board of directors (supervisory board) of a shareholding company as long as respective feasibility report is made.

It is recommended to place the internal control (audit) department subordinate to the board of directors (supervisory board) in charge of monitoring identification and disposition of non-core assets in an organization or shareholding company, which must at least once a year report to the board of directors on identification and disposition non-core assets in the organization or shareholding company.

Disclosure of non-core assets disposition information and efficient monitoring of the implementation of a corporate asset alienation program shall be provided through quarterly (by 8th date of the month following the financial quarter) publication of complete, updated and accurate information on non-core assets alienation on the web portal, including from subsidiaries, as well as presentation of information on disposition of non-core assets in corporate annual reports in the manner prescribed by Russian Government's executive order No. 1214 dated December 31, 2010. As a reminder, the document approves a tentative layout of annual reports of JSCs with federally owned interest, which was amended in November 2015 to include a separate provision to govern non-core assets disposition.

The methodological recommendations are supposed to be put into practice through endeavors of government authorities.

With regard to shareholding companies, and federal executive authorities providing legal regulation and/or supervision and coordination in business areas specified in Russia's laws and regulations governing shareholding companies listed in the list of strategically important JSCs by Russian President's executive order No. 1009 dated August 4, 2004 and in the lists of JSCs by Russian Government's executive order No. 91-r dated January 23, 2003, the Ministry of Economic Development jointly with Rosimushchestvo must perform via the web portal:

- quarterly monitoring of non-core assets disposition results;
- quarterly validation of completeness and correctness of information concerning non-core assets disposition published on the web portal by managers of shareholding companies.

Furthermore, the foregoing federal ministries and agencies must procure that labor contracts with managers of shareholding companies are amended to include provisions regarding personal liability for late publication on the web portal of information or publication of inaccurate information about non-core assets disposition.

With the aim of making quarterly analysis of shareholding companies and organizations compliance with their non-core asset disposition action plans and annual presentation of relevant information to the Russian Government, the Ministry of Economic Development established an interdepartmental committee to consider, among other things, facts when managers of shareholding companies fail to timely publish information or publish incorrect information about non-core assets disposition on the web portal, provided by Rosimushchestvo and federal executive authorities.

That's not the first time that this issue has recently been addressed. Back in 2014, Rosimushchestvo adopted a methodology for core/non-core assets identification which ceased to be in force after methodological guidelines for identification and disposition of non-core assets were adopted by Russian Government's instruction No. ISH-P13-4065 dated July 7, 2016.

Since their adoption in 2017 at government level, the aspect of property related matters has been brought to a higher level, involving various government authorities/agencies on a system-wide basis. Another, albeit negative, incentive for addressing the issue was announcement that the Ministry of Economic Development jointly with the Ministry of Finance and federal executive authorities were drafting laws and regulations restricting government aid to

organizations (shareholding companies) that fail to develop, implement or duly implement non-core assets alienation programs, including subsidization of interest rate on new investment projects in priority civil sectors, government guarantees on loans and bonded loans as part of policies of sustainable economic development.

6.1.6. Fiscal effect of federal property policy

Unlike in the previous year, the 2017 dynamics of federal budget revenues that somehow related to federal property was heterogeneous. Irrespective of 2016 federal budget revenues from proceeds from disposition of Rosneft equity shares, there was an increase in revenues from the use of federal property (from renewable sources), whereas revenues from privatization and disposition of federal property (from non-renewable sources) plummeted.

Table 9 and *10* present data on revenues (excluding 2015–2017) set forth in the Federal Budget Execution Acts 2000–2014 that stemmed from the use of federal property and disposition of federal property regarding only a specific type of tangible assets.¹

According to formal data from budget execution reports, total revenues from renewable sources contracted 70 percent year on year in 2017. As a reminder, however, record values of 2016 were seen due to the effect of a sales deal of 19.5 percent interest in Rosneft, by which all the money was to be paid to the federal budget in the form of dividends from ROSNEFTEGAZ

¹ Outside the scope of analysis are federal budget revenues from mineral tax payments (including aquatic biological resources, revenues from the use of forest resources and mineral resources), compensation for agricultural production losses related to alienation of agricultural lands, as a result of financial operations (revenues from investment of budget funds (revenues on federal budget balances and revenues from investment of federal budget funds, including, since 2006, revenues from asset management of the Stabilization Fund of the Russian Federation (since 2009, revenues from asset management of the Reserve Fund and the National Wealth Fund), revenues from investment of proceeds accumulated through auctions of federally owned shares), interest on domestic loans funded out of the federal budget, interest on government loans (interest on Russian government loans paid by foreign governments and foreign corporate entities, money from corporate entities (enterprises and organizations), subjects of the Russian Federation, municipalities in payment of interest and guarantees on loans provided by foreign governments and international financial institutions to the Russian Federation), from the delivery of paid services or recovery of government costs, transfer of profits to the Central Bank of Russia, certain payments by public and municipal enterprises and organizations (patent fees/taxes and registration charges for official registration of computer software, databanks and integrated circuit layouts and other revenues which up to and including 2004 were an integral part of payments from government organizations (apart from revenues from operations of the Vietsovpetro Joint Venture since 2001 and from transfer of a part of FSUEs profits since 2002)), revenues from exercise of product sharing agreements (PSA), revenues from disposal and sale of confiscated/seized and other property translated into government revenues (including properties transferred to the ownership of the federal government by way of inheritance or gift, or treasures), revenues from lotteries, other revenues from the use of federally owned properties and title (revenues from exercise of intellectual property rights (R&D and technological research) of military, special and double purpose, revenues from disposal of rights to research and development deliverables owned by the Russian Federation, revenues from operation and use of motor road assets, motor road tolls on motor vehicles registered overseas, disposal of the Russian Federation exclusive intellectual property rights in geodesy and cartography, and other revenues from the use of property owned by the Russian Federation), as well as revenues from permitted types of activity of organizations credited to the federal budget, proceeds from disposition of precious metals and precious stones of public reserves.

Unlike in previous years, the federal budget execution acts 2015–2016 provided no aggregated data by code of types, subtypes of revenues, classification of public administration sector's operations that are attributed to budget revenues (data are presented only by classification code in terms of administrators of revenues). Therefore data from the annual Federal Budget Execution Reports dated as of January 1, 2016 and January 1, 2017, the monthly Federal Budget Execution Report dated as of January 1, 2018 were used.

as Rosneft's parent company. Excluding the foregoing interest worth RUB 692,395 billion,¹ revenues from renewable sources increased more than 8 percent in 2017.

Table 9

**Federal budget revenues from use of federal property (renewable sources),
2000–2017, rubles in millions**

Year	Total	Dividends on shares (2000–2017) and revenues from other forms of equity participation (2005–2017)	Rental payments for federally owned land	Rental revenues from federal property	Revenues from transfers of part of after-tax profit and other mandatory payments of FSUEs	Revenues from operations of Vietsoinvest Joint Venture
2000	23244.5	5676.5	–	5880.7	–	11687.3 ^a
2001	29241.9	6478.0	3916.7 ^b	5015.7 ^b	209.6 ^d	13621.9
2002	36362.4	10402.3	3588.1	8073.2	910.0	13388.8
2003	41261.1	12395.8		10276.8 ^c	2387.6	16200.9
2004	50249.9	17228.2	908.1 ^f	12374.5 ^e	2539.6	17199.5
2005	56103.2	19291.9	1769.2 ^h	14521.2 ⁱ	2445.9	18075.0
2006	69173.4	25181.8	3508.0 ^h	16809.9 ⁱ	2556.0	21117.7
2007	80331.85	43542.7	4841.4 ^h	18195.2 ⁱ	3231.7	10520.85
2008	76266.7	53155.9	6042.8 ^h	14587.7 ⁱ	2480.3	–
2009	31849.6	10114.2	6470.5 ^h	13507.6 ⁱ	1757.3	–
2010	69728.8	45163.8	7451.7 ^h	12349.2 ^j	4764.1	–
2011	104304.0	79441.0	8210.5 ^h	11241.25 ^j	4637.85	773.4
2012	228964.5	212571.5	7660.7 ^k	3730.3 ^l	5002.0	–
2013	153826.25	134832.0	7739.7 ^k	4042.7 ^l +1015.75 ^m	6196.1	–
2014	241170.6	220204.8	7838.7 ^k	3961.6 ^l +1348.5 ^m	7817.0	–
2015	285371.1	259772.0	9032.3 ^k	5593.8 ^l +1687.8 ^m	9285.2	–
2016	946723.35/ 254328.3 ⁿ	918969.1/ 226574.1 ⁿ	9412.4 ^k	5843.25 ^o +3026.7 ^m	9471.9	–
2017	275170.35	251329.2	9825.1 ^k	5318.35 ^o +2857.7 ^m	5840.0	–

^a according to data from the Federal Agency for State Property Management of Russia, the revenues were not itemized separately in the Federal Budget Execution Act 2000, specifying the amount of payments of federally owned enterprises (RUB 9887.1 million) (excluding specific components);

^b the amount of rental (a) for farmlands and (6) for lands owned by cities, towns and settlements;

^c total rental revenues from properties allocated to (a) research organizations, (b) educational institutions, (c) healthcare institutions, (d) public museums, public institutions of arts and humanities, (e) archive institutions, (f) the Ministry of Defense of Russia, (g) organizations operating under the jurisdiction of the Ministry of Transportation of Russia, (h) organizations providing services to public academies of sciences and (i) other rental revenues from properties owned by the federal government;

^d according to data from the Federal Agency for State Property Management of Russia, the revenues were not itemized separately in the Federal Budget Execution Act 2001, the value was equal to the value of other revenues from payments of public and municipal organizations;

^e total rental revenues from properties, owned by the federal government (land rental was not itemized separately);

^f the amount of rental (a) for lands owned by cities, towns and settlements and (b) for federally owned lands after the demarcation of federal ownership of land;

^g total rental revenues from properties allocated to (a) research organizations, (b) educational institutions, (c) healthcare institutions, (d) public institutions of arts and humanities, (e) public archive institutions, (f) federal postal service branches of The Ministry of Communications and Informatization of Russia, (g) organizations providing services to public academies of sciences and (h) other rental revenues from properties owned by the federal government;

^h rental after the demarcation of federal ownership of land and proceeds from disposition of rights to enter into federally owned land leasehold contracts (excluding land parcels of federal autonomous institutions (2008–2011) and federally funded (2011) institutions);

¹ The purchase price of Rosneft shares, net of interim dividends (RUB 18.4 billion) going to the federal budget, was used to ensure a correct comparison.

ⁱ rental revenues from properties under the operational management of federal government authorities and institutions established by federal government authorities and under the economic jurisdiction of FSUEs: placed under the operational management of public (a) research institutions, (b) organizations providing scientific services to the Russian Academy of Sciences and to sector-specific academies of sciences, (c) educational institutions, (d) healthcare institutions, (e) federal postal service branches of the Federal Communications Agency, (f) public institutions of arts and humanities, (g) public archive institutions and (h) other rental revenues from properties under the operational management of federal government authorities and institutions established by federal government authorities and under the economic jurisdiction of FSUEs¹ (for 2006–2009, excluding revenues from permitted types of activity and overseas revenues from the use of federally owned properties located outside the territory of the Russian Federation that were not itemized separately at all in previous years²);

^j rental revenues from properties under the operational management of federal government authorities and institutions established by federal government authorities (excluding autonomous and federally funded institutions): placed under the operational management of public (a) research institutions, (b) organizations providing scientific services to the Russian Academy of Sciences and to sector-specific academies of sciences, (c) educational institutions, (d) healthcare institutions, (e) public institutions of arts and humanities, (f) public archive institutions, (g) under the operational management of the Ministry of Defense of Russia and its subordinated agencies (2010), (h) owned by the federal government and in the possession of the Department for Presidential Affairs of the Russian Federation (2010) and (i) other rental revenues from properties under the operational management of federal government authorities and institutions established by federal government authorities (excluding revenues from permitted types of activity and overseas revenues from the use of federally owned properties located outside the territory of the Russian Federation);

^k rental after the demarcation of federal ownership of land proceeds from disposition of rights to enter into federally owned land leasehold contracts (excluding land parcels of federally funded and autonomous institutions), as well as (a) rental for land parcels located within the right-of-way lines of federal-aid general-purpose motor roads owned by the federal government (2012–2016), (b) payments under easement agreements with regard to land parcels located within the right-of-way lines of federal-aid general-purpose motor roads for the purpose of construction (reconstruction), over-haul and operation of road service units, laying, reallocation, rebuilding, and operation of engineering networks, installation and operation of advertising structures (2012 and 2014–2016) and (c) payments under easement agreements with regard to land parcels owned by the federal government (2015–2016);

^l rental revenues from properties under the operational management of federal government authorities and institutions established by federal government authorities (excluding federally funded and autonomous institutions): placed under the operational management of public (a) research institutions, (b) educational institutions, (c) healthcare institutions, (d) public institutions of arts and humanities, (e) public archive institutions, (f) other rental revenues from properties under the operational management of federal treasury institutions, (g) federal government authorities, the Bank of Russia and governing bodies of non-federally funded funds of the Russian Federation, (h) federal treasury institutions (only 2015) (excluding overseas revenues from the use of federally owned properties located outside the territory of the Russian Federation);

^m rental revenues from properties that belong to the Treasury of the Russian Federation (excluding land parcels);

ⁿ exclusive of proceeds from disposition of equity shares in Rosneft (RUB 692.395 billion), net of interim dividend payment;

^o the data for 2016–2017 are generalized without sector-specific separation of institutions. The generalized classification includes only two categories of revenue according to the recipient of revenues from leasehold (federal government authorities, the Bank of Russia and governing bodies of non-federally funded funds of the Russian Federation and federal treasury institutions).

¹ In 2008–2009, FSUEs were not mentioned as a source of rental revenues from properties under FSUEs' economic management, and leasehold of properties under economic management of federal government authorities and institutions established by federal government authorities did not cover properties of federally funded autonomous institutions.

² According to data from the Federal Agency for State Property Management of Russia, revenues from the use of federal properties located abroad (apart from revenues of the Russian party of the Vietsovpetro Joint Venture) totaled RUB 315 million in 1999 and RUB 440 million in 2000. Later, FSUE Overseas Property Management began to play a key part in using federally owned overseas immovable properties for commercial purposes.

Source: Federal Budget Execution Acts 2000–2014, Federal Budget Execution Reports dated as of January 1, 2016, as of January 1, 2017 (annual reports), Federal Budget Execution Report dated as of January 1, 2018 (monthly report), www.roskazna.ru, own calculations.

Dividend inflow to the federal budget increased almost 11 percent, nearing in absolute terms (RUB 251.3 billion) the 2015 peak of RUB 259.8 billion. However, a part of the profits transferred from unitary enterprises plummeted more than 38 percent, surpassing annual decrease rates of 2008–2009. In absolute terms (RUB 5.8 billion), they came out to be below the 2013 level, less than federal budget revenues from land rental that increased nearly 4.4 percent to more than RUB 9.8 billion.¹

Total rental revenues from federally owned properties (nearly RUB 8.2 billion) were down nearly 8 percent. Rental revenues from properties that belong to the Treasury of the Russian Federation (excluding land parcels) (more than RUB 2.85 billion) contracted (by 5.6 percent) for the first time since they were reported separately in 2013 fiscal reports, while rental revenues from properties under the operational management of federal government authorities and institutions established by federal government authorities (excluding federally funded and autonomous institutions) (more than RUB 5.3 billion) fell even deeper (9 percent).

Like in the previous year, dividends represented most to the federal budget revenues from renewable sources (more than 91 percent compared to previous year's 89 percent, net of proceeds from disposition of equity shares in Rosneft). The percentage of land rentals stood at 3.6 percent, rentals for properties at 3.0 percent, profits transferred from FSUEs at 2.1 percent. The percentage of the two latter contracted from 2016.

Moving on to an analysis of federal budget revenues from privatization and disposition of federal property (*Table 10*), the point to note is that proceeds from disposition of the bulk of the assets (shares, plus land parcels in 2003–2007²) have since 1999 been attributed to sources of financing of the federal budget deficit.

In 2017, federal budget property-related revenues from non-renewable sources saw a 19-fold fall. Revenues from disposition of shares exhibited an even deeper (28.5-fold) fall to RUB 14.3 billion. These figures were less than those in 2010 but more than doubled the value (RUB 6.3 billion) seen in 2015.

Proceeds from disposition of land parcels contracted by more than 43 percent, down RUB 1.2 billion from previous year's RUB 2.1 billion, equaling to the value seen in 2013 and in the pre-crisis period of 2008–2009. Proceeds from disposition of various types of property posted the smallest decline (15 percent), hitting an all-time low in absolute terms (more than RUB 6.4 billion) since 2011.

Although proceeds from disposition of shares contributed most (nearly 2/3) to total revenues from non-renewable sources in 2017, their percentage came out to be much less than that (nearly 98 percent) registered a year earlier. Accordingly, the share of proceeds from disposition of other assets was up in the order of magnitude and higher. Disposition of various properties

¹ Like in the previous year, the amount of rental revenues from land includes revenues from payment for land parcels located within the right-of-way lines of federal-aid general-purpose motor roads owned by the federal government, payments under easement agreements with regard to land parcels located within the right-of-way lines of federal-aid general-purpose motor roads for the purpose of construction (reconstruction), over-haul and operation of road service units, laying, reallocation, rebuilding, and operation of engineering networks, installation and operation of advertising structures, as well as payments under easement agreements with regard to land parcels owned by the federal government, which emerged for the first time in 2015 fiscal reports.

² In 2003–2004, including disposition of leasehold rights.

made up more than 29 percent of overall proceeds (1.8 percent in 2016) as disposition of land accounted for 5.5 percent (0.5 percent in 2016).

Table 10

**Federal budget revenues from property privatization and disposition
(non-renewable sources) in 2000–2017, rubles in millions**

Year	Total	Disposition of federally owned shares (2000–2017) and other forms of equity participation (2005–2017) ^a	Disposition of land parcels	Disposition of various types of property
2000	27167.8	26983.5	–	184.3 ^b
2001	10307.9	9583.9	119.6 ^c	217.5+ 386.5+0.4 (IAs) ^d
2002	10448.9	8255.9 ^e	1967.0 ^f	226.0 ^g
2003	94077.6	89758.6	3992.3 ^h	316.2+10.5 ⁱ
2004	70548.1	65726.9	3259.3 ^j	197.3+1364.6+0.04 (IAs) ^k
2005	41254.2	34987.6	5285.7 ^l	980.9 ^m
2006	24726.4	17567.9	5874.2 ⁿ	1284.3 ^o
2007	25429.4	19274.3	959.6 ^o	5195.5 ^p
2008	12395.0	6665.2+29.6	1202.0 ^q	4498.2+0.025 (IAs) ^r
2009	4544.1	1952.9	1152.5 ^q	1438.7 ^r
2010	18677.6	14914.4	1376.2 ^q	2387.0+0.039 (IAs) ^r
2011	136660.1	126207.5	2425.2 ^q	8027.4 ^r
2012	80978.7	43862.9	16443.8 ^q	20671.7+0.338 (IAs) ^r
2013	55288.6	41633.3	1212.75 ^q	12442.2+0.310 (IAs) ^r
2014	41155.35	29724.0	1912.6 ^q	9517.7+1.048 (IAs) ^r
2015	18604.1	6304.0	1634.55 ^q	10665.5+0.062 (IAs) ^r
2016	416470.5	406795.2	2112.7 ^q	7562.6+0.012 (IAs) ^r
2017	21915.1	14284.5	1199.6 ^q	6429.7+1.3 (IAs) ^r

^a attributed to sources of internal financing of the federal budget deficit, the amount of RUB 29.6 million in 2008 (according to data from the Federal Budget Execution Report dated as of January 1, 2009) is attributed to federal budget revenues but not available in the 2008 Federal Budget Execution Act;

^b revenues from privatization federally owned organizations that are deemed to constitute sources of internal financing of the federal budget deficit;

^c proceeds from disposition of land parcels and leasehold rights to land parcels owned by the federal government (land parcels underlying privatized enterprises were separated) that are deemed to constitute federal budget revenues;

^d the amount proceeds from (1) disposition of properties owned by the federal government that are deemed to constitute sources of internal financing of the federal budget deficit, (2) proceeds (a) from sales of living quarters, (b) from disposition of federally owned productive and nonproductive assets, means of transport, other equipment and other tangible assets, as well as (3) proceeds from disposition of intangible assets (IAs) attributed to federal budget revenues;

^e including RUB 6 million from disposition of shares held/owned by subjects of the Russian Federation;

^f proceeds from disposition of land intangible assets, whose amount was not specified separately, that are deemed to constitute federal budget revenues;

^g proceeds from disposition of properties owned by the federal government (including RUB 1.5 million from disposition of properties owned by subjects of the Russian Federation) that are deemed to constitute sources of internal financing of the federal budget deficit;

^h includes proceeds: (1) from disposition of land parcels underlying immovable properties owned by the federal government prior to their alienation that are credited to the federal budget, (2) from disposition of other land parcels, as well as from disposition of the right to enter into rental agreements on these land parcels, (3) from disposition of land parcels after the demarcation of land ownership, as well as from disposition of the right to enter into rental agreements on these land parcels that are credited to the federal budget that are deemed to constitute sources of internal financing of the federal budget deficit;

ⁱ the amount (1) of proceeds from disposition of properties owned by the federal government that are deemed to constitute sources of internal financing of the federal budget deficit, and (2) proceeds from disposition of intangible assets attributed to federal budget revenues;

^j includes proceeds: (1) from disposition of land parcels prior to the demarcation of state ownership on land underlying immovable properties owned by the federal government prior to their alienation, that are credited to the federal budget, (2) from disposition of other land parcels, as well as from disposition of the right to enter into

rental agreements on these land parcels, (3) from disposition of land parcels after the demarcation of land ownership, as well as from disposition of the right to enter into rental agreements on these land parcels that are credited to the federal budget that are deemed to constitute sources of internal financing of the federal budget deficit;

^k the amount of (1) proceeds from disposition of properties owned by the federal government that are deemed to constitute sources of internal financing of the federal budget deficit, (2) proceeds (a) from sales of living quarters, (b) from disposition of equipment, means of transport and other material assets that are credited to the federal budget, (c) from disposition of ship recycling products, (d) from disposition of properties owned by SUEs, institutions, and of military materials and equipment, (e) from disposition of products of recycling of military materials and equipment and ammunition, (3) proceeds from disposition of intangible assets (IAs) attributed to federal budget revenues;

^l includes proceeds: (1) from disposition of land parcels prior to the demarcation of state ownership on land underlying immovable properties owned by the federal government prior to their alienation, (2) from disposition of land parcels after the demarcation of land ownership that are credited to the federal budget, (3) from disposition of other land parcels owned by the federal government prior to the demarcation of state ownership on non-housing land (the latter update is only referred to 2006) that are deemed to constitute sources of financing of the federal budget deficit;

^m proceeds from disposition of tangible and intangible assets (net of federal budget revenues from ownership and disposition of seized/confiscated properties and other properties translated into federal government income), include proceeds (a) from sales of living quarters, (b) from disposal of FSUEs properties, (c) from disposal of properties under the management of federal institutions, (d) from disposition of military materials and equipment, (e) from disposition of products of recycling of military materials and equipment and ammunition, (f) from disposal of other properties owned by the federal government, (g) from disposition of intangible assets, that are deemed to constitute federal budget revenues;

ⁿ proceeds from disposition of tangible and intangible assets (excluding revenues in the form of a federal share of profit-making products in the course of *execution of* production sharing agreements (PSA) and federal budget revenues from disposal and disposition of escheat, seized/confiscated properties and other properties translated into federal government revenues), include proceeds (a) from sales of living quarters, (b) from disposal of FSUEs properties, (c) from disposal of properties under the management of federal institutions, (d) from disposal of military materials and equipment, (e) from disposition of products of recycling of military materials and equipment and ammunition, (f) revenues from disposal of other properties owned by the federal government that are deemed to constitute federal budget revenues;

^o proceeds from disposition of land parcels after the demarcation of federal ownership of land that are deemed to constitute sources of financing of the federal budget deficit;

^p proceeds from disposition of tangible and intangible assets (excluding revenues in the form of a federal share of profit-making products in the course of *execution of* production sharing agreements (PSA) and federal budget revenues from disposal and disposition of escheat, seized/confiscated properties and other properties translated into federal government revenues, proceeds from disposition of sequestered lumber), include proceeds (a) from sales of living quarters, (b) from disposal of FSUEs properties, (c) from disposal of properties under the management of federal institutions, (d) from disposition of released movable and immovable military properties and other properties of federal executive authorities where military and equated to military service is stipulated, (e) disposition of military products available at federal executive authorities within the framework of military and technological cooperation, (f) revenues from disposal of other properties owned by the federal government that are deemed to constitute federal budget revenues;

^q proceeds from disposition of land parcels owned by the federal government (excluding land parcels of federal autonomous institutions and federally funded (2011–2012) institutions) that are deemed to constitute federal budget revenues, as well as, for 2015, plus payment for expanding the area of privately owned land parcels as a result of reallocation of such land parcels and land parcels owned by the federal government;

^r proceeds from disposition of tangible and intangible assets (excluding revenues in the form of a federal share of profit-making products in the course of *execution of* production sharing agreements (PSA) and federal budget proceeds from disposal and disposition of escheat, seized/confiscated properties and other properties translated into federal government revenues, proceeds from sales of sequestered lumber (2008–2011), proceeds from using material assets out of the federal reserve of special raw materials and fertile materials (with regard to proceeds from disposition, from granting for temporal use and from other use), as well as, for 2012–2017, proceeds from sales of lumber produced through measures of replacement, conservation and protection of forests while placing the federal government contract to perform the measures without selling forest planting for wood harvesting, as

well as lumber produced by using forests of the federal forestry fund land, pursuant to Articles 43–46 of the Forestry Code of the Russian Federation, revenues from intervention sales out of the reserves of the agricultural intervention fund, raw materials and foodstuff products, from using tangible assets out of the federal reserve, from the engagement of imprisoned persons in paid labor (with regard to sales of finished products), from sales of products requiring special storage conditions), include revenues: (a) from sales of living quarters, (b) from disposal of properties under the management of federal institutions (excluding autonomous and federally funded institutions (2011–2017), net of revenues from overseas missions' operations (2015–2017), (c) from disposition of released movable and immovable military properties and other properties of federal executive authorities where military and equated to military service is stipulated, (d) from disposition of products of recycling of military materials and equipment and ammunition, (e) from disposition of military products available at federal executive authorities within the framework of military and technological cooperation (2008 and 2010–2017), (f) from disposition of products of recycling of weapons and military materials and equipment as part of the federal program for Industrial Recycling of Weapons and Military Equipment (2005–2010), (g) proceeds from disposition of immovable properties of federally funded and autonomous institutions (2014–2017), (h) revenues from disposal of other properties owned by the federal government, as well as proceeds from disposition of intangible assets (IAs) that are deemed to constitute federal budget revenues.

Source: Federal Budget Execution Acts 2000–2014, Federal Budget Execution Reports dated as of January 1, 2016, as of January 1, 2017 (annual reports), Federal Budget Execution Report dated of January 1, 2018 (monthly report), www.roskazna.ru, own calculations.

Total amount of federal budget revenues from privatization (disposition) and from the use of federal property in 2017 (*Table 11*) was by 4.6 times less than the previous year's value. In absolute terms, the amount (RUB 297.1 billion) came out to be less than what it was in 2015.

Table 11

**Structure of federal property-related budget revenues from various sources,
2000–2017**

Year	Total revenues from privatization (sales) and from the use of federal property		Revenues from privatization and disposition of property (non-renewable sources)		Revenues from the use of federal property (renewable sources)	
	rubles in millions	as percentage of total	rubles in millions	as percentage of total	rubles in millions	as percentage of total
2000	50412.3	100.0	27167.8	53.9	23244.5	46.1
2001	39549.8	100.0	10307.9	26.1	29241.9	73.9
2002	46811.3	100.0	10448.9	22.3	36362.4	77.7
2003	135338.7	100.0	94077.6	69.5	41261.1	30.5
2004	120798.0	100.0	70548.1	58.4	50249.9	41.6
2005	97357.4	100.0	41254.2	42.4	56103.2	57.6
2006	93899.8	100.0	24726.4	26.3	69173.4	73.7
2007	105761.25	100.0	25429.4	24.0	80331.85	76.0
2008	88661.7	100.0	12395.0	14.0	76266.7	86.0
2009	36393.7	100.0	4544.1	12.5	31849.6	87.5
2010	88406.4	100.0	18677.6	21.1	69728.8	78.9
2011	240964.1	100.0	136660.1	56.7	104304.0	43.3
2012	309943.2/ 469243.2*	100.0	80978.7/ 240278.7*	26.1/ 51.2*	228964.5	73.9/ 48.8*
2013	209114.85	100.0	55288.6	26.4	153826.25	73.6
2014	282325.95	100.0	41155.35	14.6	241170.6	85.4
2015	303975.2	100.0	18604.1	6.1	285371.1	93.9
2016	1363193.85/ 670798.85**	100.0	416470.5	30.6/ 62.1**	946723.35/ 254328.35°	69.4/ 37.9**
2017	297085.45	100.0	21915.1	7.4	275170.35	92.6

* including central bank's proceeds from disposition of equity shares in Sberbank (RUB 159.3 billion), which possibly leads to an overestimated aggregate share of non-renewable sources because not all of the specified amount went to the federal budget, net of the book value and costs relating to disposition of equity shares. Therefore the share of renewable sources is probably somewhat undervalued;

** exclusive of proceeds from disposition of equity shares in Rosneft (RUB 692.395 billion) (net of interim dividend payment).

Source: Federal Budget Execution Acts 2000–2014, Federal Budget Execution Reports dated as of January 1, 2016, as of January 1, 2017 (annual reports), the Federal Budget Execution Report dated as of January 1, 2018 (monthly report), www.roskazna.ru, own calculations.

After a previous' year substantial change in the structure of overall revenues from privatization (sales) and from the use of federal property as a result of several sale deals involving shares of biggest companies (first of all, Rosneft), the ratio of non-renewable to renewable sources was back to its levels seen 2015.

The percentage of non-renewable sources in the structure of overall revenues from privatization (disposition) and from the use of federal property saw a 4-fold decline to 7.4 percent, whereas the percentage of revenues from the use of federal property was up from 69.4 to 92.6 percent in 2017. In absolute terms, this indicator ranked second after 2015 throughout the entire period since the early 2000s, while revenues from privatization and disposition of property were slightly more than half of the value seen in 2014 but above values seen in 2008–2010 and in 2015.

6.1.7. New version of the federally-funded program for federal property management: intermediate results and fulfillment prospects

Today's federal property policy is described by the Federally-Funded Program for Federal Property Management (hereinafter 'the Program') adopted by Russian Government's executive order No. 327 of April 15, 2014 in lieu of its counterpart that was in force over just 14 months.¹ Russian Government's executive order No. 381-12 dated 31 March 2017 introduced material updates and amendments to the 2014 Program.

Financing and indicators for performance

First and foremost, the federally-funded program has been extended till 2019, including the program's second stage (2016–2019). The Ministry of Economic Development continues to be the prime contractor of the Program as Rosimushchestvo is now a joint contractor regarding Sub-program 1 for 'Enhancing the Efficiency of Federal Property Management and Privatization, similar to that of the Federal State Reserve Agency' similar to the Sub-program for 'Public Tangible Reserves Management'. The amount and percentage of federal allocations changed as well (*Table 12*).

2017–2019 will continue to see the previous year's trend towards less funding compared with the original version of the Program: a decline of 15 percent in 2017 and 24 percent in 2018. The trend, not surprisingly, comes from budget constraints driven by troublesome conditions facing the Russian economy in recent years. Clearly, as contrasted with the 2013 program, the new version of the Program has no target indicators to achieve through allocation of extra resources.

Overall, federal budget appropriations for the Program will amount to RUB 165.8 billion in 7 years (2013–2019), adding about RUB 10.8 billion (or 7 percent) to that for the original 6-year version of the Program (2013–2018). There is, however, marginal increase (nearly RUB 712 million) through extension of the Program with regard to the Sub-program for 'Enhancing the Efficiency of Federal Property Management and Privatization' whose 2019

¹ Adopted by Russian government executive order No. 191-r dated February 16, 2013.

For more details on the federal state program 2013 see Malginov G., Radygin A. Public sector and privatization // Russian Economy in 2012. Trends and Outlooks (Issue 34). M., IEP. 2013, pp. 468–475.

funding is somewhat 15 percent less than the average annual amount of the new version of the Program and 1/4 less than that of the original version, not to mention the Program 2013, in which allocations covered only the program itself. Like in the original version of the Program, the bulk of federal allocations cover the sub-program for ‘Public Tangible Reserves Management’. The Sub-Program for ‘Enhancing the Efficiency of Federal Property Management and Privatization’ accounts for less than 20 percent of the total financing in 2013–2019, with even less (nearly 18 percent) in annual terms for 2017–2019. What is noteworthy is that it’s all about target values rather than actual values of federal funding.

Table 12

Amount of federal allocations for Federally-Funded Program for Federal Property Management, 2013–2019 (rubles in millions)

Period	Federally-Funded Program 2013*		Federally-Funded Program 2014 (original version)		Federally-Funded Program 2014 (updated version 2017)	
	total	Including supplementary funding	total	including Sub-program for Enhancing Efficiency of Federal Property Management and Privatization	total	including Sub-program for Enhancing Efficiency of Federal Property Management and Privatization
2013	5474.3	5896.9	23629.8	5673.8	23287.2	5474.3
2014	5251.4	9666.6	22093.5	5436.1	22093.5	5436.1
2015	5275.1	9842.7	27537.6	5298.9	27938.9	5408.5
2016	5469.8	11180.5	25261.0	5138.9	24854.5	4465.8
2017	5775.8	8028.8	26903.6	5158.6	22971.3	4127.6
2018	6192.0	7869.2	29605.5	5531.4	22491.1	4046.0
2019	–	–	–	–	22172.6	3991.6
Total	33438.4	52484.8	155031.1	32237.7	165809.1	32949.8

* Exclusively for the Sub-program for ‘Enhancing the Efficiency of Federal Property Management and Privatization’. No data were published for the amount of federal allocations for the Sub-Program for ‘Public Tangible Reserves Management’.

Source: The Federally-Funded Program for Federal Property Management adopted by Russian Government’s executive order No. 191-r dated February 16, 2013; The Federally-Funded Program for Federal Property Management adopted on April 15, 2014 by Russian Government’s executive order No. 327 (the original version and the updated version dated March 31, 2017).

Goals and objectives of the new version of the Program are formulated in a more laconic way. Excluding the issue of managing federal tangible assets, there is a goal to enhance mechanisms of federal property management and privatization and an objective of increasing the efficiency and quality of management. Target indicators for the Program continue to be average rates of decrease in the number of organizations with federal government equity participation and federal treasury properties (in percentage terms), whereas the original version of the Program contained target indicators including the dynamics of technology-led development processes of federal property management.

In the new version of the Program, a reform of the federal property disposition framework is expected to be completed by 2019, and the dynamics of quantitative reduction of federal treasury properties are projected to increase 24 percent in 2019 from 3 percent in 2013.

In the original version of the Program, key projected outputs were just outlined rather than linked to specific terms and quantitative indicators: (1) to streamline the composition and structure of federal property at macro- and micro-level to create strong preconditions for economic growth, as well as lay economic groundwork for public not-for-profit institutions (from the perspective of achieving national objectives and interests); (2) to increase the

efficiency of federal property management, including competitiveness and investment appeal of companies with an interest owned by the federal government, setting long- and short-term goals and objectives; (3) to restrict expansion of the public sector of economy by, including but not limited to, establishing and adhering to a framework of prohibitions and restrictions, pursuing industry-specific and other types of policies instead of direct government involvement in the economy, as well as adhering to principles of conformity, sustainability and guarantees of the long-term basis of announced goals and objectives.

Outputs for Sub-program 1 are formulated in a similar manner. It is noteworthy that the original and the new versions of the Program contain the foregoing three points (National policy priorities and goals including general national policy requirements to subjects of the Russian Federation) not as outputs but as effects that could be seen if the program target goals are achieved.

A new version of the data sheet for the Sub-program for ‘Enhancing the Efficiency of Federal Property Management and Privatization’ has a shorter, albeit different, description of *goals and objectives*.

The *goals* are (I) to streamline the composition and structure of federal property, (II) to increase the performance of federal property management and (III) to ensure efficient supervision, accounting and monitoring of the use of federal property.

The *objectives* are (1) to define the purpose, optimal composition and structure of federal property, (2) to increase the efficiency of federal property disposition and to streamline policies to commercialize federal properties, including privatization instruments, (3) to improve the efficiency and quality of corporate governance in companies with an interest owned by the federal government, management of federally owned properties including federally owned land, (4) to broaden methods of supervision and increase personal liability for management and use of federally owned properties, (5) to improve the efficiency of accounting and monitoring of the use of federal property.

A set of target indicators for the Sub-Program for ‘Enhancing the Efficiency of Federal Property Management and Privatization’ changed as well. The number of quantitative indicators decreased to 14 from 16. Like in the previous version of the Program, the streamlining of the composition and structure of federal property relies on indicators such as share of federally owned properties (by category) with defined target function (shareholding companies with government equity participation, federal government agencies, federal treasury properties), decrease rates for the number of properties (in terms of YoY percentage change for FSUEs and JSCs, and in terms of percentage change from 2012 for non-commercialized federal treasury land parcels (excluding land parcels restricted for commercialization and de-commercialized land parcels), and other federal treasury properties (excluding those owned exclusively by the Russian Federation)). The only difference in this part was that the share of FSUEs with defined target function was taken off the set of indicators.

The set of indicators describing the effectiveness of federal property management underwent major changes. The aggregate indicator (in percentage terms) showing the compliance with target federal budget revenues from management and disposition of federal property, excluding revenues from privatization, was replaced with two indicators reflecting various aspects of the property management process.

The privatization efficiency must be measured as a percentage share of FY federal budget revenues of target federal budget revenues from disposition of equity shares and stakes in the charter capital of shareholding companies pursuant to a Russian Government’s executive order

to approve a forecast plan (program) for privatization for the ensuing year (excluding proceeds from disposition of equity shares in biggest joint-stock companies). It therefore is noteworthy that the new set has no indicator for quantity of disposed highly-sought big investment property assets through public offering (out of property assets intended for disposition this year pursuant to decisions of the Russian President and/or the Russian Government) (exchange transactions and strategic sales).

A share of federal budget revenue, measured as a percentage share of FY target revenue, from stakes in the charter (pooled) capital of business partnerships and entities, or from dividends on shares held/owned by the federal government (with consideration for Russian Government's dividend omission decisions) is selected to measure the efficiency of property use.

What stands apart is another new indicator reflecting the valuation/purchase price ratio for sold properties with ownership transferred to the federal government. Although there is no clear economic rationale for that, one can assume that this relates to the fact that Rosimushchestvo has recently been increasingly focusing on disposition of *escheat and confiscated* properties.

The new version of the Program also employs the indicator for a share of civil servants in governing and supervisory boards of joint-stock companies with an interest owned by the federal government, which represents the management toolkit for federally owned assets and is supplemented with a share of JSCs (listed in the special list adopted by Russian Government's executive order No. 91-r dated January 23, 2003¹, as well as other JSCs with a controlling interest owned by the federal government) whose long-term programs have indicators for labor productivity growth, creation and modernization of high-productive jobs.

The number of indicators describing supervision over federal property management and the status of technology-led development of management processes decreased. The new version of the Program has only two indicators from the previous version's set of indicators, namely a percentage share of registered federally owned properties of the total number of identified properties subject to registration (within current year), and a percentage share of digitized public services of total services rendered by Rosimushchestvo.

The new version of the Program has no indicators for a percentage share of shareholding companies with a government full ownership interest and federal organizations with government's ownership interest of less than 100 percent where the fiscal accounting and reporting/accounting system is fully integrated into the Federal State Information and Analytical System 'Unified State Property Management System' (hereinafter the FSIAS USPMS) in the total number of federal organizations, as well as a percentage share of legally significant electronic document flow compliant with existing laws and regulations between Rosimushchestvo, including its local branches, and federal government agencies of total document flow with federal government agencies.

The new version of the Program expects the sub-program 1 to:

- define by 2019 a target function for 100 percent of organizations in which the federal government owns an interest;
- ensure conformity of the composition of organizations in which the federal government owns an interest and whose property is owned by the federal government with objectives and strategic interests of the Russian Federation by 2019;

¹ Shareholder's position of the federal government on critical matters regarding these companies shall be determined at government level.

- ensure conformity of competitive and higher-quality corporate governance of companies with an interest owned by the federal government with international standards;
- ensure further decrease in the number of federal treasury properties of the Russian Federation (excluding land parcels) from 1 percent in 2013 to 12 percent in 2019;
- increase substantially the share of commercialized land parcels;
- broaden the system of public control over federal property management and disposition;
- ensure a complete accounting for all federally owned properties under a unified federal property accounting and management system;
- ensure achievement of targets for federal budget revenues from the use and disposition of federal property.

New Program's goals and objectives

In terms of defining national policy priorities and goals, the new version of the Program contains a new reference to the Federal Act on Strategic Planning in the Russian Federation (previous versions contained no references to specific federal acts) in addition to the reference to the Concept of Long-Term Socio-Economic Development of the Russian Federation Until 2020, adopted by Russian Government's executive order No. 1662-r dated November 17, 2008.

The new version contains a new definition of independent experts as persons not holding a public office or non-civil servants of Russia, who are elected as members of supervisory boards of joint-stock companies with an interest owned by the federal government. A similar definition was made with regard to civil service for professional directors elected as members of governing boards of JSCs with an interest owned by the federal government.

As shown above, the projected goals and principal outputs for federal property management are defined more clearly than those set forth in the original version of the Program.

The new version of the Program has no clearly defined target outputs like those set for 2018 in the previous version: to increase the proportion of federally owned companies' shares listed in the Russian securities market, and to double stepwise the number of such companies (increase the number of government-controlled publicly-traded companies (OAO) listed in the Russian securities market), non-existence of federal unitary enterprises owned by right of economic management, provision of federal state registration of federal property ownership under the unified accounting and management system. Investment appeal and publicity are not mentioned with reference to international standards regarding increasing the quality of corporate governance of companies with an interest owned by the federal government.

Goals and objectives the Sub-Program for 'Enhancing the Efficiency of Federal Property Management and Privatization' underwent some kind of reformatting. The number of goals dropped from 5 to 3 and many objectives were reformulated.

Goal #1 (the new version of the Program, I) – to streamline the composition and structure of federally owned properties – appears to be bigger in terms of content volume than that in the original version of the Program (only definitions of property management targets). Therefore, the purpose, optimal composition and structure of federally owned properties are presented as an objective in the text (1), whereas objectives used to be bigger in number and less explicit (to check federal properties against objectives and interests of the Russian Federation as a public-law entity, including against powers vested upon federal government authorities, to establish a federal property management system to achieve specific goals through "road maps", to define a structural composition of federal property and a sequence of privatization of federal properties as business units).

However, the following problem-solving toolkit is almost the same, particularly with regard to the highlighted (in Goal #1) objective of (2) increasing the efficiency of federal property disposition and enhancing federal property commercialization policies, including privatization tools.

In the original version of the Program, respective policies were defined as a toolkit to deal with objectives for achieving a second goal on its own (to achieve optimal composition and structure of federally owned properties by reducing government participation in the economy, as well as streamline the composition of federal agencies operating in competitive economic sectors). The objectives were to switch from disposition of separate property or federally owned properties to disposition of business units, to increase the efficiency of disposition of equity shares in big shareholding companies with government equity participation with the aim to creating conditions for investment, securities market promotion as well as modernization and technology-led economic development, to gradually reduce the number of federal state unitary enterprises, as well as optimize the composition of other federal agencies. In this respect, a certified copy of an entry in the federal property register and technical stock-taking documents as necessary and sufficient grounds for ownership registration was mentioned among other policies proposed in the original version of the Program in the context of easing federal registration of immovable property ownership.

Goal #2 (the new version of the Program, II) – to increase federal property management efficiency – is formulated more concisely than that in the original version of the Program (*Goal #3* is to increase the efficiency of corporate governance model for companies with an interest owned by the federal government, efficient management of federally owned properties with the proprietary interest transferred to federal agencies, federally owned land parcels, as well as properties that belong to the Treasury of the Russian Federation).

The key objective is formulated more concisely too: (3) to increase the efficiency and quality of corporate governance of companies with an interest owned by the federal government, federally owned properties including federally owned land parcels.

Such objectives were mentioned in the original version of the Program: to increase the quality of corporate governance of companies with an interest owned by the federal government and the effectiveness of vertically-integrated companies and holding companies, to streamline mechanisms of shareholder's rights of the federal government with regard to publicly-traded companies (OAOs), to ensure efficient management, appropriate use and safekeeping of federally owned properties of federal organizations, to minimize the number of properties constituting the Treasury of the Russian Federation (interim status of federally owned properties), to provide a proprietary framework for federal government authorities as well as other organizations as stipulated by statutory acts, including policies aimed at accommodating certain organizations in premises that meet up-to-date operational requirements and exercising powers vested on government authorities, to ensure rational, efficient use of land parcels owned by the federal government and maximum yield.

Like in Goal #1, the original and new versions of the Programs have the same list of policies to achieve set objectives, except that supervisory boards of companies with government equity participation, including independent experts, are mentioned in addition to governing boards in the new version.

Goal #3 (the new version of the Program, III) is to provide efficient supervision, accounting and monitoring of the use of federally owned properties. In the original version of the Program, this goal (*Goal #4*) was less explicit: to provide federal property management supervision, to

decrease the probability of failure to achieve the set goals and objectives, as well as to minimize potential losses from unfavorable circumstances and conditions.” In addition, there was a separate goal (Goal #5) for federal property accounting and monitoring through introduction of a unified federal property accounting and management system including mechanisms of collection and presentation of information for making and analyzing the effectiveness of management decisions regarding federally owned properties.

The new version of the Program sets only two objectives to achieve Goal #3: (4) to broaden supervision channels and to increase personal liability for management and use of federally owned properties, (5) to increase the effectiveness of the system of accounting and monitoring of the use of federal property.

The original version of the Program contained a wider range of such objectives (to increase liability of authorized federal property managers (persons) for mismanagement, for federal property management reporting and to improve reporting procedures and forms for achieving target performance indicators set by federal agencies and companies with an interest owned by the federal government, for developing an integral scheme of incentives and liability of all those involved in the federal property management process for enhancing monitoring and expanding supervision channels over the use of federal property and the achievement of target performance indicators). Those objectives were complemented with objectives implied by the goal of federal property accounting and monitoring (to increase the accounting efficiency regarding federal property by defining its composition and levels of accounting itemization, by developing accounting and federal property management systems, by document management and storage (management decisions library) through digitizing respective paper document archives regarding federal property management, to switch to electronic interaction between managers, to create new channels for interaction between federal property managers, potential investors and the general public).

Like the foregoing goals, the new and the original versions of the Program have almost the same toolkit designed to achieve the set objectives, except that the new version contains policies to increase the quality of projection and planning for federal budget revenues from disposition and use of federal property.

Preliminary outputs

Both the new and the original versions of the Program contain a whole host of schedules thereto, of which data on metrics of indicators are of most interest. Publication of the data allows one not only to compare the two versions of the Program but also measure actual program outputs over the first half of the Program (*Tables 13–16*).¹

The dynamics of the Federally-Funded Program for Federal Property Management in 2013–2016 with regard to defining the target function of properties can be viewed as an evidence of earlier than expected achievement of target values across all categories (*Table 13*). Formal 2018 target indicators for unitary enterprises were achieved earlier than expected, in 2015, which might have been the reason why this indicator cannot be found in the set of indicators in the new version of the Program.

¹ Despite the fact that the initial stage of the Program covered 2013–2015, it is relevant to examine the 2013–2016 program outputs due to an extension of the Program through 2019 and published Rosimushchestvo’s Performance Report 2016.

Table 13

Implementation of 2013–2016 Federally-Funded Program for Federal Property Management and indicators until 2019 with regard to target function definition (share of assets with specific target function)

Indicator	2013		2014		2015		2016		2017	2018	2019
	target	actual	target	actual	target	actual	target	actual			
Percentage share of FSUEs*	25	87.1	35	97.8	45	100	60	100	–	–	–
Percentage share of shareholding companies with government full ownership interest	25	58.9	35	61	45	68	50	65.5	100	100	100
Percentage share of federal treasury properties	5	45	10	27.1	15	39	20	**	40	45	50
Percentage share of FGAs	–	0	–	20.5	–	32	5	49	60	100	100

* not included in the new 2017 version of the Program;

** the indicator was estimated using an information system KAZNA (hereinafter KAZNA). The Accounts Chamber of the Russian Federation held an onsite inspection (Examination of adequacy of policies to ensure safekeeping of federal treasury properties of the Russian Federation, save for federally owned interest, stake (share) in the charter (pooled) capital of shareholding companies and partnerships (as part of progress control measures regarding the Federally-Funded Program for Federal Property Management)) at the Federal Agency for State Property Management, which revealed improper operation of KAZNA for calculating the quantity of properties/assets. KAZNA's technical problems led to using incorrect data for calculation of the indicator for previous periods and incorrect values of indicators.

Source: The Federally-Funded Program for Federal Property Management adopted on April 15, 2014 by Russian Government's executive order No. 327, last updated on 31 March 2017, Rosimushchestvo's performance reports for 2013–2016, www.rosim.ru.

Therefore, higher values were expectedly set for 2017–2019 indicators for other categories of assets: the target function for shareholding companies and for federal government agencies was supposed to be defined in 2017 and in 2018, respectively (in 2018 in the original version of the Program), whereas the previous version of the Program expected the target function to be defined for only 15 percent of federal government agencies by 2018. Special emphasis is to be placed on properties that belong to the Treasury of the Russian Federation. The target function for this category is anticipated to be defined earlier than it was scheduled in the original version of the Program. This, however, is to be done by 2019 for only half of properties, and KAZNA's technical problems revealed by The Accounts Chamber of the Russian Federation and reported by Rosimushchestvo in its 2016 performance report raise the question about whether the values for this indicator are substantiated.

The dynamics of the Federally-Funded Program for Federal Property Management in 2013–2016 with regard to streamlining the property composition and structure (*Table 14*) shows noticeable deviations in cutting the number of business organizations that are related to federal property (unitary enterprises and shareholding companies with government equity participation). Target and actual values were approximately the same only in 2013. In 2014, the dynamics of decline in the number of economic agents' business-related organizations turned out to be below target values: 8.8 percent for JSCs with government equity participation (against the target set at not less than 15 percent), 6.3 percent for FSUEs (against the target set at not less than 12 percent). In 2015, in percentage terms, the actual figures matched the target (12 percent) for JSCs, whereas actual figures (12 percent) for FSUEs were marginally below the target (13 percent). In 2016, amid an explicit deviation of the indicator for decline in the

number of FSUEs (actual value of 9.7 percent compared with the target set at not less than 15 percent), the decrease rate (20.9 percent) for JSCs tripled the target set at not less than 6 percent.

Table 14

Implementation of 2013–2016 Federally-Funded Program for Federal Property Management and indicators until 2019 with regard to streamlining property composition and structure

Indicator	2013		2014		2015		2016		2017	2018	2019
	target	actual	target	actual	target	actual	target	actual			
Annual decline in number of JSCs with government ownership interest, percentage change year on year	not less than 9	10.3	not less than 15	8.8	not less than 12	12	not less than 6	20.9	not less than 5	not less than 6	not less than 7
Annual decline in number of FSUEs, percentage change year on year	not less than 6	6.9	not less than 12	6.3	not less than 13	12	not less than 15	9.7	not less than 20	not less than 13	not less than 13
Disposition of big highly sought investment properties through public offering (out of such properties envisaged for disposition under this year's decisions of Russian President and/or Russian Government в) (exchange transactions and strategic sales) (quantity)*	not less than 4	6	not less than 4	2	not less than 4	0	not less than 4	3	–	–	–
Acreage reduction of non-commercialized federal treasury land parcels as percentage of area of federal treasury land parcels in 2012 (excluding de-commercialized and restricted for commercialization land parcels), in percentage terms	5	3.7	10	21.5	15	17	20	33.9	25	30	35
Decrease in number of federal treasury properties (excluding land parcels) from 2012 (excluding properties owned exclusively by the Russian Federation), in percentage terms	1	2.5	3	4.6	5	5	7	**	9	11	12

* not included in the new 2017 version of the Program;

** the indicator was estimated using an information system KAZNA (hereinafter KAZNA). The Accounts Chamber of the Russian Federation held an onsite inspection (Examination of adequacy of policies to ensure safekeeping of federal treasury properties of the Russian Federation, save for federally owned interest, stake (share) in the charter (pooled) capital of shareholding companies and partnerships (as part of progress control measures regarding the Federally-Funded Program for Federal Property Management)) at the Federal Agency for State Property Management, which revealed improper operation of KAZNA for calculating the quantity of properties/assets. KAZNA's technical problems led to using incorrect data for calculation of the indicator for previous periods and incorrect values of indicators.

Source: The Federally-Funded Program for Federal Property Management adopted on April 15, 2014 by Russian Government's executive order No. 327 last updated on 31 March 2017, Rosimushchestvo's performance reports for 2013–2016, www.rosim.ru.

In the new version of the Program, decrease rates in 2017–2019 are slower than in the original version (5–7 percent compared with 8 and 18 percent in 2017–2018, respectively), whereas they are the same for FSUEs (20 percent in 2017 and 13 percent in 2018–2019 compared with 20 percent and 13 percent in 2017–2018 of the 2014 version of the Program).

An important indicator in the original version of the Program was at least 4 deals (since 2013) involving highly-sought big investment properties through public offering (exchange transactions and strategic sales) with regard to properties envisaged for disposition upon current year’s decisions of the Russian President and/or the Russian Government. The value (6) of this indicator in the pre-crisis 2013 was 1/5 times the target. The number of such deals in 2014 decreased substantially (tripled) compared with 2013, and no such deals were specified for 2015. The number of deals in 2016 was bigger (3) than that (2) in 2014, but halved (6) compared with 2013. A total number of such deals (11) represented less than 3/4 of annual values in four years (2013–2016), according to the Program.

Acreage reduction (compared with 2012) of non-commercialized federal treasury land parcels lagged behind the target at the onset of the Program (2013), but then outran it by more than 1.5–2 times in 2014 and 2016. In light of what was achieved in 2016, when 2016 year-end acreage of non-commercialized federal treasury land parcels was reduced by more than one third (from 2012), the 2017–2019 targets of the new version of the Program seem to be slow because they match the indicators set in the original version (a decline of 25–35 percent from 2012).

The same holds true for changes in the number of other federal treasury properties. In 2017–2019, the number is expected to decrease by 9–12 percent from 2012, whereas decline rates in 2013–2015 were faster or similar to target values. In 2016, the problem of correct calculation of indicators using KAZNA data emerged, as noted above.

Table 15

Implementation of 2013–2016 Federally-Funded Program for Federal Property Management and indicators until 2019 regarding federal asset management toolkit (actual indicators only for JSCs with government ownership interest)

Indicator	2013		2014		2015		2016		2017	2018	2019
	target	actual	target	actual	target	actual	target	actual			
Share of civil servants in governing and supervisory boards of JSCs with government ownership interest, in percentage terms	50	34.3	30	29.6	30	27	30	28.7	50	50	50
Share of JSCs (listed in Special List*, as well as other JSCs with government controlling interest) whose long-term programs include indicators for labor productivity growth, high-productive jobs creation and modernization, in percentage terms **	–	–	–	–	–	–	–	–	70	80	90

* companies where shareholder’s position of the federal government regarding some critical issues is to be determined at government level;

** a new indicator introduced by the 2017 version of the Program

Source: The Federally-Funded Program for Federal Property Management adopted on April 15, 2014 by Russian Government’s executive order No. 327 last updated on 31 March 2017, The Rosimushchestvo’s Performance Report for 2016, www.rosim.ru.

The management toolkit for federally owned assets (*Table 15*) is in fact related to an indicator representing a share of civil servants in governing and supervisory boards of JSCs in which the federal government owns an interest. In 2013, the value of this indicator (more than 1/3) was much less than the target (1/2). The same was seen when signs of economic downturn emerged in 2014–2016, although the Prime Minister said civil servants would be temporarily back in governing boards of federally owned companies to provide a more thorough supervision (no scope and term of such policies were specified).¹ At that period, a share of civil servants came out to be marginally smaller than the target set forth by the original version of the Program for 2014–2018 (a constant value of 30 percent). In the new version of the Program, the 2017–2019 indicator for a share (50 percent) of civil servants is equal to that for 2013 and is therefore questionable.

Regarding a new indicator (a share of JSCs in long-term programs that include certain indicators), as of August 01, 2017, indicators for labor productivity and labor productivity growth policies were included in long-term development programs (LTDPs) of 41 (or 82 percent) out of the 50 JSCs listed in the special list, as well as of 134 out of 252 JSCs not listed in the special list, in which the federal government owns an interest of more than 50 percent in aggregate (or more than 53 percent).² Therefore, while most important companies with an interest owned by the federal government had already reached the 2018 target, other companies with a controlling interest owned by the federal government have to put this matter on top of their agenda. However, consideration is to be taken of the fact that this refers only to companies with stable financial and business operations, in which Rosimushchestvo exercises shareholder's rights.³

The 2013–2016 dynamics of the Federally-Funded Program for Federal Property Management with regard to technology-led development of governance processes (*Table 16*) can be viewed as an evidence of achieving target values for most of the indicators, some of which were greatly outperformed by actual values.

In 2014–2016, in particular, nearly all public services were rendered in electronic format (more than 90 percent at 35, 50 and 65 percent, respectively, as recorded by the Program). Rosimushchestvo's services were fully digitized as provided for by the new version of the Program in 2017–2019, although this was expected to be done 100 percent in 2018 under the original version.

There are more questions to be answered regarding short-term (2017–2018) extrapolation of the degree of federal property accounting with a constant value of 80 percent set by the Program since 2014, with increase to 90 percent only in 2019. However, actual values for this indicator in 2015–2016 turned out to be less than those seen in 2013–2014, but matched the target.

In addition, federal organizations' complete integration into the FSIAS USPMS was far ahead of the schedule in the original version of the Program. In 2016, organizations with a government full ownership interest where fiscal accounting and reporting/accounting system was fully integrated into the FSIAS USPMS accounted for 40 percent of the total (the target was set at 20 percent), and 15.7 percent (the target was 10 percent) for organizations in which

¹ At the peak of crisis, with no fear // Rossiiskaya Gazeta, January 15, 2015, No. 4 (6575), pp. 1, 4.

² The 2016 year-end report on the management of federally owned shares in publicly-traded companies and the federal government's golden share (participation in corporate governance) in publicly-traded companies

³ Excluding JSCs where shareholder's rights are transferred on the government's behalf to other federal executive authorities and government corporations (GCs), or such JSCs have concluded a deed of trust, as well as JSCs in bankruptcy proceedings, and in liquidation, reorganization.

the federal government owns an interest of less than 100 percent, with the latter marginally higher (20 percent) in 2015.

Table 16

Implementation of 2013–2016 Federally-Funded Program for Federal Property Management and indicators until 2019 with regard to management processes technology-led development

Indicator	2013		2014		2015		2016		2017	2018	2019
	target	actual	target	actual	target	actual	target	actual			
Share of federally owned properties registered with the register of total identified and subject to registration properties (within current year), in percentage terms	70	96,6	80	100	80	80	80	80.2	80	80	90
Share of digitized public services of total services rendered by Rosimushchestvo, in percentage terms	10	40	35	98	50	98	65	93.3	100	100	100
Share of legally significant electronic document flow compliant with existing laws and regulations between Rosimushchestvo, including its local branches, and federal government agencies of total document flow with federal government agencies, in percentage terms*	5	6.1	35	21.1	60	38	75	57.3	–	–	–
Share of federal organizations with government full ownership interest** where fiscal accounting and reporting/accounting system is fully integrated into FSIAS USPMS, of total number of federal organizations with government full ownership interest*	–	0	1	37.8	10	39	20	40	–	–	–
Share of federal organizations where federal government owns interest of less than 100 percent where fiscal accounting and reporting/accounting system is fully integrated into FSIAS USPMS, of total number of federal organizations in which the federal government owns interest of less than 100 percent, in percentage terms*	–	0	–	...***	1	20	10	15.7	–	–	–

* not available in the new 2017 version of the program.

** this indicator is mentioned in the Program 2014 with regard to shareholding companies with a government full ownership interest which differs from the population of federal organizations with a government full ownership interest;

*** there is no data available for 2014 values of the indicator representing a share of federal organizations in which the federal government owns an interest of less than 100 percent where fiscal accounting and reporting/accounting system is fully integrated into the FSIAS USPMS, of the total number of federal organizations in which the federal government owns an interest of less than 100 percent.

Source: The Federally-Funded Program for Federal Property Management adopted on April 15, 2014 by Russian Government's executive order No. 327 last updated on 31 March 2017, Rosimushchestvo's performance reports for 2013–2016, www.rosim.ru.

Conversely, the increase in the share of legally significant electronic document flow compliant with existing laws and regulations between Rosimushchestvo, including its local branches, and federal government agencies of total document flow with federal government agencies was behind the schedule. The value for this indicator was nevertheless above 50 percent (more than 57 percent vs. the 75 percent target) at 2016 year-end.

In terms of fiscal performance, figures for federal budget revenues from federal property management and disposition (excluding revenues from privatization) were ahead of the schedule throughout the entire period of 2013–2016. The indicator stood at 103.4 percent in 2013, 157.8 in 2014, 108.0 in 2015, 103.4 in 2016. The indicator is not applied in 2017–2019.

Budgetary assignments are expectedly to be completed in full in 2017–2019 with regard to two new indicators describing the federal property management performance efficiency for the federal budget. Furthermore, two important updates were made: 1) revenues from disposition of shares of biggest JSCs were removed from the indicator for federal budget revenues from disposition of stakes in the charter capital of business partnerships and entities, and 2) Russian Government's dividend omission decisions must be considered with regard to the indicator for revenues accrued to stakes in the charter of business partnerships and entities, or dividends on shares held/owned by the federal government.

There are much more questions to be answered regarding another new indicator. The ratio of the purchase price and the estimated value of properties with ownership transferred to the federal government is expected to increase during 2017–2019. However, specified values (30 percent in 2017, 40 percent in 2018, 50 percent in 2019) imply that a pricing policy focusing on property nonliquidity, which in fact can be liquid, is allowed.

An illustration of this is sales of luxury property owned by VIPs. For example, the Rosimushchestvo Moscow Branch sold Ruslan Shamsuarov's Mercedes-Benz G63AMG¹ through Sberbank-AST Electronic Trading Platform (ETP). A professional valuator *estimated* the fair market value of the vehicle at Rb 7538 thousand. The value was lowered by 30 percent due to lack of bids pursuant to Clause 17(1) of the Provision for disposition of properties with ownership transferred to the federal government, adopted by a Russian Government's executive order.

An auction for the motor vehicle, allowing for an increase in the offer price in case of high bidding activity, was held on December 27, 2017 and declared a success, i.e. the *highest bidder* was declared the purchaser. The auction opened at RUB 5276.6 thousand and closed at RUB 6068.09 thousand, 15 percent above the offer price, but nearly 1/5 less the valuator's price.²

In addition to data on values of indicators in the new version of the Program, the schedules thereto contain a List of core measures, Data on projected key legal regulatory policies, Resource provision for the Program through federal allocations, the Program Implementation Plan for 2017 and the Planning Period of 2018 and 2019. What is noteworthy is, without getting into details, a sharp shrinkage of package of laws and regulations (LRs) proposed for adoption.

¹ LUKOIL Vice-President's son Ruslan Shamsuarov was the defendant in a media-covered Gelandewagen reckless driving case. The court held that Shamsuarov's Mercedes-Benz Gelandewagen, which was seized as a physical evidence, must be confiscated by the federal state.

² www.rosim.ru, January 15, 2018.

This refers to amendments to a legal act and two presidential executive orders, whereas the previous version contained a list of 22 LRs, and the 2013 Program had 28 LRs.

To summarize the adoption of the new version of the Federally-Funded Program for Federal Property Management in 2017, the following is noteworthy. The Program is indeed one of the most important instruments of the national economic policy in recent five years. The program could have been adopted earlier, shortly after the general Concept of Federal Property Management and Privatization in the Russian Federation was adopted in 1999, as well as during a new stage of privatization since the early 2010s, when it was an opportune time for such an omnibus hands-on document.

The outputs of the Sub-program for ‘Enhancing the Efficiency of Federal Property Management and Privatization’ in 2013–2016, given the values of most of the indicators, show that actual values were ahead of target values, which relates to formal definition (not a substantiated assessment) of the federal property target function and management, including the technological aspect of the process. In addition, there was a noticeable deviation in the decrease in the number of business organizations related to federal property (unitary enterprises and shareholding companies with government equity participation) amid unexpected success in reducing the acreage of federal treasury properties (land parcels). Total number of major deals through public offering over four years turned out to be less than the annual total, according to the Program’s data, mainly because of its outputs in 2014–2015.

Recent changes to the Program come down to the following:

- amid recently slimmed federal allocations, the Program was extended for one year (till 2019), the bulk of federal allocations cover, as before, the sub-program for ‘Public Tangible Reserves Management’ in the offing;

- goals and objectives of both the Program and the Sub-program for ‘Enhancing the Efficiency of Federal Property Management and Privatization’ are formulated more concisely and precisely;

- anticipated outputs were in part linked to timing (renewal of the federal property disposition system and setting the target function for organizations with an interest owned by the federal government by 2019) and quantitatively defined (dynamics of decrease in the number of federal treasury properties) as the toolkit designed to achieve established objectives remained unchanged;

- a set of indicators describing the implementation of the Program was renewed substantially (most of the indicators for management techniques and the indicator for the number of big deals through public offering were removed; indicators for fiscal efficiency of asset management (including privatization) were further extended; new controversial indicators related to the development of companies with government equity participation and disposition of property with ownership transferred to the federal government emerged).

Considering 2013–2016 outputs and adjustments, further prospects of the Federally-Funded Program for Federal Property Management can be viewed as relatively favorable prospects. Prerequisites for this are based on focusing on slow or sluggish dynamics of decrease in the number of federally owned assets; steadiness of projected values of indicators for a share of civil servants in governing and supervisory boards of JSCs with government equity participation and completeness of federal property accounting till 2019; noninclusion of deals involving biggest companies in assessment of federal budget revenues from disposition of shares, which, according to previous years’ practice, show a strong effect of the business

component; consideration for certain dividends omission decisions when dividends are transferred to the federal budget.

There are, however, a *few areas of concern* inherent in the new version of the Program.

First, there is a clear priority of quantitative approach towards assessing a possible contraction of the public sector. Program's rates of decrease in the number of JSCs with government equity participation and FSUEs are not justified in terms of final assessment of how many FSUEs are needed to perform government functions and so that the federal government could adequately play its role in a economy. Neither are they justified in terms of engaging concrete mechanisms of government property supervision (various types of unitary enterprises, a share of various values in the equity of shareholding companies (JSCs and LLCs), the use of golden share, special types of ownership that are formally related to not-for-profit organizations (federally owned corporations and companies, autonomous organizations)).

Based on Rosstat's data (as of early 2017¹) on the number of economic agents related to federal property, namely 1356 shareholding companies and 1245 FSUEs, this number will drop approximately to 1100 and 750, respectively, by 2020 if Program's targets are achieved. As of early 2017, however, the scale of government assets at federal level for all categories of corporate entities was many times less than what was stipulated in the Concept 1999: 1.4 thousand shareholding companies vs. nearly 3.9 thousand (a decrease by nearly 3 times), about 1.25 thousand federal unitary enterprises vs. nearly 13.8 thousand (less by an order of magnitude), 16.2 thousand agencies vs. 23.1 thousand (a nearly 30-percent decrease). An exception to this are organizations for which there is no annual decrease indicator similar to that for shareholding companies with government equity participation and unitary enterprises.

It is important for this matter that a goal-oriented approach towards federal property should be supplied with analysis of potential effects of privatization with consideration for its feasibility, comparative economic effectiveness and allocative efficiency of public and private sectors, opportunity costs and the impact on certain markets, industries, regions, national economy as a whole. Furthermore, streamlining the composition and structure of federal assets through reducing their quantity cannot be equated with privatization. Contribution of blocks of equity shares and other assets to the charter capital of various federally controlled integrated companies, transfer of assets to other level of public ownership, liquidation of economic agents as part of bankruptcy proceedings do their part.

Second, switching to measuring the fiscal efficiency of privatization by the degree of forecasting accuracy in the privatization program (net of biggest asset sales) *inevitably raises a question* about the quality of forecasting and planning of federal budget revenues from disposition and use of federally owned properties in terms of justifying respective figures/values.

The Forecast Plan (Program) for Federal Property Privatization for 2017–2019 contains a target amount set for federal budget revenues from federal property privatization net of annual RUB 5.6 billion worth of shares in biggest companies, whereas the 2017 Report on Execution of the Forecast Plan (Program) for Federal Property Privatization for 2017–2019 reports RUB 5.83 billion of federal budget revenues from sold properties (excluding biggest sales), i.e., 104 percent of the target amount. A relatively easy achievement of targets is illustrated by the previous program's outputs: the target for annual budget revenues was set at RUB 3 billion,

¹ Statistical data on the Performance Measures Framework for Federal Property Management, www.gks.ru, March 20, 2017

whereas actual amounts were RUB 8.0 billion in 2014, RUB 7.3 billion in 2015, RUB 9.5 billion in 2016, respectively.

Like in the previous versions, the Program contains no indicators for off-budget effects of privatization (investment promotion, competition and securities market, employment dynamics). However, the final paragraph (before the list of schedules) of the Program contains a separate reference to released public-sector workforce as an extra effect of federal property restructuring coupled with lifting the burden of property maintenance expenses and broadening the business sector's material base.

Third, there are few questions to be answered regarding management of federally owned assets. The indicator for a share of civil servants in governing and supervisory boards of JSCs with government equity participation fails to provide a comprehensive view of the entire body of government representatives because it doesn't cover proportions between other groups of persons generally referred to as professional directors (professional trustees and independent directors).

The following is to be considered to assess prospects for changes in the above indicator: the possibility and feasibility of engaging professional directors as members of governing and supervisory boards of military-industrial organizations related to the national security, which deserves a separate consideration,¹ as well as subsidiary and associated companies of vertically-integrated companies and holding companies. It is obvious that quantitative characteristics of civil servants' membership format may need a major revision while selling a government ownership interest (equity participation) in companies with ordinary activities not subject to restrictions, and potential expansion of the practice of engaging professional directors to subsidiary and associated companies.

The indicator for a share of JSCs with government equity participation whose long-term programs contain indicators for labor productivity growth, creation and modernization of high-productive jobs describes just a single aspect of technical and economic efficiency, which is not related to outputs. The quality of corporate governance remains off the table as well.

It's not quite clear (in the Program) whether the amount of revenues from the amount of dividends scheduled for reporting year is equated with the respective budgeted amount and how Russian Government's dividend omission decisions will be considered.

The Program has no whatsoever indicators describing management of the federal property portfolio such as unitary enterprises, institutions, immovable properties including land parcels.

Fourth, the Program contains no analysis of risks to be mitigated through Program's policies. The previous 2013 Federally-Funded Program for Federal Property Management contained policies to deal with risks: an increase in government's informal pressure on privatized companies in case of insufficient regulation of industries in question; expansion of government and quasi government entities in the course of privatization; limited positive structural effects of privatization amid sluggish "external" policies aimed at improving investment environment, developing competitive environment, enhancing corporate governance; nontransparent preparation and making of decisions amid passive behavior of government authorities; token approach towards introducing management innovations. There are more risks that may arise throughout the program: a lack of adequate laws and regulations; inconsistency between property composition and government functions, low management efficiency, a weak

¹ An exception was made for military-industrial companies related to the national security in the 2013 Federally Funded Program for Federal Property Management which had an indicator for a share of public-sector employees in governing and supervisory boards of JSCs with government equity participation.

investment promotion in the real sector, failure to generate nontax federal budget revenues, inadequate coordination and interaction between various government authorities, most of which are still pressing issues.

6.2. Compliance with the Corporate Governance Code: are there any improvements?¹

6.2.1. The outspread of Corporate Governance Codes in the world

The first corporate governance code in its present-day meaning – the Cadbury Code – was adopted in the UK in 1992 when the Cadbury Committee on Corporate Governance Issues developed the guidelines for the best corporate governance practices. The Cadbury Code laid the foundation not only for British corporate governance codes, but also paved the way for development of such codes in Europe. Late in the 1990s and early in the 2000s, corporate governance codes were approved in Austria, Belgium, Germany, France, Switzerland and Sweden.² At the same period, similar documents were developed in Australia, Canada, the USA and Japan. In Russia, the first corporate governance code was adopted in 2002. At present, a majority of developing and developed countries have introduced such codes, too.

The Cadbury Code emerged on the back of notorious corporate scandals of the late 1980s and the early 1990s (the Barlow Clowes, the Polly Peck and the BCCI). Corporate scandals became an additional motivation for development of corporate governance codes in Australia (the HIH and One. Tel), the Netherlands (the Royal Ahold), the US (the Enron, and the World Com) and Sweden (the ABB and the Skandia). In some countries, adoption of corporate governance codes was of a preventive nature (Austria, Germany and Switzerland).

Adoption of a corporate governance code is normally aimed both at making a country's corporate governance system more transparent and promoting investors', customers', employees' and the general public's confidence in joint-stock companies' governance and supervision practices. But to achieve this goal, a corporate governance code must be complied with. If not, even the very best document, in terms of its content, as an instrument of upgrading the corporate governance performance may become inefficient. So, the issue of introduction of the corporate governance code as well as utilization of some or other mechanisms of implementation thereof is very important. Lots of countries use specific methods of ensuring companies' compliance with their national codes whose standards may differ from one another in terms of toughness of corporate governance norms and do it with varying degrees of success.

The Cadbury Code can be viewed as a turning point of the “comply or explain” approach, the most popular method of ensuring compliance with corporate governance norms. Further promotion of that approach has been facilitated by the legislation of the European Union under which listed companies of the member-states of the European Union are required to disclose information on their compliance with the corporate governance code in terms of the “comply or explain” approach.³ Other corporate governance systems adopted that approach, too (Hong Kong, Egypt, Morocco, Singapore and other).

¹ This section is written by Natalia Polezhaeva, RANEPА.

² See: *Haar B.* Shareholder Wealth vs. Stakeholder Interests? Evidence from Code Compliance Under the German Corporate Governance Code (November 24, 2016). SAFE Working Paper No. 154. URL: <https://ssrn.com/abstract=2875275>.

³ See: Directive 2006/46/EC of the European Parliament and of the Council of 14 June 2006; Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings; Commission Recommendation of 9 April

The Russian corporate governance code was adopted not long ago¹, and it is complied with by companies on a voluntary basis, however, it does not mean that this matter is left unattended: compliance is actively controlled by various institutions which engage among other things in “smooth” introduction of the code’s principles and recommendations into companies’ practices. The outputs of these activities and a number of other relevant issues are presently under consideration.

6.2.2. The novelties of the Russian Corporate Governance Code

The 2008 global financial and economic crisis gave a new impulse to revision and development of corporate governance norms. In its reports of 2009–2010 on corporate governance and financial crisis², the OECD specifies that faults in corporate governance were conducive to the financial crisis. In 2011, the Financial Crisis Inquiry Commission established by the US Government released the Financial Crisis Inquiry Report³, in which it was stated that substantial faults in corporate governance and risk management in numerous systematically important financial institutions were the main cause of the crisis.

As is known, the OECD Corporate Governance Principles (hereinafter the OECD CGP) approved for the first time in 1999 on the back of a series of huge corporate scandals which swept over the world late in the 1990s and early in the 2000s (for example, the Enron and the World Com in the US and the HIH and One. Tel in Australia) were revised as early as 2004. Ten years later, in 2014, the crisis of the late 2000s laid the foundation for the start of a new revising of the OECD CGP and in 2015 the updated document was approved.⁴

It is quite obvious that the global financial and economic crisis was a driver of revision of the 2002 Corporate Behavior Code⁵ (hereinafter, CBC). Speculative investors which dominated the Russian market during the period of catch-up growth lost interest in Russian companies, while long-term investors needed precise understanding of a company’s strategic goals and prospects and wanted to be sure that their rights would never be violated. This is infeasible to achieve without permanent upgrading of the regulatory norms and corporate governance practices.

Early in the 2000s, the Russian legislation on joint-stock companies was not yet developed enough and there were plenty of issues which the 2002 CBC was meant to make up for. Due to that, the CBC pattern became rather complicated and overloaded. The Corporate Behavior Principles set out in Chapter 1 of the CBC constituted the basis for the guidelines outlined in

2014 on the quality of corporate governance reporting (‘comply or explain’) 2014/208/EU. URL: <http://eur-lex.europa.eu>.

¹ See hereinafter: *E. Apevalova, N. Polezhayeva*. The Novelties of Corporate Legislation and Regulation: Changes in the Civil Code and the New Corporate Governance Code // *The Russian Economy in 2014. Trends and Prospects*. Issue 36. Moscow: Gaidar Institute Publishing House, 2015. pp. 460–465.

² See: OECD. Corporate governance and the financial crisis. URL: <http://www.oecd.org/daf/ca/corporategovernanceandthefinancialcrisis.htm>.

³ Financial Crisis Inquiry Commission. 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>.

⁴ URL: <http://www.oecd.org/corporate/principles-corporate-governance.htm>.

⁵ Instruction No. 421/r of April 04, 2002 of the Federal Commission for Securities Markets (FCSM) “On Guidelines for Application of the Corporate Behavior Code // FCSM Bulletin No.4, April 30, 2002 (Instructions). It actually became null and void after publication of Letter No. 06-52/2463 of April 10, 2014 of the Central Bank of the Russian Federation in which the Corporate Behavior Code was endorsed.

the next nine chapters which were formulated too much in detail for the frameworks of such a document.

From the day of adoption of the CBC, a large number of corporate governance issues were resolved at the level of the legislation and regulatory acts. There was no longer any need in numerous CBC regulatory guidelines: individual chapters on the general meeting of shareholders (Chapter 2), governing bodies of the joint-stock company (Chapter 4), dividends (Chapter 9) and settlement of corporate conflicts (Chapter 10) were no longer required.

The new 2014 Corporate Governance Code¹ (hereinafter the CGC) was modeled after the OECD CGP. The CGC is made up of two parts: Part I (A) includes corporate governance principles, while Part II (B), the guidelines for implementing thereof.

Part I of the CGC is of a more practical nature as compared to the annotations of Part II of the OECD CGP which is made up of comments on corporate governance principles meant to explain what such principles are based on.

What is the difference between the 2014 corporate governance principles and the 2002 corporate behavior principles and what do they have in common with the OECD corporate governance principles?

Firstly, the new name of the code – the Corporate Governance Code – reflects changes in the approach and role of the Code. It is not only a document formulating the principles of proper behavior of Russian joint-stock companies in respect of shareholders and investors, but “an effective instrument” of upgrading the efficiency of corporate governance and facilitating the long-term and sustainable development thereof.

The CGC borrowed from the OECD CGP the definition of the corporate governance which was absent in the CBC.

The definition of “corporate governance” covers the system of networking between the executive bodies of a joint-stock company and its board of directors, shareholders and other interested parties. Corporate governance is an instrument of defining the company’s goals and methods of achievement thereof, as well as facilitating effective control over the company’s activities on the part of shareholders and other interested parties.

Secondly, the CGC borrows the CBC’s principles based on the OECD CGP as regards the rights of shareholders and equality of conditions for shareholders in carrying out by them of their rights and elaborates on them further in the guidelines (Chapter 1).

Thirdly, the principles related to a company’s board of directors were modified the most (Chapter II).

The CGC specified the responsibilities of the board of directors by including a few OECD corporate governance principles. The board of directors is obligated to do the following:

– define the principles and approaches to organization of the company’s risk management system and in-house control (2.1.3);

– play a key role in facilitating the company’s transparency and complete disclosure of the information on a timely basis, as well as ensuring an easy access for shareholders to the company’s documents (2.1.6);

– carry out control over the company’s corporate governance practice and play a key role in the company’s corporate affairs (2.1.7).

The CGC attached a form of the principle to the CBC recommendations dealing with the requirements set to a member of the board of directors. A member of the board of directors is

¹ Letter No. 06-52/2463 of April 10, 2014 of the Central Bank of Russia “On Corporate Governance Code” // Bulletin No.40 of the Central Bank of the Russian Federation, April 18, 2014.

recommended to have an impeccable business and personal reputation; relevant knowledge, skills and experience required for effective fulfillment of his/her duties (2.3.1).

The CGC has upgraded the principles as regards independent directors (2.4.1–2.4.4) as compared to OECD CGP by defining among other things the independent director as a person who has sufficient qualification, experience and independence to form a position of his /her own and make independent, objective and scrupulous judgments.

According to the CBC's recommendations, independent directors should make up minimum a quarter of the board of directors (in any case, at least three independent directors). As in case of the definition of an independent director, the requirement set to the number of independent directors became a CBC recommendation. The CGC made a principle out of that recommendation and increased the number of independent directors at least to one-third.

The CBC recommends to establish committees made up of members of the board of directors for preliminary consideration of the most important issues facing the company. The CGC principles set new requirements to the composition of the committees (2.8).

The committees on the audit and remuneration should consist of independent directors. A committee on remuneration is to be chaired by an independent director who is not the chairman of the board of directors. Most members of the committee should be independent directors by nomination.

The latest recommendations transformed into the principle were the statutes on the chairman of the board of directors (2.5) (such a principle is absent in the OECD CGP), rights and obligations of members of the board of directors (2.6) and the obligation of the board of directors to facilitate evaluation of the quality of activities of the board of directors, its committees and members of the board of directors (2.9).

Fourthly, unlike the OECD corporate governance principles the Russian principles include those which deal with a company's corporate secretary. At present, such principles make up a separate small chapter (Chapter III of the CGC) and they are partially based on the CBC recommendations (Chapter 5 of the CBC Recommendations) which specify the objectives of the company's corporate secretary (that is, effective routine networking with shareholders, coordination of the company's activities as regards protection of rights and interests of shareholders and facilitation of efficient work of the board of directors) and set requirements to his/her job (for example, fair independence from the company's executive bodies).

Fifthly, the CGC develops into separate Chapter IV on the Remuneration System an individual principle of the CBC and the OECD CGP defining the dependence of the remuneration of members of the board of directors, executive bodies and other key managers of the company on their actual contribution to the company's performance, as well as long-term interests of the company and its shareholders.

Sixthly, the CGC updates the principles dealing with in-house control and establishes new principles of risk management (Chapter V). The CBC included risk management in the in-house control procedures, so, risk management principles were absent in it.

Development of the specified principles is justified by the notorious role which corporate governance shortcomings in risk management played in development of the global financial and economic crisis of the late 2000s. Despite the important role of the risk management system, very little is said about it in the OECD CGP.

Seventhly, as regards the principles of disclosure of the information on the company and the company's information policy the CBC and CGC (Chapter VI) do not specify what relevant information the company should disclose about its activities. However, the recommended parts

of the CBC and the CGC include a list of information meant for disclosure: from the information on the pattern of the company's capital to that on the company's social and ecological responsibilities.

The OECD corporate governance principles establish straightforward that the relevant information for disclosure should include among other things the information on the rights of major shareholders, voting rights, transactions with related parties and expected risk factors.

According to the guidelines of the CGC, the company's Web-site is the main source of information disclosure.

The principles of the CGC and the CBC dealing with confidentiality and the insider information are absent in the OECD CGP, but the principles of information provision are set out in the annotations to the OECD corporate governance principles.

Eighthly, as was seen, the CGC has transformed some recommendations of the CBC into the principles of corporate governance. The most important transformation is related to the provisions on material corporate operations (they were transformed from recommended Chapter 6 of the CBC into Chapter VII on the CGC Principles).

In Corporate Governance Codes, deemed as material corporate operations are, for example, a restructuring and a takeover of the company and transactions that have led to a substantial increase in or reduction of the company's authorized capital. A novelty of the CGC consists in the fact that listing and delisting of the company's equities are attributed to the above-stated operations. Provisions on material corporate operations are absent in the OECD CGP.

So, the main advantage of the 2014 CGC consists in its pattern which became more compact and convenient. Excessive provisions duplicating the legislation were removed from the CGC which started to meet to a greater extent the international standards of corporate governance and facilitate effective application thereof by companies.

6.2.3. The “comply or explain” approach

Under the Russian CGC, joint-stock companies, state-run corporations and companies, as well as other legal entities comply with the CGC's provisions on a *voluntary* basis. However, joint-stock companies whose securities are traded publicly *should* disclose information on compliance or specify the reasons for noncompliance with the CGC's principles. Consequently, the compliance of listed companies with the Russian CGC is based on the so-called “comply or explain” approach. However, it appears that in this context the meaning of the word “should” is not quite clear: is it a pressing suggestion or an obligation and if it is the latter what consequences does a company face for a failure to comply with the CGC?

The Statutes of the Central Bank of the Russian Federation on Disclosure of the Information by Issuers of Equity Securities¹ are more concrete and establish that the company's annual report *should* include a statement on the company's compliance with the principles and recommendations of the CGC (Clause 70.3). Also, the provision in question sets the requirements to the content of the statement (Clause 70.4). In addition to the above, the Central Bank of the Russian Federation has developed both the guidelines for preparing the statement and the form of the statement.²

¹ Approved by the Central Bank of the Russian Federation on December 30, 2014; No.454-P // Bulletin of the Central Bank of the Russian Federation, Issue No.18–19, March 06, 2015.

² See Letter No. IN-06-52/8 of February 17, 2016 of the Central Bank of the Russian Federation “On Disclosure in the Annual Report of a Public Joint-Stock Company of the Information on Compliance with the Principles and Recommendations of the Corporate Governance Code // URL: <http://www.cbr.ru/>.

In the present-day practice of the corporate governance regulation, mandatory and hybrid regulations have become the most wide-spread. The latter represents a combination of the legislation (“the hard law”) and the corporate governance code (“the soft law”) which can be either complied with on an unconditionally voluntary basis or based on the “comply or explain” approach.¹ In case of a hybrid regulation, the laws regulate such components of corporate governance as organization of the board of directors, shareholders’ rights and the existence of the audit committee and mandatory external audit. The corporate governance codes deal with the issues related to independence of the members of the board of directors, in-house control, risk management and existence of the committees on remuneration and appointments.

In *the mandatory regulation*, also known as the “comply or else” approach, the regulator establishes in the form of law the corporate governance norms which are uniform and mandatory for all the companies. In case of a failure to comply with such norms, the company (its officials) will suffer a penalty in the form of a fine or imprisonment. The law does not elaborate on the factors behind noncompliance with the norms.² This approach is not expensive, but effective, so it is recommended by the European Union for the integration process of developing countries, however, it has a lack of flexibility and motivation on the part of companies, entails a disproportionate burden in case of small companies and appeals little to foreign investors.³

In case of the “comply or explain” approach which is believed to be more efficient, the principles and codes of corporate governance are of a recommendatory nature and, consequently, are not mandatory to be complied with. However, a company which fails to comply with any norms is obligated to provide sufficient explanations. Both application of the norms and justification of explanations of noncompliance therewith are acceptable methods of compliance with the norms. If the company fails to provide explanations or provides insufficient explanations, the company may be punished. This approach permits companies to adjust corporate governance norms to their own specifics and grants them relative freedom in establishing the most suitable governance patterns to upgrade governance performance. Most developing and developed countries utilize the “comply or explain” approach.

Despite the fact that corporate governance codes involving the “comply or explain” approach are regarded as voluntary, too, implementation of the approach proper must be mandatory and underpinned by relevant institutions, as well as judicial and market enforcement measures. If not, corporate governance codes which officially declare such an approach do not differ at all from ordinary voluntary corporate governance codes and may happen to be even less efficient. Unfortunately, in practice the latter option prevails.⁴ Another disadvantage of this approach consists in the fact that it is mainly applied to listed companies.

At the relatively early stages of the corporate sector development when corporate governance standards are only being introduced by the regulator and companies, the “comply or explain” approach is less appropriate. With standards being defined, the benefit from

¹ There is another approach – “apply or explain” – which represents a more accurately formulated version of the “comply or explain” approach. This approach is used in the Republic of South Africa.

² See here and after: *Sarkar S.* The Comply-or-Explain Approach for Enforcing Governance Norms (July 15, 2015). URL: <https://ssrn.com/abstract=2638252>.

³ See.: *Nedelchev M.* Good Practices in Corporate Governance: One-Size-Fits-All vs. Comply-or-Explain (September 30, 2013) // *International Journal of Business Administration*. Vol. 4. No. 6. P. 77, 78.

⁴ См.: *Hadjikyrianou G.C.* The Principle of 'Comply or Explain' Underpinning the UK Corporate Governance Regulation: Is There a Need for a Change? (May 20, 2015). *Corporate Law: Corporate Governance Law Journal*, Vol 7, Issue 81, November 27, 2015. URL: <https://ssrn.com/abstract=2690687>.

flexibility of the approach starts to outweigh its cost; the company gets higher motivation to adopt good governance practices and the regulator becomes more effective in evaluating alternative patterns of governance. With most standards established, the regulator becoming completely efficient and complexity of regulation reduced to enforcement of compliance with corporate governance norms, a switch-over to the “comply or else” approach which has a certain extent of flexibility¹ may become expedient.

It is to be noted that in developing countries where optimal governance mechanisms maximizing the company value are just evolving, such factors as non-transparency of the company’s activities, inefficiency of stock markets and a lack of financial experience with an average shareholder coupled with complex and multiple organizational, ownership and supervising structures may on one side make the “comply or explain” approach quite effective, while on the other side complicate application thereof by burdening the regulator with identification and promotion of the best governance structures.

Lots of European countries are at the advanced stage of the “comply or explain” approach with a detailed description of principles and codes of corporate governance and an active regulator in place. India and the US apply the “comply or else” approach.² India is a fast-growing and developing economy with evolving standards of corporate governance.³ On the contrary, the US is a very mature economy with a corporate governance system being well adjusted for many years. However, both India and the US consider a possibility of introducing the “comply or explain” approach in respect of individual corporate governance norms related to independent directors, non-financial reporting and corporate social responsibility.⁴

The efficiency of the “comply or explain” approach largely depends on a drive to good corporate governance, transparency of the company’s activities and identification of governance standards. The efficiency of this approach is influenced by the quality of *evaluation of the adequacy of explanations* provided by companies in respect of departures from the norms. There are three “appraisers”: a shareholder, the financial market and the regulator.

The first two “appraisers” have disadvantages which make them unpopular.

Shareholders as “appraisers” may lack financial experience and economic motivation and a free-rider problem is common to them. For an average shareholder who is less informed than a company’s manager it is difficult to assess a departure from the corporate governance norm, particularly, the principle.⁵ Even in case of identification by an individual shareholder of an unjustified departure from the norm, a retrieval of the optimal governance structure may have

¹ For example, requirements to the composition of the board of directors and companies’ committees are determined as a percentage of the size of the boards and committees and not by concrete figures.

² See Clause 49 of the 2000 Listing Agreement and the Sarbanes-Oxley Act of 2002.

³ At the same time, Brazil and the Republic of South Africa whose governance structures are undergoing the initial stages of development have adopted the “comply or explain” approach.

⁴ See: *Lai B.Y.* Are Independent Directors Effective Corporate Monitors? // An Analysis of the Empirical Evidence in the USA and Canada (May 2, 2014). URL: <https://ssrn.com/abstract=2781671>; *Harper H., Virginia E.* 'Comply or Explain' and the Future of Nonfinancial Reporting // 21 *Lewis & Clark Law Review* 317 (2017); *Singh P.D., Poonawala S.H.* Whether and Where to Spend Mandatory CSR? (June 30, 2016). URL: <https://ssrn.com/abstract=2802866>; *Dharmapala D., Khanna V.S.* The Impact of Mandated Corporate Social Responsibility: Evidence from India's Companies Act of 2013 (November 28, 2016). CES ifo Working Paper Series No. 6200. URL: <https://ssrn.com/abstract=2895986>.

⁵ For example, the Chinese Corporate Governance Code is made up of 95 principles of corporate governance, but includes no explanations of them, nor does it specify the status and number of independent directors in the board of directors. For an average Chinese shareholder, it is difficult to estimate compliance of the governance structure proposed by managers with the company’s interests.

no sense in economic terms because the organization of networking with other shareholders on this issue requires substantial costs. Also, a substandard quality of assessment by shareholders can be explained by the existence of the so-called free-rider problem when each shareholder seeking to save funds expects other shareholders to make a good assessment without his/her participation.

The financial market involves multiple investors, so as an “appraiser” it does not experience a shortage in economic motivation. However, as an association of individual shareholders, the financial market faces the free-rider problem and the problem related to a lack of experience, too. In addition, the financial market is an expensive instrument of ensuring compliance with the corporate governance norms. The financial market as an “appraiser” does not suit well developing economies because they lack the required conditions (disapproval of the overlapping of the roles of the top manager and a dominating shareholder, existence of a highly liquid financial market with low operating costs and other). In the financial market, if a company departs from the “comply or explain” approach, market-based measures of enforcement are available.

Shareholders and financial markets are “appraisers” in Brazil, Spain, the Republic of South Africa and South Korea. In the UK, shareholders assess the quality of explanations of departures from the norms of the corporate governance code and inform the regulator of any discrepancies. However, due to insufficient efficiency of the existing method of ensuring a company’s compliance with the code, the UK is looking for other options with an expanded role of the regulator.¹

The regulator can be an effective “appraiser” and have proper competence, motivation and authorities to seek enforcement of its requirements. However, as in case of shareholders, the regulator has disadvantages of its own (a lack of skilled personnel, excessive toughness and other) which may turn out to be very serious in such a specific institutional environment as Russian. An immature regulative interference may pose a threat to the entire concept of the “comply or explain” approach by undermining the principles of voluntary participation and flexibility initially envisaged in it. The regulator’s interference should not unreasonably overburden companies.

In lots of West European countries, including Belgium, Germany, France and Sweden, the regulator acts as an “appraiser”. It is worth paying attention to Belgium’s experience in developing practical guidelines for high quality explanations², for example: in explaining its departure from the norms of the corporate governance code a company cannot simply refer to the fact that it considers such norms as inappropriate; for ensuring better transparency the reasons for departure from the norms should be specified in the corporate governance statement; the board of directors should approve the reasons for such departures, their contents and other.³

It is believed that in many developing countries in the “comply or explain” approach the regulator together with shareholders can be the main “appraisers”; this practice may minimize

¹ For more details, see: *Hadjikyprianou G.C.*

² Belgian Corporate Governance Committee. Practical rules for high-quality explanations (2016). URL: <http://www.corporategovernancecommittee.be/en/explanatory-notes/practical-rules-high-quality-explanations-2016-version>.

³ In Russia, similar recommendations can be found in Letter No. IN-06-52/8 of February 17, 2016 of the Central Bank of the Russian Federation “On Disclosure in the Annual Report of a Public Joint-Stock Company of the Statement on Compliance with the Principles and Guidelines of the Corporate Governance Code”.

disadvantages proper to either of them as an individual “appraiser”. Taking into account its weakness in the above stated category of countries, the financial market plays an auxiliary role.

6.2.4. Compliance of companies’ practices with Corporate Governance Codes abroad

The levels of compliance of companies with corporate governance codes may greatly differ in various countries. For example, in Belgium, Spain, Italy, the Netherlands and Germany they exceed 90 percent.¹ As shown below, they are much lower in countries of Central and Eastern Europe.

A particular attention is to be paid to the German Corporate Governance Code (Deutscher Corporate Governance Kodex, DCGK²) as revised in 2015 which was developed by the German Government Commission on DCGK.

The DCGK includes the norms of governance and supervision for listed companies, as well as generally recognized standards of good and responsible governance. The Code is meant to make the corporate governance system more transparent and clear. It is aimed at promoting international and national investors’, customers’, employees’ and general public’s confidence in supervision and governance of listed companies in Germany.

The Code includes the guidelines noncompliance with which the company has to explain (that is, “shall” guidelines) and those noncompliance with which it may not explain (the “should” guidelines”). The DCGK is mainly made up of the “shall” guidelines and, consequently, is based on the “comply or explain” approach which is mandatory as envisaged by Clause 161 of the German Law on Joint-Stock Companies (Aktiengesetz, ActG).

The main three novelties of the 2015 DCGK emphasize the growing role of the supervisory council:³

- the supervisory council of a listed company is advised to establish the maximum term of office of a member of the supervisory council, taking into account the company’s specifics (the “should” guidelines);

- the supervisory council is recommended to make sure that a nominee to the supervisory council is fit to fulfill his/her responsibilities during the entire period of the established term of office (the “should” guidelines);

- the supervisory council is advised to specify in its statement that during the financial year its member took part in less than a half of meetings of the council or committee which he/she is a member of; participation in meetings by phone or videoconferencing is regarded as proper participation, however, it should not be a prevailing one (the “should” guidelines)⁴.

¹See: *Harper Ho, Virginia E.*, 'Comply or Explain' and the Future of Nonfinancial Reporting (July 15, 2017). 21 *Lewis & Clark Law Review* (2017). P. 320.

² URL: http://www.ecgi.org/codes/documents/cg_code_germany_5may2015_en.pdf.

³ The board of directors in the German model of corporate governance is a two-tier body made up of a unit which is entrusted with day-to-day management – the board of governors – and the body which forms the composition of the board of governors, controls its operations and formulates the general development strategy of the company, that is, the supervisory council. Also, the Supervisory Council appoints the company’s general director. See: *Yu.I. Pugach*. Comparing Corporate Governance Models in US and German Companies // *Law and Modern State*. 2015. Issue No.1. p. 84.

⁴ See: *Regierungs kommission. Deutscher Corporate Governance Kodex*. Press Release. Frankfurt am Main, 11 May 2015. P. 1, 2.

Late in March 2017, all the companies listed on the DAX and the MDAX – the stock exchange indices -- had their statements on compliance with DCGK published, so, one can make the following conclusions based on them.¹

On average, 96.4 percent of large listed companies have the “shall” guidelines. Plenty of companies demonstrate a 100-percent compliance with the guidelines; 8 percent of companies fail to comply at least with one out ten recommendations of GCGC. As compared to the previous year, in 2017 the level of compliance of DAX-listed companies did not change, while that of MDAX-listed companies grew by 0.4 percent.

It is to be noted that only 7 percent of all the companies explain the noncompliance with the “should” guidelines.

The GCGC norms which fail to be complied with more often include those on the board of governors, the supervisory council and transparency. In particular, companies do not comply with recommendations in respect of the upper limit of the remuneration of members of the board of governors; upper limits of termination benefits; disclosure of the size of remuneration of members of the supervisory council by means of tables proposed by GCGC; the composition of the supervisory councils and objective set to it; remuneration of the directors.

The clause on the composition of the supervisory council has the lowest level of compliance (56 percent). A similar situation is observed with setting of objectives to the board of directors. The clause dealing with the pattern of remuneration to members of the board of governors is rated the second as regards noncompliance (only 60 percent). Recommendations as regards disclosure of the size of remuneration to members of the board of governors by means of tables proposed by GCGC are complied with in less than 90 percent of cases.

Large companies demonstrate a higher level of GCGC compliance.

It is to be noted that about three-fourth of DAX-listed companies achieve the indicator’s best values as regards “monitoring and control”, “transparency” and “dilution of equity” and lower values as regards “motivation schemes”. Only a half of MDAX-listed companies achieved maximum results as regards all the four indicators. More substantial changes are observed in the “dilution of capital” indicator: in 2017 this indicator’s minimum value fell from 67 percent to 50 percent as compared to the previous year. Nearly 30 percent of DAX-listed companies have the level of compliance as regards “motivation schemes” below 85 percent. Companies expect relevant changes to permit them to reduce by 4 percent the level of noncompliance.

The German practice of dividing the guidelines of the corporate governance code into those which require explanations of noncompliance and those which do not is believed to be quite effective, trend-setting and at the same time not burdensome for companies which are not yet prepared for corporate governance structures. The practice of making the “comply or explain” approach legally mandatory both for the companies and the controller, particularly, in countries where the culture of compliance with corporate governance norms has not been completely formed yet – this was proved by findings of the research carried out by the European Bank for Reconstruction and Development (EBRD) – is worth studying.

In the 2016–2017 EBRD reports², they assessed the state of corporate governance systems and individual components thereof, strengths and weaknesses of corporate governance systems

¹ See: *Beyenbach J., Rapp M.S., Strenger C., Wolff M.* Code Compliance Study 2017 - Analysis of the Declarations of Conformity with the German Corporate Governance Code (Version May 2015) (June 27, 2017). URL: <https://ssrn.com/abstract=2993262>.

² See: The EBRD. Corporate Governance Sector Assessment. URL: <http://www.ebrd.com/what-we-do/sectors/legal-reform/corporate-governance/sector-assessment.html>.

and the need of further corporate governance reforming in 34 countries (*Table 17*). According to their estimates, moderate strong (“4”) corporate governance codes envisaging the “comply or explain” approach are in effect in Poland, Slovenia, Croatia, Estonia, Lithuania and Latvia (“3–4”).

Table 17

The state of corporate governance codes and the need of their reforming in 34 states, EBRD

Country	CGC	Country	CGC
Azerbaijan	2	Macedonia	2
Albania	2–3	Morocco	2
Armenia	3	Moldova	2
Belarus	2	Mongolia	2
Bulgaria	2	Poland	4
Bosnia and Herzegovina	2	Russia	4
Hungary	3	Romania	3
Greece	3	Serbia	2–3
Georgia	2	Slovakia	3
Egypt	2–3	Slovenia	4
Jordan	2	Tajikistan	2
Kazakhstan	2	Tunisia	2
Cyprus	3	Turkey	3
Kosovo	3–4	Ukraine	2
Kirgizia	2	Croatia	4
Latvia	3–4	Montenegro	2
Lithuania	3–4	Estonia	4–5

“5” – *strong or very strong*: corporate governance code (CGC) corresponds to its purpose and best practice.
“4” – *moderately strong*: larger part of code complies with its purpose, but further reforms on some aspects are required.
“3” – *good*: code represents some components of good practice, but there are a few key issues pointing to need to reassess code as a whole for reforming purposes.
“2” – *weak*: code may represent some components of good practice, but needs reforming in general.
“1” – *very weak*: code represents substantial risks and needs serious reforming

Source: The table is based on the EBRD reports.

The 2005 Estonian guidelines for corporate governance (currently under revision) developed by the Financial Supervision Authority, (FSA) and the Tallinn Stock Exchange, (TSE) are approaching the very strong level (“5”) and correspond to their purpose and good practice. The document is fairly complete and well implemented.

Ten large national listed companies publish statements on corporate governance on their Web-sites and in their annual reports. Many explanations of departures from provisions of the code are adequately justified, informative and refer to companies’ practices. A majority of listed companies do not comply with recommendations on electronic voting and disclosure of remunerations to members of the board of directors.

It is to be noted that the Estonian code does not cover key issues as regards formation and composition of committees of the board of directors, assessment of activities thereof, the Ethics Code, qualification of the directors, in-house control and other. This partially explains a high level of companies’ compliance with the Code’s provisions.

Generally, the FSA effectively facilitates compliance with the corporate governance guidelines and publishes on a regular basis detailed reports on assessment and promotion of listed companies’ practices and progress in the disclosure of information. The latest reports were provided in 2010 and 2011.¹ On its part, the TSE facilitates compliance with the Code, publishing annual ratings of the top 20 listed companies of the Baltic Region. One of the criteria of the rating is the quality of a company’s annual report. Companies which seek to occupy the top rating positions are expected to provide a complete review of their practices.

The Polish, Slovenian and Croatian Corporate Governance Codes are comprehensive and well-implemented.

¹ See: FSA. Corporate Governance Overviews. URL: <https://www.fi.ee/index.php?id=12510>.

Poland's ten largest listed companies provide reporting on their compliance with the national corporate governance code, with nine of them offering explanations in case of noncompliance with individual provisions of the Code. On average, companies fail to comply with 1–3 provisions of the CGC. Most explanations are of an informative nature, but the quality is getting down as the size of companies diminishes. The Warsaw Stock Exchange is entrusted with the responsibility of facilitating companies' compliance with the Polish Corporate Governance Code, however, the EBRD did not find relevant reports of the stock exchange or another entity which is in charge of control over compliance with the code.

Slovenia's nine largest listed companies out of ten included statements on compliance – based on the “comply or explain” approach – with the corporate governance code in their annual reports. Only two companies appointed an official to supervise the company's compliance with the Code. The Ljubljana Stock Exchange which actively promotes good corporate governance practices published in 2012 the statistical analysis of companies' compliance with the Slovenian Code.¹ According to the analysis in question, upgrade in the compliance level was observed in the past few years. However, the level of compliance presented in annual reports can be artificially overstated on the back of incorrect interpretation by companies of the CGC's provisions. Also, companies' explanations of departures from the Code's provisions seem too formal and rarely include concrete arguments or alternative practices.

Croatia's ten largest listed companies published statements on their compliance with the national corporate governance code, however, not all the explanations of departures from the norms were justified. Despite good statistical reports on corporate governance in general, the Croatian Financial Supervision Authority and the Zagreb Stock Exchange do not exercise proper control over explanations provided by companies.

The courts of law in the above countries rarely or never refer to corporate governance codes as a source of companies' rights and obligations.

In Latvia and Lithuania, companies' explanations in case of noncompliance with provisions of the corporate governance code look often uninformative. Also, a big problem is a lack of active controllers monitoring compliance with the Codes and, consequently, this makes relevant reporting unavailable.

The countries with a good (“3”) level of corporate governance codes based on the “comply or explain” approach include Hungary, Greece, Cyprus, Romania, Slovakia, Serbia and Turkey. All these countries are member-states or associate members of the EU.

According to the Hungarian legislation and the listing rules of the Budapest Stock Exchange, the country's listed companies are obligated to provide reporting on compliance with the corporate governance code and explain the reasons for departure from the code's provisions. Hungary's ten largest companies publish compliance statements on their Web-sites. Most statements demonstrate a fairly high level of compliance, but explanations of departures from the norms are often formal and uninformative. Also, the corporate governance code has a rather complicated pattern: provisions are divided into recommendations, proposals and explanations. It is to be noted that not all the provisions are in line with the latest legislative changes and the best practices. It is not clear again which entity is responsible for ensuring companies' compliance with the Hungarian Code.

In other countries of this group, a generally similar situation with some deviations is observed. For example, Creek companies interpret differently the “comply or explain”

¹ See: Ljubljanska borza. Analiza razkritij odstopanj v izjavah o skladnosti s Kodeksom (September 2014) http://www.ljse.si/media/Attachments/Izdajatelj/Analiza_razkritij_odstopanj_izjav_CG_2012_internet.pdf

approach: at least 1/3 of the listed companies developed corporate governance codes of their own and provided statements on compliance with them, which situation cannot be regarded as a very good practice. In the Turkish Code, provisions related to independent directors, committees and separation of duties between the chairman of the board of directors and the chief executive director are mandatory for listed companies. Fulfillment of other provisions is based on the “comply or explain” approach. However, penalties may not necessarily be imposed either in case of violation of a mandatory provision or supply of insufficient explanations of departures from a non-mandatory norm; this is evidence of insufficient control over companies’ compliance with corporate governance norms.

The weak (“2”) level of corporate governance codes based on the “comply or explain” approach can be observed in Bulgaria, Macedonia, Montenegro, Bosnia and Herzegovina, as well as Moldova. The CGCs of the above countries are characterized by a weak content; only a few companies comply with the CGC; application of the “comply or explain” approach is ineffective (for example, scoring tables with numerical values in Bulgaria and Montenegro); explanations of departures from the CGC’s provisions are few and uninformative; there is a lack of proper control over compliance with the corporate governance code.

In the rest of the countries with weak corporate governance, compliance with the CGC is voluntary (Belarus, Kazakhstan, Mongolia, Tunisia, Ukraine and other) or this can be stated as such judging by a rather low level of companies’ compliance with the Codes (Azerbaijan, Georgia, Egypt, Jordan, Morocco and other).

So, the “comply or explain” approach is the most effective for a majority of developed countries and numerous developing countries not only as a method of ensuring companies’ compliance with corporate governance norms, but also in terms of upgrading the norms as a result of promotion of corporate governance performance.

Being a kind of co-regulation, this approach based on a dialogue between the regulator and regulated entities facilitates the regulator’s better understanding of regulated entities’ essential needs and alternatives in corporate governance, thus making the regulator’s policy more efficient.

Flexibility of the “comply or explain” approach permits companies to adapt corporate governance norms to their own specifics and have some freedom in establishing governance patterns which suit them the best.

However, it is not enough to declare the “comply or explain” approach to upgrade corporate governance performance. The efficiency of the approach depends on a number of factors, including the level of a country’s economic development, as well as the method of handling some procedural issues, the main of which is assessment of the quality of the actual corporate governance practice.

6.2.5. The analysis of companies’ compliance with the Corporate Governance Code in Russia

Analyzing Russian companies’ compliance with the corporate governance code (CGC), both the Central Bank of the Russian Federation and other entities utilized in their research mainly public information which is available in companies’ open documents (quarterly and annual reports, statements on compliance with the CGC principles, lists of affiliated persons, reports on material facts and other) and *did not carry out verification of authenticity of such information*. Joint-stock companies determined on their own the extent of compliance with one or another principle of the CGC and the entities which carried out the analysis specified a *high*

level of formal approach and a low information content of statements provided by companies, particularly, as regards explanations of departures from corporate governance norms. With such an approach prevailing, the research discussed below does not completely reflect the authenticity of companies' compliance with the CGC in Russia.

In Russia, companies' compliance with the CGC by means of the "comply or explain" approach is controlled by the Central Bank of the Russian Federation. The first review of the corporate governance practice at Russian public companies in 2015 was published by the Central Bank of the Russian Federation in April 2017.¹ The second and currently latest review based on the results of 2016 was released in December 2017²; it presents a comparative analysis of practices of the CGC application in 2015 and 2016.

For the second review, the Central Bank of the Russian Federation examined statements on compliance with the CGC principles and recommendations provided by 49 companies and 29 companies whose equities were included in the quotation list of the first level (QL1) and the quotation list of the second level (QL2), respectively. The remaining six companies did not provide any statements.

The analysis identified positive dynamics of introduction of the CGC principles and recommendations in the practice of Russian companies. For example, six companies from QL1 promoted by more than 20 percent the level of compliance with the CGC principles and upgraded the quality of explanations of departures from the CGC norms. Though no such substantial changes were observed in QL2, four companies declared that they started to comply with more than a half of norms within the past year. Plenty of companies expect to promote further their compliance with the CGC. Next year, the Central Bank of the Russian Federation expects growth in the level of introduction of the CGC, too, though a more moderate one.

However, the regulator points to the same quality of companies' explanations of departures from the CGC principles, which fact means that the Central Bank of the Russian Federation has to take more efforts to explain to companies what quality of explanations it expects from them (explanatory letters, seminars, networking with companies on the individual basis, sampling analysis of the authenticity of statements and other). The work of the Central Bank of the Russian Federation both on the reviews and with joint-stock companies is an important factor facilitating upgrading of the corporate governance practice.

The outputs of the research carried out by the Central Bank of the Russian Federation pointed to growth of 11 percent in the average level of compliance with the CGC principles and recommendations as compared to the previous year. In 2016, this level was equal to 69 percent. Three companies reported on compliance with over 90 percent of the principles, however none of them managed to comply completely with the CGC.

The share of the companies which complied with less than a half of the CGC principles decreased from 36 percent to 11.5 percent. In QL1, the specified share fell from 23 percent to 4 percent. In QL2, the share of companies which complied with over 75 percent of the CGC principles doubled (*Fig. 1*).

¹ URL: http://www.cbr.ru/StaticHtml/File/14233/Review_17042017.pdf.

² URL: http://www.cbr.ru/Content/Document/File/33001/Review_27122017.pdf.

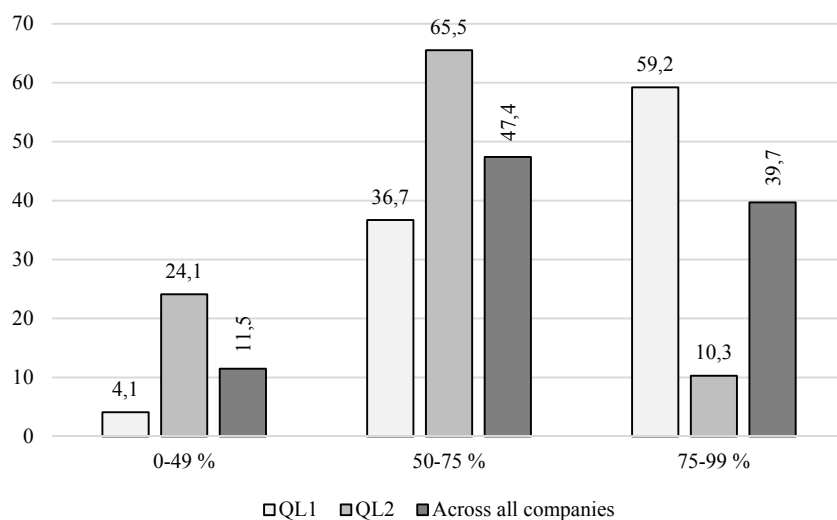


Fig. 1. Distribution of the companies by the level of their compliance with the CGC principles in 2016, %

Source: The data of the second Review by the Central Bank of the Russian Federation based on the results of 2016

Over 75 percent of the CGC principles are complied with by 39.7 percent of companies, while 50–75 percent of the principles, by 47.4 percent of the companies. The minimum percent of compliance with the CGC principles is equal to 34 percent.

The average share of companies’ noncompliance with the CGC principles fell from 15 percent to 9 percent. In QL1, this share decreased two times over from 12 percent to 6 percent, while in QL2, from 24 percent to 15 percent (*Fig. 2*).

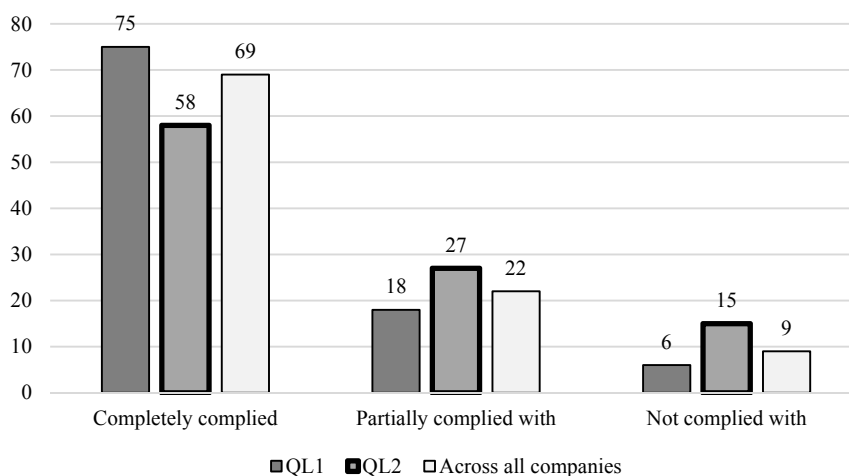


Fig. 2. The average number of CGC principles complied with by companies in 2016, %

Source: The data of the second Review by the Central Bank of the Russian Federation based on the results of 2016

As regards complete compliance with principles and recommendations of individual chapters of the CGC, Chapter III on the Corporate Sector is complied the most with (77 percent of companies). It is followed by Chapter V on the Risk Management System and In-House

Control (55 percent of companies). In 2015, the above-mentioned chapters were complied the most with, but the number of companies which observed them was smaller (45 percent and 42 percent).

The most complicated chapter in terms of implementation is Chapter II on the Company's Board of Directors, which is made up of 36 principles. None of the companies managed to comply with it. Apart from a large number of principles, implementation of that chapter is complicated by lack of actual loyalty on the part of members of the board of directors to relevant corporate governance approaches (*Table 18*).

There are difficulties with implementation of provisions of Chapter I on the Rights of Shareholders and Equality of Conditions for Shareholders; only 8 percent of QL1 companies comply completely with it against 3 percent of QL2 companies, though in 2015 there were no such companies at all.

Generally, the number of companies which reported full compliance with the principles of individual chapters of the CGC has increased. However, the Central Bank of the Russian Federation stated a somewhat decrease in implementation by QL2 companies of the principles of the three chapters – on the Remuneration System, the Disclosure of the Information and Material Corporate Operations – which situation can be justified by instability of the QL2 composition that changed more than 25 percent as compared to 2015.

Table 18

The percentage of the companies which reported 100 percent compliance with the principles of individual chapters of the CGC in 2016

Chapter of CGC	Number of principles	QL1, %	QL2, %
I. Shareholders' Rights and Equality of Conditions for Shareholders in Fulfillment of Their Rights	13	8	3
II. Company's Board of Directors	36	0	0
III. Company's Corporate Secretary	2	78	76
IV. Company's System of Remuneration of Members of Board of Directors, Executive Authorities and Other Key Managers	10	8	0
V. Risk Management System and In-House Control	6	55	55
VI. Disclosure of Information on Company and Company's Information Policy	7	24	3
VII. Material Corporate Operations	5	12	3

Source: The data of the second review by the Central Bank of the Russian Federation based on the results of 2016.

The ten CGC principles which are most commonly complied with by companies did not change, but the level of compliance with those principles greatly increased. If in 2015 all the companies reported full compliance with only one principle under which shareholders should be provided with reliable and effective methods of accounting of their share rights and granted a feasibility to make a free and easy assignment of their shares (1.4.1), in 2016 companies complied completely with seven CGC principles, including those establishing the following:

- extra payments or compensations are not envisaged by companies in case of early termination of the authorities of members of the board of directors due to a change in control over the company or other events (4.2.3);

- the compensation amount (“a gold parachute”) paid by the company in case of early termination of the authorities to members of the executive bodies or top managers on the company's initiative and in case of absence of unscrupulous practices on their part should not exceed a double amount of the fixed portion of the annual remuneration (4.3.3).

Three more CGC principles (1.1.1, 1.3.1, 3.1.2) are complied with by 97 – 99 percent of the companies. As compared to the previous year, the number of the principles which are fully complied with by over 80 percent of the companies has increased.

Seven out of nine principles which are not complied with more often than others and observed by less than a half of the companies are related to the board of directors.

The least observed principle (7.2.2) concerns the norms and procedures which are to be specified in the company's internal documents as regards fulfillment of material corporate operations. This principle is complied with by only 19 percent of the companies.

Also, the least observed principles are at present the following ones (complied with by 21 percent and 22 percent of companies, respectively) under which:

- an independent director is elected the chairman of the board of directors or a senior independent director is determined from among the elected independent directors to coordinate the work of independent directors and maintain networking with the chairman of the board of directors (2.5.1);

- the company has implemented the program of long-term motivation of members of the executive bodies and other top managers with utilization of the company's equities (options or other financial derivatives based on the company's equities) (4.3.2).

Despite a low level of compliance with these CGC principles, some progress in performance is observed as compared to 2015. For example, the share of the companies which fully complied with Principle 7.2.2, Principle 2.5.1 and Principle 4.3.2 increased by 2-3 percent. The number of the companies meeting the remaining seven principles increased on average by 11.4 percent.

The “comply or observe” approach offers companies the following two options of compliance with corporate governance norms: (1) comply with the CGC principles and recommendations (Russian companies are definitely making quite a good progress in it); (2) not comply with individual CGC provisions, but disclose the information on the reasons for such noncompliance. In the latter option, the quality of companies' explanations of departures from the CGC principles remains not very high.

At the year-end 2016, the average level of quality of explanations across all the companies amounted to 39 percent, an increase of only 4 percent compared to 2015. In QL1, the level of quality of explanations increased from 38 percent to 45 percent. In QL2, this level fell from 33% to 30%, probably, on the back of substantial renewal of the composition of QL2. It is to be noted that numerous companies in QL2 lacked experience in providing explanations and the regulator did not have time to carry out explanatory work with them, so, only a few QL2 companies managed to upgrade the quality of their explanations as compared to 2015 (*Fig. 3*).

A high level of quality explanations of the reasons for noncompliance with the CGC principles (over 75 percent) was achieved only by few companies. In QL2, there are no such companies, while in QL1 their share amounts to 10 percent, that is, only five companies all together, including four companies assessing the quality of their explanations to be more than 80 percent and one company estimating it over 90 percent.

The share of the companies whose quality of explanations needs upgrading has largely increased. In QL1, this share grew from 18 percent to 29 percent as compared to 2015, while in QL2, from 7 percent to 17 percent.

A positive thing is a reduction from 80 percent to 69 percent of the share of companies whose quality of explanations requires substantial improvement. It is to be noted that in QL1, the

number of companies with the quality of explanations estimated below 10 percent has decreased by 50 percent to three companies.

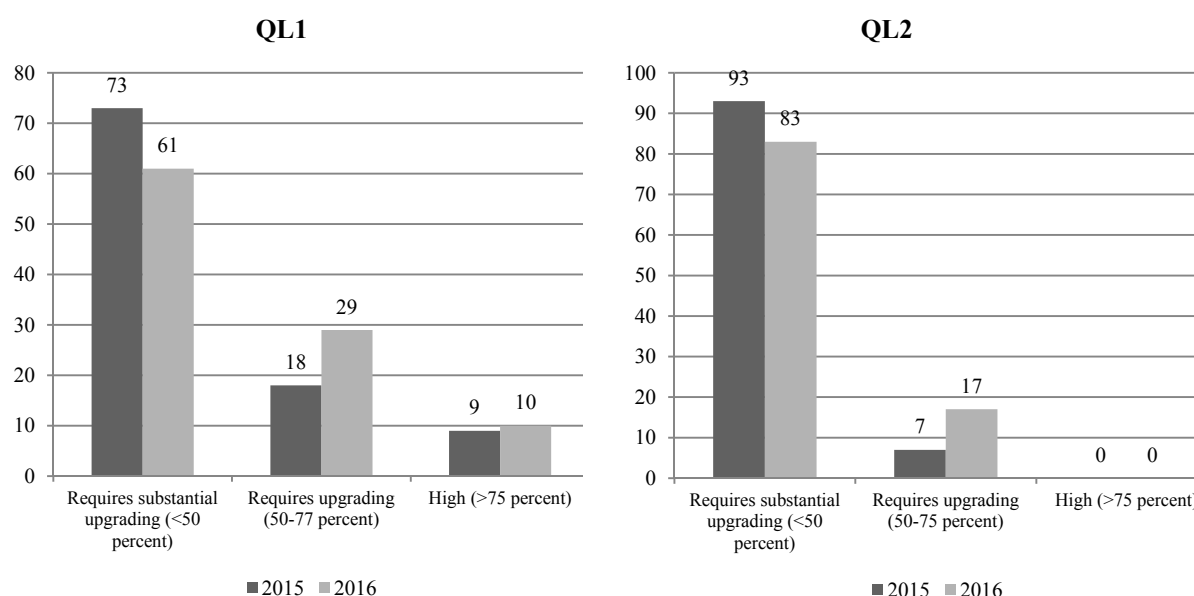


Fig. 3. The shares of different quality levels of explanations of reasons for noncompliance with the CGC principles by QL1 companies and QL2 companies, %

Source: the data of the second Review by the Central Bank of the Russian Federation based on the results of 2016.

The largest number of high-quality explanations (33 percent of the companies) was provided in respect of the reasons for noncompliance with Principle 7.2.1, under which the information on fulfillment of material corporate operations should be disclosed with explanation of reasons for such operations and terms and consequences thereof.

Five out of ten principles in respect of which companies demonstrated the lowest level of quality of explanations deal with regulation of the work of the board of directors (Principle 2.2.1, Principle 2.3.3 and other). On average, 88 percent of the companies failed to provide quality explanations.

So, unlike the level of companies' compliance with the principles and recommendations of the Russian CGC which largely increased in 2016 and is expected to keep on growing, the quality of explanations of reasons for departures from individual principles leaves much to be desired. Instead of reasonable comments, companies reduce their explanations to the sheer fact of noncompliance with a principle or refer to the absence of the relevant requirement either in the legislation or listing rules; this cannot be regarded as a reasonable explanation, either.

The Central Bank of the Russian Federation specifies that it is necessary to formulate clearly in explanations the reasons for which this or that situation prevails in the company; what factors it can be justified by; whether such a situation is accepted as suitable to the company in terms of specific conditions of the company's operation and development; what measures the company has taken or is going to take to reduce risks related to a failure to apply the best

corporate governance practice; whether the company plans and within what time-limits to introduce the relevant CGC recommendations and other.¹

It is to be reminded that without quality explanations the “comply or explain” approach is not going to be effective enough.

Apart from the Central Bank of the Russian Federation, the issues of introduction of the CGC are dealt with at twelve state-controlled joint-stock companies by the Rosimuschestvo, the Open Government, the Expert Council under the Government of the Russian Federation and the Working Group on Establishment of the International Financial Center. The list includes the following: the PAO (a publicly traded company) AK “ALROSA”, the PAO “AK Transneft, the PAO Aeroflot, the PAO Gazprom, the PAO NK Rosneft, the OAO (open-end joint-stock company) “RZHD”, the PAO “Rosseti”, the PAO “RusGidro”, the PAO “Rostelekom”, the PAO “FSK UES”, the PAO Sovkomflot and the PAO VTB Bank.

The need of introducing an individual monitoring for joint-stock companies with state participation is substantiated by the specifics of such companies.

The Rosimuschestvo has been carrying out implementation of the CGC at state-controlled joint-stock companies since 2014. The Agency analyzed the 2016 annual reports of 20 joint-stock companies with state participation as regards their compliance with the CGC principles and recommendations.²

On average, the level of compliance by companies with a sample of *key* CGC provisions amounts to 90 percent, an increase of 13 percent as compared to 2015.

The chapters which are the most complied with include Chapter III on the Corporate Sector (100 percent), Chapter I on the Rights of Shareholders (93 percent) and Chapter IV on the System of Remuneration of Members of the Board of Directors (92 percent). The levels of compliance with the remaining chapters exceed 70 percent.

The highest positions as regards introduction of key sections of the CGC are occupied by the PAO Gazprom (100 percent), the PAO Aeroflot (100 percent), the PAO Sovkomflot (97 percent) and the PAO NK Rosneft (95 percent).

The highest progress as regards introduction of the CGC in 2016 as compared to 2015 was achieved by the PAO Aeroflot (from 81 percent to 100 percent), the PAO Transneft (from 58 percent to 74 percent) and the PAO Rusgidro (from 38 percent to 63 percent).

The Roskomimuschestvo does not analyze the provided explanations of the reasons for noncompliance with individual CGC principles.

The Open Government, the Expert Council under the Government of the Russian Federation and the Working Group on Establishment of the International Financial Center carry out on a regular basis – several times a year – a monitoring of introduction at the above 12 joint-stock companies with state participation of 13 main CGC recommendations as regards upgrading the efficiency of the board of directors and its role in corporate governance:³

- a ban on voting by quasi-treasury stocks;
- taking of decisions by a simple majority of all the members of the board of directors;

¹ See: The Central Bank of the Russian Federation. The Review Based on the 2016 Results of Corporate Governance Practices in Russian Publicly Traded Companies. Issue No. 2 (December 2017). p. 34.

² See: The minutes No.4 of September 21, 2017 of the meeting of the Public Council under the Ministry for Economic Development of the Russian Federation URL: <http://economy.gov.ru/wps/wcm/connect/c6b9eee6-365e-4022-ac85-eeca22d7e12a/4.pdf?MOD=AJPERES&CACHEID=c6b9eee6-365e-4022-ac85-eeca22d7e12a>.

³ See: The Open Government. The corporate governance level at companies with state participation started to meet higher standards, but some system-based problems still exist (14.11.17). URL: http://open.gov.ru/events/5516467/?sphrase_id=236270.

- issues addressed "in praesentia" by the board of directors;
- issues related to the conflict of interests of members of the board of directors;
- the right of access of the members of the board of directors to the company's and controlled legal entities' documents and information;
- authorities of the board of directors in respect of controlled legal entities' boards of directors and sole executive bodies;
- authorities of the board of directors in respect of controlled legal entities' operations;
- authorities of the board of directors in respect of control over the company's management;
- the board of directors' audit committee made up of independent directors;
- anti-corruption policy, "hot-line";
- in-house audit;
- risk management department;
- formalized risk management system.

Table 19

The ratings of complete introduction of the CGC's priority recommendations

Company	Rostelekom	ALROSA	VTB	Aeroflot	Rosseti	Transneft	Rosneft	RusGidro	FSK UES	Gazprom	RZhd	Sovkomflot
Number of implemented recommendations	11/13	9/13	9/13	8/13	8/13	8/12	6/13	6/12	5/13	3/13	2/12	2/12

Source: The data of the outputs of the monitoring by the Open Government, the Expert Council under the Government of the Russian Federation and the Working Group on Establishment of the International Financial Center for November 2017

In the past three years, the level of corporate governance in companies with state participation has started to meet in general higher standards, but in most companies the specified recommendations were not implemented in full. Also, a number of cases of noncompliance with recommendations which companies used to comply with before was identified.

In accordance with the criteria under review, the PAO Rostelekom is more effective than others in implementing recommendations (*Table 19*). The company initially had at its disposal a risk management system which met the requirements of the CGC and introduced the in-house audit and a number of measures enhancing the role of the board of directors in compliance with the CGC. However, the company systematically violates the recommendation as regards a ban on voting by quasi-treasury stocks.

The PAO Gazprom fails to comply with recommendations on promotion of the role and efficiency of the board of directors as well as those dealing with a ban on voting by quasi-treasury stocks, the in-house audit and the risk management system despite the fact that the company established a special risk management department. According to experts, the PAO Gazprom's unwillingness to introduce recommendations is evident. It is to be reminded that as per the Rosimuschestvo's data the PAO Gazprom has introduced completely (100 percent) the key sections of the CGC, so it remains unclear what factors are behind this contradiction.

Unlike the PAO Gazprom, the RZhd – despite its second to last place in the rating – prepared a draft of amendments to its charter with experts' recommendations taken into account and the statutes on the board of directors to upgrade considerably the company's position.

The Open Government and other participants in the monitoring pay attention to companies' explanations of non-implementation of the CGC's priority recommendations, as well as companies' reasons for which they consider recommendations introduced, but do not offer their assessments thereof.¹

Thus, despite somewhat different approaches to analyzing and discrepancies in the outputs, both the Central Bank of the Russian Federation and other institutions rated fairly highly the level of Russian companies' compliance with the CGC's recommendations and principles and made positive forecasts as regards further implementation thereof. Unlike the extent of compliance with the CGC's provision, the quality of companies' explanations of noncompliance with some principles leaves much to be desired. Being the main "appraiser" of such explanations, the Central Bank of the Russian Federation refrains from taking tough enforcement measures in respect of companies whose explanations are insufficient and makes a greater emphasis on the explanatory work.

However, not all the institutions analyzing companies' compliance with the CGC in Russia arrived at the same results in their research.

For example, despite a switchover of the Russian CGC from the category of good ("3") Codes to that of moderately strong ones ("4") in December 2017², the European Bank for Reconstruction and Development stressed that as before only Russia's five large listed companies out of ten had disclosed the information on compliance with the CGC. In addition to that, a majority of explanations did not include any references to the current state of corporate governance practices at companies. Also, the EBRD specified that there were no references to the CGC as the source of companies' rights and obligations in the judicial practice.

Having compared the results of its research into corporate governance structures of Russian publicly traded companies in 2012 and 2015, the Deloitte CIS Corporate Governance Center came to the conclusion that corporate governance had seen no change for the better since 2012.³

The 2015 research included 120 Russian companies whose common shares were in the list of the first and second levels of the Moscow Stock Exchange (99 companies) and listed on the London Stock Exchange, the New York Stock Exchange and the NASDAQ (21 companies). It is to be noted that 22 percent of the companies of the sample were from the energy sector; 10 percent, from the oil and gas industry; 8 percent, from the banking sector. The government controls directly and indirectly 34 companies, that is, 3 companies less than in 2012, however, the average value of the state participation in those companies increased on the contrary by 7 percent and amounted to 70 percent.

According to the Deloitte CIS Corporate Governance Center, the level of Russian companies' compliance with the best corporate governance practice is not getting higher due to a lack of foreign investors' interest in them as a result of sanctions and falling oil and gas prices. Also, in 2016 the new listing rules and the "comply or explain" approach did not work in full, while the project of establishing the premium listing segment at the Moscow Stock Exchange for companies with high corporate governance standards was frozen.

¹ See: The Open Government, the Expert Council under the President of the Russian Federation and the Working Group on Establishment of the International Financial Center. The Corporate Governance Code was introduced in November 2017. URL: <http://open.gov.ru/upload/iblock/131/131f73d02f7071214a16614f2a70af8f.pdf>.

² See: EBRD. Corporate Governance in Transition Economies: Russian Country Report (December 2017). URL: <http://www.ebrd.com/documents/ogc/russia.pdf>.

³ See: The Corporate Governance Pattern at Russian Publicly Traded Companies. Research by the Deloitte CIS Corporate Governance Center, 2015 URL: <https://www2.deloitte.com/content/dam/Deloitte/ru/Documents/about-deloitte/pressrelease/corporate-governance-structures-of-public-russian-companies-rus.pdf>.

As regards the *composition* of the board of directors, the Deloitte CIS Corporate Governance Center stated the insufficient number of external (independent) directors in companies' boards of directors; independent directors accounted for 27 percent and 32 percent of the seats at state-owned companies and private companies, respectively, while under the CGC at least one-third of the elected contingent of the board of directors is recommended. This norm was complied with by 41 percent of the companies.

A factor which brought about a situation where the number of independent directors is not sufficient enough was a renewed practice of 2014-2015 of appointing high-ranking government officials to boards of directors of state-owned companies; the share of such officials largely increased as compared to 2012 and amounted to 21 percent. Directors related one way or other to the state accounted for other 42 percent of the seats in companies' boards of directors. (Fig. 4).

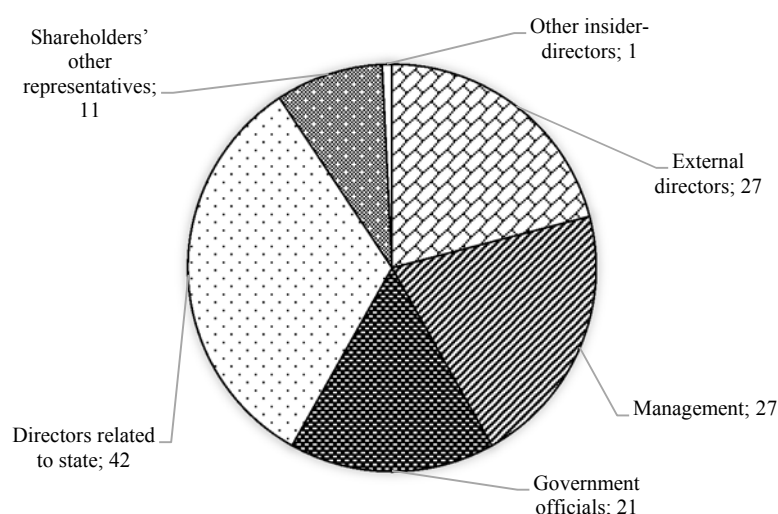


Fig. 4. The pattern of the board of directors at state-owned companies, %

Source: The Deloitte research data for 2015

Also, there is a shortage of efficient independent expert-directors in all the companies. The scope of candidates is limited by the CGC's tough requirements to the notion of independence (no relations with the company's shareholders, including kinship relations; a ban on civil service work within a year prior to election to the board of directors and other).

Another problem is the concentrated ownership pattern typical of Russian companies with an average size of a large equity package amounting to 57.6 percent; this is different from the normal situation where minority shareholders usually nominate independent directors.¹

Foreign members of the board of directors can be found with 61 percent of the companies; they account for 30 percent and 72 percent of the seats at state-owned and private companies, respectively, and that is quite a high indicator.

As regards the *composition* of the boards of directors, proceeding from the data of the two research carried out by the Deloitte in 2012 and 2015 it can be stated that the number of companies with some or other committees established has decreased (see Table 20).

¹ See: Yu. Petrova, M. Podtserob, C. Romanova. The Corporate Governance in Russia Has Not Improved Since 2012 – Deloitte // The Vedomosti daily, April 05, 2016. URL: <https://www.vedomosti.ru/management/articles/2016/04/06/636572-korporativnoe-upravlenie>.

Table 20

Companies with relevant committees of the board of directors, %

	2015	2012
Audit Committee	95	98
Remuneration and Appointments Committee	64	88
Remuneration Committee	18	—*
Nomination Committee	13	—*
Strategy Committee	53	43
Risk Management Committee	9	8
Ethics Committee or Ethics/Corporate Governance Committee	3	13
Corporate Governance Committee	8	—*

*not available.

Source: The Deloitte research data for 2012 and 2015

In compliance with the CGC, the audit committee is to be made up of independent directors, however, it is so only with 23 percent of companies out of 111 companies with such a committee established and its composition disclosed. It is to be noted that in 47 percent of audit committees the majority is made up of independent directors, while in 19 percent of audit committees there are no independent directors at all. In audit committees, independent directors account on average for 51 percent. It is to be noted that 25 percent of the companies have no independent directors on remuneration and appointments committees, either.

In compliance with the CGC, an independent director is to be elected the chairman of the board of directors or the board of directors has to assign the senior independent director out of the number of independent directors. This provision is complied with only by 27 percent of the companies. It is noteworthy that only 13 percent of the boards of directors have an independent chairman; 18 percent of the boards of directors assign an independent senior director.

Despite the CGC's recommendations, only 22 percent of the companies reported self-appraisal of the activities by the board of directors (16 percent) or external assessment (6 percent).

Though under the CGC it is inadmissible to vote at the company's general meeting of shareholders by *quasi-treasury stocks*, that is, equities whose holder is an entity controlled by the issuer, such equities can be found with 28 percent of the companies and they account on average for 7 percent of the market capitalization of a relevant company. In case of the Uralkaly Company, the share of quasi-treasury stocks amounted to 40 percent.

Summing up the **results**, it is feasible to make the following conclusions:

1. The Russian Corporate Governance Code is a *quality document* with a good pattern and content meeting the global corporate governance standards, including the OECD Corporate Governance Principles. The Russian CGC is in no way inferior to corporate governance codes of other countries and in some ways it is even better (the CGC's Part II is of an advisory, rather than annotative, nature; the Code provides a definition of the independent director and includes a separate chapter on the remuneration system and other). The CGC is aimed at upgrading the governance efficiency of Russian companies and facilitating their long-term and sustainable development.

2. Application by companies of the CGC's principles and recommendations is *voluntary* and based on their willingness to be more attractive to foreign investors. However, in modern Russia where the corporate culture is not yet developed enough pure voluntary participation could considerably slow down implementation of the CGC's provisions. Keeping that in mind, the architects of the CGC envisaged a soft method of compliance based on the "*comply or explain*" approach applicable only to joint-stock companies whose equities are publicly traded; both

application of the norms and explanation of the reasons for non-application with them are deemed proper methods of compliance with the norms.

3. If utilized correctly, the “comply or explain” approach is believed to be more effective as compared to mandatory regulation. However, in most developing and developed countries which announced this approach there is *a problem of implementing* it in practice. It often happens that an entity which is obligated to control implementation of the approach is neither designated nor fails to carry out its functions, while companies which do not comply with corporate governance norms provide either formal explanations or no explanations at all.

The fact that companies have to explain the reasons for which they have failed to comply with corporate governance norms makes the “comply or explain” approach the most valuable because by doing so companies may depart, on one side, from the norms, while, on the other side, the regulator is getting a better idea of the regulated entities’ essential needs and resources in the field of corporate governance. Consequently, without quality explanations provided, this approach makes no sense.

4. *Russia has created almost all the conditions* for successful utilization of the “comply or explain” approach and, as a consequence, implementation of the CGC.

The obligation to implement this approach is envisaged in the Statutes of 2014 of the Central Bank of the Russian Federation on Disclosure of the Information by Issuers of Equity Securities. Also, for a company’s equities to be included in the quotation list of the first level the Moscow Stock Exchange Listing Rules¹ require from 2015 a disclosure of the information with explanation of the reasons in case of the company’s failure to comply with the CGC’s recommendations as regards the corporate secretary (Clause 2.18).

The entity with the required competence and authority to supervise companies’ compliance with the CGC and appraise the quality of explanations in case of companies’ departures from the CGC’s norms is the Central Bank of the Russian Federation which has adopted a responsible approach to fulfillment of its duties. The Central Bank of the Russian Federation develops regulatory documents, carries out explanatory work with companies and prepares and releases highly informative reports.

Despite such an activity, the Central Bank of the Russian Federation does not resort to tough enforcement measures and prefers to carry out explanatory work with companies without burdening them with its interference; it is believed that at the initial stage of implementation of the CGC’s norms such a policy is a reasonable solution.

5. Based on the information from companies’ disclosed documents, the Central Bank of the Russian Federation assessed positively the average level of compliance by Russian listed companies with the *CGC’s principles and recommendations*; in 2016 it amounted to 69 percent of all the principles, an increase of 11 percent on the previous year. In 2017, the Central Bank of the Russian Federation expects growth in the compliance level, though a more moderate one.

A number of institutions (the Rosimuschestvo, the Open Government, the Expert Council under the Government of the Russian Federation and the Working Group on Establishment of the International Financial Center) dealing with introduction of the CGC’s principles at some Russian companies despite some discrepancies in the results rated highly the level of compliance with the CGC’s principles. In 20 joint-stock companies controlled by the state, this level of compliance was equal on average to 90 percent.

¹ URL: <http://fs.moex.com/files/257/24914>.

All the institutions, including the Central Bank of the Russian Federation have come to the conclusion that companies complied the least with the principles dealing with the board of directors.

Unlike the level of compliance with the CGC and its dynamics, the average *level of the quality of companies' explanations* of departures from the CGC's provisions did not virtually change and amounted only to 39 percent in 2016 as per the data of the Central Bank of the Russian Federation; the above is evidence of the need for the regulator to step up its work in this area.

At the same time, the above indicators do not completely reflect the current state of things due to the established approach to assessment of companies' compliance with the CGC's principles and recommendations: companies determine on their own the extent of compliance with the principles, doing it often for the sake of appearance, while the entities carrying out the analysis examine mainly the information provided by companies, rather than the actual corporate governance practices.

It is to be noted that outputs of some research into Russian companies' compliance with the CGC are not very positive. For example, the Deloitte CIS Corporate Governance Center came to a conclusion that corporate governance in Russia had not changed for the better since 2012. The difference between research results can be partially explained by different compositions of company groups subjected to the analysis. Also, the specified research does not provide assessments of companies' explanations of reasons for noncompliance with the CGC's recommendations.

6. In the end, it can be stated that *there is undoubtedly progress* in compliance with the Russian CGC and the activities of the Central Bank of the Russian Federation in this area will definitely facilitate promotion of the CGC's principles and recommendations with expansion of the range of legal entities which the "comply or explain" approach is going to be applied to.

A particular attention is to be paid to the quality of companies' explanations because at this stage the regulator has to identify the factors behind the low quality of explanations, rather those behind noncompliance with the CGC's provisions. *It is necessary to switch over from assessment of formal statements to assessment of actual corporate governance practices*, but it is quite a complicated process and it requires substantial resources. It is to be noted that some steps have already been taken in that direction: the Central Bank of the Russian Federation is networking with some companies on the individual basis to upgrade the quality of their explanations. The regulator is planning to network more actively with companies to eradicate the formal approach and ensure the situation where companies' explanations of departures from the CGC's norms meet shareholders' and investors' expectations. The proper implementation of the "comply or explain" approach will facilitate promotion of transparency, upgrade the existing corporate governance rules with companies' comments taken into account and further develop the corporate culture in Russia.

6.3. Science and innovations¹

The year of 2017 can be described as a year of making plans, rather than assessing outputs, in the Russian scientific and technological sector. Preference was given to the development of a plan for the implementation of Scientific and Technological Development Strategy of the Russian Federation, including its integration with policies in progress as part of the

¹ This section is written by Irina Dezhina, the Gaidar Institute, the Skolkovo Institute for Science and Technologies.

National Technological Initiative of Russia (NTI), and to the endorsement of the state program for the development of a digital economy in the Russian Federation, including its synchronization with the NTI for the development of scientific and educational and technological competences. Finally, the 2017 full-year consideration of a new science legislation still continued at the end of year.

There were extensive debates about the application of bibliometrics as a scientific performance measurement tool because government agencies, scientific funds, research institutions and higher education institutions use bibliometrics for measuring the performance and rewarding of both individuals and institutions. The final results of a college monitoring, including its scientific and innovative component, and of performance measurement of subordinate institutions of the Federal Agency for Scientific Organizations (FASO) were made public.

A pilot program on support to medium-sized growth companies gained most of the momentum in the technological innovations sector, whereas there was no visible breakthrough in the innovation policy with regard to large and small innovative businesses. On top of that, the segment of technological business venture capital funding stalled.

6.3.1. National policy scientific and technological priorities

The implementation plan for the Scientific and Technological Development Strategy of the Russian Federation adopted in December 2016 (hereinafter “the Strategy”) was endorsed in 2017. The State Program on Digital Economy of the Russian Federation¹ that also sets out scientific and technological development guidelines emerged in summer. The National Technological Initiative was somewhat tuned to the Strategy and the Digital Economy state program. The Strategy identifies the National Technological Initiative of Russia as a key tool designed to “ensuring that basic knowledge, exploratory and applied scientific research are translated into products and services to facilitate Russian companies in taking leading positions in promising markets pursuant to existing and newly emerging (including after 2030) priorities.”²

The Strategy provides for a linkage between “grand challenges” and scientific and technological priorities that can be forged not only through the NTI but also by redesigning a master science and technology program called the State Program for Scientific and Technological Development until 2020. The Program will be replaced with a new state program for Scientific and Technological Development of the Russian Federation for 2018-2025 that was not yet developed at the end of 2017. The new program intends to build a new integral model of public investment, ranging from the provision of support to qualified researchers and entrepreneurs to the introduction of mechanisms designed for the development of science and innovations across the entire knowledge life cycle. That was, in some ways, announcement of returning to the concept of “innovative elevator.” The following key innovations were introduced: a multilateral funding rule, common approaches towards pilot project appraisal, and lifting of restrictions on program deadlines (planning horizons can possibly be extended to

¹ The Program was endorsed by the Russian Government through Executive Order No. 1632-z dated July 28, 2017 <http://static.government.ru/media/files/9gFM4FHj4PsB79I5v7yLVuPgu4bvR7M0.pdf>

² Paragraph 23 of the Strategy. Source: <http://kremlin.ru/acts/bank/41449/page/2>

3–7 years).¹ The Russian Ministry of Education and Science has de facto initiated ways of further business engagement in identifying priorities with an open invitation to companies to co-finance research within an industrial partnership.²

A new list of priorities set out in the Strategy adds to the list of most important scientific areas and appears to introduce for the first time the use of methods of social sciences and humanities to deal with problems. At the same time, they duplicate nearly 70 percent of the priorities adopted back in 2011 by a presidential executive order, with the former being more elaborated. For example, the previous priority was transport systems at large, whereas the today’s priority is intellectual transport, logistic and telecommunication systems.

The number of NTI priorities has been cut substantially. The top priorities are 10 “cross-cutting technologies” that are duplicated in the Digital Economy state program (*Table 21*). These very priorities will supposedly be provided with extra resources.

Table 21

“Cross-cutting technologies” in NTI and in Digital Economy state program

NTI	Digital Economy state program
Big data	Big data
Artificial intelligence	Neurotechnologies and artificial intelligence
Distributed ledger systems	Distributed ledger systems
Quantum technologies	Quantum technologies
New manufacturing technologies	New manufacturing technologies
Sensor technologies and robot accessories	Robot accessories and sensor technologies
Wireless communication technologies	Wireless communication technologies
Neurotechnologies and virtual and augmented reality technologies	Virtual and augmented reality technologies
	Industrial Internet
New and portable power sources	
Technologies to control properties of biological objects	

Sources: <http://www.nti2035.ru/technology/>; <http://static.government.ru/media/files/9gFM4FHj4PsB79I5v7yLVuPgu4bvR7M0.pdf>

The changes represent an alternative approach towards the provision of a wide range of support to research. Resuming financing of a great number of subject areas can hardly be possible amid low-level target funding under the (new) Strategy. There are plans to increase R&D spending to 2 percent of GDP by 2035, that’s what many countries have already achieved.

Such a moderate way of targeting took place amid continuous decline in R&D spending as a percentage of GDP, from 1.13 percent in 2015 to 1.1 percent in 2016. Russia ranks 35th in R&D spending as a percentage of GDP. In absolute terms, Russia has moved down to 10th place in R&D spending, the country’s ranking back in 1995. Russia continues to fall behind leading countries: Russia spends on R&D 13.5 times less than the United States, 11 times less than China, 4.6 times less than Japan, three times less than Germany. Over the past two decades a few catching-up countries have increased considerably investment in R&D, including investment from businesses. R&D spending over the same time has increased 2.6 times in Russia, 21.9 times in China, 4.5 times in Korea, 3.7 times in Israel.³

¹ An explanatory note to (Russian) government’s draft executive order Concerning the Approval of the State Program of the Russian Federation “The Scientific and Technological Development of the Russian Federation.” <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&base=PNPA&n=30448&dst=104152#0>

² Kiseleva M. About science on the Science Day: An Exclusive Interview with Olga Vasileva // Indicator, February 8, 2017 <https://indicator.ru/article/2017/02/08/intervyu-olgi-vasilevoj/>

³ Ratai T. Science spending in Russia and in world’s leading economies // Science, Technologies, Innovations. September 7, 2017 M.: National Research University Higher School of Economics, p. 1.

The shortened list of priorities reflects a policy of focusing on top-performers. The decision appears reasonable because of scarce resources. It's likely, however, that this will deliver a short-term result. The flip side of the approach is further narrowing of the scope of scientific appraisal in Russia while there is a small number of subject areas that meet the global level. Selective support of a small number of subject areas can lead to removing a series of research areas that could potentially underpin a future breakthrough out of the scientific landscape.

Lastly, Russia's presidential election has entered the pre-election period, and the Center for Strategic Research (CSR) has prepared an analytical report (*A new technological revolution: Challenges and opportunities for Russia*)¹ with the aim to create a new scientific and high-tech based technological image by 2024, by the end of the next presidential term. "Technological revolution" must bring about an economic growth of 4 percent of GDP a year that can supposedly be achieved through "profound technological and organizational changes in traditional industries" as well as building up new sectors. The report proposes that the NTI management should be improved because it lacks, according to the report, efficiency, and a "Russian science management system" should be launched.² The latter intends to create a new management mechanism "in the format of special federal executive body authorized to develop a national policy and a legal framework of higher education and science." Russia already has a federal executive body – the Ministry of Education and Science – with the same powers.

A great deal of strategic-level documents makes the objectives and principles of public scientific and technological regulation difficult to understand. On the one hand, there is a long list of research areas to implement in order to respond to "grand challenges." On the other hand, the NTI and the Digital Economy program rely on a small number of priorities that are extensively debated and developed worldwide and related to the development of digitization, big data and similar technologies. This set of topics in place makes it difficult to see the country's specific features and to understand what should be done first and which development aspects are most pressing today and in the medium term. There is, by contrast, an approach announced in the UK. In November 2017, the British government unveiled the "Industrial Strategy for the UK" with the aim of making the UK the world's most innovative nation by 2030. The UK strategy provides a much shorter list of "grand challenges" and key technologies than its Russian counterpart. A fund – Industrial Strategy Challenge Fund (ISCF) – will be established for the development of new technologies. The government plans to invest £725 million over the next three years in the ISCF. The level of investment in research and development (R&D) will therefore be up from 1.7% to 2.4% of GDP by 2027.³ The money will be spent to address problems related to four "grand challenges", namely artificial intelligence, clean growth, ageing society and future of mobility (of people, goods and services). Initial investment will go to transform the construction sector and help create affordable places to live and work that are safer, healthier and use less energy, as well as to technologies that help improve early diagnosis of illnesses and develop precision medicine for patients across the UK. The sectors of priority for research and development financing are construction and automotive

¹ A new technological revolution: Challenges and opportunities for Russia. An expert-analytical report prepared under academic supervision of V. N. Knyaginina. M.: Center for Strategic Research, October 2017 <https://csr.ru/wp-content/uploads/2017/10/novaya-tehnologicheskaya-revolutsiya-2017-10-13.pdf>

² Ibid., p. 100.

³ Government unveils Industrial Strategy to boost productivity and earning power of people across the UK. Press release. November 27, 2017. <https://www.gov.uk/government/news/government-unveils-industrial-strategy-to-boost-productivity-and-earning-power-of-people-across-the-uk>

sector, life sciences, artificial intelligence. Thus, there is a clear chain stretching from pressing grand challenges facing the UK to economic sectors and then to research and development to be first to invest in. This logic makes it possible to bind up the interests of the nation and business while providing science with targets in the form of subject areas of priority. Furthermore, the UK strategy will be implemented on a step-by-step basis and based on the latest achievements in developments related to new battery technologies and robotics.

The Russian Strategy sets out seven “grand challenges” of a very general concept: ranging from exhausted possibilities of economic growth based on extensive mineral extraction, provision of food security, development of new power systems, response to threats to national security to making an efficient use of space including the development of airspace and outer space, the global ocean, the Arctic and Antarctic regions. The “grand challenges” are therefore too comprehensive to be easily decomposed to the level of priority sectors and research areas. The NTI, in turn, as a key tool for the Strategy implementation makes the set of country’s trending technologies too narrow, thus creating a dissonance between a wide range of problematics and a narrow range of selected subject areas that must be implemented to respond to the “grand challenges.”

Viewing the national policy priorities from the perspective of budget allocation, rather than the contents of strategic documents, leads to a conclusion that serious moves in the structure of R&D appropriations still remain to be seen. There are, however, several noteworthy factors.

First, there is a plan to reallocate federal budget appropriations to support basic research over the next three years. However, the biggest gain will be driven by wage growth for researches employed by FASO’s institutions and by the Russian Research Center ‘Kurchatov Institute’, a federal state budgetary institution, including its subordinate institutions. This will ensure the implementation of President's Executive Order *No. 597 dated May 7, 2012, under which wages must be increased to a level that doubles the average wage in a region. Total basic research spending will advance at steady (Table 22), albeit slow, pace.*

The share of basic research appropriations of total spending on civil scientific research and developments will also advance to 41.9 percent in 2018, 44 percent in 2019 and 45.5 percent in 2020. This type of funding structure corresponds to basic research spending in developed European countries. In France and in the UK, for example, basic research spending account for 45 and 40 percent of budget appropriations on civil R&D.¹ At the same time, the Europe average is more than 52 percent, similar to that (53 percent) in the United States.

Table 22

Changes in budget allocations on basic research

Program	Budget allocations in 2018, billions of rubles	Financing, percentage change, year on year:	
		2019	2020
Basic research (classification division)	151.7	101.8	102.0
Implementation of basic scientific research by institutions of state academies of science, financial provision for state academies of science	83.2	97.2	102.3

Source: Draft Federal Law On the Federal Budget for 2018 and the Planning Period 2019 and 2020.

¹ What is the optimal balancer between basic and applied research? // UNESCO Science Report: towards 2030. http://www.unesco.org/new/en/natural-sciences/science-technology/single-view-sc-policy/news/what_is_the_optimal_balance_between_basic_and_applied_research/

Increased spending on military defense R&D (according to *non-classified budget items*) comes under notice in applied scientific research, that represent 85.7 percent of civil R&D appropriations in 2018, 85.8 percent in 2019, and 90.4 percent in 2020.

There was a positive trend toward annual growth (within a range of 5–16 percent) in civil applied research, particularly in healthcare spending, including topic subject areas such as translational medicine and precision medicine. Russia’s Healthcare Development state program has moved up to 3rd place in volumes of R&D appropriations (*Table 23*) with a provision for annual growth in funding. However, applied R&D spending for a series of country’s topic subject areas – energy and power saving, agriculture development – remain extremely low.

Table 23

Dynamics of R&D appropriations for state programs with biggest R&D funding (billions of rubles)

State program	2018	2019	2020
Scientific and technological development for 2013–2020	167.9	168.1	170.9
Use of outer space in Russia for 2013–2020	80.7	67.3	64.2
Healthcare development	24.7	26.7	31.0
<i>Percentage share of the three programs of total civil R&D appropriations</i>	<i>75.5</i>	<i>74.7</i>	<i>76.8</i>

Source: Draft Federal Law On the Federal Budget for 2018 and the Planning Period 2019 and 2020.

Budget appropriations on civil science for the next three years have negative dynamics (*Figure 5*), making it difficult to implement all the large-scale plans that are reflected in strategies and programs.

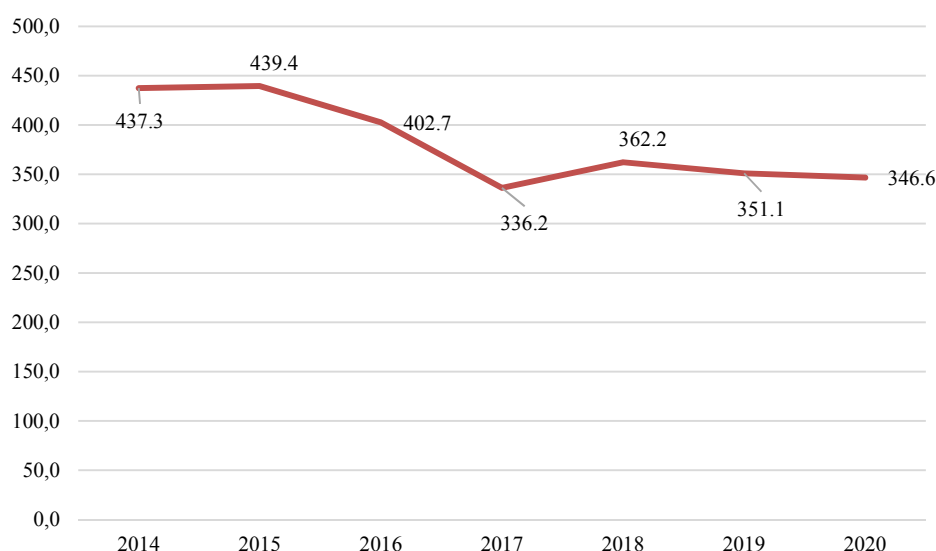


Fig. 5 Federal budget allocations on civil science, billions of rubles

Sources: Data for 2018–2020, according to The Draft Federal Law On the Federal Budget for 2018 and the Planning Period 2019 and 2020; data for 2014–2017, Ratai T. Russia’s federal budget allocations on civil science // Science, Technologies, Innovations. June 28, 2017 <https://issek.hse.ru/news/207116445.html>

Strategic documents ignore the impact of sanctions which appear long term and therefore constitute a “challenge” and have an effect on, among other things, the policy of international scientific and technological cooperation. All the more so because Russia’s major, albeit insignificant on a global scale, scientific exchange is taking place with the United States

(according to co-publishing data).¹ The United States remain the world's scientific center, and the international cooperation in science is developing more intensively between the United States and countries such as China, UK, Germany, Canada, India, Japan and France. At the same time, it is the relationships between Russian higher education institutions and leading research countries that have been declining as research backed by foreign funds have been discontinued.² In addition, Russia's Federal Agency for Intellectual Property, Patents and Trademarks (Rospatent) has reported on the sanctions-induced decline in patenting of foreign inventions in Russia over the past 3–4 years.³ Therefore, there is a decline in the diversity of sources of science funding and ways of implementing scientific research and in imports of technologies into the country.

The impact of sanctions on Russia's research and development has to be given more assessment. The problem has been acknowledged, as evidenced by increasing number of debates on the role of science as a "soft power" factor of positive effect and maintaining relations amid adverse international climate. The Russian Foundation for Basic Research, for example, has proposed placing a question of scientific diplomacy on the agenda of the Global Research Council, an informal association of research funding organizations. In particular, the emphasis can be placed on international support to research (Antarctica, near and deep space, cyberspace etc.) that cannot be afforded by just a few countries.⁴

6.3.2. Science in higher education institutions: achievements |

and challenges

The main topics concerning science in higher education institutions were achievements and challenges facing leading higher education institutions participating in the 5-100 Project, the research development in core higher education institutions, as well as changes in authorizing higher education institutions to award an academic degree at their own discretion.

5-100 Project higher education institutions: Costs and cost-efficiency

The 5-100 Project higher education institutions have overall good research results, but they are still lagging far behind world's leading universities (*Table 24*).

Table 24 presents data suggesting there is a certain correlation between the intensity of publication activity and the citation of articles. Indeed, it's important that the type of a college is taken into account. For example, articles of the National Research Nuclear University MEPhI show more citation potential because a great deal of research works are performed by large international teams using large installations. Only two classical universities offering a wide array of social sciences and humanities rank among top-5 on publication activity, thus making, in a natural way, the average figure smaller. At the same time, the leader among higher education institutions is the Novosibirsk State University, a classical university, because a

¹ According to data for recent decade. Source: OECD (2017), OECD Science, Technology and Industry Scoreboard 2017: The digital transformation, OECD Publishing, Paris. P. 128.

² Enikopolov R. Closed mind: Constraints facing Russia's science and education // RBC, June 2, 2017 <https://www.rbc.ru/opinions/politics/02/06/2017/593116589a79472c6c142171>

³ Skorobogaty P. Who is to invest in a perpetuum mobile // Expert, No. 45, 2017 <http://expert.ru/expert/2017/45/kto-dast-deneg-na-perpetuum-mobile/>

⁴ Belayeva S. Soft albeit strong. Research funds to help global diplomacy // Poisk, No. 46, November 17, 2017 <http://www.poisknews.ru/theme/international/30290/>

major contribution to scientific achievements stems from the long lasting close relationship with research institutions that make up the Novosibirsk Science City (“Akademgorodok”).

Table 24

Costs/research results ratio in 5 higher education institutions as part of 5-100 Project, with highest publication activities

University	Number of publications per teacher in WoS ¹	Average citedness of publications per teacher in WoS	Researchers' average salary, thousands of rubles monthly	Budget subsidy size, millions of rubles	Best ranking (in one of the three rankings), 2017
Novosibirsk State University	7.5	48	115.21	3884	250 (QS)
National Research Nuclear University MEPhI	6.1	44	128.55	4056	373 (QS)
Moscow Institute of Physics and Technology	5.4	23.8	113.83	4087	251-300 (THE)
National Research University of Information Technologies, Mechanics and Optics	4.9	10.1	193.7	4087	501-600 (THE)
Tomsk State University	4.4	11.2	174.40	3157	323 (QS)

Sources: Ponomarev V. Consecutive motions. Russian higher education institutions: 5-100 Project // Expert, November 27, 2017 <http://expert.ru/expert/2017/48/posledovatelnoe-dvizhenie/>; Kiseleva M. Achievements of 5-100 Project higher education institutions and what lies ahead of them // Indicator.ru. 04.09.2017 <https://indicator.ru/article/2017/10/04/budushee-proekta-5-100/>; Information and analytical materials based on the results of performance monitoring of higher education institutions. <http://indicators.miccedu.ru/monitoring/?m=vpo>

What’s also remarkable is that the performance in science has little to do with researchers’ average salary and government subsidies. Top-performing Novosibirsk State University pays moderate salaries compared with top income earners such as the National Research University of Information Technologies, Mechanics and Optics and the Tomsk State University, both having lower rankings on performance. The point to note is that the average salary in the 5-100 Project higher education institutions is much higher than in higher education institutions and research institutions across the country. According to data for January-September 2017, the gross payroll in R&D institutions was Rb 50,100 for chief, leading and senior researchers and Rb 39,200 for researchers and junior researchers (*Fig. 6*).² Heads of institutions were paid four times as much, Rb 173,100 on average across the country and Rb 257,700 on average in Moscow.

¹ Web of Science (WoS) is an online subscription-based scientific citation indexing service that provides analysis of publication activities of authors from various countries.

² Suslov A.B. Research institutions gross payroll by researcher official capacity: January-September 2017 // Science, Technologies, Innovations. December 6, 2017 M.: National Research University Higher School of Economics, p. 2. https://issek.hse.ru/data/2017/12/06/1161557911/NTI_N_76_06122017.pdf

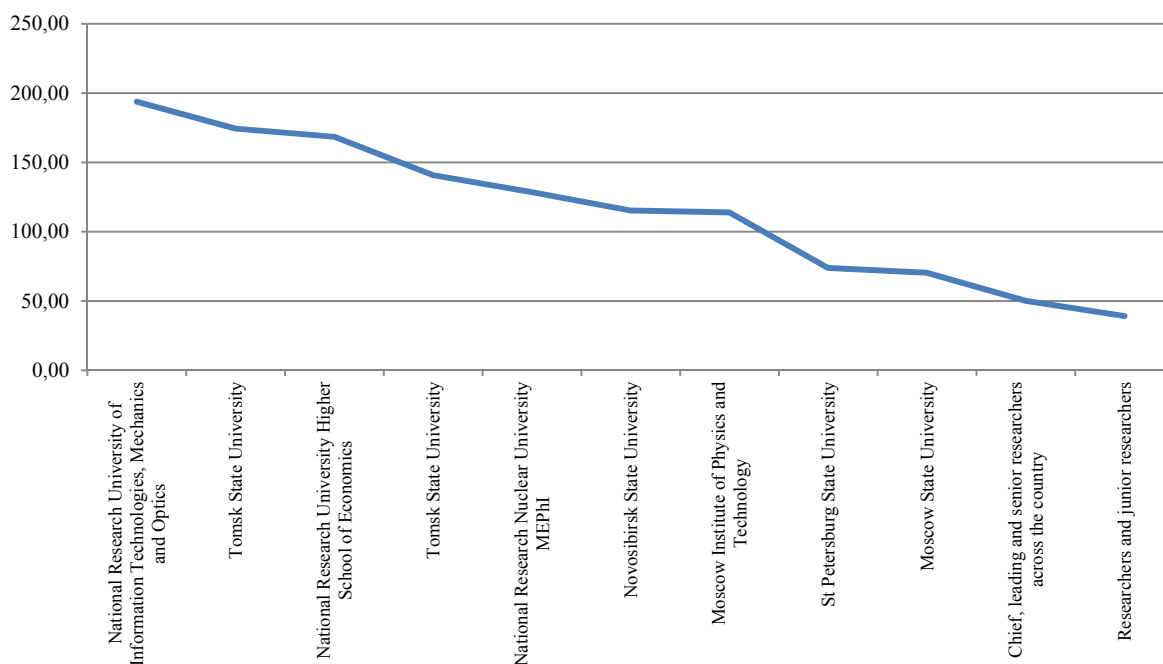


Fig. 6. Researchers' average monthly salary, thousands of rubles

Sources: Suslov A.B. Gross payroll by researcher's official capacity at research institutions: January–September 2017 // Science, Technologies, Innovations. December, 6, 2017 M.: National Research University Higher School of Economics, p. 2. https://issek.hse.ru/data/2017/12/06/1161557911/NTI_N_76_06122017.pdf; Information and analytical materials based on the results of performance monitoring of higher education institutions. <http://indicators.miccedu.ru/monitoring/?m=vpo>

Data for 2017 show a visible upgrade in overall rankings, albeit far behind the main objective of entering the top-100 world's universities ranking. Only the Novosibirsk State University managed to hit the QS top-300 ranking¹ as the Moscow Institute of Physics and Technology moved up to the THE top-100 ranking², whereas the rest fell far behind them, with the National Research University of Information Technologies, Mechanics and Optics even downgraded to the QS top-500 ranking. Therefore, there are serious divergences between a university's level of achievements and government funding and employee earnings. A major subsidy and high salaries do not guarantee the highest possible level of productivity.

Researchers of the National Research University Higher School of Economics have made an in-depth analysis of the publication activity of 14 higher education institutions participating in the 5-100 Project to compare with a control group comprising 13 higher education institutions that received no subsidies for entering global rankings. The higher education institutions of both groups were selected so that they have similar start positions (the study covered a period of 2010-2015).³ Actually, it was found that the number of publications was increasing in both groups, but the 5-100 Project higher education institutions showed higher

¹ QS World University Rankings is a global survey including the world's top universities ranking compiled by Quacquarelli Symonds (QS), a British consulting company.

² THE World University Rankings is a global survey including the world's top universities ranking compiled by Times Higher Education.

³ Poldin O.V., Matveeva N.N., Sterligov I.A., Yutkevich M.M. College publication activities: The effect of the 5-100 Project // *Voprosy Obrazovaniya*, 2017, No. 2, pp. 13–14.

growth rates leaving other higher education institutions further trailing behind them. In addition, the 5-100 Project higher education institutions have more quality publications (in first-quartile journals).¹ Apparently, the participation in the 5-100 Project has a positive effect on the scientific performance of higher education institutions, however, the question is how long the growth will continue and how the growth in the number of publications correlates with the quality of scientific novelty of research. The recent results published by Nature show that citation of truly innovative articles is lagging in time. It takes much longer for such articles to reach a high level of citation than it does for regular articles. Such articles can see their citation increase considerably no earlier than five years from the date of initial publication.²

Publication activity and unintended effects

The past year continued to see the effects of policies aimed at stimulating scientific performance with a view to increasing the number of scientific publications and thus making the Russian science more “visible”. Institutions’ performance is now assessed through the number of publications, the success of agency-funded projects and grants from funds. The Russian Research Fund has the minimum number requirements for articles that are annually indexed by WoS/Scopus.³ The race for numbers has increased the number of publications in non-reputable journals that are denied by WoS and Scopus and easy to publish articles, including on a fee basis. The practice was expanding fast enough to be noticed by the government. The Ministry of Education and Science announced that funding of higher education institutions publishing articles in non-reputable journals as well as abusing self citation can be cut down. The Kazan Federal University, the Peoples’ Friendship University of Russia and the Immanuel Kant *Baltic Federal University* took the lead in the quantity of publications in non-reputable journals.⁴ Note that the 5-100 Project higher education institutions have somehow joined the all-out race for numbers, with a full-fledged industry of non-reputable journals having emerged worldwide in response to the demand. According to Nature’s estimates, the number of non-reputable journals has recently increased over 100,000, equal to the number of reputable scientific journals.⁵

Another ambiguous trend is growing number of affiliations per author that is most markedly represented in the 5-100 Project that encourages engagement of foreign scholars as well as researchers of academic institutions to Russian higher education institutions. Over the last three years the number of affiliations per author in first-quartile articles of leading higher education institutions of the 5-100 Project has nearly doubled compared with the rest of Russian authors’ articles. Hence, it follows that the growth in publishing activity of these universities is driven by, among other things, sponsors including, above all, foreign universities and institutions of the Russian Academy of Science.⁶ Indeed, the number of engaged foreign teachers and

¹ Poldin O.V., Matveeva N.N., Sterligov I.A., Yutkevich M.M. College publication activities: The effect of the 5-100 Project // *Voprosy Obrazovaniya*, 2017, No. 2, pp. 13–21.

² Blinkered by bibliometrics // *Nature*, vol. 544, April 27, 2017. P. 411.

³ According to Elsevier, a global information analytics business, Scopus is the largest abstract and citation database of peer-reviewed literature that can track scientific citation of publications.

⁴ The Ministry of Education and Science to deny payment to 5-100 Project higher education institutions caught in self citation // *Indicator.ru*, 17 May, 2017 <https://indicator.ru/news/2017/05/17/vuzy-5-100-samocitirovanie/>

⁵ Kolata G. Many Academics Are Eager to Publish in Worthless Journals // *The New York Times*, October 30, 2017. <https://www.nytimes.com/2017/10/30/science/predatory-journals-academics.html>

⁶ Sterligov I., Hodger T. Looking at science from the single-author articles perspective // *Izmereniya Nauki*, No. 2, 2017 <https://okna.hse.ru/news/212247840.html>

researchers in these higher education institutions has increased by 4.5 times.¹ On the one hand, they help Russian counterparts integrate into international research groups and projects. On the other hand, however, this may produce an effect such as the “purchase” of publications through entering into contracts with highly productive scientists from other countries.² This can be proved by the fact that foreign scientists working in Russia, mostly in Moscow-based higher education institutions, account for just 1.5 percent of the total number of researchers across the country.³

It would be difficult to further increase the presence of foreign high-level researchers because of a lack of ambitious objectives that could be more appealing than money for world’s top class specialists. High-ranking government officials acknowledged that more than once.⁴ The shortage of professionals who can formulate such objectives has recently become obvious.

Therefore, data on characteristics of scientific productivity and its linkage with ranking upgrade are highly controversial. There are, of course, some positive things to note: the number of the 5-100 Project higher education institutions that are now ranked has increased, whatever the ranking position is. While three higher education institutions participating in the 5-100 Project ranked among top-100 on subject areas in 2015, the number doubled to six in 2017. However, the number of non-participating higher education institutions ranked among top-100 higher education institutions on subject areas doubled during the same period.⁵ What’s unclear is the performance measure for the 5-100 Project in terms of how long it would take to be ranked. In the medium term, there are marked constraints to growth induced by the quality of human capital and the effect of some external factors that dampen its increase through foreign specialists engagement.

In the long term, an adverse effect of the race for publications and ranking can stem from higher stratification in the scientific community. Even in the group of leading higher education institutions the stratification is already apparent from the employee earnings perspective. Institutions of the Russian Academy of Science are facing a similar situation.⁶ There is no regularity, however, that is commonly found in foreign higher education institutions where academicians and specialists in social sciences and humanities are always paid less than specialists in natural sciences, not to mention specialists in engineering. There are other types of stratification. One is that employee earnings within an institution differ largely because of, among other things, personal bonuses from senior management. The 5-100 Project has also made it possible to pay various types of bonuses. However, the principles of purpose and size of bonuses are sometimes not clear enough, except for a publication bonus that is paid are

¹ Ponomarev V. Consecutive motion. Russian higher education institutions: The 5-100 Project // *Expert*, 27 November 2017 <http://expert.ru/expert/2017/48/posledovatelnoe-dvizhenie/>

² Poldin O.V., Matveeva N.N., Sterligov I.A., Yutkevich M.M. College publication activities: The effect of the 5-100 Project // *Voprosy Obrazovaniya*, 2017, No. 2, p.31.

³ Dyachenko E., Nefedova A., Streltsova E. Foreign scientists employment in Russian research institutions and higher education institutions: Opportunities and constraints // *University management: Practices and analysis*, 2017, Vol. 21, No. 5, p. 134.

⁴ Medvedev Yu. Trubnikov: Russia to see world-class megascience centers // *Rossyiskaya Gazeta*, January 9, 2018 <https://rg.ru/2018/01/09/akademik-trubnikov-v-rf-poiaviatsia-megasajens-centry-mirovogo-urovnia.html>;

Kiseleva M. Billions, wages and brains: A dispute between RAS professors and government officials // *Indicator*, 30 November 2017 <https://indicator.ru/article/2017/11/30/sobranie-professorov-ran/>

⁵ Invanter A. Without GOELRO and a bomb // *Expert*, June 30, 2017 <http://expert.ru/expert/2017/21/bez-goelro-i-bombyi/>

⁶ Volochkova N. Digging deep. Russian Academy of Science digs into institutions’ problems // *Poisk*, No. 49, December 8, 2017 <http://www.poisknews.ru/theme/ran/30916/>

publicly disclosed. Accordingly, there is more guessing about it and discontent among scientists. Some say highest bonuses are paid to professors closely connected with senior management and to personnel “favored by senior management.”¹ Therefore, this implies that the stratification leads to breaking the relationship between earnings and actual contribution to science and eventually has adverse effects on ethical norms.

The bibliometric pressure has expanded beyond the country’s borders, affecting foreign counterparts cooperating with Russian scientists. The results of a recent survey of the specific features of the Russian-French Scientific Collaboration² show that the pressure to publish a prescribed number of articles has an adverse effect on foreign partners. Russian counterparts ask their foreign partners to publish as many articles as possible and to include as many Russian coauthors as possible in their articles. According to French scientists, Russian quantitative requirements for publications can sometimes be a problem for the normal course of work. In response to the publication requirement there is growing number of salami publications, in which novel ideas are cut into fragments, each being used for writing a separate article; the number of coauthors having little to do with the article is intentionally big. Bibliometric data show that the number of single-author articles is declining although there is much more single-author articles in Russia than, for example, in China. Over the past two decades the number of Russian single-author articles in first-quartile journals has been halved from 10.2 to 5.3 percent.³ The fact to consider is that 19 percent of authors of such articles not only have Russian but also foreign affiliation and they have much better citation than plain Russian articles.

The key way of stimulating publishing activity is to pay extra to authors, in which case the size of payment depends on the impact factor of a journal.⁴ Using scientific internship as an efficient way of improving publication activity is a much more rare practice by Russian higher education institutions. Foreign studies, however, show that citation of mobile scientists’ articles is higher by an average of 40 percent than that of non-mobile scientists.⁵ Mobility, in turn, also can be viewed as intensity indicator for international links. Recent studies of a relative effect of government funding and international cooperation on research paper citations⁶ in OECD countries shows that international collaboration has a stronger impact on citation than an increase in government research funding. Furthermore, there is also some negative correlation between growth in funding and the probability of occurrence of most-cited articles.

Although the correctness of expert appraisal is questionable, it has increasingly been considered as a counter balancer to bibliometrics. The entire post-Soviet periods saw the number of Russian scientists decline, the proportion of “middle-aged” researchers worsen, and

¹ Aglitskiy I. The way college professors turn into service workers // *Nezavisimaya Gazeta – Science*, May 24, 2017 http://www.ng.ru/nauka/2017-05-24/10_6994_students.html

² Dezhina I. Russian-French Scientific Collaboration: Approaches and Mutual Attitudes // *Sociology of Science and Technology*, 2018, no.1 (in press).

³ Sterligov I., Hodger T. Looking at science from the single-author articles perspective // *Izmereniya Nauki*, No. 2, 2017 <https://okna.hse.ru/news/212247840.html>

⁴ Impact Factor (IF) is a numerical measure of the importance of a scientific journal to assess the level of the journal, the quality of articles published by the journal, to provide financial aid to researchers and employ personnel.

⁵ Nature Editorial. Science without walls is good for all // *Nature*, vol. 550, October 5, 2017. PP. 7–8. <https://www.nature.com/news/science-without-walls-is-good-for-all-1.22742>

⁶ Leydesdorff L., Bornmann L., Wagner C. The relative influences of government funding and international collaboration on citation impact (December 13, 2017). <https://arxiv.org/abs/1712.04659>

the Russian expertise degrade gradually with some extra suffering from a small number of specialists of certain subject areas, when a conflict of interests is inevitable. Grant-based financing became less available too by the time the period of upturn was over and research funding began to decline, and therefore expertise tuned into a tool aimed at promoting “insider” projects regardless of conflict of interests because vast academic disciplines had to compete with each other more often than not.

The bibliometric and expertise trap is difficult to overcome because of devaluation of scientific reputation. Policies such as purging of journals, detecting of plagiarists, criticizing the expertise and automatic appointment of experts have a positive, albeit an extremely slow, effect on public awareness.

Science in core universities

Core higher education institutions took the cue from leading universities and increased their scientific level.¹ Although research and development is not a core activity of core higher education institutions, it is very important for them because they focus on interacting with regional enterprises in many subject areas including innovations, which is difficult to do without having a scientific background. That’s the reason why core higher education institutions have scientific work targets among expected effects, as measured by R&D volumes and the number of publications in WoS/Scopus per academic. Some core higher education institutions are faced with the challenge of achieving required performance targets that require productivity be up by 7–10 times² and R&D volume per academic be up to a level 3.5 times the average across the national higher education system. To be able to deal with the problem of increasing publication activity, core higher education institutions started adopting practices of leading universities, including all pros and cons, namely the creation of an incentives framework as well as publication activity centers that also provide training for academics apart from exercising statistical functions. These policies intend to promote growth in the number and quality of publications though, among other things, stepping up competence in preparing for research and writing scientific papers. In addition, core higher education institutions tend to increase R&D investment: core higher education institutions received about 40 percent of total government funding of scientific research development.³

Overall, the effects of college special-purpose programs are positive from the perspective of encouraging universities to develop and apply new practices in research and education, management and entrepreneurship. A study of the National Research University Higher School of Economics aimed at seeking and streamlining best management practices of research

¹ Core higher education institutions emerged in 2016, initially, as a result of consolidation of a few higher education institutions in a region, with the aim to promote the development of subjects of the Russian Federation through supplying highly qualified specialists to the local labor market, address pressing regional economic objectives and implement educational and innovative projects jointly with the region and regional enterprises. The consolidation requirement to make higher education institutions eligible for the core college status be has been removed since 2017. Russia has 33 core higher education institutions, with the aim to reach 100 by 2022.

² I.V. Arzhanova, A.B. Vorov, D.O. Derman, E.A. Dyachkova, A.V. Kalyagin. Results of the implementation of programs on the development of core universities in 2016 // *University management: Practices and analysis*. Volume 21, No. 4, 2017, p.13. DOI 10.15826/umpa.2017.04.045

³ Calculations are based on data from I.V. Arzhanova, A.B. Vorov, D.O. Derman, E.A. Dyachkova, A.V. Kalyagin. Results of the implementation of programs on the development of core universities in 2016 // *University management: Practices and analysis*. Volume 21, No. 4, 2017, p. 20.

institutions and higher education institutions¹ shows that universities have more successful practices than research institutions, including a higher level of practices designed to develop competences and support publication activity. However, there is a weak cooperation between research institutions and higher education institutions as well as between higher education institutions.

Updates to academic degree awarding

Finally, advantages and problems related to authorizing some higher education institutions to award an academic degree at their own discretion have become a stand-alone subject for debate. Moscow State University (MSU) and St. Petersburg State University (SPSU) were the first to be authorized to do so. However, a monitoring of the practice of organizing the thesis defense process and academic degree awarding should be launched. Last year, however, before the work on formation of new dissertation defense boards in the above universities had even started, the Russian government authorized another 19 higher education institutions and 4 scientific organizations to award an academic degree.² Such an abrupt extension of powers for higher education institutions appears a hasty decision amid reputation value erosion, growth in the number of publications in non-reputable journals, purchase and forgery of dissertations.

Meanwhile, MSU and SPSU took seriously the objective of setting new requirements for dissertation defense boards and academic-degree seekers. The task was found to be a challenge, with some options on how to handle it. As a result, the requirements of both universities are now much more strict than those of dissertation defense boards operating within the framework of State Commission for Academic Degrees and Titles, and therefore the number of academic-degree seekers has decreased with new dissertation boards in place. In MSU, for example, the number of dissertation defenses has dropped to about 40 a year from 700–800 in previous years.³ Not only the transition period but also the reputational constraining factor should be taken in account here. It's important that both universities put a high value on the reputational factor at the expense of less quantities during the fledging period of boards. While MSU has set up standing dissertation defense boards, SPSU has adopted the western model that allows for setting a dissertation board tailored to each dissertation defense. Both approaches have advantages such as, for example, the MSU's model offers less bureaucratic proceedings than what is normally required for each dissertation defense. It's important that both universities have high quality requirements to publications of academic-degree seekers, and there are plans to conduct a monitoring of papers throughout the full dissertation preparation cycle rather than for a short period immediately preceding the dissertation defense.

Most of the higher education institutions authorized to award academic degrees have a certain (research, federal university) status or they are authorized to develop educational standards at the their own discretion. This gives promise that they will be able introduce dissertation defense principles to make these higher education institutions and research institutions more reputable. However, the cases of MSU and SPSU show that easier, albeit excessively bureaucratized, ways of dissertation defense are still in favor, thus evidencing of a small number of robust research papers. Statistics prove the same: the number of successfully

¹ <https://goodpractice.hse.ru/>

² Russian government's executive order No. 1792-p dated August 23, 2017 <http://static.government.ru/media/files/JnFTLJA581O4J7RuZuruWKeKZAyWC1V7.pdf>

³ Emelyanekov A. Dissertation and reputation // *Rossyiskaya Gazeta*, November 29, 2017 <https://rg.ru/2017/11/29/vladimir-filippov-doplata-za-uchenuiu-stepen-stala-perezhitkom-proshlogo.html>

defended Phd and doctoral dissertations has been decreased as a result of purge and cancellation of a series of dissertation defense boards. The number of successfully defended doctoral dissertations has almost halved as successfully defended Phd dissertations more than halved from 2012.¹

6.3.3. Academic science

Last year, experts and mass media paid great attention to what was going on in FASO institutions and in the Russian Academy of Science (RAS), mostly in connection with the RAS president election. The sector itself underwent no substantial changes. There was a dispute about Russian scientists and RAS management's discontent of the recent RAS reform as well as the background of a new RAS presidential election.

The Russian academic community came into sharp contrast with FASO management's assessments as to what was going on in FASO institutions. The RAS Trade Unions jointly with the Academic forum 'Russia: Key challenges and solutions'² conducted an expert survey of 240 FASO employees. The survey shows that the science sector is faced with challenges in all research areas:

- lack of funding, low salaries, lack of opportunities for scientific expeditions and for attending scientific conferences;
- restricted access to information resources including databases on published research papers;
- further increase in the number of FASO bureaucratic requirements for updating statistical data, rankings, citation, time-consuming registrations on websites, etc.;
- therefore, there are serious problems facing young people engagement in FASO scientific and research organizations.

In June, the discontent was strong enough to develop into a protest rally demanding increase in funding of FASO institutions, including the state task³, and RAS professors met in November with Russian presidential aid Aleksei Fursenko, expressing their complaints regarding low salaries and calling for new types of grants for middle-aged researchers.⁴

The FASO management, in turn, believe positive changes have been seen for the entire list of announced issues; in particular, FASO Director Mikhail Katyukov stated at a RAS General Assembly that:

- research funding was on the rise. The decline in federal budget funding was compensated by a considerable growth in off-budget funding, adding a total of 6.6 percent;
- average salary increased 29 percent (in 2016 from 2013);
- young scientists accounted for 45 percent of the total research workforce, proving there is no problem with young people engagement in science;

¹ Emelyanenkova A. Dissertation and reputation // *Rosyiskaya Gazeta*, November 29, 2017 <https://rg.ru/2017/11/29/vladimir-filippov-doplata-za-uchenuiu-stepen-stala-perezhitkom-proshlogo.html>

² Sadykova R. The RAS reform is a proven failure: FASO to expand, institutes to lose their premises. February 23, 2017 <http://www.mk.ru/science/2017/02/23/reforma-ran-priznana-provalnoy-fano-rasshiraetsya-instituty-vyselyayut.html>

³ "Once again close to the poverty line": News from a rally of RAS employees // *Indicator*, June 28, 2017 <https://indicator.ru/article/2017/06/28/miting-rabotnikov-ran/>

⁴ Kiseleva M. Billions, wages and brains: A dispute between RAS professors and government officials // *Indicator*, November 30, 2017 <https://indicator.ru/article/2017/11/30/sobranie-professorov-ran/>

- the number of publications in journals indexed by WoS increased (up 12.7 percent in the period of 2013–2015).¹

There is a host of reasons for the disparity in assessing the situation. Researchers' base salaries are low indeed, salary growth records are based on data for total earnings generated from all sources. Earnings, however, are difficult to project, being an indefinite component that can change considerably depending on whether grants and contracts are available or not. In addition, many FASO institutions legally move employees from full-time to part-time status as well as switch to fixed-term employment agreements to ensure growth in salaries.² There is also a statistical casus of data for young scientists – they are growing in number due to, among other things, retirement of old-age researchers.³

The transition to bibliometric accounting is a challenge too, particularly for older researchers who are used to work under no pressure from scientometric assessment. Furthermore, such assessments ignore the fact that any type of work is not necessarily supposed to deliver immediate results in the form of publications, that is to say, there is disparity between the periods of reporting on such figures and a period required for delivering the results that are worth of publishing.⁴ Things got complicated late in the year, when FASO announced that salaries are supposed to rise proportionally to the increase in the number of articles.⁵ That gave rise to a sharply negative response on the side of academic community because there is no linear relationship between the salary size and the scientific performance (productivity).

Finally, there were continuous jitters stemmed from a long-lasting preparation for the performance measurement of FASO institutions coupled with the actions performed by the Agency for consolidation of institutions into bigger scientific centers, without having to provide any solid rationale for such actions and clear-cut criteria for measuring the performance of the ongoing restructuring process.⁶ In 2017, the work on establishment of such federal and regional centers was accelerated, however, they are not subject to performance measurement during the ongoing monitoring cycle. Further, 493 FASO scientific organizations underwent performance measurement by the end of 2017. The concern about managerial decisions that could be made following the performance measurement prompted RAS institutions and branches to virtually ignore it. According to the performance measurement protocol, RAS branches must prepare expert reports based on performance data from institutions. At a later stage, RAS branches must check whether institutions are equitably divided into categories and provide, if needed, their observations.⁷ By October 2017, 90 percent of institutions ignored FASO's request to provide

¹ Shorthand notes of Mikhail Kotuykov's speech at a RAS General Assembly. March 20, 2017 FASO of Russia. http://fano.gov.ru/ru/press-center/card/?id_4=37994

² Maksimov. Russia to see less scientists. RAS employees rally in Moscow. June 23, 2017 <http://fedpress.ru/news/77/society/1808890>

³ Demina N. Scientists and government officials: Is dialogue possible? // *Troitsky variant-nauka*, No. 243, December 5, 2017, p.1. <https://trv-science.ru/2017/12/05/uchenyie-i-chinovniki-dialog-vozmozhen/>

⁴ Saburova L. Survival or development: Opportunities and risks stemmed from an academic science reform for the regional scientific community // *Sociologia nauki i tekhnologii*. 2017. Volume 8, No. 4, p.50.

⁵ Rubtsov A. Double up the reality: Russian science is forced to imitate // *RBC*, January 30, 2018 <https://www.rbc.ru/opinions/politics/30/01/2018/5a702b549a794769102a5a0c>

⁶ Simplicity in relations with science is worse than robbery. An editorial, *Nezavisimaya Gazeta*. May 22, 2017 http://www.ng.ru/editorial/2017-05-22/2_6992_red.html

⁷ Volochkova N. Stagewise. RAS institutions ranking// *Poisk*, No. 35, September 1, 2017 <http://www.poisknews.ru/theme/science-politic/28378/>

the required data.¹ Not until the election of new RAS President did the work on data collection for the assessment was accelerated, and expert reports were prepared by the end of October.² It's characteristic that top-performers accounted for 58 percent of FASO institutions, whereas just 5 percent were recognized as low-performing institutions, according to data from RAS branches. Comparison of data from branches with quantitative (including scientometric) performance figures of institutions revealed that there were only 130 high-performing institutions (26 percent). High-performing institutions had 0.6 publications a year per researcher (less than in higher education institutions), whereas low-performers had 0.1. It's characteristic that there was no big difference in funding of high- and low-performers.³ The results obtained revealed inappropriate funding and a relatively modest performance of institutions.

Overall, 2017 continued to see a negative environment stemming from the *continuing standoff between RAS and FASO* and from general discontent of the RAS reform despite the fact that many scientists and RAS members are conscious of the need for such a reform. RAS member Aleksei Khokhlov expressed his complaints in clear and unmistakable terms: "*The RAS Presidium has long been notoriously known for its nontransparent, behind-the-curtain functioning and a highly archaic infrastructure. What is more, no changes in its style of operation have been seen since the 2013 RAS reform in response to external changes.*"⁴ That's exactly why the academic community had high hopes for the election of a new RAS President.

No RAS presidential election took place in March 2017. The official reason was that the RAS presidential election procedure needed updating. RAS is a state-funded institution and therefore Russian government's opinion about RAS performance and president is instrumental. It appears that previous RAS President Vladimir Fortov who ran for the presidency in March was not considered a person able to continue the RAS reform and forge relationships with other government agencies. However, it is Vladimir Fortov who was in fact the sole the favorite to win the presidency. All the candidates eventually dropped out, and the RAS presidential election was slated for late in September. Amendments to the legislation were introduced in August. The idea is that not only RAS branches may nominate candidates for RAS presidential elections. RAS members themselves may run for the presidency in a proactive manner, provided that they collect more than 50 RAS members' signatures for candidacy. It is not until the list of candidates is approved by the Russian government that the approved nominees may take part in the election. The newly elected RAS President is subject to approval by the Russian President.⁵ Therefore, RAS presidential elections are now under rigorous surveillance and formal control by the Russian government.

¹ Chernykh A. RAS members to face attendance checks // *Commersant*, October 11, 2017 <https://www.kommersant.ru/doc/3434864>

² Volochkova N. Academically speaking. RAS branches ranking institutions // *Poisk*, No. 46, November 17, 2017 <http://www.poisknews.ru/theme/ran/30239/>

³ Volochkova N. Not enough leaders? Evaluation commission's final conclusions spoil the fun of scientists // *Poisk*, No. 52, December 29, 2017 <http://www.poisknews.ru/theme/science-politic/31538/>

⁴ Aleksei Khokhlov: RAN engine's four-year wheel spin // *RIA Novosti*. July 29, 2017 <https://ria.ru/science/20170729/1499294783.html>

⁵ Federal Act dated July 29, 2017 No. 219-FZ *On Amendments to the Federal Act On the Russian Academy of Sciences, the Reorganization of the State Academies of Sciences and Amendments to Certain Legislative Acts of the Russian Federation* <http://www.garant.ru/products/ipo/prime/doc/71632828/>

The list of candidates was updated by September. RAS member Aleksandr Sergeev¹, Director of Institute of Applied Physics of the Russian Academy of Sciences (the city of Nizhniy Novgorod), was the favorite to win. In his election program Mr. Sergeev presented a conservative enough approach towards the RAS reform that was favored by the majority of RAS members. Eventually, the forecasts proved correct after Aleksandr Sergeev won the election. The next day after the election the Russian president signed a decree appointing Mr. Sergeev as RAS president.

The newly elected RAS President believes that the first thing to do is to change the RAS status so that it ceases to be a state-funded institution. This must be done so that RAS will perform not only research and methodological functions but also organizational and methodological control of FASO institutions, including allocation of funds, as was the case prior to the reform.² The RAS President noted, however, that this process is a long-term process, and therefore a new status will not be granted in the offing.³

In addition, according to the newly elected president, FASO must be informally accountable to RAS by appointing scientists as including through introducing scientists into the FASO management as well as holding concurrently the position of FASO director and of RAS senior manager. The ideas of centralization have an effect on RAS regional branches too: the RAS President believes that RAS must bring them under scientific and organizational control and become their co-founder.

It's curious that Aleksandr Sergeev *shares almost the same views* as the previous RAS president, including views on how RAS must integrate itself into the process of addressing national issues. Again, focus is placed on major projects and on RAS engagement in the achievement of military-industrial complex tasks. According to the newly elected RAS President, it's important to, first, take part in major scientific projects, that's what RAS did in the Soviet era, and, second, conduct research to strengthen the national defense capabilities. In doing so, a basic and exploratory research program aimed at meeting the interests of the military-industrial complex needs to be adopted. Lastly, it's important to resume the program of integration with higher education institutions that was underway in the mid/late 1990s, performing largely the function of supplying manpower for RAS.

In the context of the above views and objectives it's not surprising that the new RAS Presidium has many members of the former RAS Presidium, with a few of them being compromised by scandals associated with, among other things, forged dissertations.⁴ The stated views nevertheless meet the views of a majority of RAS members. Some of them even wrote an Open Letter addressed to the Russian President in support of the idea to make FASO accountable to the Russian Academy of Science, bring back academic institutions under the RAS control, and grant a special status to RAS.⁵

It's remarkable, however, that the newly elected RAS President has publicly acknowledged that RAS had lost people's respect. A critical goal, according to Aleksandr Sergeev, is to regain

¹ Vaganov A. The government seem to have elected the President of the Russian Academy of Sciences // *Nezavisimaya Gazeta-Nauka*, September 3, 2017 http://www.ng.ru/science/2017-09-03/100_ran030917.html

² Russian science enters a death valley. *Commerzant* publishes a speech of the newly elected RAS President // *Commerzant*, September 26, 2017 <https://www.kommersant.ru/doc/3422102>

³ Volochkova N. Digging deep. Russian Academy of Science digs into institutions' problems // *Poisk*, No. 49, December 8, 2017 <http://www.poisknews.ru/theme/ran/30916/>

⁴ Orlova O. Academicians manage to gain government's respect but lose the game with themselves // *Weekly journal*. October 2, 2017 <http://www.ej2015.ru/?a=note&id=31623> (was available on October 30, 2017)

⁵ An open letter to President Putin // *Kommersant*, December 27, 2017 <https://www.kommersant.ru/doc/3509262>

public and people's confidence and respect, which is, however, difficult to accomplish because good reputation is easier to lose than to achieve, let alone to regain. Therefore, reforms that go beyond partial returning to the previous framework will have to be introduced. Anyway, that's what the Russian President's stance is all about – the consolidation of the three academies is a good solution¹, and therefore the main course of the RAS reform is on the right track.

6.3.4. Technological innovations promotion policy

The Digital Economy of the Russian Federation state program marks a new uptrend in the development of the country's innovation sector.² The program sets out basic cross-cutting digital technologies the government will promote as well as goals and objectives of developing research competences and technological capabilities. The program aims to develop startups³, increase big companies engagement in innovative activities, intensive training of IT specialists and other professionals that are in demand in times of digitization. In particular, at least 10 globally competitive leading companies and at least 500 small and medium-sized enterprises specializing in the development of digital technologies and platforms and in the provision of digital services are expected to emerge by 2024.⁴ In terms of ideology, the program is in line with the import substitution concept because it aims primarily to enhance research competences and technological capacity, sets out “*technological self-sufficiency* regarding every subject area of cross-cutting digital technologies on a global level, and national security.”⁵ There is a problem though: *McKinsey estimates* Russia's reliance on imports in certain market segments is getting critical: the country imports 80 to 100 percent of various types of IT equipment and about 75 percent of software.⁶ The amount of venture capital funding of digital projects in Russia has been decreasing by approximately 5 percent a year.⁷

The Program was adopted amid stagnant technological innovations. A host of indicators describing country's inventive and innovative activities fell below an already low level of innovation activities that was observed over a long period of time (see *Fig. 7*).

First and foremost, according to Rospatent, in 2017, there was a decline in the patent activity of Russian research institutions and higher education institutions and therefore in the potential to set up startups on the basis of intellectual property.⁸ The marketability of developments is low, with patented R&D products making up 10 percent, of which 2.2 percent have found practical application, which is due to (apart from companies' weak interest in innovations) a lack of clear-cut standards for the distribution of intellectual property rights, undeveloped court practice, shortage of patent lawyers.⁹

¹ A meeting with members of the Russian Academy of Sciences. May 30, 2017 <http://kremlin.ru/events/president/news/54635>

² Endorsed by the Russian government through executive order No. 1632-p dated July 28, 2017 <http://static.government.ru/media/files/9gFM4FHj4PsB79I5v7yLVuPgu4bvR7M0.pdf>

³ A meeting concerning the implementation of the Digital Economy state program. August 15, 2017 <http://government.ru/news/28825/>

⁴ The Digital Economy of the Russian Federation state program», pp. 16-17. <http://static.government.ru/media/files/9gFM4FHj4PsB79I5v7yLVuPgu4bvR7M0.pdf>

⁵ *Ibid.*, p. 11.

⁶ Digital Russia: A new reality. Aleksandr Aptecman, Vadim Kalabin, Vitaly Klintsov et al. Digital/ McKinsey. July 2017. P. 43. <file:///D:/Libraries/Downloads/Digital-Russia-report.pdf>

⁷ *Ibid.*, p. 49.

⁸ Skorobogatiy P. Who is to invest in a perpetuum mobile // *Expert*, No. 45, 2017 <http://expert.ru/expert/2017/45/kto-dast-deneg-na-perpetuum-mobile/>

⁹ *Ibid.*

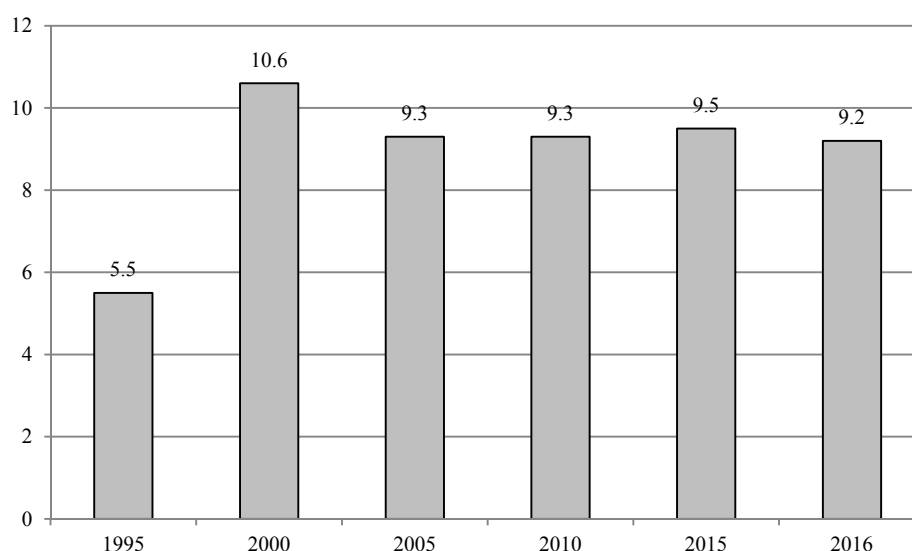


Fig. 7. Innovative enterprises in industry, as a percentage of total industrial enterprises

Source: Fridlyanova S. Industrial enterprises' innovative activities // Science, Technologies, Innovations. November 15, 2017 M.: National Research University Higher School of Economics, p. 1.

Second, hopes that student startups will encourage the development of small business (in particular, a series of programs of the Innovation Promotion Fund rely on that) have not been met. Russian Prime Minister Dmitry Medvedev noted that student entrepreneurship “has failed to meet at least 10 percent of what was expected.”¹ Indeed, student entrepreneurship is still performing the training function, and it is therefore difficult to find investment for this type of business. However, it is not only student startups that are difficult to find investors for because, third, venture capital funding has been decreasing in the country due to, among other things, sanctions. According RBC’s full-year report, the past three years saw transaction volumes in the Russian venture capital ecosystem decline 75 percent, total capital of venture capital funds operating in the Russian market drop 19 percent, venture capital transaction volumes lose 66 percent.² According to data from the OECD, venture capital investments Russia ranks 30rd on volume out of 33 countries covered by statistics. Russian statistics, however, cannot be used for dividing this type of investment into early and seed-stage investments and later-stage investment in business development³, and it is therefore difficult to measure the innovation orientation of venture capital investments.

Venture capital is expected to be found in big state-owned companies, the target of a new policy that was introduced in June by the Russian President. The policy is so-called “coercion to innovations” by way of recommending such companies to set up corporate venture capital funds and deal with startups. Needless to say, big companies are in focus because most of the

¹ Sotnikova A. Dmitry Medvedev carps about student startups failure to meet “at least 10%” of expectations // RBC, May 25, 2017 <https://www.rbc.ru/society/25/05/2017/5926ef489a7947524fe9cec5>

² Data for 2014–2016. Source: New instruments formation. RBC 2016 full-year report . M.: RBC, August 2017 http://www.rvc.ru/upload/iblock/150/Report_RVC_2016.pdf

³ According to data for 2016. Source: OECD (2017), OECD Science, Technology and Industry Scoreboard 2017: The digital transformation, OECD Publishing, Paris. P. 158.

R&D investment worldwide come from big and medium-sized companies that have long been in the market¹; however, fresh small companies tend to offer new innovative ideas.

The recommendation to set up corporate venture capital funds is addressed mostly to biggest state-owned companies such as Rostech, the Federal Space Agency of the Russian Federation (Roscosmos), the United Aircraft Corporation (UAC), the United Shipbuilding Corporation (USBC), State Atomic Energy Corporation (Rosatom).² A few companies agreed late in November on pooling their efforts to set up venture capital funds: Roscosmos, RBC, VEB-Innovations established a venture capital fund; UAC joined a venture capital fund set up by the Skolkovo Foundation and RBC; USBC plans to establish a venture capital fund early in 2018.³

It's unlikely that corporate venture capital funds will swiftly solve the startups problem because Russia has not more than a few dozens of projects that can be appealing for investors, according to experts.⁴ Rostelecom, Gazprom Neft, *RT-Business Development* LLC stand out among existing corporate funds. No successful project kick-offs has been seen yet. The new activity in this sector shows that centralized administrative resources continue to be in use despite low effectiveness of the coercion to innovations. It's not technological innovations that help big companies gain competitive advantages; in particular, state-owned companies gain advantage through having access to administrative resources, government subsidies and government defense contracts.⁵

The Digital Economy state program can be sort of a catalyst to get things going at least within a limited segment despite overall adversity facing the innovation ecosystem. In April 2017, The Institute of Innovation Management of the National Research University Higher School of Economics conducted a survey among 100 companies (mostly small companies). The survey shows that the program can be used as a mobilizing tool designed for more active transition to digital technologies. However, not all of them are aware of what digital transformation of economy is all about, and digitization is quite often viewed as a way of streamlining internal processes of doing business. Approximately 60 percent of the surveyed companies said digital technologies can be used to streamline the document flow, while only 28 percent companies mentioned big data processing, storage and analysis.⁶ Therefore, the majority of companies said digital technologies had the strongest effect on stepping up internal processes, namely simplification, acceleration, labor and resource intensity reduction, whereas the weakest effect was on sales, acquisition of new consumers and appearance of brand new products, services and opportunities, with no effect at all on 34–41 percent of cases.⁷ It's characteristic that a lack of special support policies was found to be one of the main constraints,

¹ OECD (2017), OECD Science, Technology and Industry Scoreboard 2017: The digital transformation, OECD Publishing, Paris. P. 29.

² Vladimir Putin commissions biggest Russian companies to set up venture capital funds // RNS Information Agency, June 2, 2017 <https://rns.online/economy/Putin-poruchil-krupneishim-kompaniyam-Rossii-sozdat-venchurnie-fondi-2017-06-02/>

³ Khlyuavko A. Roscosmos sets up a venture capital fund // Vedomosti, November 30, 2017 <https://www.vedomosti.ru/technology/articles/2017/11/30/743634-roskosmos-venchurnii-fond>

⁴ Kerber S., Leader CJSC Managing Director. Mneniye // RNS Information Agency, November 10, 2017 <https://m.rns.online/opinions/Kakuyu-vigodu-mozhet-prinesti-korporativnii-venchurnii-fond-2017-11-10/>

⁵ Sakovich M.. VC is judged by “exits”: Why the Russian startups market keeps seeing small number of “exits”? // Forbes, March 10, 2017 <http://www.forbes.ru/tehnologii/338751-vc-po-ekzitam-schitayut-pochemu-na-rossiyskom-rynke-startapov-po-prezhnemu-malo>

⁶ Global Economy: Global trends and Russian business practice / under the editorship of Medovnikov D.S. – M.: National Research University Higher School of Economics, 2017. PP. 49–50.

⁷ Ibid., p. 56.

apart from the traditional shortage of funding. The Digital Economy state program may just as well facilitate the solution of the problem.

Another important aspect related to the program is human capital. Seventy percent of respondents pointed to a lack of high-quality labor force, including insufficient skills of personnel using digital technologies. The manpower issue, particularly IT specialists training, was paid a special attention while discussing the Digital Economy state program. The question of how many specialists the country needs to become a digital economy had different answers. According to the Agency for Strategic Initiatives (ASI), 120,000 highly qualified engineers and programmers are needed for a breakthrough, whereas managers of the Russian Ministry of Communications said about one million IT specialists.¹ The figures appear very approximate because of such a wide disagreement. Up to 2,000 IT specialists left the country over the past two years, according to Russoft, a nationwide association of leading companies specializing in software development. Although the number isn't big, we are talking about most qualified specialists.² Collectively, these data explain why the educational component is essential in the Digital Economy state program. The workforce issue is expected to be addressed through competence development centers that will be established as part of the implementation of the Digital Economy state program and through NTI.

An initiative aimed at promoting medium-sized private growth companies (national champions) was developed amid relatively negative trends in the innovation sector. The initiative is a pilot program encompassing 30 companies. Another 32 companies were selected on a competitive basis late in 2017.³ The initiative exhibits the effectiveness of agencies' pooled efforts, the value of non-monetary policies as well as the potential of support tools synergy.

The key principle of the initiative is "manual" operation with companies in order to facilitate and double down their innovative activities. In 2017, The Ministry of Education and Science offered companies (national champions) to take part in identifying promising subject areas that will then be supported on a competitive basis through a federal special-purpose program – Research and development according to priority areas of the scientific and technological sector development in Russia for 2014–2020. The companies are eligible for competition, and government co-financing at initial R&D stages will cover up to 70 percent of the project value.⁴ The Ministry's approach towards looking for and engaging industrial partners is now a pilot project, but it's likely that it will continue to develop because companies have great interest in this type of cooperation. Financial aid is also provided via the Industrial Development Fund in the form of easy-term loans and via the SMB Corporation in the form of sureties on concessional lending basis. There is another approach via the Russian Export Center that helps companies with registration of intellectual property rights abroad, compensation for certification costs as well as product shipment costs.⁵

National champions support tools include various forms of stimulating horizontal links with, above all, state-owned companies that regulate innovation development programs. Such links

¹ A meeting at the Council for *Strategic Development and Priority Projects*. July 5, 2017 <http://kremlin.ru/events/president/news/54983>

² Digital Russia: A new reality. Aleksandr Aptecman, Vadim Kalabin, Vitaly Klintsov et al.. Digital/ McKinsey. July 2017. P. 60.

³ Mekhanik A. A happy new champions! <https://stimul.online/articles/sreda/s-novymi-natschampionami/>

⁴ Kondrakova T. Request for a signal. Ministry of Education and Science waiting for proposals from medium-sized business // Poisk, May 19, 2017 <http://www.poisknews.ru/theme/science-politic/25315/>

⁵ Grigorjeva I. High-tech exports to see 3.5-fold increase by 2020 // Izvestia, August 22, 2017 <https://iz.ru/632460/inna-grigoreva/mer-vysokotekhnologichnyi-eksport-vyrastet-v-35-raza>

are expected to help state-owned companies implement more efficiently their plans and medium-sized companies sell their technologies and products. There are plans to encourage the establishment of consortiums that will embark on the development of globally competitive technologies. Such initiatives also can help big state-owned companies solve the problem of retarded innovation-driven development. According to managers of the Ministry of Economic Development of Russia, the implementation of innovation development programs state-owned companies has worsened, the number of innovation units of state-owned companies has been decreasing because “political momentum has been lost.»¹ Therefore, the political momentum may be regained through promotion of cooperation with medium-sized growth companies. The national champion status will ensure that products are competitive. Further, this approach also can help solve the import substitution problem.

At the same time, the “manual mode” is quite useful for medium-sized companies in the case of pilot project, whereas it is difficult enough to apply across the country. Another factor that may affect the forms of support in place is the temptation to make advantage of the industrial partner status for gaining a priority access to budget allocations. Where promising subject areas are determined by a limited pool of companies, it’s highly likely that the companies will win ministries’ tenders to be eligible for funding. Some companies do prefer “easy ways”: companies’ (national champions) 2017 road maps of growth showed that some of the supportive policies requested from the government aim to eliminate competition in the industry rather than facilitate the development of new technologies.²

Given all the existing potential problems, a concierge service program for medium-sized growth companies sets an interesting precedence of comprehensive use of various government support tools and makes it possible to ensure that they are well balanced.

* * *

The last year saw the government continue to build out its presence in science and in the development and application of new technologies. The government outpaced the business sector in R&D spending, priorities of (mostly digital) development were set. New policies of “coercion to innovations” were introduced. The government strengthened its positions in the academic system.

Two aspects were characteristic for the scientific and technological policy. First, a series of documents, including statistical documents, were quickly developed and approved. New long-term documents emerged during the year. Second, the implementation of a number of initiatives faltered, such as performance measurement of scientific organizations, updates to the system of distribution of budget appropriations, creation of conditions to encourage venture capital funding, creation of a legal framework to govern intellectual property rights. A number of the last year’s new policies resembled some of the previously implemented ideas and therefore looked like cyclical attempts to solve the same unmanageable problems. The Digital Economy state program has almost the same technological priorities as the NTI does, core universities started mimicking the approaches of leading higher education institutions, RAS’ new plans were similar to early ideas of switching back to a number of prereform governance policies.

¹ Medovnikov D. Russia concentrated gets Innovative. <https://stimul.online/articles/interview/innovatsionnaya-rossiya-sosredotachivaetsya-2/>

² Saraev V. A nationwide experiment. <https://stimul.online/articles/sreda/eksperiment-natsionalnogo-masshtaba/>

Overall, the scientific and innovation policy tends to provide priority support to top-performers that are selected according to various criteria, be it universities, technology companies or selectively engaged foreign scientists. The approach is irrational amid limited capital resources, but it has side-effects. In the scientific and research sector this leads to stratification of the scientific community, which might turn out to be socially dangerous in the future. The scientific labor market remains exclusive, there is no system in place for staff exchange, engagement of specialists from the global market, as well as smooth-running mobility. The focus on specific types of companies in the innovation sector may lead to unreasonable benefits and distortion of competition. At the same time, the pilot project of custom-tailored support to companies (national champions) created an interesting precedence of comprehensive use of the available government support tools. The foregoing open a window of opportunity for forging horizontal links between various actors within the innovation system.

6.4. Government promotion of scientific research and innovative activity at higher educational institutions: the main instruments of support, its scale and beneficiaries¹

6.4.1. Scientific research and innovative activity at universities: the current situation and development trends

One typical feature of Russia's science sector, inherited from the Soviet period, is the predominant role in its research and development (R&D) activities of the 'traditional' scientific research organizations, represented by the research institutes operating under the system of government-funded academies of sciences (academic science), as well as by the research institutes and R&D bureaus subordinated to branch ministries and government departments (sectoral science); meanwhile, the role of higher educational institutions (HEE) in those activities was rather modest. At the same time, since the early 2000s, the volume of R&D projects launched in Russia by higher educational institutions and the number of researchers participating in them, has been increasing at a stable rate both in absolute and relative terms (*Fig. 8*). As a result, over the last one-and-a-half decades, the number of researchers involved in the higher education sector increased more than 1.5 times, the sector's relative share in the total number of researchers and total internal R&D costs² nearly doubled, and the corresponding costs incurred by higher educational institutions in constant prices increased more than 4-fold.

The growth rates were highest over the period 2009–2011, when in face of post-crisis recovery across the Russian economy, the government, in an attempt to achieve 'new quality' economic growth on the basis of the experiences gained during the crisis, was looking for and developing, among other things, new growth drivers. Universities were chosen to be one of those drivers, and they were assigned the role of scientific research and innovation centers in addition to their educational role; this goal, in its turn, significantly increased government

¹ This section is written by Mikhail Kuzyk, IAC, RANEPa; Yuri Simachev, NRU HSE, RANEPa.

² Hereinafter, internal R&D costs are understood as the actual costs incurred in the course of implementing R&D projects in RF territory, with no regard for their actual source of funding (i.e., including those funded from abroad). Internal R&D costs include both operating costs (salary and wage expenses, supplies and materials, maintenance costs, etc.) and capital costs (those incurred on the purchase of land, on the construction or purchase of buildings, on the purchase of equipment classified as capital assets, etc.). (For more details see, e.g., *Gorodnikova N.V., Gokhberg L.M., Ditkovsky K.A. et al. Science and technology indicators in the Russian Federation: HSE Data Books. Moscow. 2018*).

involvement in the scientific research and innovation activity of higher educational institutions (more on that later).

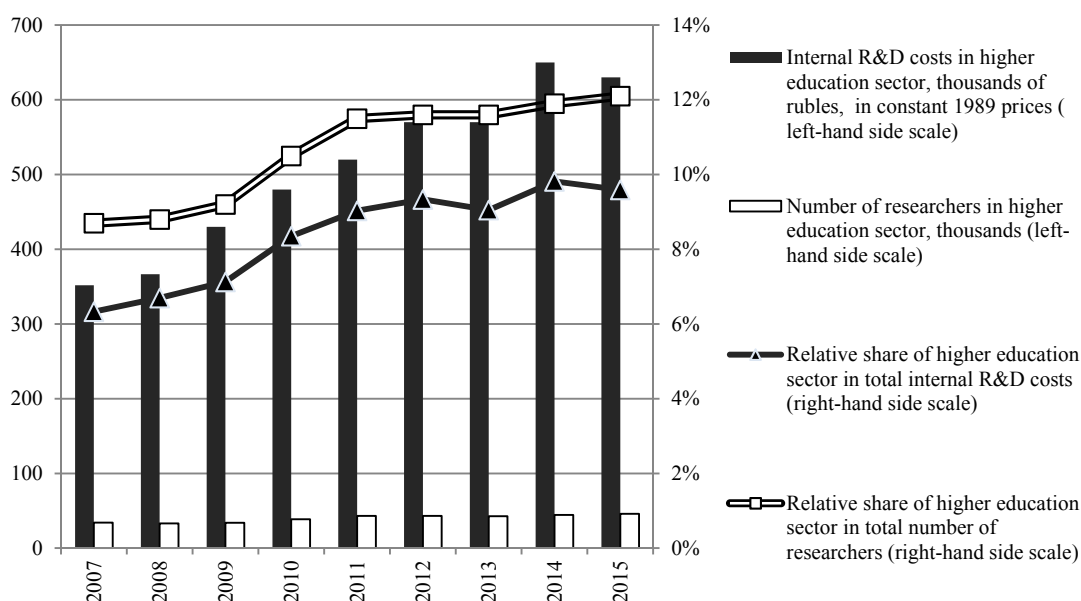


Fig. 8. Scientific research activities in Russia's higher education sector in 1995–2015

Sources: data released by NRU HSE; own calculations.

Growth of the R&D costs of higher educational institutions was boosted in the main by the increased funding allocated to applied studies, and their volume (in comparable prices) over the period from 2002 through 2015 more than tripled. At present, applied studies account for nearly a half of the total scientific research expenses in the higher education sector, whereas in the early 2000s their share amounted to about a third (*Fig. 9*). Interestingly, the relative share of the 'intermediate' category – the practical implementation phase of applied R&D studies – over the same period notably shrank.

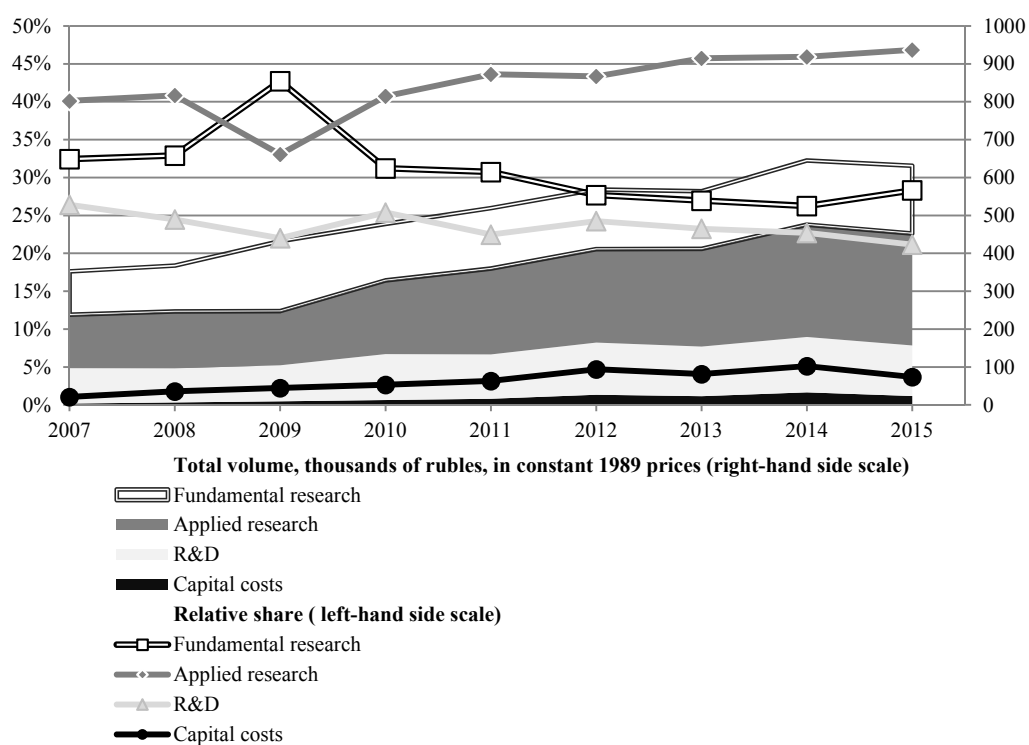


Fig. 9. Internal R&D costs in Russia's higher education sector in 2002–2015

Sources: data released by NRU HSE; own calculations.

The bulk of R&D projects implemented by universities (more than 70 percent) belong to the category of natural and technical sciences. However, since the early 2000s, the relative share of the latter has shrunk, while that of research in the field of social sciences and humanities, on the contrary, notably increased (Fig. 10).

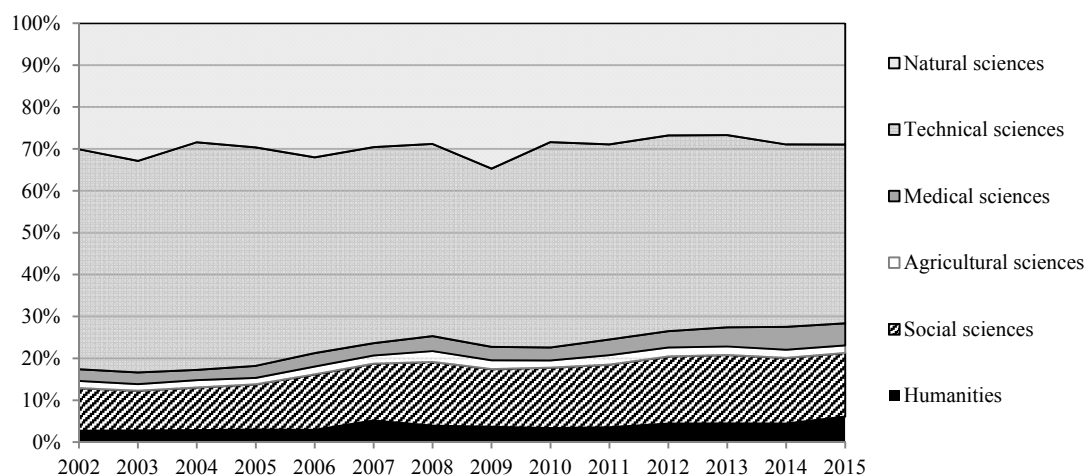
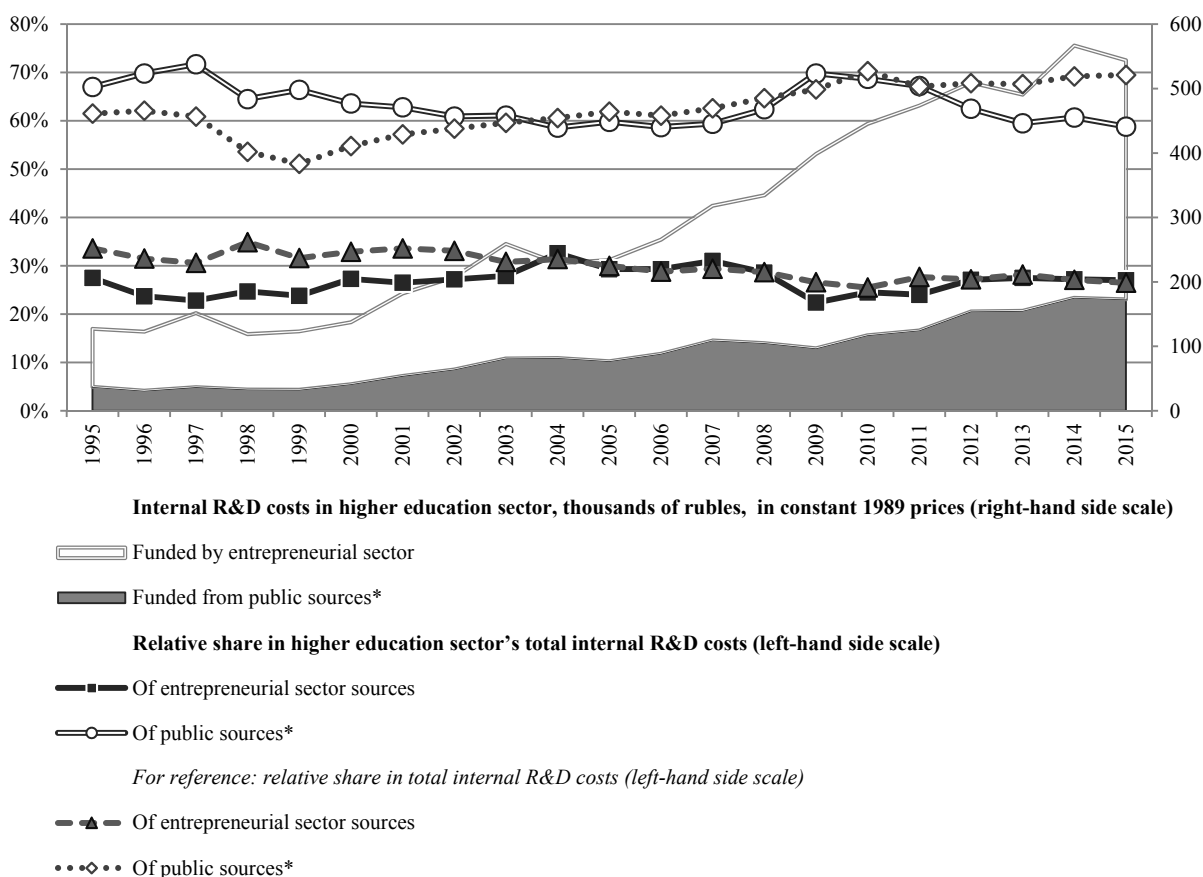


Fig. 10. The structure of internal operating R&D costs in Russia's higher education sector, by branch of science, in 2002–2015

Sources: data released by NRU HSE; own calculations.

It is important to note that, in spite of the sufficiently stable growth rate, displayed approximately since the early 2000s, of the volume of scientific research funded by the entrepreneurial sector, its relative share in the total internal R&D costs of the higher education sector was not demonstrating any more or less distinctly visible upward trend, varying in the interval between 23 and 33 percent, and from 2010 onwards became stabilized at 27 percent, while the relative share of public sector funding allocated to research projects launched by higher educational institutions (including the funding provided by companies operating in the public sector) was demonstrating, over the period 2010–2015, a downward trend¹ (however, when taken in absolute terms, the volume of public funding was increasing – see *Fig. 11*). Meanwhile, for Russia's science sector in general, the overall picture appears to be even less optimistic: since the early 2000s, there has been stable growth in the relative share of the volume of public funding allocated to R&D projects, and shrinkage of funding from the entrepreneurial sector.



*Including the organizations belonging to the public sector.

Fig. 11. The share of internal R&D costs in the higher education sector covered by the entrepreneurial sector and the public sector in 1995–2015

Sources: data released by NRU HSE; own calculations.

¹ In fact, this trend was offset by the increasing funding of R&D projects by higher educational institutions from their own sources.

As far as the innovative activity of universities is concerned, its results traditionally have been estimated by the scale of influence of the higher education sector on the innovation products actually implemented by commercial companies. The available official statistics provide information neither on the number of higher educational institutions cooperating with the business sector, nor on the number of enterprises tapping on the higher education sector as a source for implementable innovations; nevertheless, these data still make it possible to follow the quantitative movement of joint scientific research projects launched by industrial enterprises together with higher educational institutions, as well as the relative share of innovative companies involved in this type of cooperation (Fig. 12). The available data point to the existence of a weak but sufficiently stable positive trend in the development of cooperation of industrial companies with higher educational institutions in the R&D field over the past decade (in contrast to their cooperation with the sector of 'traditional' science, where no growth trend is visible).

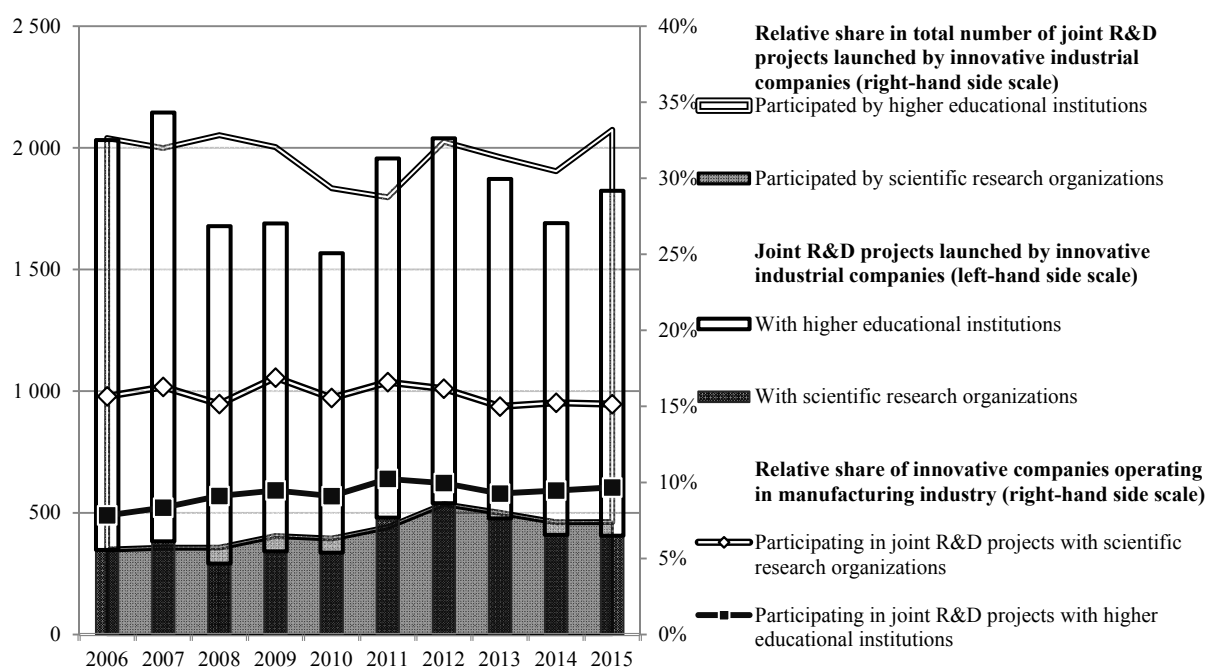


Fig. 12. R&D projects launched by industrial companies jointly with higher educational institutions and scientific research organizations in 2006–2015

Sources: data released by NRU HSE; own calculations.

An important index (which has been in high demand in recent years, including in the sphere of Russian government administration, of which more will be said later) reflecting the competitive capacity of the national higher education sector is the hierarchy of Russia's leading universities in the global ranking. In order to analyze the scientific research aspect of the activity of Russian universities, it will be worthwhile to look at the annual data collected in accordance with QS World University Rankings Methodology, where the highest weighting is allotted to each institution's *Academic Reputation* score.¹ Lately, the positions of Russian universities in

¹ This metric, with weighting of 40 percent, is based on *Academic Survey* dataset (for reference: in Russia's *Three University Missions* ranking, the academic component of a university's activity has weighting of 25 percent). The

that ranking have been gradually improving, and this happens mostly due to the better scores gained by the higher educational institutions of the 'second wave', and not the leading universities (Fig. 13).

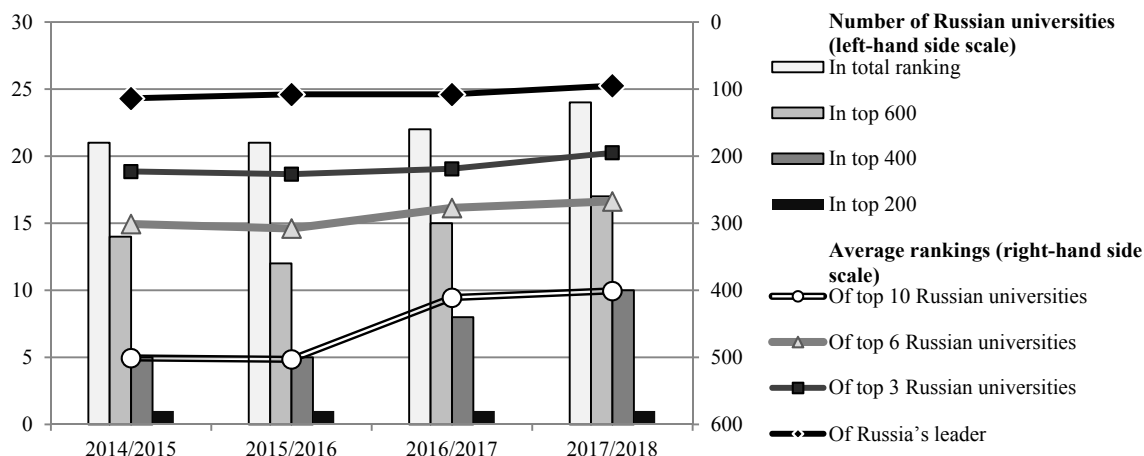
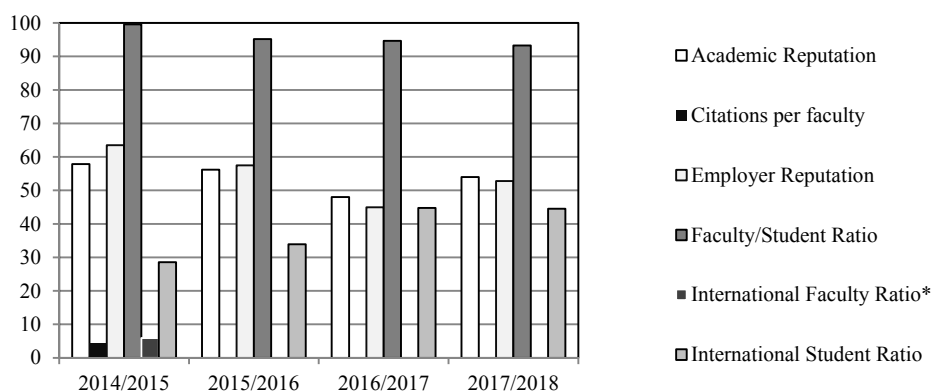


Fig. 13. Russian universities in QS World University Rankings

Source: own calculations based on QS World University Rankings.

While looking at the main metrics used to compile the QS score, it is worthwhile to note that many of the Russian universities included in the ranking – and not only the leading ones – have a high score on their *Faculty/Student Ratio*. The weakest point of those Russian higher educational institutions are their *Citations per Faculty* and *International Faculty Ratio* scores (Fig. 14).



*In the ranking results for 2015/2016, 2016/2017, and 2017/2018 there are no relevant scores for leading Russian universities.

Fig. 14. The average scores of Russia's top three universities included in QS World University Rankings

other five metrics utilized by QS in evaluating universities, are Citations per faculty (20 percent); Faculty/Student Ratio (20 percent); Employer Reputation (10 percent); International Student Ratio and International Faculty Ratio (5 percent each). For further details, see QS World University Rankings Methodology. URL: <https://www.topuniversities.com/qs-world-university-rankings/methodology>

On the whole, in spite of the growing activity of universities in the scientific research field, Russia has still failed to join the group of leaders in terms of the relative share of R&D projects implemented by higher educational institutions, falling behind not only the developed industrial countries, but also some of the newly emerged industrial powers, as well as quite a few of the post-socialist states and former USSR republics (*Fig. 15*).

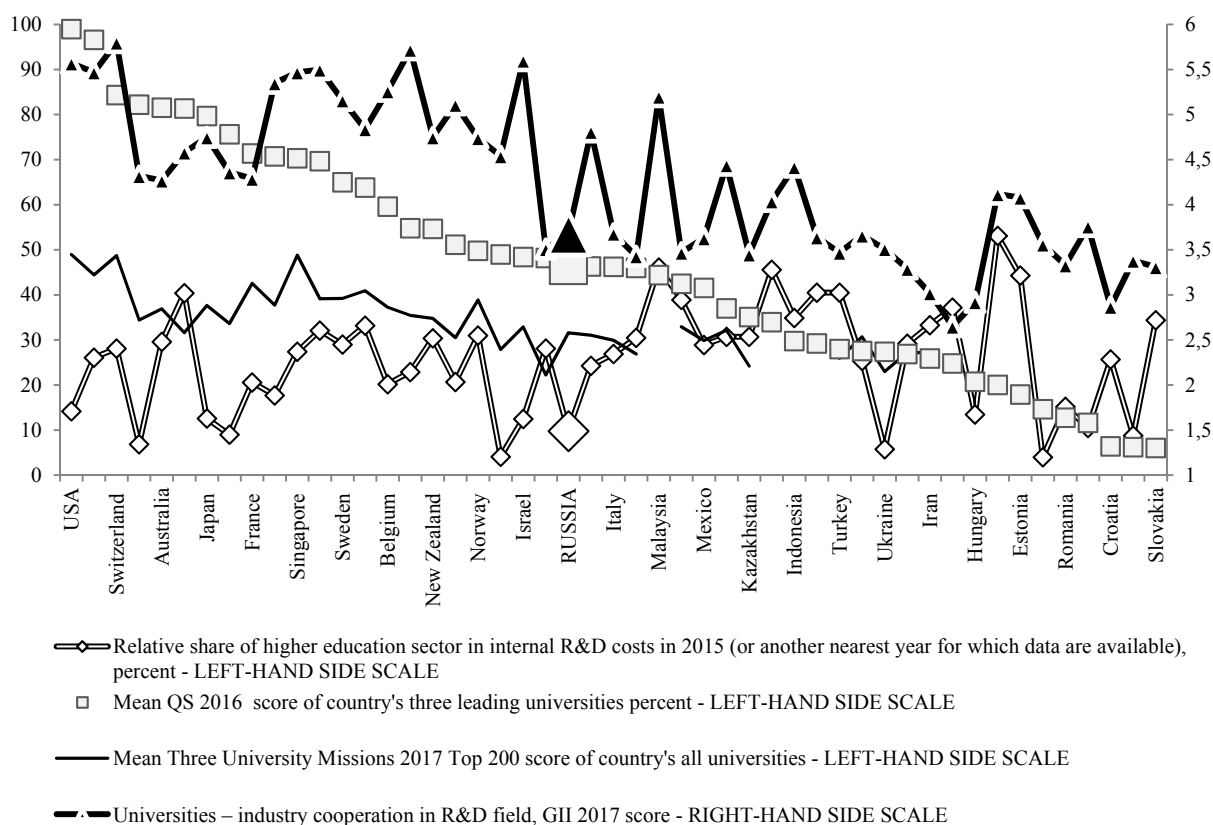


Fig. 15. The scientific research and innovative activity indices of higher educational institutions; the international competitive capacity indices of leading universities – by-country comparison

Sources: own calculations based on data released by NRU HSE, Global Innovation Index 2017, and *Three University Missions*.

The same pattern can be observed with regard to the cooperation of Russian universities with industry in the R&D field: although by her Global Innovation Index ranking,¹ Russia is ahead of a majority of her former socialist-camp partners and post-Soviet states, she lags significantly behind both the traditional and newly emerging leaders in innovative development, including the Republic of Korea, Singapore, China, and Malaysia. And finally, if we choose to speak of the international competitive capacity of a country's leading higher educational institutions in the terminology of global university rankings, Russia in this respect falls far behind not only the recognized world leaders in higher education like the USA, the UK and Switzerland, but also some other countries like China and Singapore. This conclusion is fully supported not only

¹ The Global Innovation Index 2017. URL: <https://www.globalinnovationindex.org/gii-2017-report>

by Russia's scores assigned by foreign agencies (like the already cited QS World University Rankings), but also by one Russian agency (*Three University Missions*,¹ which is frequently criticized for its excessive partiality to Russian higher educational institutions.²

Thus, it should be admitted that, in spite of the progress achieved in recent years, both Russia's higher education sector as a whole and some of its leading representatives still have a long way to go before they win high scores, on a global scale, in terms of their scientific research and innovative activity indices.

6.4.2. The main instruments employed by the government in promoting the scientific research and innovative activity of higher educational institutions³

Beginning from somewhere in the middle of the past decade, the government began to pay much more attention to developing scientific research and innovative activity at higher educational institutions (HEE). One of the first measures undertaken in that direction (and the first one to be truly wide-ranging) was the support for and development of **centers for shared use of scientific equipment (CSU)** set up on the basis of higher educational institutions, as well as scientific research organizations. These centers, in addition to the conduct of studies, tests and measurements, were also charged with the task of participating in training specialists and other staff with university-level qualifications.⁴

Centralized federal budget funding has been allocated to the creation and development of centers for shared use of scientific equipment since 2005, to the total value of RUB 15 million RUB (RUB 1.1 million per annum on the average); in this connection, no less than 80 percent of that sum must be spent on purchases of expensive equipment items (to the value of more than RUB 1 million).⁵ As of end year 2017, as total of 578 centers were established throughout

¹ *Three University Missions*. Moscow international ranking. URL: <https://mosiur.org/>

² Suffice to say that only two Russian universities are among the Top 200 in QS World University Rankings – Lomonosov Moscow State University and Saint Petersburg University, whereas in *Three University Missions'* Top 200, as many as 13 Russian higher educational institutions are included.

³ In this section, we discuss the government support measures and instruments that are initially designed (in full or predominantly) specifically for higher educational institutions, with a significant emphasis on the development of their research and/or innovative activity. For this reason, we do not consider here the funding earmarked for research projects implemented in the framework of federal targeted programs (such as the *FTP Research and Development in the Priority Areas of Development of the Russian Scientific and Technological Complex*); the grants issues by the Russian Science Foundation and the Russian Foundation for Advanced Research Projects, etc., when universities are treated on equal terms with all the other recipients of government support. We do not analyze here some of the specialized instruments applied by the RF Ministry of Education and Science by way of promoting educational activities (the programs *Cadres for the Regions*, *New Cadres for the Defense-Industrial Complex*; the status of a *federal innovation site*). Besides, we do not discuss here some financial instruments intended for higher educational institutions that channel small amounts of support (in objective terms, relative to the size of the entire university (e.g., some spending items earmarked for individual and collective research projects in the framework of *FTP Scientific Research and Educational Cadres for Innovative Russia* for 2009–2013 and the Program PUSK (Partnership of Universities and Businesses) launched by the Innovation Promotion Foundation). And finally, in general, we do not discuss the basic channel for funding the activity of universities in the form of government assignment because, strictly speaking, this is not government support in its traditional understanding (optional and selective).

⁴ The procedure for setting up a federal center for shared use of scientific equipment (approved by Order No 1351 of the RF Ministry of Education and Science, dated March 11, 2011).

⁵ This requirement is stipulated in the *FTP Research and Development in the Priority Areas of Development of the Russian Scientific and Technological Complex for 2014–2020*, whereby the government funding of the centers is

the territory of Russia, more than half of them (282) being based at higher educational institutions¹; however, the actual number of recipients of the relevant government support was 152, because many higher educational institutions included in the program set up several centers at once. The absolute champions in this respect are two universities in the south of Russia – Stavropol State Agrarian University and Southern Federal University, which received federal government funding for the creation of 10 and 14 centers respectively.

In 2006–2008, among the activities funded in the framework of the National Priority Project *Education* through government support channels were **innovative educational programs (IEP)** implemented by higher educational institutions. Each of these programs was expected to offer a set of measures designed to develop and implement new and upgraded technologies, methods and forms to be employed as part of the teaching process in order to ensure not only fine quality education, but also its integration with science and innovative activity, and to provide the alumni with professional skills capable of ensuring their high competitive potential in the labor market.²

It is important to note that the criteria for selecting those higher educational institutions that were to become the recipients of government support included not only the quality of their innovative programs (the expected results and changes to be achieved in the fields of scientific research and education, their sustainability, availability of resources, including extrabudgetary funding sources, efficient program management, etc.), but also their overall performance level in each field (scientific research, innovative and educational activity), as well as their intellectual potential and material base.³

The recipients of government support from the federal budget under these programs, in the total amount of RUB 30 billion, were 57 higher educational institutions; so, each of them was allocated slightly above RUB 500 million (or approximately RUB 260 million per annum). Meanwhile, the actual amount of support received by higher educational institutions varied rather widely – from RUB 220 million (St. Petersburg Mining University) to nearly RUB 1 billion (Lomonosov Moscow State University and Saint Petersburg State University). The bulk of budget funding received by these higher educational institutions was spent on purchases of laboratory equipment⁴.

An upshot of this support for innovative educational programs implemented by higher educational institutions was, quite logically, the introduction of a new institution category in the higher education sector – that of **national research university (NRU)**. In this connection, it was planned from the very start, and moreover, stipulated in legislation, that these universities were to implement educational programs and engage in fundamental and applied scientific

regulated. Previously, it was regulated in the framework of the Federal Research and Technology Target Program *Research and Development in the Priority Directions of Development of Science and Technologies* for 2002–2006, and the FTP *Research and Development in the Priority Areas of Development of the Russian Scientific and Technological Complex for 2007–2013*.

¹ Web portal *Modern Research Infrastructure of the Russian Federation*. URL: <http://ckp-rf.ru/ckp/>

² The procedure and criteria for the selection procedure, through a tender, of higher professional education institutions implementing innovative educational programs (approved by Order No 44, dated March 2, 2006, of the RF Ministry of Education and Science).

³ Ibid.

⁴ Education in Russia [Information and analytical data]: Federal Reference Book. V. 5. Moscow: Strategic Partnership Center, 2008. (In Russian)

research in a broad spectrum of fields,¹ and do it all with equal efficiency. In fact, that is why the name of this category included the word 'research'.

As was the case with innovative educational programs, the support to NRUs was provided in the framework of special university development programs, and the candidates were selected, as a rule, on a competitive basis (one exception was the two NRU set up by a special Presidential Executive Order as a pilot project). The factors to be taken into consideration were the level of a given higher educational institution (its human resources potential, educational and scientific research infrastructure, performance level in the fields of education, scientific research and innovations, international and national recognition), and the quality, substantiation for, and expected results of its development program.² To assess the efficiency of program implementation, a list of more than 20 indices was drawn up, these indices describing not only the activity in the educational and scientific research fields, but also innovative activity;³ it should be added that the currently applied version of the list no longer contains these indices.⁴

Initially it was established that the status of a NRU should be granted to universities for a 10-year period (later on, this restriction was abolished). However, budget funding for their development programs was to be provided only during the first 5 years, on condition that they must also attract co-funding from extrabudgetary sources in the amount of 20 percent. The possible areas for spending these budget resources were purchases of laboratory and scientific research equipment, personnel training in order to improve their qualification, curricula elaboration, database development, and improvement of education and scientific research quality management systems.⁵

Over the period 2008–2010, the status of a NRU was granted to 29 universities, 23 of which previously had been receiving government support for their innovative educational programs. The total amount of budget funding allocated to the NRU development programs was approximately RUB 50 billion RUB, or about RUB 1.7 billion per university, or RUB 360 million per annum. About a half of this amount was earmarked for the development of the universities' material and technical base. The highest amount of budget funding – RUB 1.8 million – is to be received by three higher technical educational institutions situated in Moscow: National Research Nuclear University (MEPhI), National University of Science and Technology (MISIS), and Bauman Moscow State Technical University; the lowest – RUB 540 million – is allocated to the development program launched by St. Petersburg Academic University (the nanotechnology scientific research and education center of the Russian Academy of Sciences).

On the whole, we must note the obvious continuity between the NRUs and the previously existing innovation support programs (the list of support recipients, the principles of their

¹ Federal Law No 18-FZ, dated February 10, 2009, 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation with Regard to Issues Associated with the Activity of Federal Universities'. It should be added that at present, that norm is no longer in force. Instead it is established that the activity of NRUs (at least in the framework of programs receiving government support) should be aimed at providing the priority directions in the development of science, technology, machinery, relevant sectors of the economy, and the social sphere with human resources, and at developing and implementing hi-tech projects (Federal Law No 273-FZ, dated December 29, 2012, 'On Education in the Russian Federation').

² The Provision on the selection, through a tender, of university development programs included in the category *national research university* (approved by Decree of the RF Government No 550, dated July 13, 2009).

³ Approved by Order No 296, dated July 29, 2009, of the RF Ministry of Education and Science.

⁴ Approved by Order No 1038, dated September 22, 2015, of the RF Ministry of Education and Science.

⁵ Ibid.

selection, the support targets, and even the corresponding amount of budget allocations). At the same time, while the programs were more oriented to the development of educational activities, the NRUs (at least in accordance with the initial idea of their creation) were to develop equally their activities in the educational and scientific research fields.

Alongside the status of a NRU, another 'status' category for higher educational institutions was introduced in Russia – that of a *federal university (FU)*.¹ The basic functions assigned to such universities, beside the implementation of innovative educational programs, training the personnel needed for the region's comprehensive socio-economic development, and ensuring systemic modernization in the field of professional education, were the conduct of fundamental and applied studies across a broad spectrum of fields, and integration of science, education and industry – among other things, by practically implementing their intellectual products.²

The organization of federal universities was based on a territorial principle, and involved, as a rule, the enlargement of the already existing higher educational institutions. As was the case with NRUs, for each of the universities its own specific development program was approved. Each of these programs envisages educational and scientific research activities, as well as innovative activities; however, no precise targets are established for the latter. It is interesting to note that 8 out of 10 programs envisage the allocation of budget funding. The total volume of budget allocations in the framework of these programs is RUB 40 billion – in the amount of about RUB 5 billion per university, or RUB 1 billion RUB per annum.

In late 2009, the status of a *leading classical university (LCU)* was approved in its present form, and it was legislatively consolidated to Russia's two major universities – Lomonosov Moscow State University and Saint Petersburg State University, these being unique scientific research and educational complexes of paramount importance for the future progress of Russian society. The leading classical universities differ from the other higher educational institutions in that their scientific research and educational complexes may incorporate not only structural subdivisions, but separate legal entities, e.g., research institutes. Besides, Lomonosov Moscow State University and Saint Petersburg State University are endowed with the right to independently establish the educational standards for their curricula.³ Similarly to the other 'status' categories established for universities, the leading classical universities are assigned their own special development programs where innovative activities are stipulated alongside educational and scientific research activities, but without any specific targets. The total volume of budget funding allocated in the framework of university development programs for 2010–2016 was RUB 15.8 billion – on the average RUB 1.1 billion per university per annum; in this connection, the bulk of these resources – approximately 85 percent – was earmarked for the development of universities' material and technical base and infrastructure.

In the same year (2009), the set of instruments to be employed in the support for the scientific research and innovative activities of higher educational institutions (which previously included

¹ To be more precise, the first federal universities were established back in 2006 – two years before their status was formalized in legislation.

² Federal Law No 18-FZ, dated February 10, 2009, 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation with Regard to Issues Associated with the Activity of Federal Universities'. It should be noted that by now, that norm has been abolished, and the role assigned to federal universities in existing legislation is reduced to developing human resources needed for comprehensive socio-economic development of the subjects of the Russian Federation (Federal Law No 273-FZ, dated December 29, 2012, 'On Education in the Russian Federation').

³ Federal Law No 259-FZ, dated November 10, 2009, 'On Lomonosov Moscow State University and Saint Petersburg State University'.

in the main special programs and 'status' categories), was augmented by yet another tool - a ***small innovative enterprise set up by a higher educational institution (SIE)***, its goal being the implementation of intellectual products. Initially, budget-funded higher educational institutions (and research institutions) were granted the right to create such enterprises without previously obtaining the approval of an empowered government body.¹ From 2011, the rights of budget-funded institutions to dispose of their property² were significantly expanded, and so it became easier for them to create the charter capital of their enterprises set up with the purpose of intellectual product implementation. Besides, they were granted the right to lease out their premises to their newly created small enterprises without open tender,³ and the small enterprises were allowed to operate under a simplified taxation system,⁴ as well as to apply reduced rates to their insurance contributions to government extrabudgetary funds (until 2019).⁵

At present, the official follow-up database of small innovative enterprises operating in the science and innovation sector contains information on 2,600 enterprises, their founders being approximately three hundred higher educational institutions⁶ – about a third of their total number, or (this being a more illustrative figure) more than half (55 percent) of all state and municipal higher educational institutions, and the latter are, in fact, the target of this particular support mechanism. The obvious leaders in this respect are Belgorod State Technological University and South Ural State University, as they hold stakes in the capital of 84 and 63 SIEs respectively.

It is essential to note in this respect that the number of project-implementation companies was used as one of the targets in the development programs implemented at some federal universities, as well as in the innovative infrastructure development programs of higher educational institutions (for more details about this mechanism, see later); in this connection, 76 higher educational institutions are the founders of half of all the project-implementation companies (PIC). This fact has led to the assumption that sometimes, the creation of a SIE, at least during the initial phase, was purely formal and enforced, and this, in its turn, had a negative effect on the viability of such enterprises.⁷

¹ Federal Law, dated August 2, 2009, No 217-FZ 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation Concerned with Issues in the Creation, by Budget-funded Scientific and Educational Institutions, of Economic Societies for the Purposes of Practical Application (Introduction) of the Results of Intellectual Activity.' Somewhat later, this norm was extended to include autonomous institutions in accordance with Federal Law No 273-FZ, dated December 29, 2012 'On Education'.

² Federal Law No 83-FZ, dated May 8, 2010, 'On the Introduction of Alterations to Some Legislative Acts of the Russian Federation in Connection with Improvement of the Legal Status of State (Municipal) Institutions.'

³ Federal Law No 22-FZ, dated March 1, 2011, 'On the Introduction of Alterations to Article 5 of the Federal Law 'On Science and Government Policy in the Field of Science and Technology' and Article 17.1 of Federal Law 'On the Protection of Competition.'

⁴ Federal Law No 310-FZ, dated November 27, 2010, 'On the Introduction of Alterations to Article 346.12 of Part Two of the Tax Code of the Russian Federation.'

⁵ Federal Law No 272-FZ, dated October 16, 2010, 'On the Introduction of Alterations to Federal Law "On Insurance Contributions to the Pension Fund of the Russian Federation, the Social Insurance Fund of the Russian Federation, the Federal Compulsory Medical Insurance Fund and Territorial Compulsory Medical Insurance Funds", and Article 33 of the Federal Law "On Compulsory Pension Insurance in the Russian Federation".'

⁶ SRI FRCEC: Registration and monitoring of small innovative enterprises of scientific and educational sectors. URL: <https://mip.extech.ru/index.php>. Strictly speaking, the number of higher educational institutions – founders of enterprises was initially somewhat higher, but some of them have by now been reorganized by way of merger with other higher educational institutions.

⁷ See, e.g., *Ruposov V.* Economic activity analysis of ISTU small innovation enterprises. Proceedings of Irkutsk State Technical University. 2014. No 4; *Sterligov, I.* A third of all small businesses based at higher educational

In 2010, against the backdrop of post-crisis recovery in the national economy and the increasing focus of the government on the potential sources of stable growth, there was also a noticeable surge in the policies oriented to innovations, scientific research and technical development, and one of their priorities *de facto* was a boost given to the scientific research and innovative activity of universities. At the same time, only one of the instruments included in the government package was shaped in accordance with the tradition that had emerged over the previous years, as government support for a special program that addressed an entire higher educational institution, – the ***innovative infrastructure development program of a higher educational institution***. The budget funding received in this way could be spent by higher educational institutions specifically on the development and proper equipment of innovative infrastructure units (business incubators, technoparks, innovative technology and engineering centers, certification centers, technology transfer centers, centers for shared use of scientific equipment, etc.), as well as on the valuation and legal protection of intellectual products, training abroad and continuing education courses for their staff, creation and implementation of educational programs in the field of small innovative entrepreneurship, consulting services associated with technology transfer, and creation and development of SIEs.¹

The selection of infrastructure development programs by open tender, where the bidders were required to conduct fundamental and applied studies in the priority fields that were relevant for the development of science and technology, and to efficiently launch educational programs and the set of measures needed to ensure the development of innovative infrastructure. As was the case with other similar tenders, the choice of winners depended not only on the content of their submitted programs, but also on the overall scientific research, education and innovative potential of a given higher educational institution.

The winners in the two tenders were the innovative infrastructure development programs of 78 higher educational institutions (76 of which are currently operating as independent legal entities). The total volume of budget allocations in the framework of this support program over the period 2010–2012 amounted to RUB 9 million, or approximately RUB 115 million per program.

The second support instrument, launched in 2010, envisages co-funding, by the government, of innovative projects aimed at creating hi-tech industries and implemented jointly by higher educational institutions² and businesses. In this connection, the direct recipients of budget subsidies are the business companies, which use this funding to pay for the R&D products created by the higher educational institutions in the framework of the joint projects. In the course of a tender, the factors that are primarily considered are the experience of the bidding company in the field addressed by the proposed projects or in related fields, in the implementation of R&D projects, and in the cooperation with higher educational institutions as their customer.³ It was intended that in the elaboration of R&D products ordered in the

institutions exist only on paper. Science and Technology of the Russian Federation STRF.ru. 2011. URL: http://www.strf.ru/material.aspx?CatalogId=221&d_no=41450#.VNqByeY0Enh

¹Provision on the government support of innovative infrastructure development, including the support of small-scale innovative entrepreneurship, at federal higher professional educational institutions (approved by Decree of the RF Government No 219, dated April 9, 2010).

² From 2012 onwards, in order to outsource their R&D projects, commercial companies may also commission state research institutions.

³ Rules for the allocation of subsidies by way of providing government support to the development of cooperation between Russian higher educational institutions, and state research institutions and organizations implementing comprehensive projects aimed at creating hi-tech industries, in the framework of the subprogram Institutional

framework of a given project, undergraduate and postgraduate students should be involved, and the corresponding target was stipulated in the agreement between the government body and the business company.¹

This mechanism is still being actively applied, and in fact, it has become the mainstream channel of financial support for the cooperation between higher educational institutions and businesses, both in terms of the number of participants and in terms of the volume of budget allocations. Over the period 2010–2017, support was provided to a selection of more than 400 projects, participated by over a hundred of higher educational institutions. Most often, the recipients of government support are leading multidisciplinary universities and higher technical educational institutions like Lomonosov Moscow State University (14 projects), Moscow Institute of Physics and Technology (MIPT) (14 projects), and National University of Science and Technology (MISIS) (12 projects). The total volume of budget funding allocated to the projects is almost RUB 50 billion, or RUB 140 million per project

And finally, one more instrument, also launched in 2010, envisages *support, in the form of grants, for studies conducted at higher educational institutions² under the guidance of eminent scientists*, Russian or foreign, with a position of authority in one or other field of science. To conduct such a study, the scientist should put together a scientific research team, which should include, as a mandatory requirement, the undergraduate and postgraduate students of a given higher educational institution.³ As is the case with co-funding of joint projects, this support instrument is still being applied. The recipients of this form of support have been 60 higher educational institutions implementing 159 scientific research projects. Once again, the leaders in terms of the number of received grants have become Lomonosov Moscow State University and Moscow Institute of Physics and Technology (MIPT) (12 and 9 supported projects respectively), as well as Novosibirsk State University (10 grants) and Saint Petersburg State University (9 grants). The total volume of government funding allocated over the period 2010–2017 amounted to approximately RUB 26 billion, or about RUB 130 million per grant.

The *programs of innovative development of biggest companies in the public sector*, launched from 2011 onwards, were designed, among other things, to promote the cooperation of such companies with higher educational institutions. One of the inalienable components of these programs is the set of measures aimed at boosting cooperation with leading higher educational institutions in a variety of forms, including joint studies, participation in curricula improvement, organizations of internships and on-the-job training courses, etc. However, these measures, when implemented in actual practice, did not result in a significantly increased scale

Development of the Scientific Research Sector of the Government Program of the Russian Federation Development of Science and Technology for 2013–2020 (approved by Decree of the RF Government No 220, dated April 9, 2010).

¹ Order of the RF Ministry of Education and Science No 904, dated November 7, 2012.

² From 2012 onwards, government support has also been extended to academic research institutions and state research centers.

³ Provision on the allocation of grants by the Government of the Russian Federation by way of providing government support to scientific research conducted under the guidance of leading scientists at Russian higher educational institutions, research institutions subordinated to the Federal Agency for Scientific Organizations, and state research centers of the Russian Federation in the framework of the subprogram Institutional Development of the Scientific Research Sector of the Government Program of the Russian Federation Development of Science and Technology for 2013–2020 (approved by Decree of the RF Government No 220, dated April 9, 2010).

of cooperation between biggest companies and higher educational institutions, at least during the initial phase of implementation of the innovative development programs.¹

In 2012, the government once again resorted to its habitual and traditional practice of supporting higher educational institutions through special programs, which this time were named the *strategic development programs of higher educational institutions*. The main declared goals of government support were to improve the administrative performance of higher educational institutions, to create strategic management institutions, and to coordinate the structure and content of curricula with the labor market demand, the goals and strategies of socio-economic development of the regions and industries, and the most promising direction of science and technology development. In this connection, it was expected that the programs will conduce to the improvement of the educational, scientific research and innovative activity of higher educational institutions, as well as their competitive capacity on the national and global level, ensure sustainable development of human resources, implementation of innovative methods and hi-tech learning techniques in the educational process, improve the infrastructure employed in the educational process and scientific research, and promote modernization of their laboratories and experimental base. In the final analysis, each of those programs was expected to shape a state-of-the-art higher educational institution capable of providing hi-tech industries or the social sphere with human resources, performing sophisticated academic studies and implementing R&D projects on the basis of highly performing principles and forms of integration of science, education and the business community.²

The area designated for implementing that instrument was from the very start limited to higher educational institutions subordinated to the RF Ministry of Education and Science. Besides, the recipients of budget subsidies earmarked for the implementation of strategic development programs could not be those higher educational institutions that in 2012 were the beneficiaries of other program-oriented government support instruments; thus, the universities with a special status were automatically excluded from the group of potential recipients of support (for each of them, an individual development program was approved). In the course of a tender bidding, as was the case with the other program-oriented forms of support, a number of factors apart from the quality of prepared programs were taken into consideration, namely the educational, scientific research and innovative potential of higher educational institutions, as well as their financial stability³.

Over the period from 2012 through 2014, the government provided support to 55 strategic development programs launched by higher educational institutions. Most of these programs were geared towards the budget expenditure ceiling established for this funding instrument – RUB 300 million (RUB 100 million per annum).

A new phase of active government policy in the higher education sector was initiated by one of the May 2012 Presidential Executive Orders,⁴ which set as one of the basic government policy targets in the sphere of education and science that no less than five Russian universities

¹ *Gershman M., Zinina T., Romanov M. et al.* The programs of innovative development of companies with state stakes: intermediate results and priorities. / Ed. L.M. Gokhberg, A. N. Klepach, P.B. Rudnik et al. Moscow. NRU HSE, 2015

² Provision on the support, by open tender, of the strategic development programs of state higher professional educational institutions, dated November 11, 2011.

³ *Ibid.*

⁴ The Presidential Executive Orders addressing the issue of improving some basic directions of government policy, issued in May 2012, at the start of the current electoral cycle.

should by 2020 be ranked among the world's top hundred.¹ To achieve this target, in 2013, a new mechanism of *government support for Russia's leading universities designed to improve their competitive capacity relative to the other world leading research and education centers* was launched, better known as *Project 5-100*. In order to qualify for government support, a higher educational institution was to be included in at least one of the three top global university rankings, as well as to comply with a number of formal criteria, including the mean Unified State Examination score of its enrolled first-year students; the number of undergraduate students studying under budget-funded tuition programs; the relative number of postgraduate students; the volume of spending on R&D projects; publication activity; and the number of foreign students or faculty members (scientific research and education personnel, SREP)².

Project 5-100 receives the most traditional form of support available for higher educational institutions, which envisages budget funding allocated in the framework of special programs, titled 'the programs designed to improve the competitive capacity of higher educational institutions among the world's leading scientific research and education centers'. These programs include, among other things, measures designed to boost the academic mobility of SREP in the form of participation in internships and on-the-job training courses, involvement of young staff members with an experience of scientific research or tutoring activities in the projects launched by leading educational or scientific research organizations, implementation of joint educational programs with the participation of such organizations, attraction of foreign students, implementation of research studies and R&D projects under the guidance of eminent scientists, and in collaboration with leading scientific research organizations or hi-tech companies.³

In 2013, 15 universities were selected for participation in the project; in 2015, on the basis of a second tender bidding, their number increased to 21. All the project participants, without exception, enjoy the status of federal or national research universities (and so receive the government support pertaining to their status), or previously were the recipients of support in the framework of another program-based instrument – an innovative education program. The total volume of budget funding allocated to higher educational institutions in the project's framework over the period 2013–2017 amounted to more than RUB 50 billion, or RUB 577 million per university per annum. Meanwhile, the relevant budget funding has been distributed unevenly between the universities: while the leaders like NRU HSE, MIPT, MPhI, and ITMO received in excess of RUB 800 million in per annum terms, the majority of the universities of the 'second wave' were allocated less than RUB 150 million.

A kind of supplement to Project 5-100, oriented in the main to promoting the educational and scientific research activity of universities, was the program of *financial assistance to projects for establishing and developing engineering centers (EC)*, launched in 2013. This mechanism is aimed at creating, on the base of and in collaboration with higher educational institutions, a network of specialized centers providing engineering services to organizations operating in the real sector, developing the best available technologies, promoting innovative scientific research and R&D projects, and supervising the training of personnel in the

¹ Presidential Executive Order No 599, dated May 7, 2012, 'On Measures Aimed at the Implementation of Government Policy in the Field of Education and Science'.

² Order of the RF Ministry of Education and Science No 296, dated April 22, 2013.

³ Rules for the distribution and allocation of subsidies by way of providing government support to the leading universities of the Russian Federation in order to improve their competitive capacity among major global scientific and educational centers (approved by Decree of the RF Government No 211, dated March 16, 2013).

engineering field. In this connection it is important to note that in each given year, the tenders held in order to select the best engineering center projects were emphasizing different aspects of their activity. Thus, in 2016, the focus was on import substitution in industry and Russia's lower dependence on imports; in 2017, it was on the Arctic zone and on promoting the production of civilian and dual-use technologies by enterprises belonging to the defense-industrial complex.¹

An interesting feature of this instrument is that from the very start, it has been an interdepartmental undertaking: the corresponding measures are included in the Government Program *Development of Industry and Its Competitive Potential*, supervised by the RF Ministry of Industry and Trade, while the actual management of government support is executed by the RF Ministry of Education and Science. At the same time, the recipients of subsidies may only be the higher educational institutions subordinated to the RF Ministry of Education and Science and oriented to R&D projects and training of engineering personnel.

As is the case with many other support mechanisms discussed here, one necessary attribute of government support is the existence of a special program – the strategic engineering center development program. Interestingly, in order to become eligible for government support, a higher educational institution must create a separate legal entity – an engineering center proper. However, it is not the latter that becomes the recipient of government funding – it is allocated to the higher educational institution; meanwhile, the main index of support efficiency is the volume of services provided by the engineering center to companies operating in the real sector. No less (and in recent years, more) than half of the funding allocated by the government must be spent on purchases of equipment, software and intangible assets.²

Over the period from 2013 through 2017, the government subsidies earmarked for the creation and development of engineering centers were received by 49 higher educational institutions. Their total volume was more than RUB 4.5 billion – approximately RUB 100 million per higher educational institution.

A new phase (and so far the last one) in the evolvement of government policy aimed at the development of universities, with a distinct emphasis on the ‘peripheral’ regions, started in 2015, when the government launched one more specialized program-based financial support instrument in the form of a new status that could be granted to a higher educational institution – that of a *core university*. The declared goal of that instrument is the socio-economic development of Russia's regions through the creation of university centers for their innovative, technological and social development. For that reason, the formal requirements established for the potential recipients of government funding clearly focus not only, and not so much, on regional universities, but on those higher educational institutions that have never received government financial aid on the federal level, or received it on a very limited scale. In the first round of tender bidding in late 2015 – early 2016, the candidates for government support could not be federal universities, Project 5-100 participants, or higher educational institutions situated in Moscow and St. Petersburg (this requirement automatically removed from the candidate list the leading classical universities – Lomonosov Moscow State University and Saint Petersburg State University, and a number of other higher educational institutions receiving substantial government support (see below)). In the second round (2017), this limitation also included

¹ Provision on an open public tender for government support of projects aiming at the creation and development of engineering centers on the basis of higher educational institutions subordinated to the RF Ministry of Education and Science, dated October 12, 2016 (fifth bidding) and September 27, 2017 (sixth bidding) respectively.

² Ibid.

national research universities. Besides, for a more even distribution of core universities across Russia's territory, it is envisaged that two higher educational institutions belonging to that category cannot be situated in one and the same municipal formation. It is also important to note that in the first round, the mandatory requirement to the higher educational institutions applying for the status of a core university was their enlargement by way of merger with one or several other educational institutions, while in the second round, that condition no longer applied.¹

Similarly to the other program-based government support instruments, the criteria for selecting the recipients of budget funding were based not only on the content of core university development programs, but also on the assessment of the actual situation at the higher education institutions posing as candidates for government support. However, this time the highest score was gained not on the basis of the actual indices displayed by the higher educational institution, but depending on the quality of its submitted program. The latter must include measures designed to achieve modernization of its educational, scientific research, and innovative activity, its material and technical base, its social and cultural infrastructure, its administration system, as well as measures aiming at the development of local community, urban and regional environment. As for the indices of higher educational institutions on which the choice of appropriate candidates is made, these are the number of undergraduate and postgraduate students, the number of taught disciplines and specialties, employment opportunities for the alumni, the volume of R&D projects, the number of faculty staff with academic degrees, the amount of aggregate income from all sources and that generated by scientific research, and the citation index.

On the basis of the results of the first tender, government support was allocated to 11 higher educational institutions. The total amount of federal budget funding allocated to their development programs in 2016 was RUB 1.2 billion, or approximately RUB 110 million per higher educational institution. In the second round, 22 higher educational institutions were additionally selected, for 8 of which support is to be allocated from the federal budget, and for the other 14 – from regional budgets, while the cost of methodological and consulting support is to be covered by the RF Ministry of Education and Science.

And finally, the latest government initiative aimed at developing the scientific research and innovative activity of higher educational institutions is the Priority Project *Higher Educational Institutions As Centers of Innovative Space*,² its most important component being the **creation of university centers for innovative, technological and social development of the regions** with the purpose of involving universities in dealing with the issues of sustainable socio-economic development of the Russian Federation and its subjects. It should be noted that although there are some very obvious similarities with the targets designated in the program for core universities, this priority project envisages the creation of a unit with a different status, which will function, in effect, as a superstructure relative to the already existing support instruments. The university applying for the creation of a university center must participate in Project 5-100; have the status of a federal or core university; or answer several formal requirements, i.e., the mean Unified State Examination score of its enrolled first-year student; the volume of R&D

¹ Provisions on the procedure of selection, by open tender, of higher educational institutions to be recipients of financial support from the federal budget for their federal state higher educational institution development programs, dated October 16, 2015 and February 17, 2017.

² It should be noted that it is specifically in the framework of this project that the financial support of the leading universities – participants in the 5-100 Project – has been provided since 2017.

projects; the amount of income; and the relative shares of different categories of students, and these indices, it should be added, are not the same for different groups of regions. Besides, the status of a university center is by definition unobtainable for the higher educational institutions situated in Moscow, St. Petersburg, Moscow Oblast, and Leningrad Oblast.¹

The spectrum of declared goals of the newly established university centers is very broad, and it differs for the centers oriented to innovations, technologies, and the social sphere. The common goals for all types of centers are the capitalization of the educational, scientific research, and technological results achieved in various sectors of a region's economy; the creation of appropriate conditions for the implementation of project-oriented educational programs covering a complete project life cycle; harmonization of the themes of applied R&D projects with the *Strategy for Scientific and Technological Development of the Russian Federation*; participation in activities oriented to systemic cooperation with scientific research organizations and businesses through the creation of chairs addressing fundamental fields, joint implementation of educational programs and scientific research projects; participation in activities oriented to the creation of proper conditions for continuing education, improving informational, financial and legal literacy of the population, and the improvement of faculty professional competence. The centers for innovative development of the regions, alongside all these goals, must also develop innovative ecosystems conducive to increasing the income generated by universities from the commercial use of their intellectual products, and involve both students and faculty in innovative and entrepreneurial activities. The specific tasks assigned to the centers for technological development of the regions are the creation of sectoral engineering centers capable of providing the infrastructure needed by businesses in order to implement their projects in accordance with the directions of the *National Technology Initiative (NTI) Strategy* and to promote their innovative R&D ideas; the implementation of project-oriented Master's Degree programs in the fields of technological entrepreneurship and management of technological projects, with the involvement of companies operating in the real sector; promotion of students' technological entrepreneurship, creation and development of startup accelerators and innovative entrepreneurship support programs with the participation of development institutions. And finally, the university centers for social development of the regions are expected to ensure the implementation of project-oriented Master's Degree programs in the fields of social entrepreneurship and social project management, with the involvement of companies operating in the real sector, including welfare-oriented non-profit organizations, and to promote the development of students' social entrepreneurship, creation and development of startup accelerators and social entrepreneurship support programs with the participation of development institutions, including for the purpose of creation, by students and alumni, of welfare-oriented non-profit organizations.²

Traditionally, the creation of university centers involves elaboration of a specialized document package – the program of university's reorganization into a university center. However, the set of required targets for program implementation reflects rather accurately the stipulated goals of university centers - while, generally speaking, this is not typical of the majority of other government support instruments employed in the development of universities. It is noteworthy that the selection of higher educational institutions to serve as university centers

¹ The model and parameters of monitoring the university centers for innovative, technological and social development of the regions (annex to the RF Ministry of Education and Science's Letter No LO-1754/05, dated August 31, 2017).

² Ibid.

initially was not expected to depend on federal budget funding (while the possibility of such obligations emerging at some point in the future cannot be ruled out). However, the approved format of the reorganization programs does envisage public funding from regional and local budgets.¹

In late 2017, a total of 51 higher educational institutions were officially recognized to be university centers for innovative, technological and social development of the regions. An overwhelming majority in that group was represented by federal or national research universities, Project 5-100 participants, or (at least) core universities. Over the next few years, it can be expected that this status will become more widespread, one reason for that assumption being the fact that, in the Priority Project *Higher Educational Institutions As Centers of Innovative Space*, it is stipulated that in 2019, there should be 70 university centers, and in 2025 – no less than 100 university centers.²

The main formal and content-related features of the mechanisms employed in promoting the scientific research and innovative activities of higher educational institutions are shown in *Table 25*.

On the whole, the government support policy targeting the scientific research and innovative activities of higher educational institutions, in contrast to many other areas of government activity, is evidently systematic and has an internal logic, even if it may be considered to be somewhat disputable. Thus, the ‘broader’ measures (those designed to increase the number of newly created small innovative companies, support the projects aimed at setting up centers for shared use of scientific equipment and cooperation projects) have been applied alongside with support instruments targeting a small the number of leading higher educational institutions (the development programs of national research universities, federal universities, and leading classical universities; and Project 5-100). It is important to point out the continuity between different measures. Thus, for example, the large-scale but short-lived support program targeting the innovative educational activities of higher educational institutions evolved into a permanent status or category being assigned to some of them; the participants in Project 5-100 were for the most part federal and national research universities, while the participation in that project, together with the status of a federal or core university, makes it easier for a higher educational institution to gain official recognition in the capacity of a university center for the development of a region.

One question of paramount importance arising in the course of discussion of any direction or instruments of government policy is the actual positive effect produced by government efforts. Available official data and materials not only fail to provide any exhaustive answer to that question, but do not make it possible even to get near to any coherent answer at all. On the one hand, over the entire period when the government was supporting higher educational institutions in their scientific research and innovative activity, the latter were demonstrating a trend towards growth. On the other, growth of the relevant indices had begun prior to the onset

¹ The requirements as to the content and structure of the application for participating in the selection of higher educational institutions by university centers for innovative, technological and social development of the regions; Comments on the conduct of and selection conditions for the creation of university centers for innovative, technological and social development of the regions (annex to the RF Ministry of Education and Science’s Letter No 05-18062, dated September 7, 2017).

² Certificate of the Priority Project *Higher Educational Institutions As Centers of Innovative Space* (approved by Presidium of the Presidential Council for Strategic Development and Priority Projects, protocol No 9, dated October 25, 2016).

of massive-scale government support for higher educational institutions, and then it happened against the backdrop of the positive movement of many other basic macro indices.

Generally speaking, in order to generate the necessary ‘body of evidence’ confirming the results of government policy, one must identify the effects produced specifically by the acts undertaken by the government, which could not have been achieved in absence of such acts. In this connection, one must take into consideration not only the results of government support, but also the indirect effects, including changes in the behavior of the beneficiaries of support and their contractors.¹ It should be noted that the direct, the indirect, and in particular the behavioral effects often appear with a significant lag of up to several years. Today, the Russian government administration system lacks any practical experience of such assessments. Strictly speaking, this circumstance makes it impossible to draw any well-substantiated conclusions or make any definite statements, not only specifically of the results produced by government policies in the higher education sector (and in other sectors as well), but also of the sustainability of the ongoing positive changes, and whether they will survive if the support is discontinued.

In principle, considering the length of the period of government support, its systemic character, and its rather massive scale (more on this later), we believe that, most probably, it did produce a significant positive influence on the development of scientific research and innovative activity at higher educational institutions; however, we cannot say this with absolute certainty.

Table 25

**The main instruments of government support for scientific research
and innovative activity of higher educational institutions**

Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
Support for projects aimed at creation and development of CSUs	From 2005	Budget funding for projects	Implementation of interdisciplinary scientific research projects in priority science and technology development fields in Russian Federation, including in collaboration with world’s leading research centers. Participation in personnel training at university level, on basis of CSUs	Support for 578 CSUs, including 282 CSUs in higher education sector based at 151 HEEs. Total volume of budget funding is approximately RUB 15 billion	No less than 80 percent of funds should be spent on purchasing cutting-edge scientific research equipment
Innovative educational programs of higher educational institutions	2006–2008	Budget funding for programs	Application of cutting-edge educational technologies & methods. Provision of high quality education, high competitive capacity of alumni on labor market. Integration of educational, scientific-research & innovative activities	Support for programs launched by 57 HEEs. Total volume of budget funding RUB 30 billion	Selection criteria included not only program quality, but also financial etc. situation of bidding HEEs. Allocated budget funding was spent mostly on equipment
Federal universities	From 2006	Status (category); in most cases – budget funding for development programs	Implementation of innovative educational program integrated into global educational space. Systemic modernization of professional education. Personnel training based on cutting-edge educational technologies for comprehensive	10 federal universities were created based on reorganization of approximately 30 higher educational institutions	Federal universities were formed on command basis – without open tenders. Federal universities were set up based on existing HEEs; in most cases, by enlargement through merger with

¹ One example of such an approach being applied in Russia can be found in *Simachev Yu., Kuzyk M., Zudin N.* The Impact of Public Funding and Tax Incentives on Russian Firms: Additionality Effects Evaluation // New Economic Association. 2017. No 2. P. 59–93.

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Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
			socioeconomic development of region. Wide-range fundamental & applied studies; integration of science, education & industry, including by implementing intellectual products	Total volume of budget funding allocated in 2010–2016 was RUB 36 billion	other HEEs and secondary educational institutions. Budget funding was envisaged in only 8 development programs. Main budget-fund expenditure item was development of material & technical base and infrastructure of universities – more than 40 percent of total volume
National research universities	From 2008	Status (category); budget funding for development programs (for 5 years)	Personnel supply for priority directions of development of science, technologies, equipment, branches of economy, and social sphere. Development of hi-tech products and their implementation in industry	Category NRU was assigned to 29 higher educational institutions. Total volume of budget funding for development programs in 2009–2014 amounted to approximately RUB 50 billion	Initially, to qualify for NRU category, HEEs were to equally efficiently implement educational programs and conduct wide-range fundamental and applied research. Selection criteria were primarily university's characteristics, its potential and efficiency, followed by quality of its submitted program. Approximately half of budget funds allocated to these programs was spent on logistics development
Leading classical universities	From 2009 (formalized in legislation)	Status (category); budget funding for development programs (for 10 years)	Formal legitimization of special status of 2 biggest Russian universities as unique scientific research complexes, of immense significance for Russian society's development	Status granted to Lomonosov Moscow State University and Saint Petersburg State University. Total volume of budget funding for development programs in 2010–2016 amounted to approximately RUB 16 billion	Scientific research-educational complexes of leading classical universities may include legal entities like research institutes, etc. Universities may establish their own educational standards for their curricula. Major part (approximately 85 percent) of budget funds allocated to these programs was spent on logistics and infrastructure development
Stimulating creation, by government & municipal HEEs, of SIEs	From 2009	Possibility of creating SIEs and endowing them with property. Possibility for SIEs to use simplified system of taxation. Lower rates of contributions to government funds for SIEs	Implementation of intellectual products, all rights thereto belonging to founding HEEs	Official registration of 2,600 SIEs set by 289 operating HEEs	Half of SIEs were created by HEEs, to meet corresponding targets
Support for projects launched jointly by HEEs and businesses, to promote hi-tech	From 2010	Budget subsidies to business companies, to fund R&D	Support for cooperation between HEEs and businesses; elaboration of financial, organizational and normative mechanisms, promotion	Support for approximately 400 projects	State's direct contractor is not HEE (final recipient of support), but

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Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
industries (Decree No 218)		products developed by HEEs as part of projects	of sustainable public-private partnership in implementation of complex joint projects of launched by universities and industrial companies. Identification of existing 'stepping stones' for future research, and identification of institutes or groups of researchers capable of creating science-intensive products. Implementation of cutting-edge organizational & managerial principles in applied studies and R&D projects launched by HEEs in relevant fields. Curricula upgrades by HEEs in accordance with existing technology market demand	Total volume of budget funding in 2010–2017 amounted to approximately RUB 50 billion	company actually implementing project. Result achieved in each project should be creation of new of upgraded hi-tech product. Undergraduate and postgraduate students must be involved in R&D projects
Programs of innovative infrastructure development at HEEs (Decree No 219)	2010–2012	Budget funding for development programs	Creation of innovative environment. Development of cooperation between HEEs and industrial enterprises. Support for SIEs set up by HEEs	Support for 78 programs launched by 76 operating HEEs. Total volume of budget funding was RUB 9 billion	To qualify for support, HEEs should conduct fundamental and applied studies in priority fields of science and technology, efficiently implement educational programs and measures designed to develop innovative infrastructure. Selection, by open tender, depended not only on quality of submitted programs, but also on scientific research, educational and innovative potential of HEEs. Support directions, relative to programs: <ul style="list-style-type: none"> • development of innovative infrastructure units at HEEs (businesses incubators, technoparks, innovative technological and engineering centers, certification centers, technology transfer, CSUs, etc.), provided with cutting-edge equipment and software; • legal protection & valuation of intellectual products, all rights thereto belonging to HEEs; implementation and elaboration of training and refresher programs for personnel involved in small innovative entrepreneurship;

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Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
					<ul style="list-style-type: none"> internship and refresher courses, for personnel of HEEs, in innovative entrepreneurship and technology transfer at foreign universities; consulting services of foreign and Russian experts pertaining to technology transfer, creation and development of small innovative companies
Support for scientific research studies under supervision of leading scientists (Decree No 220)	From 2010	Budget grants for studies	<p>Integration of HEEs in training highly qualified personnel.</p> <p>Involvement of undergraduate and postgraduate students in advanced scientific research under supervision of leading scientists.</p> <p>Improvement of higher education quality, training of highly qualified scientific research personnel.</p> <p>Improvement of professional opportunities for young talent, their anchoring in Russian science.</p> <p>Improvement of scientific research personnel qualification.</p> <p>Assistance to integration of Russian science in global scientific research space;</p> <p>increased mobility and circulation of scientific research personnel.</p> <p>Growth of international scientific research cooperation.</p> <p>Development of science and innovations at HEEs.</p> <p>Boosting activity of HEEs in relevant scientific research field, development of scientific research potential of HEEs.</p> <p>Achievement of scientific research results of world standards.</p> <p>Creation of competitive scientific research laboratories.</p> <p>Growth of citation index and/or patent index</p>	In 2010–2017, 159 grants were issued to 60 HEEs. Total volume of budget funding is RUB 26 billion	<p>Leading scientist should display mastery specific field of science.</p> <p>Research team must include undergraduate and postgraduate students of HEEs</p>
Measures designed to promote cooperation with leading HEEs under innovative development programs targeting biggest state corporations	From 2011	Administrative-command stimulation	Creation of demand by biggest state corporations for R&D products created by HEEs.	Innovative development programs of 60 companies were approved and launched	<p>Selection of core HEEs, research subjects (science, technology), and scope of joint scientific research or R&D projects.</p> <p>Elaboration of scientific research programs with HEEs, envisaging, e.g., technological and marketing information exchange mechanisms, collaboration in science and technology development forecasts, creation at HEEs of scientific research and R&D management systems targeting</p>

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Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
					<p>expected demand of businesses and industry. Implementation, in coordination with HEEs, of programs designed to improve education quality and personnel training for hi-tech industries, and education plan and curricula improvement in collaboration with businesses; involvement of companies' employees as tutors; development of internship and on-job practice systems for undergraduate and postgraduate students, faculty and scientific research personnel of HEEs; development of continuous personnel training courses for businesses. Formation of organizational mechanisms for interaction of businesses with HEEs, including mutual participation of personnel in collegiate managerial and consultative bodies</p>
Strategic development programs of HEEs	2012–2014	Budget funding for development programs	<p>Improvement of administration efficiency of HEEs, development of management best practices and formation of strategic management institutes to answer labor market demand and goals of socioeconomic development of regions, and promising science and technology fields. Adaptation of professional education structure to suit labor market requirements and socioeconomic development strategy of region or branch of industry. Sustainable development of HEEs: their human resources, educational and scientific research infrastructure, performance in fields of education, scientific research, and innovations. Improvement of competitive capacity of HEEs, at national and international levels. Active implementation of new methodologies and technologies in educational process; modernization of laboratory and experimental base; formation of resource base in accordance with each HEE's development priorities</p>	Support for 55 programs. Total volume of budget funding is approximately RUB 16 billion	Support recipients were limited to HEEs subordinated to RF Ministry of Education and Science. Support recipients could not be HEEs receiving budget funding for implementation of other development programs

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Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
Support for leading universities to increase their competitive capacity (Project 5-100)	From 2013	Budget funding for development programs. Status of project participant	No less than 5 Russian universities to be ranked, by 2020, among the world's top hundred. Development of leading universities to improve their competitive potential compared with world's leading scientific research and educational centers	Participated by 21 universities, nearly all of them with status of NRU or FU. Total volume of budget funding allocated to HEEs in 2013–2017 is in excess RUB 50 billion	Support recipients were universities already included in world rankings and answering some special formal requirements (their number of undergraduate and postgraduate students, R&D expenditures, publication activity, etc.)
Support to projects for creation and development of engineering centers based at HEEs	From 2013	Budget funding for projects (2–3 years)	Formation, on basis and with participation of HEEs, of network of centers providing engineering services to organizations operating in real sector, personnel training courses in engineering field, and implementing best available technologies, and promoting innovative scientific research and R&D projects	Government subsidies were received by 49 HEEs. Total volume of support is RUB 4.7 billion	Example of successful inter-departmental cooperation between RF Ministry of Education and Science, and RF Ministry of Industry and Trade. Support recipients were limited to HEEs subordinated to RF Ministry of Education and Science. To qualify for support, HEEs must be oriented to R&D projects and personnel specialization in engineering services. In different years, engineering center creation projects were selected with focus of different aspects of their activity. Mandatory requirement for support recipients was elaboration of engineering center strategic development program. To qualify for support, HEEs must create legal entity, its main target indicator being volume of services provided to real sector. However, actual recipient of support is not engineering center, but HEE itself. No less than half of budget funding must be spent on acquisition of equipment, software, and intangible assets
Core universities	From 2016	Federal budget funding for some development programs. Funding for other development programs from regional budgets	Core university status. Socioeconomic development of regions, including through creation of university centers for innovative, technological and social development	33 universities were selected; 19 received federal budget for development programs, 14 were funded from budget of each region. In 2016, total volume of	Support recipients are limited to federal state HEEs. Support recipients cannot be federal or national research universities, Project 5–100 participants, or HEEs situated in Moscow and St. Petersburg

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Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
				support for 11 development programs of 'first wave' core universities was RUB 1.2 billion	One municipal formation should house not more than one core university. In first round of bidding for core university status, mandatory requirement for applicants is that they must undergo reorganization by way of merger with one or several educational organizations. Selection criteria focus not on character of HEEs, on their program development quality. Core university development programs should include measures designed to modernize educational, scientific research and innovative activities, logistics, and social and cultural infrastructure, university administration systems, and also development of local community and urban and regional environments, with emphasis on regional development.
University centers for innovative, technological and social development of regions	From 2017	Special status. Funding for reorganization programs from regional budgets	Involvement of universities in issues of sustainable socioeconomic development of Russian Federation and RF subjects. Capitalization of educational, scientific research & technological products in region's industries; creation of appropriate conditions for implementation of projects-oriented educational programs covering complete project life cycle. Harmonization of applied R&D projects with <i>Strategy of Scientific and Technological Development of the Russian Federation</i> . Participation in activities oriented to systemic cooperation with scientific research organizations and businesses through creation of chairs addressing fundamental fields of science, joint implementation of educational programs and scientific research projects. Participation in creating proper conditions for continuous education courses, improvement of informational, financial legal literacy, and professional competence of educators	51 HEEs are officially recognized as university centers	Diversification of newly created university centers, at least by type of their tasks. Formally declarative procedure for recognizing HEEs to be university centers, though rather rigid 'filtration': applicant HEE must be Project 5–100 participant, federal or core university, or satisfy some formal requirements

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Direction (instrument) of support	Period of use	Support character	Goals and tasks	Scope	Specificities, focus
			<p>Centers of innovative development of regions must develop innovative ecosystems conducive to increasing universities' income generated by their intellectual products, and involve students and faculty in innovative and entrepreneurial activities.</p> <p>Specific tasks assigned to centers for technological development of regions are: creation of sectoral engineering centers capable of providing infrastructure needed by businesses to implement their projects in accordance with <i>National Technology Initiative (NTI)</i> and to promote innovative R&D; implementation of projects-oriented Master's Degree programs in technological entrepreneurship and management of technological business projects in real sector; involve students in technological entrepreneurship; create and develop startups accelerators and innovative entrepreneurship programs with participation of development institutions.</p> <p>Centers for social development of regions must ensuring implementation of project-oriented Master's Degree programs in social entrepreneurship and social project management involving companies operating in real sector, including welfare-oriented non-profit organizations, and involve students in social entrepreneurship, create and develop startup accelerators and social entrepreneurship programs with participation of development institutions, including creation, by students and alumni, of welfare-oriented non-profit organizations</p>		

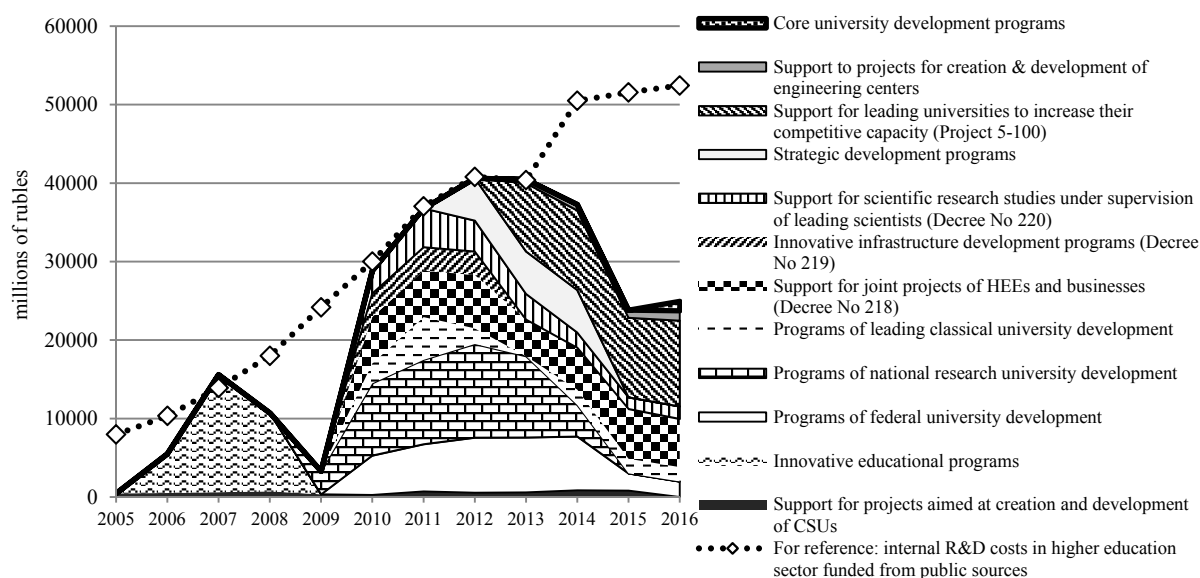
Source: own compilation based on normative legal acts, methodological and reporting documents and materials of the official websites of state authorities, projects, programs and instruments of support.

6.4.3. The key directions, scope and specificities of current government policy aimed at promoting scientific research and innovative activities of higher educational institutions

On the whole, among the government measures designed to promote scientific research and innovations in the higher education sector, the prevailing ones are program-oriented support instruments that require the recipient higher educational institution to be granted a special status or a special category. Besides, this direction of government policy, similarly to some other directions (in particular, industry and innovations¹), relies mostly on financial instruments.

¹ See, e.g., *Kuzyk M., Simachev Yu.* Russia's Innovation Promotion Policies: Their Evolution, Achievements, Problems and Lessons // Russian Economy in 2012. Trends and Outlooks. Issue 34. Section 6.4. Moscow: Gaidar Institute. 2013. P. 521–571; *Simachev Yu., Kuzyk M., Kuznetsov B., Pogrebnyak E.* Russia on

The total volume of federal budget funding allocated to higher educational institutions through these support instruments over the period 2005-2017 amounts to nearly RUB 300 billion, which is comparable with the total amount of government investment, over the same period, in the major state development institutions of the innovation sphere: RUSNANO Corporation, Skolkovo Foundation, Russian Venture Company (RVC), and the *Innovation Promotion Fund*. During that period, the volume of government support peaked (to approximately RUB 40 million per annum) in 2011–2014, when the government, on the one hand, was preoccupied with searching and 'fostering' new drivers of sustainable economic growth, universities designated to be one of those drivers, and on the other, it was not yet setting any new goals in response to political and economic changes in the global arena, like that of making the national economy's main sectors to be less dependent on imports. It should also be noted that over the major part of the period under consideration, the volume of government support was comparable to the amount of internal R&D costs in the higher education sector covered from public sources – budgets of all levels and state corporations (*Fig. 16*). Moreover, during the 'inter-crisis' period from 2010 through 2013, these government support instruments were totally (or almost totally) determining the character of internal R&D costs covered from public sources, and in 2007, when the process of innovative educational program implementation was at its highest, even exceeded the latter.¹



*Budget of all levels and public sector organizations.

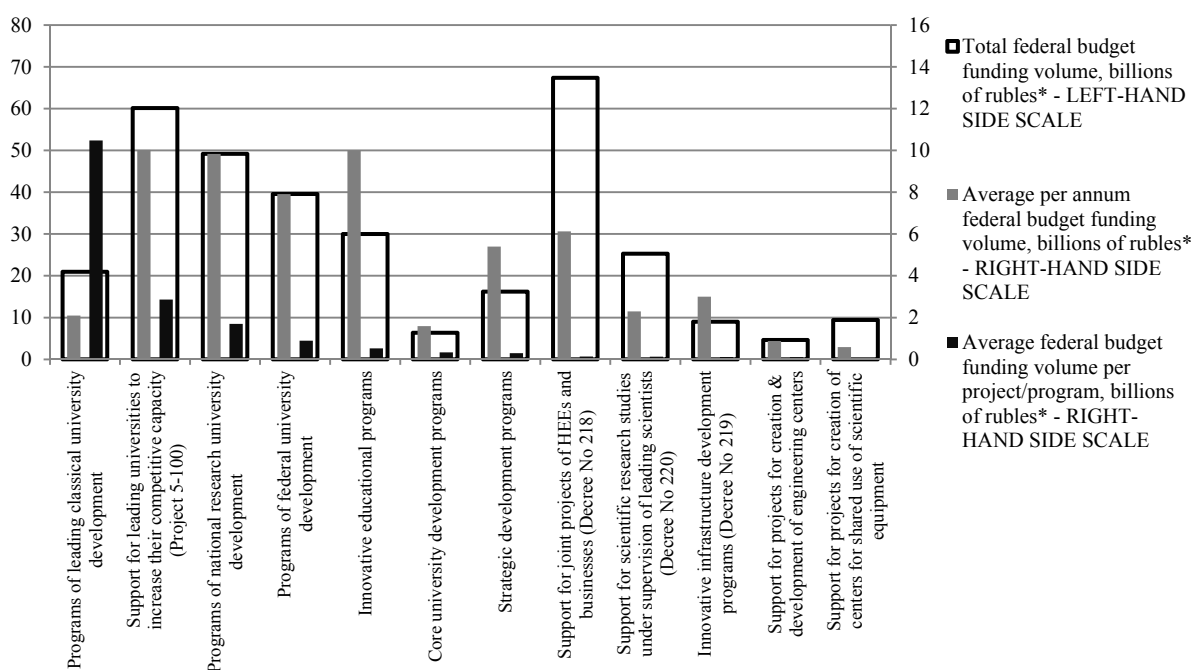
Fig. 16. The volume of federal budget funding received by higher educational institutions through government support instruments in 2005–2016.

Sources: own compilation based on normative legal acts, reporting documents and materials published at the official websites of government agencies, projects, programs, and support instruments, as well as statistical data released by NRU HSE.

the Path Towards a New Technological Industrial Policy: Exciting Prospects and Fatal Traps // Foresight. 2014. V. 8. No 4. P. 6–23.

¹ In fact, this is not surprising because, generally speaking, such programs envisaged funding for both the scientific research and educational activities of higher educational institutions.

If each support instrument is to be taken separately, the highest total volume of budget funding allocated to higher educational institutions (with due regard for the approved budget obligations) was channeled by way of supporting the projects launched by higher educational institutions jointly with businesses in the framework of RF Government Decree No 218 dated April 9, 2010, followed by Project 5-100 and the development programs of NRUs and federal universities (Fig. 17). The last three mechanisms also boast of the highest per annum volume of budget funding, together with the innovative educational programs of higher educational institutions. At the same time, if we look at the amount of budget funding channeled through one implemented project or program, the obvious leader will be the category of leading classical universities and their development programs.



*With the amount of approved budget obligations.

Fig. 17. The volume of federal budget funding distributed through the government support instruments targeting the scientific research and innovative activities of higher educational institutions

Source: own compilation based on normative legal acts, reporting documents and materials published at the official websites of government agencies, projects, programs, and support instruments.

The main direction of government financial support was the development of the material and technical base and infrastructure of higher educational institutions – some of these instruments were from the very start oriented to the relevant targets (support for the creation of centers for shared use of scientific equipment and engineering centers; innovative infrastructure development programs), while others revealed their focus *de facto* at a later stage (innovative educational programs, the programs for development of federal universities, national research universities, and leading classical universities). Targeted funding of R&D projects is assigned

to only two instruments, although in a sizable amount: matching grants,¹ earmarked for supporting the cooperation between higher educational institutions and businesses (RF Government Decree No 218); and the grants earmarked for the conduct of studies under the guidance of eminent scientists (RF Government Decree No 220).

As for the 'scope' of the various measures and instruments of government support applied in the higher education sector, assessed by the number of actually involved higher educational institutions, an absolute leader in this respect is the instrument envisaging the creation of small innovative companies charged with the task of practically implementing R&D products: by late 2017, approximately 300 higher educational institutions had set up such subsidiaries. Among the financial instruments, the widest 'audience' was benefited by the support for the creation and development of centers for shared use of scientific equipment – over slightly more than a decade, that instrument encompassed more than 150 higher educational institutions.

Overall, the government policy of promoting the scientific research and innovative activities of higher educational institutions has been evolving across two distinctly visible planes. One of them is horizontal and involves measures oriented to a very broad range of recipients; it is characterized by a relatively modest volume of support allocated to each program or project (or at least it appears to be modest by comparison with that the amount of funding allocated to the second category of support instruments), and also, typically, by the extension of government support to those higher educational institutions that have not been receiving it previously. The second plane is vertical and involves sizable financial support allocated to a rather narrow group of eligible universities (*Fig. 18*). Somewhere halfway between these two categories of government support measures are the instruments launched in 2016–2017 – core universities and university centers for innovative, technological and social development of the regions. Still, the first support instrument is nearer to the horizontal plane, because the selection procedure established for core universities is clearly oriented to the attraction of new 'players', previously overlooked by the massive-scale government support measures. By contrast, the creation of university centers is, more likely, a vertical measure, because those higher educational institutions that have already been 'filtered' through the selection procedures established for other government support instruments (which are mostly vertical), have the highest chance of acquiring the status of a university center.

And finally, considering the situation with regard to government support measures designed to promote science and innovations in the higher education sector relative to each representative of that sector, we should note, first of all, the very uneven pattern of support distribution. Thus, over the period from 2005 through 2017, only slightly more than a third (37 percent) of all higher educational institutions were actually targeted by one or other support instrument, while only a quarter of them were recipients of financial support (*Fig. 19*).

¹ The term *matching grant*, which is a rather widespread instrument in many countries, means that state or local governments designate funds to go to particular types of projects.

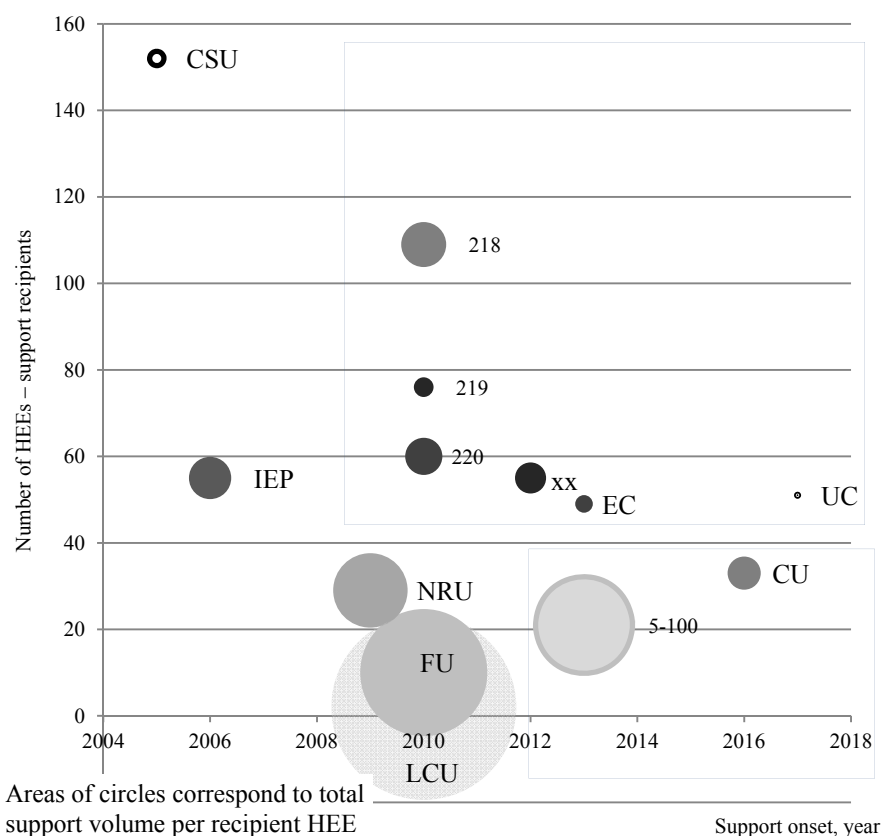


Fig. 18. The distribution of financial support instruments targeting the scientific research and innovative activities of higher educational institutions, by launch year and by number of support recipients, as of end year 2017

Source: own compilation based on normative legal acts, reporting documents and materials published at the official websites of government agencies, projects, programs, and support instruments.

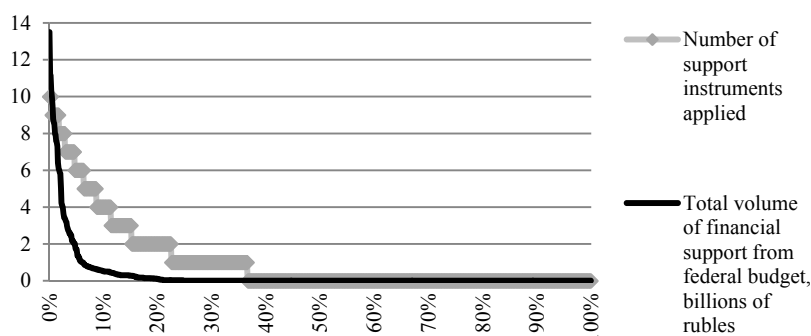


Fig. 19. The distribution of higher educational institutions by number of support instruments and by volume of federal budget funding in 2005–2017

Source: own compilation based on normative legal acts, reporting documents and materials published at the official websites of government agencies, projects, programs, and support instruments.

Sizable chunks of budget funding – no less than RUB 200 million in total over the entire period under consideration – were received by 16 percent of higher educational institutions.

Another, even more vivid, evidence of high concentration of support is that 4 percent of universities accounted for $\frac{3}{4}$ of budget funding, while half of it was allocated to 2 percent, represented by the 'chosen few' with the status of a leading classical university, federal university or national research university, or at least a participant in Project 5-100.

The leaders in terms of the number of directions of government support are not the higher educational institutions situated in Moscow or St. Petersburg, but major regional universities: Tomsk State University, Tomsk Polytechnic University, Samara University, and Ural Federal University. The group of higher educational institutions boasting of having the most comprehensive set of government support instruments at their disposal consists in the main of the habitués of global university rankings; however, there are also several higher educational institutions that are less known, either in Russia or abroad: Altai State University and Petrozavodsk State University.

If we look at the volume of financial support received by higher educational institutions over the period 2005–2017, the topmost positions, quite predictably, will belong to two leading classical universities – Lomonosov Moscow State University and Saint Petersburg State University, both of them also topping the list of Russian universities in QS World University Rankings; and also Ural Federal University and Far Eastern Federal University, also on this list, but with a significantly lower ranking (also compared with the other Russian universities).

On the whole, the pooled data on the volume of financial support received by leading Russian universities and their scores in QS World University Rankings do not provide a definite answer to the question as to whether government support has indeed helped in boosting their competitive capacity on a global scale (at least in terms of that particular ranking). On the one hand, the universities included in the rankings are receiving, as a rule, government support in amounts that look impressive against the general background, while several higher educational institutions, having received sizable support over recent years (primarily in the framework of Project 5-100), notably improved their total ranking score. However, on the other hand, quite a few of Russia's representatives in QS World University Rankings have received a relatively modest volume of financial support through these specific instruments (at least compared with the leaders), while some other higher educational institutions, after receiving sizable budget allocations, still failed to gain a ranking score.

In our opinion, the assumption that government support has a positive effect on the global ranking scores of Russia's higher educational institutions is, at least, not unrealistic, and given that its effect, as noted earlier, oftentimes becomes visible with a significant lag, the successes of those higher educational institutions that have not been included in the rankings, or included with a near-bottom score, may well happen in the nearest future. However, in absence of a comprehensive practical assessment methodology, capable of decomposing a wide spectrum of government support effects on the performance of higher educational institutions and clearing them of other factors, the opposite may also be assumed – that all those measures have helped little in boosting the competitive capacity of Russian universities on a global level, and that their progress in gaining ranking scores has to a certain extent resulted from a favorable combination of circumstances, and also, possibly, from estimations based on artificially generated indices and other parameters necessary for getting that score.

* * *

The competitive potential of a national economy at present strongly depends on the activity of higher educational institutions. The modern leading universities not only perform their educating function, but also actively generate new knowledge and innovations. In the developed industrial countries, for at least two decades already, the trends towards strengthening the role of universities as a source of commercial technology products for businesses have become increasingly visible.¹

In Russia, the 'university sector' has traditionally displayed a relatively modest scale of scientific research and innovative activity. At the same time, for at least a decade, the government has been investing a lot of effort in the development of scientific research and innovative activity at higher educational institutions, and these efforts became increasingly pronounced after 2009, by way of learning lessons from the experiences of the crisis and attributing 'new quality' to economic growth.

In the framework of the government science and innovation promotion policy targeting higher educational institutions, we can distinguish two different, almost perpendicular, directions. The first one envisages substantial support to be granted to a small group of higher educational institutions (the leaders); the new instruments applied in the framework of this direction frequently become an extension of the already existing ones, both in practical and in formal terms, because their launch sometimes requires the participation of higher educational institutions in the previously launched support mechanisms. It is interesting to note that the most notable surge in the development of the relevant set of instruments occurred during the 'inter-crisis' period – from 2010 through 2013. The second direction from the very start was oriented to a broad range of beneficiaries and implied the extension of government support to new 'players', that is why some of its mechanisms impose restrictions on the participation of those higher educational institutions that have previously been involved in other support schemes.

As far as the outcome of the government efforts of promoting scientific research and innovative activity in the higher education sector is concerned, the question has so far remained open. At the same time, one evident (although not totally indisputable) confirmation of the positive results of the first (vertical) plane of government support has been the notable progress of several actively supported higher educational institutions in their global university ranking scores. Meanwhile, the high concentration of government support, and especially its financial component, its repeated pattern, and the small number (relative to the size of the higher education sector) of its constant recipients is indicative, at least, of the insufficient performance of its second (horizontal) plane, oriented to the broadest possible range of recipients. No doubt, the sparse distribution pattern of the formally 'massive-scale' government support instruments among Russian higher educational institutions is the upshot of the weakness and passivity of many of them. However, such a situation has also been caused by the existing restrictions on the ability to get government support, both formal ones, having to do with the form of ownership of a given higher educational institution, its subordination to a certain government department, etc., and also with some informal restrictions, the most important of them being the well-known

¹ See, e.g., *Henderson R., Jaffe A., Trajtenberg M.* Universities as a source of commercial technology: A detailed analysis of university patenting // *Review of Economic and Statistics*. 1998, 80(1). P. 119–127; *Caloghirou Y., Kastelli I., Tsakanikas A.* Internal capabilities and external knowledge sources: complements or substitutes for innovative performance? // *Technovation*. 2004, 24 (1). P. 29–39.

Matthew effect, when the fact of having received government support once increases the organization's chance to gain access to it in the future.¹

On the whole, in spite of a certain growth, over recent years, displayed by the scientific research and innovative activity indices of Russia's universities, this country is still lagging significantly behind the global leaders. In this connection, judging by the results of our analysis of government policy in that sphere, we can note that, although the government support aimed at developing the potential of the national leaders is undoubtedly important, the greatest success in boosting the competitive capacity of higher educational institutions, including their scientific research and innovative activities, can be achieved through promoting the activity of the Russian higher education sector 'at large'. Meanwhile, as demonstrated by the results of previous studies, the budget funding mechanisms traditionally prevailing among the government support measures aimed at higher educational institutions, as well as in some other directions of government support policy, are good for achieving targeted and focused effects, while massive-scale effects are better achieved by means of fiscal instruments, standardization measures, and properly tuned activities of the development institutions, such as the support of innovative startups by the *Innovation Promotion Fund*, or the development of micro-funding infrastructure for small business by MSP Bank.²

6.5. The North Caucasus in 2017: major development trends³

In 2017, the social and economic development of the North Caucasian regions was proceeding amid introduction by the federal center of some new forms of regional economic support. A change in economic policy priorities in the North Caucasus was taking place amid sluggishness of the health resort sector, growing debt accruals for gas- and power supply and prevailing land-related conflicts.

6.5.1. The federal program for development of the North Caucasian federal okrug: a shift in priorities?

In 2017, the main document setting out the federal center's approaches to development of the North Caucasian Federal Okrug's (NCFO) regions was still the State Program for Development of the North Caucasian Federal Okrug approved in 2014. However, the program's funding was substantially cut as compared to the earlier approved funding volumes: by the RF Government Resolution of March 31, 2017 the volume of federal budget allocations for implementation of the program in 2017 was set at RUB 13.9 billion against RUB 31.8 billion planned earlier.

This reduction took place amid introduction into the state program in question of a new component, that is, support which is to be rendered for real economy projects via regional development corporations on the co-financing basis with private businesses. This program component which was put into action in 2017 was announced by Lev Kuznetsov, Minister for

¹ For more details see, e.g., *Crespi F., Antonelli C.* Matthew effects and R&D subsidies: knowledge cumulability in high-tech and low-tech industries. University 'RomaTre'. Departmental Working Papers of Economics, 2011, No 0140.

² See, e.g., *Ivanov D., Kuzyk M., Simachev Yu.* Fostering Innovation Performance of Russian Manufacturing Enterprises: New Opportunities and Limitation // *Foresight*. 2012. V. 6. No 2. P. 18–41; *Simachev Yu., Kuzyk M., Ivanov D.* Russian Financial Development Institutions: Are We on the Right Way? // *Voprosy Ekonomiki*. 2012. No 7. P. 4–29.

³ This section is written by Konstantin Kazenin, the Gaidar Institute, IAES-RANEP.

the North Caucasian Affairs at the meeting of the Government Commission dealing with the issues of social and economic development of the North Caucasian Federal Okrug on October 21, 2016. Lev Kuznetsov said that: “We get down to the new segment of our state program, that is, support for and development of the real sector of the economy... At the first stage, identical limits are set in respect of each subject of the NCFO. It permits us on one side to start on equal grounds, while on the other side to assess effectively the performance of each management team... Agricultural projects are a key niche within the framework of those projects which we expect to carry out.”¹

Out of 15 investment projects rendered support to within this new line of the program in 2017, the Republic of Dagestan, the Chechen Republic and the Republic of Karachayev-Cherkesia started to implement 3 projects each; the Ingush Republic and the Republic of North Osetia-Alania, 2 projects each; the Republic of Kabardino-Balkaria and the Stavropol Territory, one project each. The above projects can be divided into the following three categories: agricultural projects (10), manufacturing projects (3) and tourism-related projects (2). Such a distribution points to the fact that in 2017 the support of projects in manufacturing became a priority in implementing the program. According to the data of the RF Ministry for the North Caucasus, with co-financing taken into account in 2017 investments in projects underpinned by the program amounted to about RUB 9 billion, while implementation of the projects permitted to create 1,800 jobs. It seems that in the course of further implementation of the program the government intends to make an emphasis on co-financed investment projects in regions. As early as November 2016, O. Beisultanov, First Deputy Minister for the North Caucasian Affairs declared that the level of funding of the NCFO's regions under the federal program in 2018-2019 would depend on the 2017 performance of regional subprograms which included such investment projects. However, it is too premature to judge on the efficiency of program-funded projects in 2017.

In implementing large-scale investment projects which profile federal officials regarded as drivers of the NCFO's development in the beginning of the 2010s, no break-through dynamics were observed in 2017. According to the data of the OAO Kurorty Severnogo Kavkaza (Resorts of the North Caucasus), out of six ski resorts which were to be created in the republics of the NCFO building activities were carried out only at three of them: Arkhyz (the Republic of Karachayev-Cherkesia), Elbrus (the Republic of Kabardino-Balkaria) and Veduchi (the Chechen Republic). It is to be noted that RUB 4.2 billion was envisaged by the Law on the 2017 Federal Budget and allocated on implementation of a tourist cluster project in the North Caucasian Federal Okrug; most of the budget allocations were spent on building of the ski resort infrastructure in Chechnya. The analysis of the open source data on the progress in carrying out of resort projects in the North Caucasus permits to identify the following problems which arose in 2017:

1. Even those resorts where in 2015–2016 the tourist infrastructure was largely expanded saw no growth in the number of tourists. According to unofficial estimates published in the mass media, during the 2017/2018 New Year holidays 120,000 people and 60,000 visited ski resorts of the Republic of Karachayev-Cherkesia and the Republic of Kabardino-Balkaria, respectively. A 50 percent growth in the number of tourists at these resorts is within the limits of those fluctuations which are related to weather conditions, so one cannot speak about a progressive increase in the flow of tourists;

¹ <http://government.ru/news/24968/>

2. There are explicitly different levels of investors' interest to projects which are underway in the republics. This is proved by the current number of residents of special economic zones (SEZ) established on the basis of resorts in various regions. For example, out of 28 SEZ residents 27 SEZ residents are registered at the Arkhyz SEZ in the Republic of Karachayevo-Cherkesia, including 3 SEZ residents who appeared there only in 2017 and invested over RUB 1 billion in design and construction jobs. Despite the fact that budget funding of building of resort-based special economic zones continues, private investors do not take much interest in them;

3. There are technical problems related to introduction of unified standards of services at the ski resort complex of the NCFO. According to the data of the OAO Kurorty Severnogo Kavkaza, in 2017 there were difficulties, for example, in introducing a unified ski pass at the resorts of the Republic of Kabardino-Balkaria, the Republic of Karachayevo-Cherkesia and the Chechen Republic. The diverse ownership pattern of these resorts and a lack of consensus between owners are the obstacle.

The above two factors prove the existence of the trend – identified in the 2016 review¹ – towards the “fragmentation” of the ski resort cluster of the North Caucasus: initially planned as a single commercial body, at present it represents standalone recreation entities in different regions with a different level of development, investors' interest and explicit problems related to introduction of any unified service standards.

6.5.2. Problems with accruals of debts for gas and power supply

One of the North Caucasus's most explicit economic problems hindering the development of the region's power generation sector and the economy as a whole is debt accruals for gas and power-supply. In 2017, negative dynamics were observed in that sector. So, in September 2017 the management of the PAO MRSK Severnogo Kavkaza (Interregional Utility Distribution Company of the North Caucasus) declared that the debt accruals for power-supply of the subjects of the North Caucasian Federal Okrug exceeded RUB 22.8 billion, while debt accruals from the beginning of the year amounted to RUB 2.75 billion. In January 2018, the press-service of the PAO MRSK Severnogo Kavkaza stated that ultimate customers' debt for power-supply in the North Caucasus already amounted to RUB 23.6 billion. As regards debts for gas-supply, in September 2017 Viktor Zubkov, Chairman of the Board of Directors of the RAO Gazprom announced that the debt accruals of the North Caucasus for gas-supply exceeded RUB 61 billion. The share of the North Caucasus in the aggregate debt of Russia's residents for gas-supply amounted almost to 84%. Lev Kuznetsov, Minister for the North Caucasian Affairs estimated the debt of the North Caucasian regions for gas-supply and power-supply in H1 2017 at RUB 7 billion and RUB 2 billion, respectively.

In 2017, high-ranking government and corporate officials not only acknowledged publicly the debt problem, but also proposed methods of handling it, mostly through promotion of supervision over the energy consumption, strengthening of responsibility for payments of regional and local authorities and ownership restructuring in the power-supply sector. So, in September Viktor Zubkov, Chairman of the Board of Directors of the PAO Gazprom said that it was necessary to appoint in each populated area of the North Caucasian regions authorized persons responsible for the payment discipline. Commenting on the situation with debt accruals

¹ See: The Russian Economy in 2016. Trends and Prospects. The Gaidar Institute Publishing House, Moscow, 2017.

for power supply in the Republic of Dagestan, Deputy Prime Minister Alexander Khloponin declared the need of consolidating the region's power grids. At the level of the RF Government and top corporate management of large companies, a task was set to resolve the existing debt crisis. It is to be noted that in previous years efforts of federal government and corporate entities to cope with growing debt accruals for gas- and power supply in the North Caucasus did not crown with success. It is noteworthy that in 2017 no new ways of solving this problem were offered by responsible persons at least in the public space. According to numerous expert estimates, high debt accruals for gas- and power supply in the North Caucasus can largely be explained by consumption of power by small enterprises operating without proper registration and paying nothing for electricity consumed (for example, brick-making plants and garment and shoe-making workshops). It appears that the crisis situation with debts cannot be overcome without constant efforts being made to make the economy of the North Caucasus more transparent.

6.5.3. Conflicts at the municipal level

Throughout the entire post-Soviet period, conflicts between different groups of the population or between residents and the government and local authorities taking place at the level of individual municipal entities (districts, towns and rural settlements) have been a major factor of destabilization in the North Caucasus. In 2017, the economic basis for such conflicts was still in place and no solid institutional foundations were created to solve them.

An example of quite a dramatic land-related conflict at the level of the rural municipal district was the developments in the Nogaisky District in the north of Dagestan in July 2017. The situation in that district changed much for the worse after Ramazan Abdulatipov, head of the region appointed the acting head of the district.¹ District assembly deputies refused to approve the decision of the head of the region. After almost two weeks of confrontations with district deputies, the leadership of Dagestan and the district assembly agreed on a compromise candidature of the head of the district. The confrontations were accompanied by numerous meetings of district residents protesting against the decision of the region's leaders; anti-riot police was permanently deployed in the district to maintain law and order.

It is to be noted that unresolved land issues instigated ethnic mobilization in this conflict. Local activists raised the issue of the status of agricultural land plots within the boundaries of the district. Nearly half of agricultural land plots in this and other flat districts of Dagestan are attributed to distant-pasture cattle tending lands,² which under the legislation of the Republic of Dagestan are in the ownership of the government of the region and are leased out to various agricultural organizations, primarily, from mountain districts. The presence of the so-called "external" lessees causes often protests of public activists who position themselves as advocates of the interests of flat land locals (during the abovementioned conflict in the Nogaisky District a group of public activists which opposed the republican authorities held a Congress of the Nogai people and put forward to the leadership of Dagestan demands related to distant-pasture

¹The protesters disrupted the presentation of the head of the Nogaisky District. Kavkaz Uzel. 03.07.2017. <http://www.kavkaz-uzel.eu/articles/305406/> The decision on appointment of Yarlykov as acting head of the Nogaisky District was cancelled. Kavkaz Uzel. July 04, 2017. <http://www.kavkaz-uzel.eu/articles/305487/>.

² See K.Kazenin. The Components of the Caucasus: Land, Power and Ideology in the North Caucasian Republics. Moscow: REGNUM, pp. 24-49.

cattle tending lands¹). A lack both of any decisions on disputed lands and clear-cut conflict resolution procedures put on a hold this situation in which land disputes become a kind of an “asset” used by the sides in their fight for control over municipal entities.

Another municipal level conflict was observed in the North Caucasus in 2017 and it showed that in resolving land disputes in this region there was a great danger of force being used instead of appeals to the law. This conflict is about the land meant for development in the Volny Aul neighborhood of Nalchik, capital of the Republic of Kabardino-Balkaria. In mid-2017, the initiative group representing about 1500 residents of the neighborhood demanded land plots for private housing development being allocated free of charge. The activists referred to the fact that land plots in question belonged in the Soviet period to an agricultural enterprise for which family members of those who now claimed that land used to work. According to the initiative group, those families were entitled to receive that land free of charge for private housing building because they had been on the waiting list from the Soviet days. Initially, the position of the Nalchik City Council was to auction off that land. After the activists expressed their disagreement with the stance of the Nalchik City Council, they declared that pressure, including unlawful detentions of some public activists was exerted on them by law enforcement agencies.² It is to be noted that only interference of regional authorities helped ease tensions around that issue. The problem was resolved through assignment of disputed land plots to the leasehold of the cottage building cooperative established by neighborhood residents for distribution of the land plots among those who needed them. Town council officials who opposed that decision were dismissed.³

The common dominators of all local land-related conflicts are as follows:

- land-related conflicts were not considered by courts of law. They were solved either through interference of the executive authorities or remained unresolved;
- land-related conflicts are becoming the factor of protest mobilization of groups of residents of the North Caucasus.

It is noteworthy that similar specifics of land-related conflicts in the North Caucasian regions were observed in previous years, too. By virtue of the above-stated specifics, land relations remain the factor of social and political tensions in the North Caucasus with explicit lack of lawful instruments being available for resolution of such conflicts.

6.6. Military economy and military reform in Russia⁴

6.1.1. Military recruitment and social security policy

The number of Russian Armed Forces (RFAF) authorized strength at year-end 2017 increased 17,387 to 1,903,758 on the back of disbandment of the Federal Special Construction Agency (Spetsstroy); therefore, the RFAF’s total authorized strength rose to 1,013,628 from

¹ The Nogai People Congress participants stated that the confrontation with the authorities of Dagestan was growing. Kavkaz Uzel. July 17, 2017. <http://www.kavkaz-uzel.eu/articles/304488/>

² Nalchik city residents’ fight for land led to mass detentions. Kavkaz Uzel. October 31, 2017 <http://www.kavkaz-uzel.eu/articles/311852/>

³ Allocation of land plots inspired Volny Aul residents. Kavkaz Uzel. February 15, 2018. <http://www.kavkaz-uzel.eu/articles/316583/>

⁴ This section is written by Vasily Zatsëpin, RANÉPA (Sub-sections 6.6.1–6.6.3); [Vitaly Tsymbal](#), RANÉPA (Sub-sections 6.6.1–6.6.2).

1 million.¹ That was the first time when data on RFAF's authorized war strength (1,700,000) were published by mass media, posting a substantial decrease from 5 million reported prior to the military reform of 2008-2012.²

The Russian Defense Ministry did not publish 2017 year-end service personnel statistics like it did in previous years; therefore, the total accountable strength presumably decreased to 240,000 from previous year's 270,000 as a result of a 35,000 (13 percent) decline in the number of conscript personnel.³ Overall, the 2017 total number of conscript personnel inflow stood at 276,000, or 31,000 (10 percent) less than in 2016.⁴

The accountable strength of contracted privates and sergeants remained unchanged (384,000) during the year, suggesting that the Defense Ministry opted not to increase the number to 425,000, as was planned for 2017,⁵ on the ground that 384,000 was an optimal strength at the time.

Military pay in Russia were not indexed for inflation in 2017, remaining at the level of 2016 (an average of Rb 63.6 thousand)⁶ as military pensions were raised, since February 01, 2017, by 4 percent to an average of Rb 23.5 thousand.

In 2017, 10,000 (half of the previous year's 20.4 thousand) of Defense Ministry service personnel were provided with permanent housing. The Defense Ministry's housing wait list comprised 32.1 thousand persons at year-end, adding 2.3 thousand to the previous year's number, thus suggesting that the service housing problem will not be solved until 2021.⁷

In 2017, more than 31,000 of Defense Ministry service personnel received service housing (29.2 thousand a year earlier). The number of service personnel entitled to housing allowances almost doubled in 2017, increasing to 107.7 thousand from 59,000.⁸ The momentum of key housing indicators suggests that the Defense Ministry will not be able to solve the service housing problem by the end of 2018, as was anticipated early in 2014.⁹

In 2017, according to data from the Chief Military Investigation Department, military investigation authorities received 32.6 thousand offence reports. The number of offences in the Armed Forces dropped 2 percent as the number of corruption-related offences under jurisdiction of military investigation decreased by 14 percent.¹⁰

Russian public attitudes towards the RFAF saw further improvement in 2017, as evidenced by data from a November public opinion survey of the Russian Public Opinion Research

¹ Executive order No. 127 dated March 28, 2017 'Concerning Amendments to Executive order of the President of the Russian Federation' No. 329 of July 08, 2016 'Concerning Authorized Strength of the Armed Forces of the Russian Federation'; Executive order No. 555 of November 17, 2017 'Concerning the Establishment of Authorized Strength of the Armed Forces of the Russian Federation'.

² Mobilization scales // Vedomosti. February 13, 2017 (No. 26). P. 3. URL: <https://www.vedomosti.ru/politics/articles/2017/02/13/677314-mobilizatsiyu-gubernatori> (accessed date: February 13, 2017).

³ An expanded meeting of the Russian Defense Ministry Board. Balashikha, December 22, 2017. URL: <http://www.kremlin.ru/events/president/news/56472> (accessed date: December 25, 2017).

⁴ Russian President's executive orders No. 135 dated March 30, 2017 and No. 445 dated September 27, 2017.

⁵ Sub-paragraph 'd', Paragraph 1 of Russian President's executive order No. 604 dated May 07, 2012.

⁶ *Semenov D.* A military economy strategy // *Krasnaya Zvezda.* October 30, 2017 (No. 121). P. 1.

⁷ See *Semenov D.* An "army" of new tenants.

⁸ *Ibid*

⁹ A progress report regarding the Defense Ministry's action plan for the implementation in 2013 of the Russian President's executive orders No. 597, 601, 603, 604, 605 dated May 07, 2012. M., January 22, 2014. URL: <http://mil.ru/files/files/result2013/10-planMO2013.html> (accessed date: November 22, 2017).

¹⁰ *Gavrilov Yu.* Corruption with a negative sign // *Rossiyskaya Gazeta.* February 06, 2018. (No. 27).

Center.¹ In fall 2017, 62 percent of respondents said the RFAF were in excellent/good condition, another 24 percent said they were in normal condition, whereas 5 percent said they were in bad condition. Two years ago, 49 percent of respondents said the RFAF's condition was good, 40 percent said it was well, whereas 8 percent said it was bad or very bad. In fall 2017, 86 percent of respondents said Russia's defense capability was getting stronger, whereas only 2 percent said it was weakening, and 9 percent claimed it remained unchanged. Forty two percent of respondents said Russia's defense capability was strengthening due to weapons modernization. However, there was a substantial increase in the number service personnel's wives viewing the military service as a hazardous job.²

6.6.2. Military-technical policy

While Russia's military-technical policy continued in 2017 as part of the National Armaments Program (NAP) for 2011–2020 and the Basics of Military-Technical Policy of the Russian Federation for the Period up to 2025 and Beyond, as confirmed by Russian President Vladimir Putin in May 2012³, stakeholders' efforts were focused on drafting a new national armaments program for 2018–2027.

President Vladimir Putin held two regular days-long sessions in May and in November to discuss various aspects regarding the NAP and the development of the Military-Industrial Complex (MIC). Furthermore, the Military-Industrial Commission held two sessions in January and in September 2017 to discuss the fulfillment of the government defense contract (GDC), the development of RFAF's armaments system and strengthening of MIC companies and organizations.⁴

Overall, according to data from the Russian Defense Ministry, the 2017 GDC was fulfilled.⁵ Therefore, three regiments (four regiments a year earlier) of the Strategic Missile Forces (SMF) were re-equipped with YARS systems (a Russian MIRV-equipped, thermonuclear armed intercontinental ballistic missile) as the Aviation Strategic Nuclear Forces received three modernized aircrafts (four aircrafts in 2016). The Ground Forces received 2,055 new and modernized weapons (2,930 in 2016). The Aerospace Forces (ASF) received 191 up-to-date aircrafts and helicopters (139 in 2016). The Navy (Navy) received 23 ships, boats and vessels (26 a year earlier). In addition, 59 unmanned aircraft systems comprising 199 unmanned aerial vehicles were manufactured and delivered to the Army last year (105 systems with 260 unmanned aerial vehicles in 2016).

Therefore, the Strategic Nuclear Forces saw an increase in up-to-date arms of 19 percentage points to 79 percent over 2016 (+5 percentage points a year earlier), the ASF – 6 percentage points to 73 percent (+12 percentage points in 2016), the Navy – 6 percentage points to

¹ Russian Army: Public opinion. // VTSIOM. Press release. November 08, 2017 (No. 3509).

² The ghost of the Fatherland defender // Ogonyok. February 19, 2018 (No. 6).

³ Executive order No. 603 dated May 07, 2012 On the Fulfillment of Construction Plans (Programs) and Improvement of the Russian Armed Forces, Other Troops, Military Units and Agencies and Modernization of the Defense Industry.

⁴ A session of the Military-Industrial Commission. Moscow, January 26, 2017. URL: <http://www.kremlin.ru/events/president/news/53782> (accessed date: January 26, 2017); *ibid.* Moscow, September 19, 2017. URL: <http://www.kremlin.ru/events/president/news/55653> (accessed date: September 19, 2017).

⁵ An expanded meeting of the Russian Defense Ministry Board. M., December 22, 2017. URL: <http://www.kremlin.ru/news/56472> (accessed date: December 22, 2017).

53 percent (+8 percentage points a year earlier), and the Russian Ground Forces – 3 percentage points to 45 percent (+7 percentage points in 2016).¹

In 2017, according to the Russian Defense Minister, the Army and Navy were 59.5 percent equipped with up-to-date arms, an increase of 1.2 percentage points over 2016, or less than *one third* of the growth (3.7 percentage points) promised earlier in the year,² which seems unexplainable given that the GDC 2017 was fulfilled in general. Such an abnormally slow growth in the NAP key indicator in 2017 is in sharp contrast to the above figures of growth in equipment with arms across all services and branches of the Armed Forces. 2016 saw an increase of 11.1 percentage points in up-to-date arms.

We analyzed the Defense Ministry’s efficiency in spending of NAP appropriations in 2011–2017 (Fig. 20) using Federal Treasury’s data on federal budget expenditure on the Defense Ministry GDC, Russian Accounts Chamber’s data on commercial loans backed by government guarantees for the same purpose, as well as Defense Ministry’s data on growth in up-to-date arms and equipment (UTDAE)³ and on Ministry’s repayment of commercial loans.⁴ The analysis revealed that the NAP key indicator originally planned for 2017 – “more than a 62 percent level of up-to-date arms” – reflects an expenditure of less than Rb 400 billion per percentage point of growth over the previous year. Although the figure is massively more than that in 2014–2016, it represents a spending efficiency similar to that in 2012 and 2013. The spending level reached Rb 1220.1 billion in 2017.

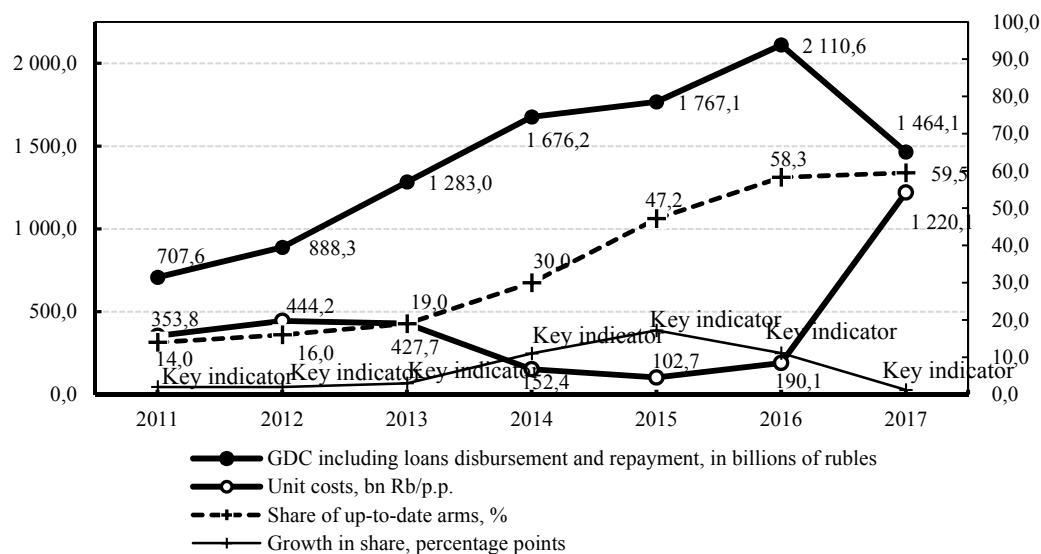


Fig. 20. Defense Ministry’s efficiency in spending of NAP appropriations in 2011–2017

Sources: The Federal Treasury of Russia; The Accounts Chamber of the Russian Federation; The Russian Defense Ministry; own calculations.

¹ An expanded meeting of the Russian Defense Ministry Board. M., December 22, 2017. URL: <http://www.kremlin.ru/news/56472> (accessed date: December 22, 2017).

² Sergei Shoigu: “This year the Ministry of Defense is set to ... reach a new level of more than 62 percent of equipment with up-to-date armaments in the constant combat readiness forces”. State Duma’s shorthand report dated February 22, 2017 URL: <http://transcript.duma.gov.ru/node/4606/> (accessed date: March 07, 2017).

³ Avdeev Yu. Research-based focus // *Krasnaya Zvezda*. November 01, 2017 (No. 122). P. 6.

⁴ The Russian Defense Ministry saved 130 billion rubles in 2016–2017 through early loans repayment. URL: https://function.mil.ru/news_page/country/more.htm?id=12155560@egNews (accessed date: January 15, 2018).

In other words, if Defense Ministry's and MIC's spending efficiency in 2017 had remained at the 2014–2016 level, the equipment with up-to-date arms would have ranged between 66.0 to 72.6 percent, and even if spending efficiency had fallen to values seen in 2011–2013, the level of equipment with up-to-date arms would have been within a range of 61.6–62.4 percent. The declared NAP fulfillment indicator of 59.5 percent means that the MIC spent inefficiently about Rb 1 trillion of 2017 federal budget allocations for the Defense Ministry GDC to fulfill the NAP.

6.6.3. Military financial policy

The Federal budget 2017 was adjusted twice, in July and in November.¹ Appropriations within the 'National Defense' section were initially set at Rb 2 trillion 836 billion by the Federal Budget Act 2017,² posting a decline of Rb 940 billion (or 24.9 percent) from earlier year's actual amount spent.³ In July, appropriations rose Rb 39 billion (1.4 percent) to Rb 2 trillion 875 billion with a more substantial increase of Rb 175 billion (6.1 percent) to Rb 3 trillion 50 billion (3.3 percent of GDP) late in the year. Both the latest and previous year's increase were driven by the need to repay commercial loans backed by government guarantees to finance GDC in 2013–2014.

All the above indicators for military appropriations can be found in federal budget bills, not in published legal acts. Confidential federal budget revenues in 2017 were rolled back to the 2015 level (see *Table 26*) as confidential expenditure stood at Rb 2 trillion 833 billion (3.1 percent of GDP).

Table 26

Confidential federal budget expenditure in 2008–2017, %

Code and section (subsection) containing confidential expenditure	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	2	3	4	5	6	7	8	9	10	11
Total federal budget expenditure	11.1	10.1	10.5	11.7	11.6	13.8	14.9	19.1	21.7	17.3
0100 NATIONAL MATTERS	7.4	5.6	5.9	10.4	11.4	10.1	10.1	15.1	12.5	14.6
0107 Administration and conduct of elections and referendums	–	–	–	–	–	–	–	–	–	1.5
0108 Foreign affairs and international cooperation	<0.1	–	–	–	–	<0.1	1.4	24.1	23.1	26.5
0109 National material reserves	89.7	84.6	83.9	85.6	86.5	86.1	86.7	87.2	84.1	86.6
0110 Basic research	0.9	0.7	0.2	0.5	0.8	0.7	0.8	0.8	0.8	0.6
0112 Applied scientific research regarding national matters	–	–	–	–	0.3	0.3	0.8	0.7	–	–
0114 Other national matters	1.1	1.9	1.9	1.7	1.6	3.6	5.1	5.3	3.4	4.4
0200 NATIONAL DEFENSE	45.9	47.7	46.5	45.4	47.5	50.4	56.0	65.4	70.5	63.9
0201 Russian Federation Armed Forces	38.9	39.2	37.8	39.3	40.7	46.7	52.0	65.3	69.0	60.5
0204 Mobilization preparation of the economy	100	100	100	100	100	100	100	100	100	100

¹ Federal Act No. 415-FZ of December 19, 2016 'Concerning the Federal Budget for 2017 and the Planning Period Until 2018 and 2019'; Federal Act No. 157-FZ of July 01, 2017 'Concerning Amendments to Federal Act 'Concerning the Federal Budget for 2017 and the Planning Period Until 2018 and 2019'; Federal Act No. 326-FZ of November 14, 2017 'Concerning Amendments to Federal Act 'Concerning the Federal Budget for 2017 and the Planning Period Until 2018 and 2019'.

² Attachment 2 to the Accounts Chamber's report regarding a federal bill 'Concerning Amendments to Federal Act 'Concerning the Federal Budget for 2017 and the Planning Period Until 2018 and 2019', approved by Accounts Chamber Panel's minutes No. 35K(1180) dated June 05, 2017.

³ Federal Act No. 287-FZ of October 16, 2017 'Concerning the Federal Budget Execution for 2016'.

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1	2	3	4	5	6	7	8	9	10	11
0206 Nuclear weapons complex	100	100	100	100	100	100	100	100	100	100
0207 Fulfillment of international obligations under military-technology cooperation projects	100	100	100	100	61.6	80.6	76.7	80.8	77.6	76.9
0208 Applied science research in national defense	93.0	92.9	91.7	92.4	92.9	94.3	92.1	91.7	96.3	95.7
0209 Other matters regarding national defense	29.9	37.1	48.0	35.0	48.6	34.6	46.9	38.8	41.8	55.6
0300 NATIONAL SECURITY AND LAW ENFORCEMENT	31.3	31.0	31.5	31.6	24.0	26.6	27.1	28.4	29.1	29.4
0302 Internal affairs agencies	5.0	3.7	4.2	3.9	3.3	3.8	3.9	4.9	5.8	5.8
0303 Internal Troops	10.3	8.2	8.2	7.4	4.6	4.4	5.3	6.9	—	—
0303 Federal National Guard Troops	—	—	—	—	—	—	—	—	7.7	7.0
0304 Agencies of justice	—	—	—	—	—	—	—	—	3.2	3.4
0306 Security service agencies	98.9	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8
0307 Border guard agencies	100	99.5	98.6	99.2	99.1	99.6	99.9	100	100	100
0309 Protection of population and territories from natural and man-made emergencies, civil defense	50.3	50.0	48.6	44.5	41.6	38.5	39.1	39.7	45.7	49.1
0313 Applied scientific research in national security and law enforcement	75.1	75.0	91.4	86.6	86.6	82.5	82.7	91.2	90.5	92.4
0314 Other matters regarding national security and law enforcement	49.3	60.6	49.9	12.4	12.1	11.8	44.8	60.7	59.3	58.2
0400 NATIONAL ECONOMY	1.1	0.8	1.4	1.9	2.5	4.7	3.6	5.5	7.0	9.5
0403 Exploration and use of outer space	—	—	—	—	—	—	—	—	—	56.3
0408 Transport	—	—	—	—	—	0.1	—	0.2	—	—
0410 Communications and information technologies	—	—	—	—	<0.1	1.8	2.0	0.5	—	—
0411 Applied scientific research in national economy	6.0	4.5	5.4	11.9	15.3	18.3	23.8	26.7	14.2	17.6
0412 Other matters regarding national economy	1.3	0.9	2.9	2.2	2.5	9.4	2.9	8.0	17.3	18.2
0500 HOUSING AND UTILITIES	6.7	9.5	15.0	13.8	6.7	9.1	9.7	4.3	7.8	1.4
0501 Housing development	14.5	11.4	19.1	20.2	8.6	16.8	25.0	12.0	22.3	7.7
0700 EDUCATION	2.8	2.9	3.2	4.0	3.3	3.8	4.1	3.3	3.1	3.1
0701 Pre-primary and primary education	2.8	3.6	3.5	3.7	3.2	0.7	0.8	1.2	7.2	6.8
0702 General secondary education	2.0	2.9	2.7	0.7	0.3	0.5	1.1	1.0	0.6	0.8
0704 Secondary vocational education	0.9	0.2	—	—	—	—	—	—	—	—
0705 Vocational training, retraining and advanced training	1.6	2.6	11.8	18.1	11.3	4.5	2.8	2.9	3.4	2.5
0706 Higher and postgraduate vocational education	3.3	3.4	3.6	5.0	4.1	4.9	5.1	3.9	3.6	3.7
0709 Other matters regarding education	0.4	0.6	0.5	0.3	0.4	0.5	0.9	1.2	0.9	—
0800 CULTURE, CINEMATOGRAPHY, MASS MEDIA	0.2	0.2	0.2	—	—	—	—	—	—	—
0800 CULTURE, CINEMATOGRAPHY	—	—	—	0.1	0.1	0.1	0.1	0.1	0.2	0.2
0801 Culture	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0804 Print media and publishing	2.7	3.1	3.3	—	—	—	—	—	—	—
0900 HEALTHCARE, PHYSICAL CULTURE AND SPORTS	3.4	2.9	2.8	—	—	—	—	—	—	—
0900 HEALTHCARE	—	—	—	2.4	2.1	2.8	2.6	2.6	2.9	3.4
0901 Inpatient medical care	2.9	1.9	1.8	2.1	1.5	2.3	1.6	1.7	1.9	3.3
0902 Outpatient medical care	3.7	3.6	4.6	2.3	2.3	3.3	3.0	2.6	3.3	2.7
0905 Health resort and wellness services	14.5	14.7	11.0	10.0	10.6	12.3	14.6	15.3	16.1	17.1
0907 Sanitary and epidemiological welfare	0.7	0.2	0.5	0.6	0.7	0.7	0.6	0.7	0.7	0.7
0908 Physical culture and sports	0.5	0.6	0.8	—	—	—	—	—	—	—
0910 Other matters regarding healthcare, physical culture and sports	1.7	1.2	0.9	—	—	—	—	—	—	—
0909 Other matters regarding healthcare	—	—	—	0.4	0.3	0.4	0.6	0.4	0.5	0.7
1000 SOCIAL SECURITY POLICY	<0.1	<0.1	—	—	0.1	0.1	<0.1	0.1	0.1	0.1
1001 Retirement benefits	—	—	—	—	—	—	—	0.1	0.1	0.1

Cont'd

1	2	3	4	5	6	7	8	9	10	11
1003 Social protection	<0.1	<0.1	–	–	0.3	0.4	0.1	0.2	0.3	0.4
1004 Family and child welfare	–	–	–	–	–	<0.1	<0.1	<0.1	<0.1	–
1100 PHYSICAL CULTURE AND SPORTS	–	–	–	0.2	0.3	0.3	0.3	0.2	0.3	0.2
1101 Physical culture	–	–	–	62.0	4.9	6.9	7.6	3.8	3.6	5.2
1200 MASS MEDIA	–	–	–	0.2	0.2	0.4	0.4	0.3	2.2	0.3
1202 Print media and publishing	–	–	–	2.9	3.1	5.0	5.4	4.5	5.1	5.4
1204 Other matters regarding mass media	–	–	–	–	–	–	–	–	12.9	–

Sources: Federal Budget Execution Acts for 2008–2016, 2017 – Federal Treasury’s monthly progress reports on consolidated and federal budgets for December 2017. Data for 2008–2010 are presented with regard to respective sections and subsections of the budget expenditure classification in force since 2011. Data from the old budget classification are written in italics.

Table 27 presents absolute and relative values of the key components of direct military spending in the 2017 federal budget and their change in nominal terms over 2016,¹ based on Federal Treasury monthly reports on the execution of consolidated and federal budgets for December 2017.

Table 27

Direct military spending under ‘National Defense’ section, 2017

Section and subsections	Total expenditure, in millions of rubles	% change over 2016, rubles in millions (growth, %)	Expenditure (% change over 2016, p.p.)	
			Federal budget 2017	as a percentage of GDP
NATIONAL DEFENSE	2.852.230	–923,075 (–24.45)	17.37 (–5.63)	3.10 (–1.29)
Russian Federation Armed Forces	2.219.075	–716,560 (–24.41)	13.51 (–4.37)	2.41 (–1.00)
Mobilization and out-of-forces preparation	6.636	–231 (–3.36)	0.04 (–)	0.01 (–)
Mobilization preparation of the economy	3.351	–236 (–6.57)	0.02 (–)	<0.01 (–)
Nuclear weapons complex	44.437	–1.185 (–2.60)	0.27 (–0.01)	0.05 (–)
Fulfillment of international obligations under military-technology cooperation projects	8.823	–1.041 (–10.56)	0.05 (–0.01)	0.01 (–)
Applied science research in national defense	270.499	–200.777 (–42.60)	1.65 (–1.22)	0.29 (–0.25)
Other matters regarding national defense	299.453	–3.045 (–1.01)	1.82 (–0.02)	0.33 (–0.03)

Sources: The Federal Treasury of Russia; own calculations.

Overall, expenditure within the ‘National Defense’ section in 2017 were Rb 198 billion less than what was planned in the November version of federal budget act, mainly because the Defense Ministry transferred Rb 140 billion of UTDAE purchase and repair allocations and Rb 65 billion of R&D allocations for the GDC as part of the NAP back to the federal budget. The money transfer decision was made by the Defense Ministry and supported by the Russian President in order to prevent further increase in Ministry’s payables for advanced payments that were made two weeks after the date of signing the latest amendment to the federal budget 2017, because by December 1st the GDC was faced with a threat of non-execution worth Rb 250–300 billion.² *Fig. 21* shows the developments regarding Defense Ministry’s payables for advanced payments that unfolded shortly before the decision was made.

¹ Pursuant to Federal Act No. 287-FZ dated October 16, 2017 ‘Concerning the Federal Budget Execution for 2016’.

² *Falichev O.* The Ruble to fight terrorists // *Voенно-Promyshlenny Kurier*. January 10, 2018. (No. 1).

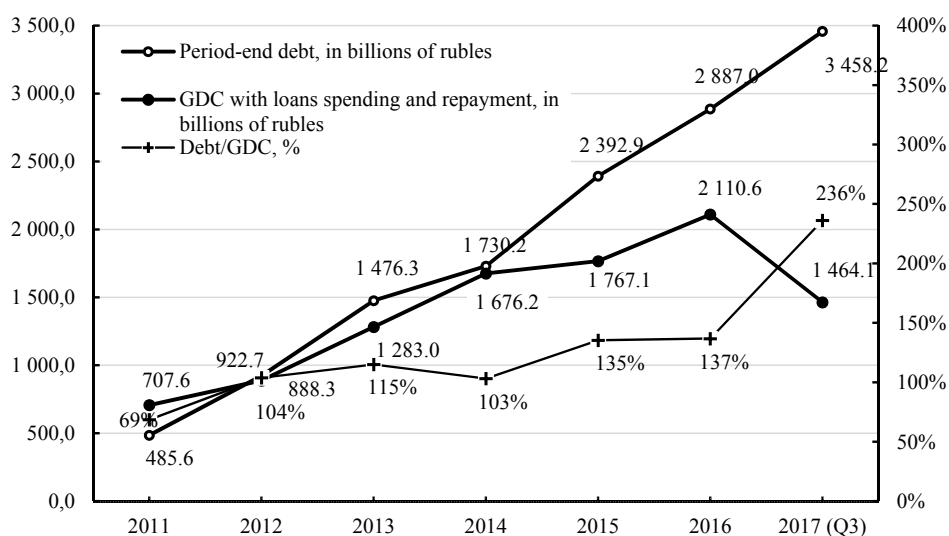


Fig. 21. Defense Ministry's payables for advance payments, 2011–2017

Sources: The Federal Treasury of Russia; The Accounts Chamber of the Russian Federation; own calculations.

The foregoing money transfers possibly helped the Defense Ministry to “manage to overcome adverse trends related to advanced payments in the industry and full payment of non-executed contracts”.¹

Military spending under other federal budget sections are presented in Table 28. The spending structure saw no serious changes compared with the previous year. Federal National Guard Service expenditure emerged in another four sections of the budget expenditure classification, and the target expenditure item ‘Mobilizational preparation of government agencies’ made explicit those federal budget expenditure in various expenditure classification sections which used to be mostly within the ‘Reimbursement Subsidies for Maintenance Costs of Special-Purpose Facilities’ section. Biggest absolute gains were seen in expenditure on the Defense Ministry, the Federal National Guard Service, confidential expenditure within the ‘National Economy’ section and expenditure on military survivor benefits and war disablement benefits within the ‘Social Security Policy’ section.

Table 28

Direct and indirect military spending under other sections of federal budget, 2017

Subsection, target item or type of expenditure	Total expenditure, rubles in millions	% change over 2016, rubles in millions (growth, %)	Expenditure (% change over 2016, p.p.)	
			Federal budget 2017	as a percentage of GDP
1	2	3	4	5
‘National Matters’				
<i>Defense Ministry expenditure</i>	9	-13 (-59.50)	<0.01 (-)	<0.01 (-)
Mobilizational preparation of government agencies	103	103 (-)	<0.01 (-)	<0.01 (-)
‘National Security’ and ‘Law Enforcement’				
Federal National Guard Service	222.588	106.169 (91.19)	1.36 (0.65)	0.24 (0.11)
Border guard agencies	140.386	10 406 (8.01)	0.85 (0,06)	0.15 (-)
Mobilizational preparation of government agencies	23	23 (-)	<0.01 (-)	<0.01 (-)

¹ See An expanded meeting of the Russian Defense Ministry Board.

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7	2	3	4	5
'National Economy'				
Mobilizational preparation of government agencies	124	124 (-)	<0.01 (-)	<0.01 (-)
"Destruction of chemical weapons stockpiles in the Russian Federation" Presidential program	348	-167(-32.35)	<0.01 (-)	<0.01 (-)
Subsidies to the Russia-NATO Coordination Center	19	-1 (-6.00)	<0.01 (-)	<0.01 (-)
"Industrial Recycling of Weapons and Military Equipment (2011–2015) and Until 2020" Federal Special Program	13	-36 (-73.58)	<0.01 (-)	<0.01 (-)
<i>Capital construction within GDC</i>	6.971	-291 (-4.01)	0.04 (-)	0.01 (-)
<i>Contributions to charter capitals and grants to MIC organizations</i>	4.268	-30.821 (-87.84)	0.03 (-0.19)	<0.01 (-0.04)
<i>Confidential expenditure</i>	234.119	73.603 (45.85)	1.43 (0.45)	0.25 (0.07)
'Housing and Utilities'				
<i>Defense Ministry expenditure</i>	45.923	44.591 (3332.40)	0.28 (0.27)	0.05 (0.05)
<i>Federal National Guard Service expenditure</i>	2.283	2 283 (-)	0.01 (0.01)	<0.01 (-)
"Destruction of chemical weapons stockpiles in the Russian Federation" Presidential program	2	-431 (-99.52)	<0.01 (-)	<0.01 (-)
'Education'				
<i>Defense Ministry expenditure</i>	73.777	-1.915 (-2.53)	0.45 (-0.01)	0.09 (-)
<i>Federal National Guard Service expenditure</i>	4.782	4.782 (-)	0.03 (0.03)	0.01 (0.01)
Mobilizational preparation of government agencies	1	1 (-)	<0.01 (-)	<0.01 (-)
'Culture and Cinematography'				
<i>Defense Ministry expenditure</i>	3.761	702 (22.96)	0.02 (-)	<0.01 (-)
<i>Federal National Guard Service expenditure</i>	275	275 (-)	<0.01 (-)	<0.01 (-)
Mobilizational preparation of government agencies	4	4 (-)	<0.01 (-)	<0.01 (-)
'Healthcare'				
<i>Defense Ministry expenditure</i>	58.697	2.387 (4.24)	0.36 (0.01)	0.06 (-)
<i>Federal National Guard Service expenditure</i>	4.375	4.375 (-)	0.03 (0.03)	<0.01 (-)
<i>Medicines provision to ZATO FMBA</i>	7	7 (-)	<0.01 (-)	<0.01 (-)
'Social Security Policy'				
<i>Defense Ministry expenditure</i>	487.794	21.373 (4.58)	2.97 (0.13)	0.53 (-0.01)
<i>Expenditure on Federal National Guard Service and Border Guard Agencies</i>	71.805	29.516 (69.63)	0.44 (0.18)	0.08(0.03)
Material support to specialists of the Russian Federation nuclear weapon complex	7.327	-3 (-0.04)	0.04 (-)	0.01 (-)
Military survivor benefits and war disablement benefits	14.333	1.384 (10.69)	0.09 (0.01)	0.02 (-)
Lump sum pregnancy benefit to the pregnant spouse of a conscript, as well as monthly child benefit per child of a conscript	926	-26 (-2.75)	0.01 (-)	<0.01 (-)
Mobilizational preparation of government agencies	6	6 (-)	<0.01 (-)	<0.01 (-)
'Physical Culture and Sports'				
<i>Defense Ministry expenditure</i>	3.717	-1.634 (-30.53)	0.02 (-0.01)	<0.01 (-)
'Mass Media'				
<i>Defense Ministry expenditure</i>				
Mobilizational preparation of government agencies	4	4 (-)	<0.01 (-)	<0.01 (-)
'General Intergovernmental Transfers Within the Budget System of the Russian Federation'				
Subsidies to ZATO budgets	9.449	-503 (-5.05)	0.06 (-)	0.01 (-)
Relocation of persons from ZATOs	447	1 (0.31)	<0.01 (-)	<0.01 (-)
TOTAL UNDER OTHER SECTIONS	1,402,584	267.098 (20.09)	8.54 (1.62)	1.52 (0.20)

Sources: The Federal Treasury of Russia; own calculations.

All in all, in 2017 total federal budget defense appropriations (see *Table 29*), calculated by the UN Standardized Reporting Instrument for Military Expenditures, dropped 1.1 percentage points year-over-year to 4.6 percent of GDP.

Table 29

Total military and related federal budget spending in 2017

Expenditure	Total expenditure, rubles in millions	% change over 2016, rubles in millions (growth, %)	Expenditure (% change over 2016, p.p.)	
			Federal budget 2017	as a percentage of GDP
Total military spending related to recent and past military activities	4,254,857	-655.976 (-16.22)	25.91 (-4.00)	4.62 (-1.08)
Total expenditure under 'National Defense' and 'National Security and Law Enforcement' sections	4,770,299	-903.711 (-19.99)	29.05 (-5.51)	5.18 (-1.41)

Sources: The Federal Treasury of Russia; own calculations.

In 2017, the peak of expenditure Rb 1.007 billion (35.3 percent of allocations under the federal budget act) within the 'National Defense' section fell on the fourth quarter (27.6 percent in the first quarter) despite the transition to GDC quarterly pre-financing and a marked expenditure cut at year end. According to the consolidated federal budget quarterly revenue/expenditure sheet, the spending limit for 'National Defense' allocations set forth by the federal budget act was exceeded most (Rb 27 billion) in March.

In 2017, Defense Ministry's service personnel costs amounted to Rb 489 billion 930 million (0.53 percent of GDP), a 3.5 percent increase over 2016 (Rb 473 billion 536 million a year earlier). Defense Ministry's civil personnel payroll stood at Rb 198 billion 400 million (0.22 percent of GDP), Rb 589 million less than previous year's amount. In 2017, Defense Ministry service personnel retirement benefits amounted to Rb 339 billion 330 million (0.37 percent of GDP), adding 3.8 percent to previous year's value.

In 2017, Defense Ministry's costs on combustibles and lubricants (C&L) and subsistence support dropped 15 and 2.6 percent year-over-year, respectively. Defense Ministry's expenditure on clothing supply also contracted 6.9 percent to Rb 27 billion 256 million.

In 2017, Defense Ministry's budget investments in capital construction projects contracted 23.2 percent year-over-year to Rb 121 billion 911 million (0.13 percent of GDP). However, Defense Ministry's expenditure within the 'Housing and Utilities' section (*Table 28*) increased more than 30-fold to Rb 45 billion 923 million (0.05 percent of GDP) on the back of discontinued outsourcing and recovered departmental utilities system since April 2017.

Table 30 presents our assessment of credit financing contribution in Russia's military spending in 2011–2017 based on Russian Accounts Chamber's data on actual execution of government guarantees for GDC crediting, as well as commercial loans repayment data from the Accounts Chamber and the Defense Ministry. Conservative estimate of a single annual rate of 10,3 percent was used as a first approximation to calculate a bank premium. The total credit scheme contribution for each year is defined as the difference between exercised guarantees and the credit/loan principal.

Table 30

Credit financing contribution to Russian military spending, 2011–2017

	2011	2012	2013	2014	2015	2016	2017	2011–2017
1	2	3	4	5	6	7	8	9
Exercised guarantees, in billions of rubles	123.2	187.7	350.5	470.9	8.5	200.8	–	1,341.6
Repaid loans, in billions of rubles, of which:	–	–	–	–	182.3	792.0	186.8	1,161.1
principal repayment, in billions of rubles	–	–	–	–	123.2	568.5	137.4	829.0

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1	2	3	4	5	6	7	8	9
bank premium, in billions of rubles	–	–	–	–	59.1	223.5	49.4	332.1
Total credit scheme contribution, in billions of rubles	123.3	187.7	350.5	470.9	–114.7	–367.6	–137.4	–
Total credit scheme contribution, as a percent of GDP	0.20	0.28	0.48	0.59	–0.14	–0.43	–0.15	–

Sources: The Federal Treasury of Russia; The Russian Defense Ministry; own calculations.

Table 31 presents Russia's military spending in the period of 2007–2017, including 1 billion Rb 932 million within total consolidated expenditure as part of the 'National Defense' section of consolidated budgets of subjects of the Russian Federation in 2017 and credit financing contribution in 2011–2017, as shown in Table 30.

Table 31

Russia's key military spending indicators, 2007–2017

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	2	3	4	5	6	7	8	9	10	11	12
1. In nominal terms (at current prices), in billions of rubles											
Federal budget appropriations under 'National Defense' section: within the existing budget classification system	839.1	1 031.6	1 192.9	1 278.0	1 537.4	1 846.3	2 111.7	2 470.6	3 163.8	3 895.4	3 049.8
Federal budget expenditure outturns under 'National Defense' section within the existing budget classification system ^a	831.9	1 040.8	1 188.2	1 276.5	1 516.0	1 812.3	2 103.6	2 479.1	3 181.4	3 775.3	2 852.3
Russian Federation's military spending, according to data submitted to the UN ^b	942.0	1 118.0	1 166.1	1 162.5	1 423.3	1 689.3	1 660.1	1 962.1	2 903.3	2 055.7	–
Total military spending related to recent and past military activities ^c	1 133.5	1 448.8	1 748.7	1 880.3	2 267.1	2 841.9	3 344.0	3 928.8	4 197.6	4 545.4	4 119.4
2. In real terms (at 2017 prices),^d in billions of rubles											
Federal budget appropriations under 'National Defense' section: within the existing budget classification system	1 947.1	2 029.2	2 300.7	2 158.7	2 240.3	2 466.2	2 676.0	2 912.4	3 448.5	4 098.0	3 049.8
Federal budget expenditure outturns under 'National Defense' section within the existing budget classification system	1 930.3	2 047.5	2 291.6	2 156.1	2 209.0	2 420.9	2 665.7	2 922.4	3 467.6	3 971.7	2 852.3
Russian Federation's military spending, according to data submitted to the UN	2 185.9	2 199.2	2 249.0	1 963.5	2 074.0	2 256.5	2 103.8	2 313.0	3 164.6	2 162.6	–
Total military spending related to recent and past military activities	2 630.2	2 849.9	3 372.6	3 176.0	3 303.5	3 796.2	4 237.7	4 631.3	4 575.3	4 545.4	4 119.4
3. In real terms (at 2007 prices),^e in billions of rubles											
Federal budget appropriations under 'National Defense' section: within the existing budget classification system	839.1	874.5	991.5	930.3	965.5	1 062.8	1 153.3	1 255.1	1 486.1	1 766.0	1 314.3
Federal budget expenditure outturns under 'National Defense' section within the existing budget classification system	831.9	882.4	987.6	929.2	952.0	1 043.3	1 148.8	1 259.4	1 494.4	1 711.6	1 229.2
Russian Federation's military spending, according to data submitted to the UN	942.0	947.8	969.2	846.2	893.8	972.5	906.6	996.8	1 363.8	932.0	–
Total military spending related to recent and past military activities	1 133.5	1 228.2	1 453.4	1 368.7	1 423.7	1 636.0	1 826.2	1 995.9	1 971.8	2 060.7	1 775.3
4. Economy's military burden,^f as a percent of GDP											
Federal budget appropriations under 'National Defense' section: within the existing budget classification system	2.52	2.50	3.07	2.76	2.55	2.71	2.89	3.12	3.80	4.53	3.31
Federal budget expenditure outturns under 'National Defense' section within the existing budget classification system	2.50	2.52	3.06	2.76	2.51	2.66	2.88	3.13	3.82	4.39	3.10
Russian Federation's military spending, according to data submitted to the UN	2.83	2.71	3.00	2.51	2.36	2.48	2.27	2.48	3.49	2.39	–
Total military spending related to recent and past military activities	3.41	3.51	4.51	4.06	3.76	4.17	4.57	4.96	5.04	5.28	4.48

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1	2	3	4	5	6	7	8	9	10	11	12
5. At purchasing power parity (at current prices), in billions of US\$											
Federal budget appropriations under 'National Defense' section: within the existing budget classification system	60.0	71.9	85.0	80.7	88.6	102.3	114.3	116.1	131.9	153.8	116.5
Federal budget expenditure outturns under 'National Defense' section within the existing budget classification system	59.5	72.6	84.7	80.6	87.4	100.5	114.1	116.5	132.7	149.0	109.0
Russian Federation's military spending, according to data submitted to the UN	67.4	78.0	83.1	73.4	82.0	93.6	90.1	92.2	121.1	81.2	–
Total defense appropriations related to recent and past military activities	81.1	101.0	124.6	118.8	130.7	157.5	181.4	184.6	175.0	179.4	157.4
6. At average annual exchange rate (at current prices), in billions of US\$											
Federal budget appropriations under 'National Defense' section: within the existing budget classification system	32.8	41.5	37.6	42.1	52.3	59.4	66.3	64.3	51.9	58.1	52.3
Federal budget expenditure outturns under 'National Defense' section within the existing budget classification system	32.5	41.9	37.5	42.0	51.6	58.3	66.1	64.5	52.2	56.3	48.9
Russian Federation's military spending, according to data submitted to the UN	36.8	45.0	36.8	38.3	48.4	54.3	52.1	55.1	47.6	30.7	–
Total military spending related to recent and past military activities	44.3	58.3	55.1	61.9	77.1	91.4	105.0	102.3	68.9	67.8	70.6
For reference											
Gross domestic product deflator, % change year-over-year	113.8	118.0	102.0	114.2	115.9	109.1	105.4	107.5	108.2	103.6	105.2
Purchasing power parity, ^g Rb/US\$	13.98	14.34	14.03	15.83	17.35	18.04	18.43	21.28	23.98	23.33	26.17
U.S. dollar exchange rate (average annual), Rb/US\$	25.58	24.86	31.72	30.37	29.39	31.09	31.85	38.42	60.96	67.03	58.35

^a For 2017: data from the Federal Treasury's monthly consolidated budget execution report for December 2017.

^b For 2017: to be submitted by the Russian Government to the UN in 2018, including expenditure on the Federal National Guard Service and the Border Guard Troops.

^c Including military retirement pensions and costs on chemical weapons stockpile destruction and military equipment recycling.

^{d, e} Deflated by GDP deflator.

^f In italics, relative to GDP values, excluding latest changes in Rosstat's methodology.

^g For 2017: own calculations.

Sources: Federal Budget Acts 2007–2017 and Federal Budget Execution Acts 2007–2016; United Nations Report on Military Expenditures; Russian Central Bank; Rosstat; Russian Federal Treasury.

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